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

BASIC DATA REPORT NO. 15

GROUND-WATER AND SURFACE-WATER DATA FOR FREDERICK COUNTY, MARYLAND

Compiled by

James R. Dine
Michael D. Tompkins
and
Mark T. Duigon

Prepared in cooperation with the
United States Department of the Interior
Geological Survey
and the
Frederick County Board of Commissioners

1985

CONVERSION OF MEASUREMENT UNITS

The following factors may be used by those readers who wish to convert the inch-pound units published in this report to metric (International System) units.

Multiply Inch-Pound Unit	*By*	*To Obtain Metric Unit*
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
foot per second (ft/s)	0.3048	meter per second (m/s)
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
mile (mi)	1.609	kilometer (km)
square mile (mi^2)	2.590	square kilometer (km^2)
gallon (gal)	3.785	liter (L)
gallon per minute (gal/min)	0.06308	liter per second (L/s)
gallon per day (gal/d)	0.003785	cubic meter per day (m^3/d)
million gallons per day (Mgal/d)	0.04381	cubic meter per second (m^3/s)
degree Fahrenheit (°F)	°C = 5/9 (°F-32)	degree Celsius (°C)

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GROUND-WATER AND SURFACE-WATER DATA FOR FREDERICK COUNTY, MARYLAND

Compiled by
James R. Dine, Michael D. Tompkins, and Mark T. Duigon

ABSTRACT

This report presents hydrologic data collected in Frederick County, Maryland. Surface-water data include streamflow measurements, basin characteristics, and chemical analyses of water collected at 25 sites. Ground-water data include locations and descriptions of 1,898 wells and 130 springs, chemical analyses of water from 45 wells and 24 springs, water levels measured in 58 selected wells, and geophysical logs of three wells. Ground-water and surface-water appropriation data are also included.

INTRODUCTION

Frederick County, the largest county in Maryland, is located in the north-central portion of the state (fig. 1). It is bounded on the north by Pennsylvania, on the west by Washington County, on the south by the Potomac River and Montgomery County, and on the east by Carroll County. Approximately 60 percent of the county lies within the Piedmont physiographic province; the remainder, from Catoctin Mountain westward, lies within the Blue Ridge province. The area of the county is 664.8 mi^2, 79 percent of which is rural or agricultural land and 12 percent is publicly owned parks or conservation lands. The eastern section of the county is characterized by rolling hills and broad, flat valleys. Catoctin Mountain, trending approximately north-south, presents an abrupt change to the ridge and valley topography of the Blue Ridge province.

The population of Frederick County has grown 34.5 percent over the period 1970–80 (Maryland Department of State Planning, p. 124). It was 114,263 in 1980, with the city of Frederick the major population center. This increase, together with a parallel growth in industry and commercial services, increasing numbers of residential subdivisions, and a predicted continuing growth rate, has prompted a reevaluation of the water resources of the county.

This report presents basic information related to the occurrence, availability, and quality of the water resources of the county. Surface-water data include streamflow measurements, basin characteristics, and chemical analyses of water collected at 25 sites. Ground-water data include locations and descriptions of 1,898 wells and 130 springs, chemical analyses of water from 45 wells and 24 springs, water levels measured in 58 selected wells, and geophysical logs of three wells. Ground-water and surface-water appropriation data are also included. These and other previously collected data were used to prepare a revised water-resources report of Frederick County (Duigon and Dine, in preparation).

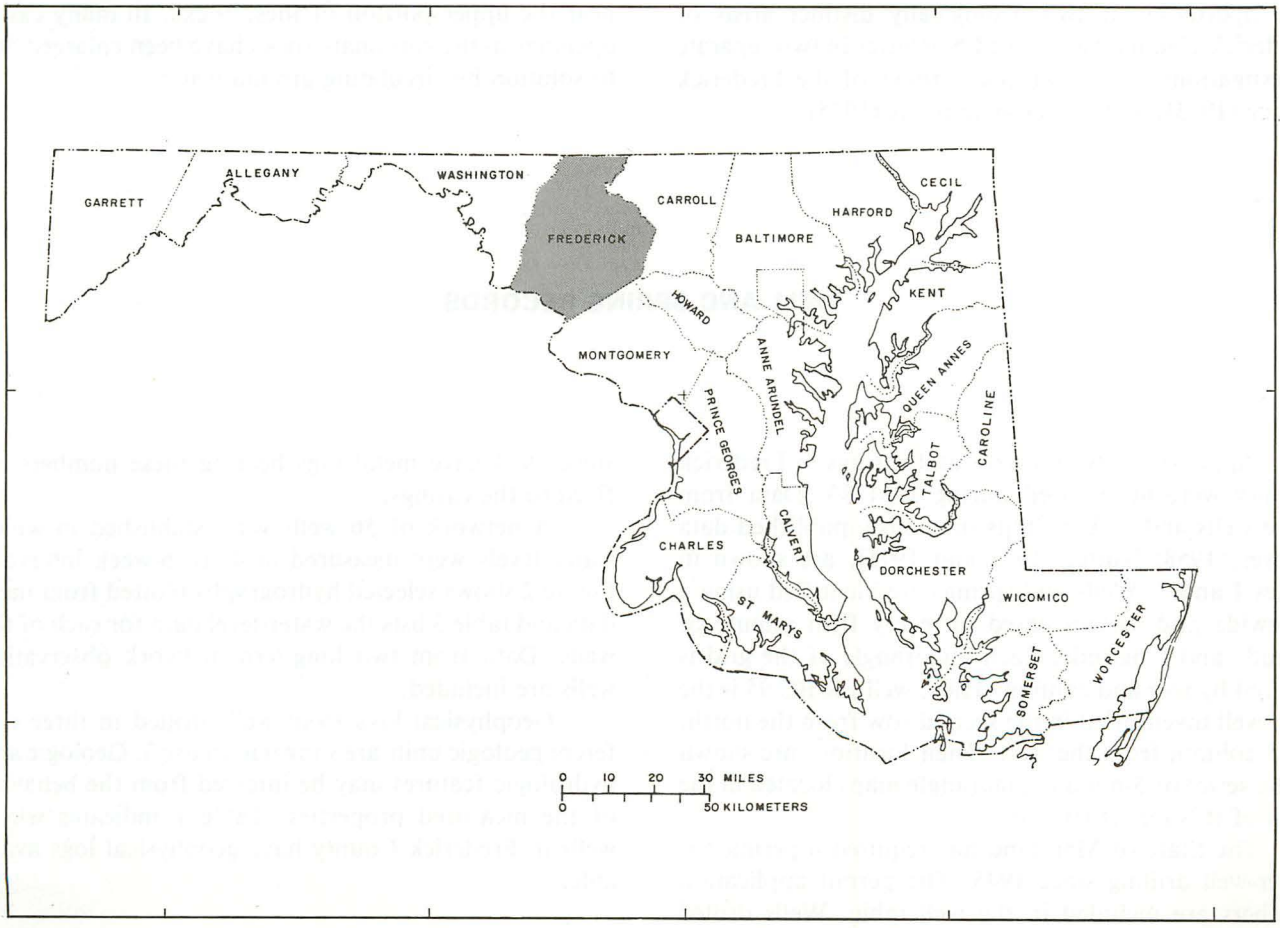

Figure 1.—Location of Frederick County, Md.

Acknowledgments

This study was completed in cooperation with the U.S. Geological Survey Water Resources Division, and the Frederick County Board of Commissioners. The Frederick County Planning Commission provided guidance by relating the needs and objectives of the county.

Previous Investigations

An early investigation including Frederick County was done by Clark, Mathews, and Berry (1918, p. 437–442), who described 34 wells in Frederick County. The geology of the county was mapped by Jonas and Stose (1938). Stose and Stose (1946, p. 1–131) described the geology of the county with some minor revision, and Bennett, in the same report (p. 165–187), discussed its ground-water resources. A more extensive study of the water resources presented by Meyer and Beall (1958) initiated the well and spring inventory of Frederick County; these data, supplemented by data from wells and springs inventoried for more recent projects (including the present study), are included in this report. The hydrology of two geologically distinct areas of Frederick County was studied by Nutter in two separate investigations — the carbonate rocks of the Frederick Valley (1973), and the Triassic rocks (1975).

Description of the Aquifers

Much of Frederick County is underlain by crystalline rocks of Precambrian and Cambrian age. Rocks east of the Frederick Valley are chiefly phyllite, schist, and metabasalt, with quartzite interbedded throughout the formations. The Blue Ridge area is bounded by ridges with crests formed by Cambrian quartzites. Metabasalt and metarhyolite of Precambrian age are the chief lithologies occurring between the ridges. Frederick Valley, which occupies the central part of the county, is underlain by Cambro-Ordovician limestones. Triassic shales and sandstones occur along the southwest edge and the northern portions of the valley. Quaternary alluvium and terrace gravels occur along some streams, and sediments derived from the ridge tops have been deposited along part of the eastern foot slope of Catoctin Mountain.

Most ground water in Frederick County occurs in fractures and joints in the rocks, or in void spaces in the disintegrated and weathered rock and sediments near land surface. The widths of the openings and the number of fractures in the rocks generally decrease with depth; therefore, most ground-water circulation occurs near the upper portion of these rocks. In many cases, openings in the carbonate rocks have been enlarged due to solution by circulating ground water.

WELL AND SPRING RECORDS

Approximately 800 wells and springs in Frederick County were inventoried during 1981–83. Data from these wells and springs, plus previously published data (Meyer, 1958; Nutter, 1973 and 1975), are shown in tables 1 and 2. Wells and springs are identified using a statewide grid system based on every fifth minute of latitude and longitude. Each quadrangle of the grid is lettered by row and column. Thus, well FR BC 95 is the 95th well inventoried in the second row from the north, third column from the west. Their locations are shown in the series of 5-minute quadrangle maps located in the back of this report (fig. 5).

The State of Maryland has required a permit for water-well drilling since 1945. The permit application numbers are included in the well table. Wells drilled since 1973 have metal tags bearing these numbers affixed to the casings.

A network of 56 wells was established in which water levels were measured at 4- to 6-week intervals. Figure 2 shows selected hydrographs plotted from these data and table 3 lists the water-level data for each of the wells. Data from two long-term network observation wells are included.

Geophysical logs from wells drilled in three different geologic units are shown in figure 3. Geologic and hydrologic features may be inferred from the behavior of the measured properties. Table 1 indicates which wells in Frederick County have geophysical logs available.

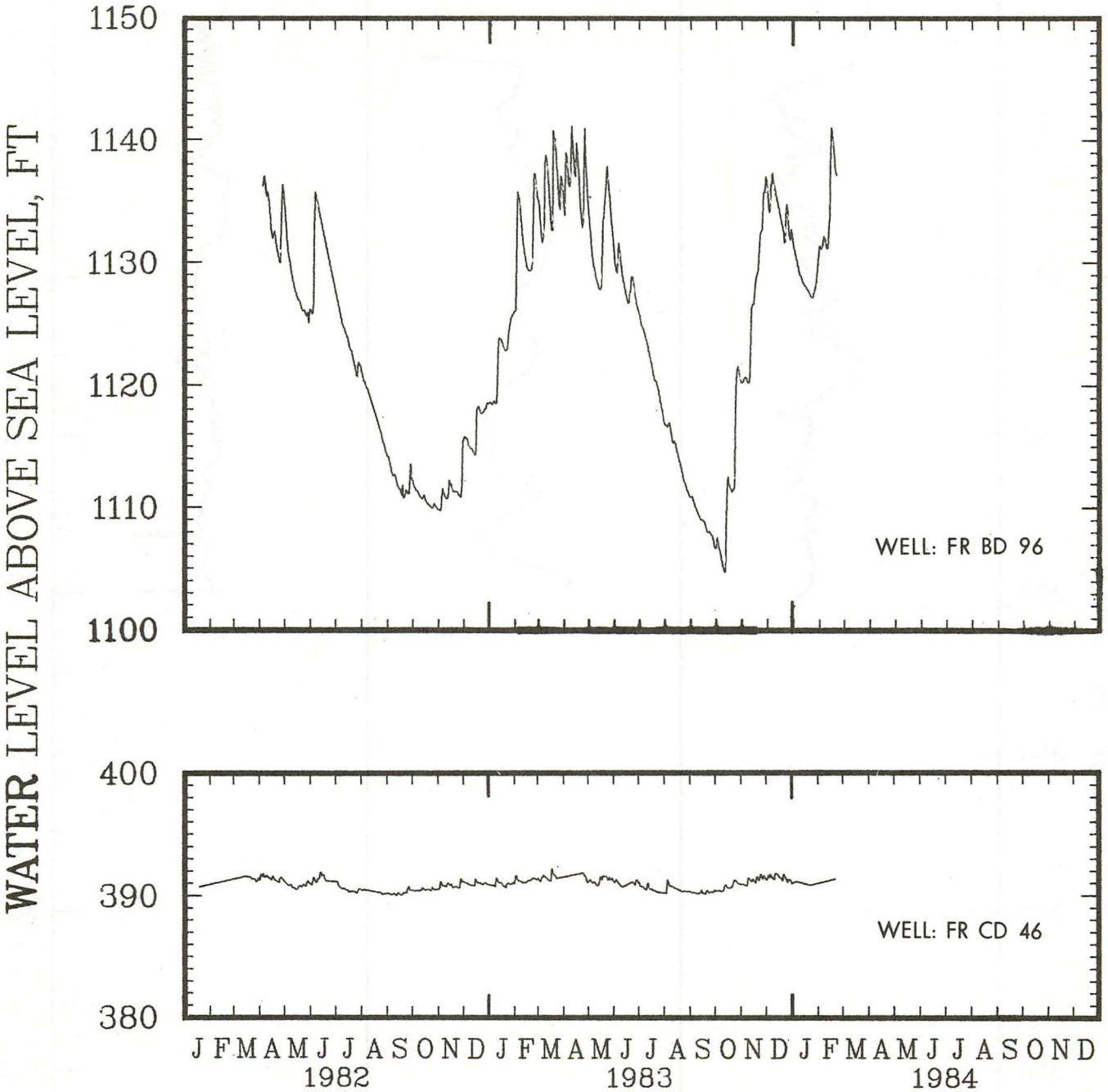

Figure 2.—Selected well hydrographs.

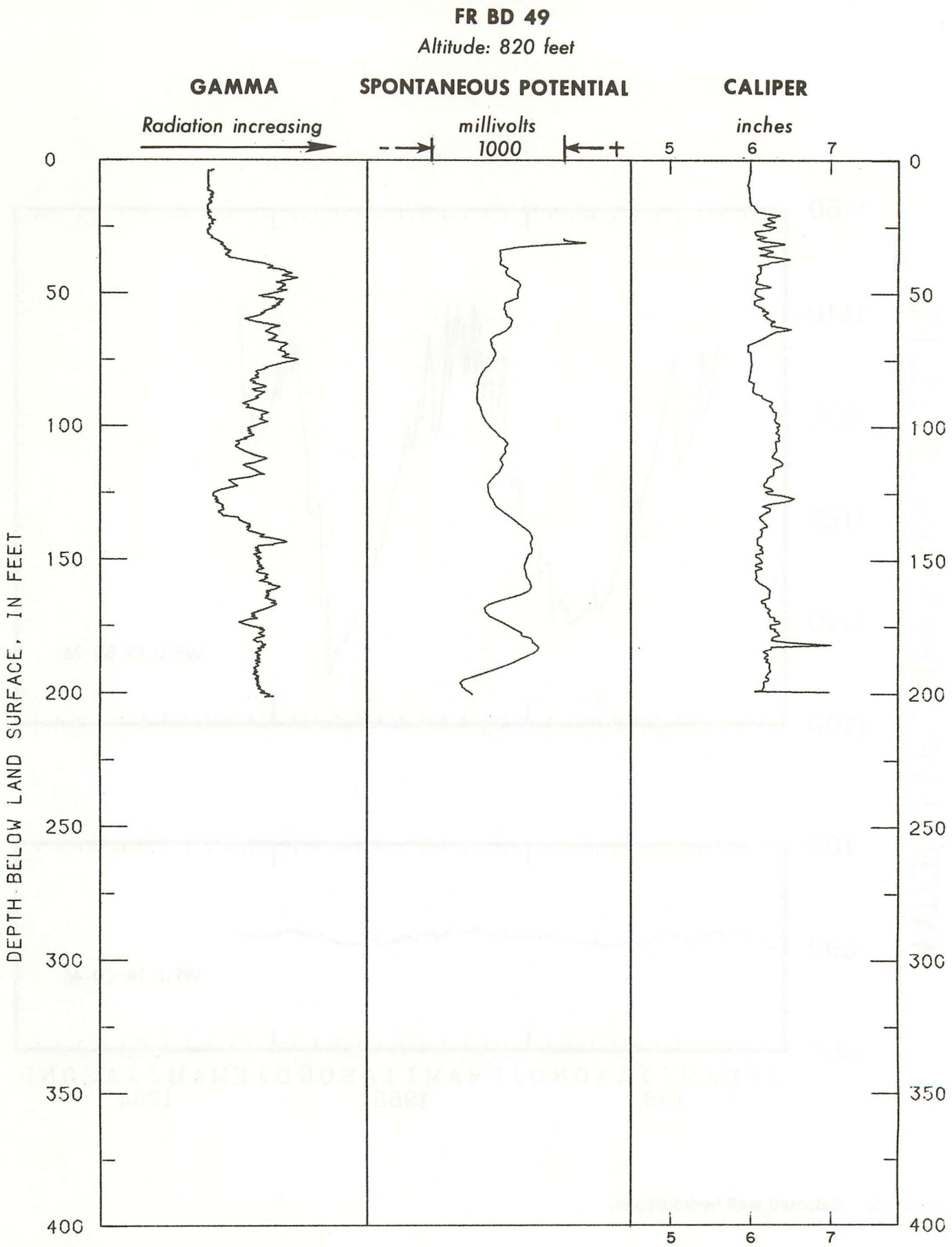

Figure 3.—Selected geophysical logs

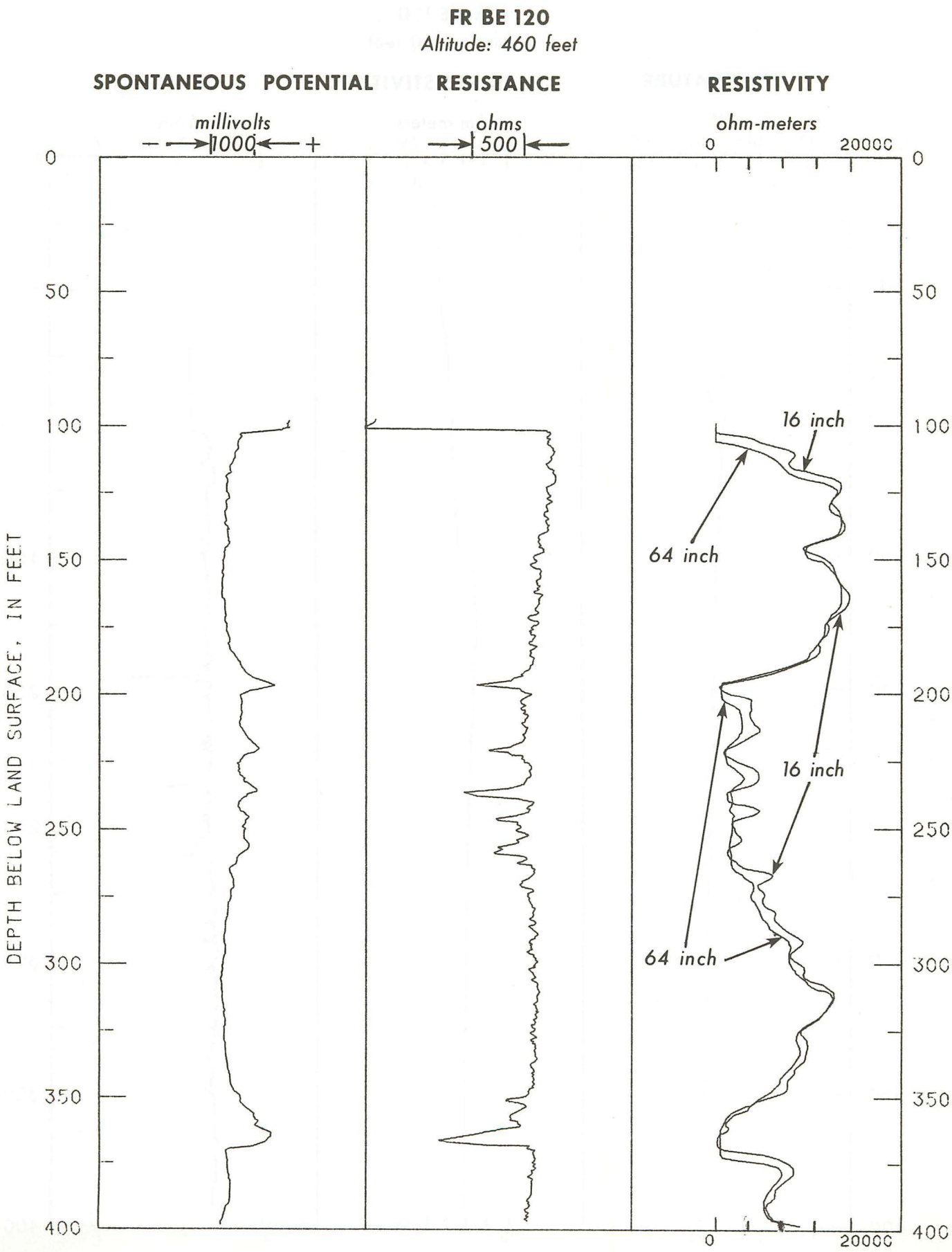

Figure 3.—Selected geophysical logs—continued.

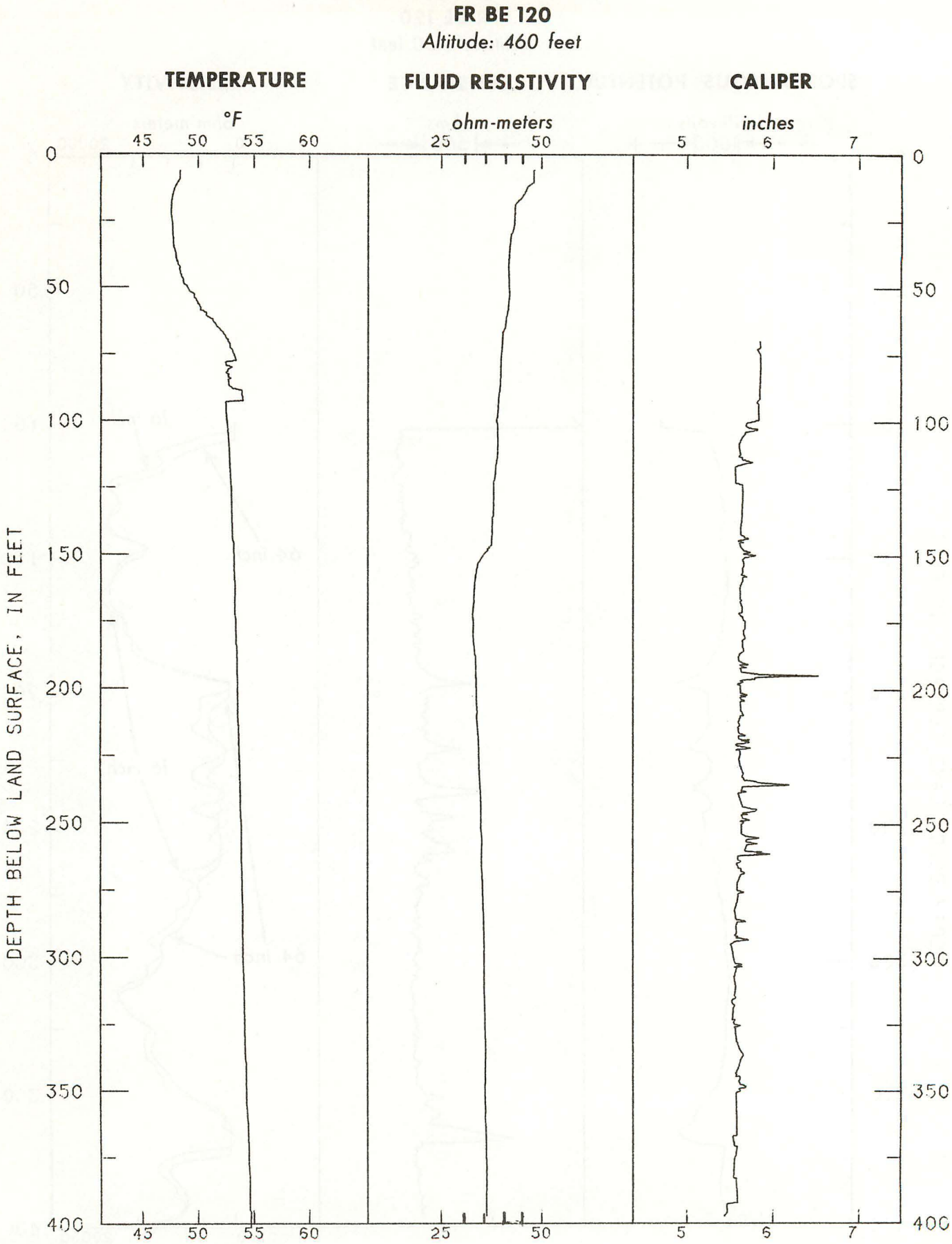

Figure 3.—Selected geophysical logs—continued.

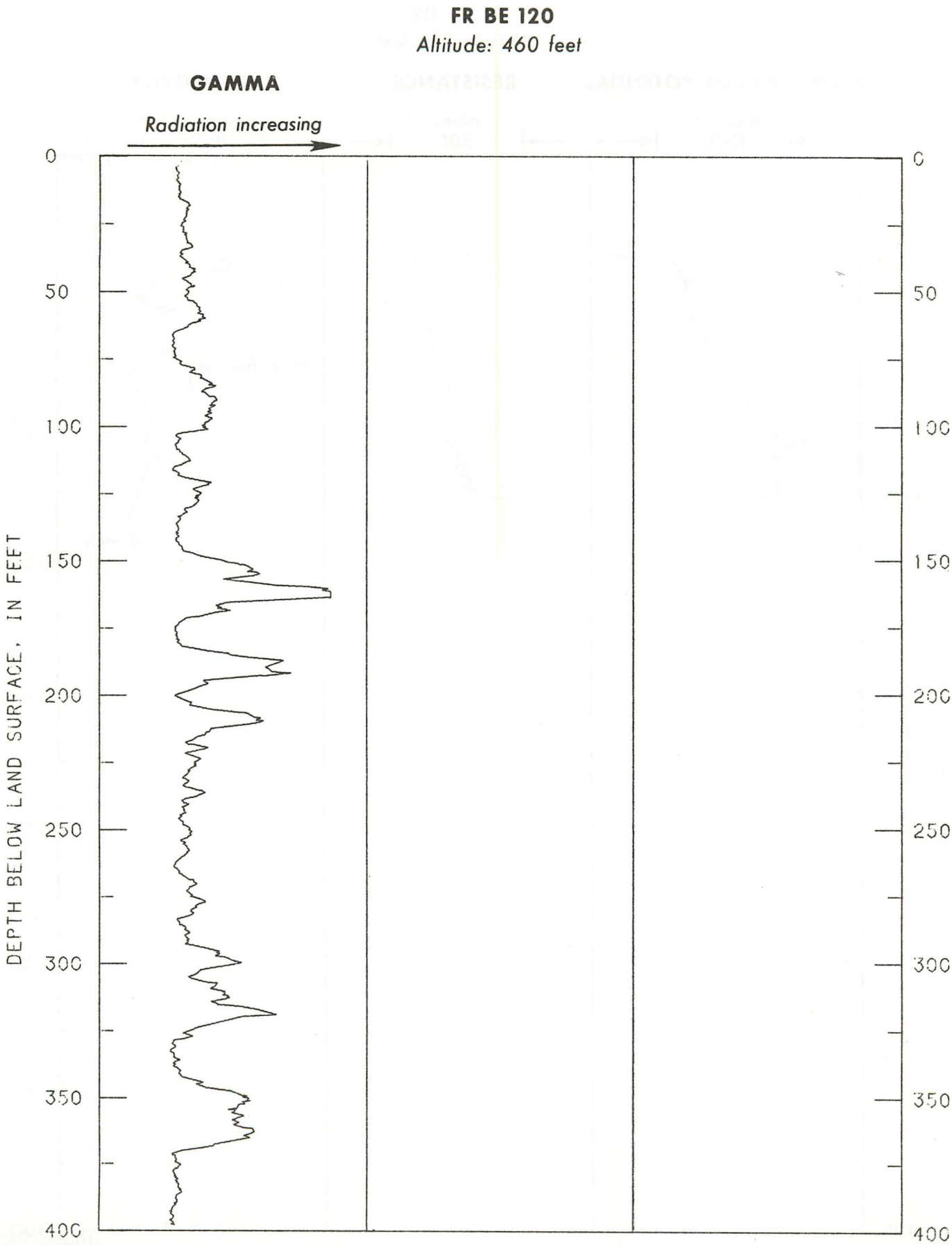

Figure 3.—Selected geophysical logs—continued.

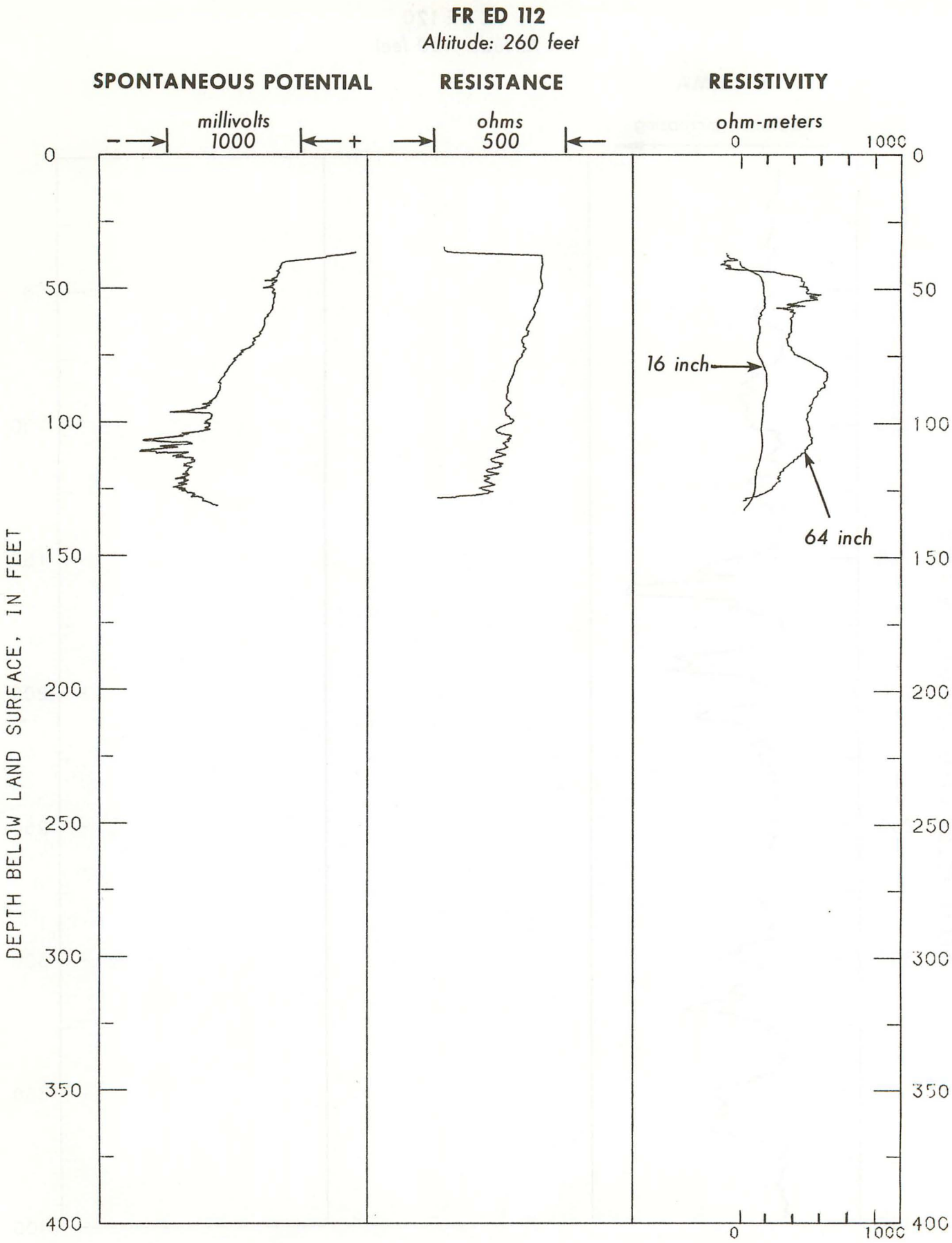

Figure 3.—Selected geophysical logs—continued.

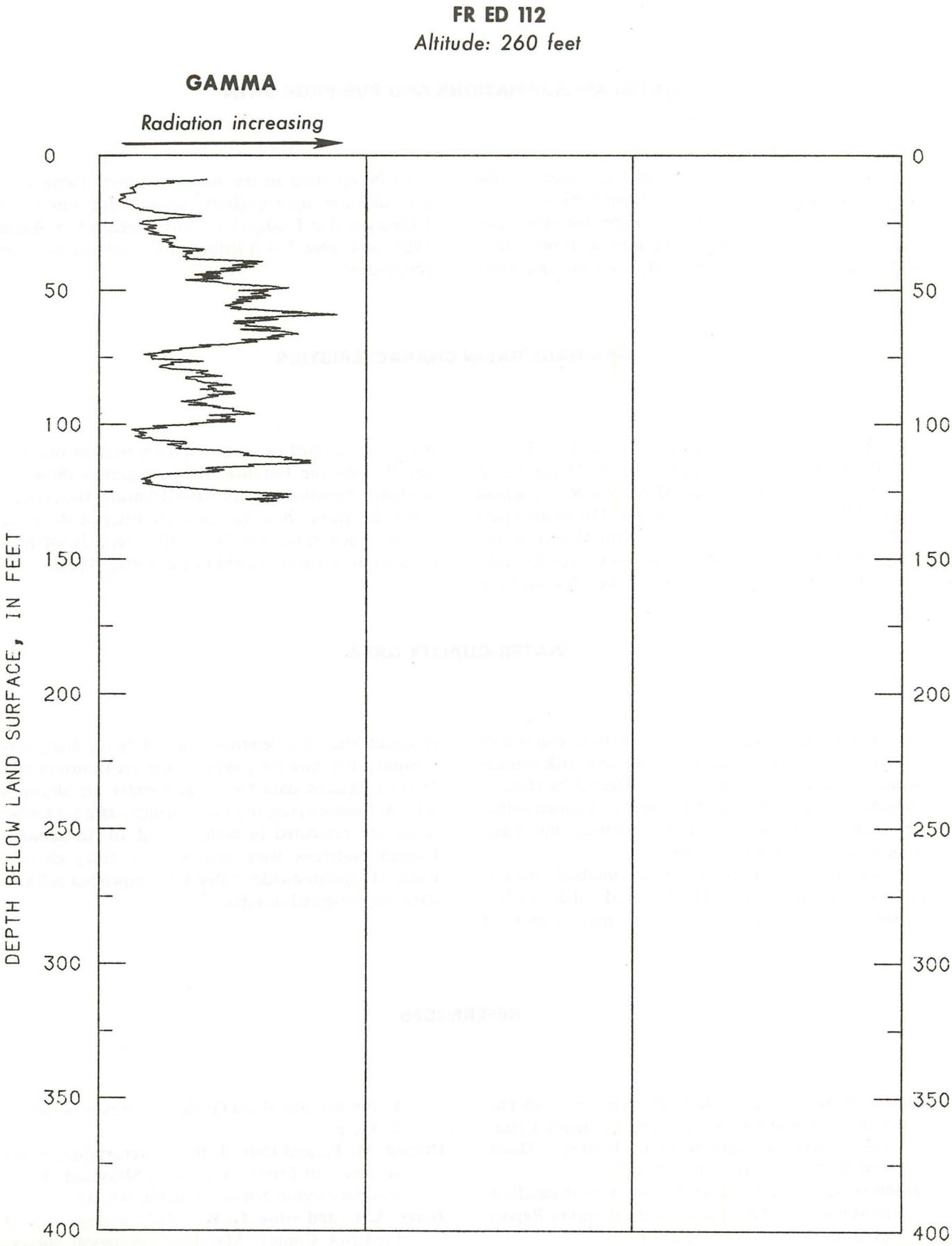

Figure 3.—Selected geophysical logs—continued.

WATER APPROPRIATIONS AND PUMPAGE DATA

A water-appropriation permit is issued by the Maryland Water Resources Administration to individuals and companies that use water for other than domestic, farming, or irrigation purposes. If more than 10,000 gal/d (average) are used, monthly quantities must be reported to the Administration. Table 4 lists ground-water appropriation permits for more than 10,000 gal/d in Frederick County issued before August 1983, and table 5 is a listing of the surface-water appropriations.

DRAINAGE-BASIN CHARACTERISTICS

All of the drainage in Frederick County is directed into the Potomac River. Approximately 75 percent of the county is drained by the Monocacy River, whose headwaters are in Adams County, Pa. The western part of Frederick County, between Catoctin Mountain and South Mountain, is drained chiefly by Catoctin Creek. The remainder of the county, along the southern border, is drained by several smaller streams that flow directly into the Potomac River. Figure 4 shows the discharge-measurement sites and delineates the drainage basins for those sites. The characteristics of these sites are described in table 6. Streamflow records for Frederick County are contained in Carpenter (1983).

WATER-QUALITY DATA

The quality of water is a result of the interaction of the water with atmospheric gases, soil and rock constituents, and stream sediments. It is affected by rates of movement and contact, and by mixing. Human activities such as agriculture, water treatment, and waste disposal can affect water quality.

The quality of water affects its suitability for certain uses. Temperature, pH, dissolved solids, carbon dioxide, and iron are some of the more important characteristics that determine suitability for many uses. Common ion data for ground water are shown in table 7; trace-element data for ground water are shown in table 8. Common ion and trace-element data for surface water are presented in tables 9 and 10. In addition, bottom materials were analyzed for trace elements (table 11) and pesticides (table 12). Suspended sediment data are presented in table 13.

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Bennett, R. R., 1946, Ground-water resources, *in* The physical features of Carroll and Frederick Counties: Maryland Department of Geology, Mines and Water Resources, p. 165–187.

Carpenter, D. H., 1983, Characteristics of streamflow in Maryland: Maryland Geological Survey Report of Investigations No. 35, 237 p.

Clark, W. B., Mathews, E. B., and Berry, E. W., 1918, The surface and underground water resources of Maryland, including Delaware and the District of Columbia: Maryland Geological Survey, v. 10, pt. 2, 542 p.

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Maryland Department of State Planning, 1981, Maryland population data: Maryland Department of State Planning, Office of Planning Data, p. 124.

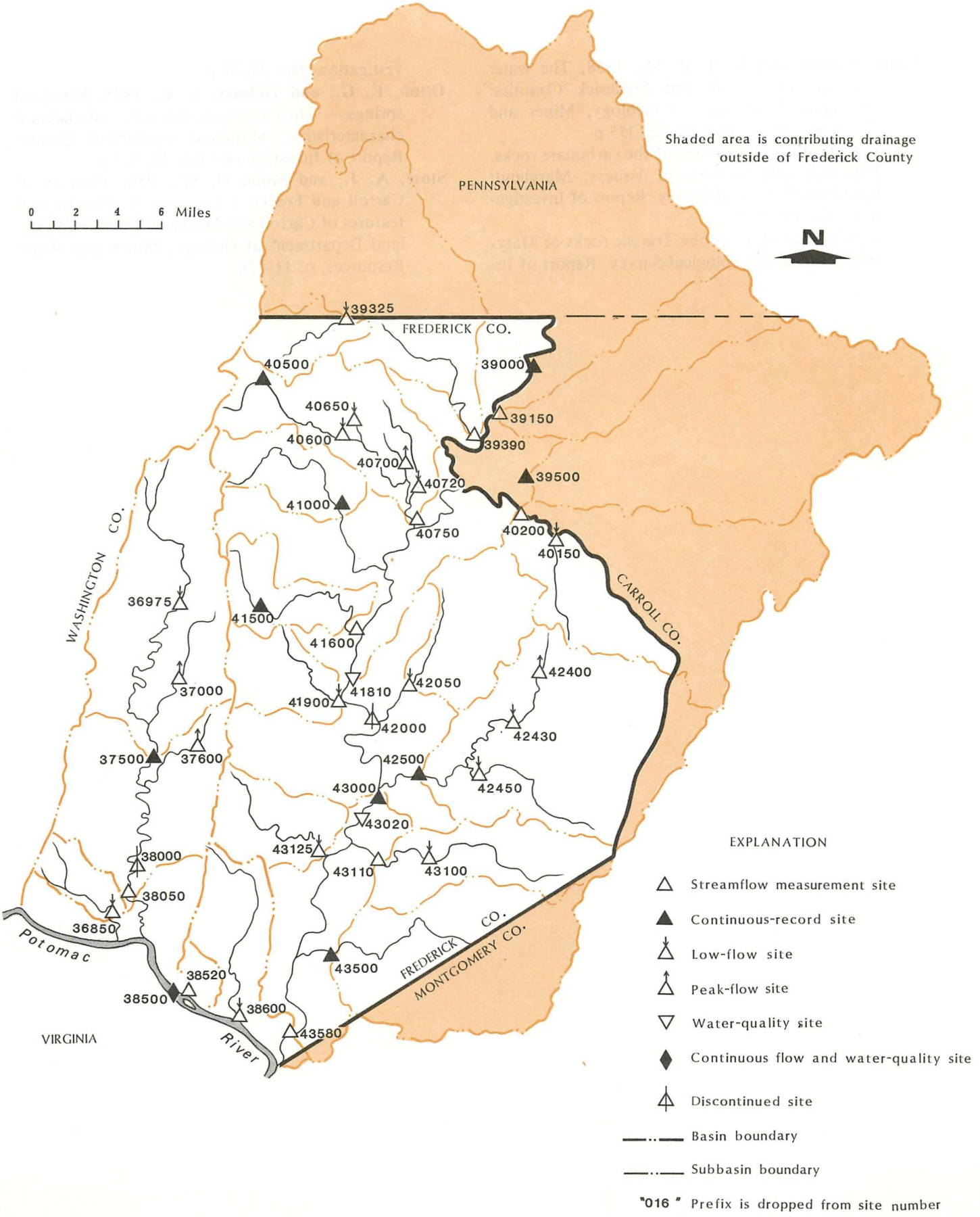


Figure 4.—Locations of surface-water data sites.

Meyer, Gerald, and Beall, R. M., 1958, The water resources of Carroll and Frederick Counties: Maryland Department of Geology, Mines and Water Resources, Bulletin 22, 355 p.

Nutter, L. J., 1973, Hydrology of the carbonate rocks, Frederick and Hagerstown Valleys, Maryland: Maryland Geological Survey, Report of Investigations No. 19, 70 p.

_____ 1975, Hydrology of the Triassic rocks of Maryland: Maryland Geological Survey, Report of Investigations No. 26, 37 p.

Otton, E. G., and Hilleary, J. T., 1985, Maryland springs — Their physical, thermal, and chemical characteristics: Maryland Geological Survey, Report of Investigations No. 43, 151 p.

Stose, A. J., and Stose, G. W., 1946, Geology of Carroll and Frederick Counties, *in* The physical features of Carroll and Frederick Counties: Maryland Department of Geology, Mines, and Water Resources, p. 11–128.

Table 1.—Records of selected wells in Frederick County, Md.—Explanation of codes

TOPO SETTING

F	Flat
G	Flood plain
H	Hilltop
S	Hillside
T	Terrace
U	Undulating
V	Valley, flat
W	Upland draw

USE OF WATER

C	Commercial
F	Fire
H	Domestic
I	Irrigation
J	Industrial (cooling)
N	Industrial
P	Public supply
Q	Aquaculture
R	Recreation
S	Stock
T	Institution
U	Unused
Z	Other

FINISH

O	Open end
W	Walled
X	Open hole

SOURCE

E	Estimated
R	Reported
S	Measured

OTHER DATA AVAILABLE

A	Chemical analysis available at USGS Mid-Atlantic District Office
C	Core available at USGS Mid-Atlantic District Office
G	Geophysical logs available at USGS Mid-Atlantic District Office
O	Additional water-level data available (table 3)
Q	Water-quality data available (table 7)

GEOLOGIC UNIT CODE

Code	Geologic Unit	Geologic Age
110ALVM	Quaternary Alluvium	Quaternary
110MNWS	Mountain Wash	
110QRNR	Quaternary System	
231DIBS	Diabase Dikes and Sills	Upper Triassic
231GBRG	Gettysburg Shale	
231NOXF	New Oxford Formation	
231NOXFB	New Oxford Formation Basal Limestone Conglomerate	
300GLRM	Glenarm Series	Paleozoic
300IJMV	Ijamsville Formation	
300LBRN	Libertytown Metarhyolite	
300MRBG	Marburg Formation	
300SGFM	Sugarloaf Mountain Quartzite	
300SMCK	Sams Creek Metabasalt	
300URBN	Urbana Formation	
300WKFD	Wakefield Marble	
367GROV	Grove Limestone	Lower Ordovician
377ANTM	Antietam Formation	Lower Cambrian
377FDCK	Frederick Limestone	
377HRPR	Harpers Formation	
377LUDN	Loudoun Formation	
377TMSN	Tomstown Dolomite	
377WVRN	Weverton Formation	
400CTCN	Catoctin Metabasalt	Precambrian
400GBGG	Granodiorite and Biotite Granite Gneiss	
400MTRL	Metarhyolite and associated Pyroclastic Sediments	
400PCMB	Precambrian Erathem	

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR AD 2	FR-01-4515	FOX, RICHARD M	WELDO FUNT	1954	1240	W	36	H	400CTCN
FR AD 3	FR-00-6084	WAYNANT, VAUGHAN W	IRA ROCK	1950	1050	S	130	H	400CTCN
FR AD 4	FR-00-6682	WEAMIRT, JAMES	A R KEYSER	1951	1130	V	86	H	400CTCN
FR AD 5	FR-01-5063	ANDERSON, ALVIN	WELDO FUNT	1954	1050	V	50	H	400CTCN
FR AD 6	FR-01-4437	FORREST, THEODORE F	WELDO FUNT	1954	1050	V	47	H	400CTCN
FR AD 7	FR-00-9642	MANAHAN, DONALD	WELDO FUNT	1952	1240	V	62	H	400CTCN
FR AD 8	FR-01-0459	BENCHOFF, WALTER	WELDO FUNT	1952	1240	V	45	H	400CTCN
FR AD 9	FR-01-0480	OVERCASH, ROBERT E	WELDO FUNT	1952	1140	V	45	H	400CTCN
FR AD 10	FR-01-1098	DELAUTER, EDWIN	WELDO FUNT	1952	880	V	60	H	400CTCN
FR AD 12	--	VICTOR CULLEN SCHOOL	--	1914	1110	S	200	T	400CTCN
FR AD 13	--	VICTOR CULLEN SCHOOL	--	1914	1110	V	185	T	400CTCN
FR AD 14	--	VICTOR CULLEN SCHOOL	--	1923	1110	V	185	T	400CTCN
FR AD 15	FR-01-4613	FOX, GLENN	WELDO FUNT	1954	990	S	35	H	400CTCN
FR AD 16	FR-01-8014	KIPE, RAYMOND H	WELDO FUNT	1955	1080	S	55	H	400CTCN
FR AD 17	FR-02-1170	ROWE, MELVIN	WELDO FUNT	1955	1190	S	56	H	400CTCN
FR AD 18	FR-01-7898	ROYER, SAMUEL F	WELDO FUNT	1955	795	S	38	H	400CTCN
FR AD 19	FR-02-3518	HARBAUGH, HENSON	WELDO FUNT	1956	880	S	60	H	400CTCN
FR AD 20	FR-02-4156	BROWN, FLOYD E	WELDO FUNT	1956	1560	S	70	H	400CTCN
FR AD 21	FR-02-5151	BUMBAUGH, GLENN R	WELDO FUNT	1956	1585	S	45	H	400CTCN
FR AD 22	--	BYRNE CHILDREN'S HOSP	--	--	1580	S	216	T	400CTCN
FR AD 23	FR-73-1438	FEUTZ, RICHARD L	KEYSER-GARVER	1973	1560	S	102	H	400CTCN
FR AD 24	FR-73-7153	SMITH, JAMES	JACK HARLEY	1979	1570	S	250	H	400CTCN
FR AD 25	FR-73-0699	BROWN, THELMA	D WOODWARD	1973	1175	S	200	H	400CTCN
FR AD 26	FR-73-8005	MANAHAN, DONALD M	D WOODWARD	1980	1130	S	300	H	400CTCN
FR AD 27	FR-73-7054	SMITH, DILBERT	W B QUYNN	1979	1130	S	140	H	400CTCN
FR AD 28	FR-73-0528	GRAY, KARL C	A R KEYSER	1973	1085	S	322	H	400CTCN
FR AD 29	FR-73-7029	GRAY, KARL	ROBERT CLINE	1979	1065	S	150	H	400CTCN
FR AD 30	FR-73-3144	ALBRIGHT, GARY W	D WOODWARD	1975	895	S	175	H	400CTCN
FR AD 31	FR-73-2249	LINS, STEPHEN	KEYSER-GARVER	1974	1050	S	223	H	400CTCN
FR AD 32	FR-73-7090	FOX, RICHARD	ROBERT CLINE	1979	1040	S	250	H	400CTCN
FR AD 33	FR-73-4712	CHRISTIE, JOHN G	KEYSER-GARVER	1977	1560	H	200	U	400CTCN
FR AD 34	FR-73-5767	WORTH, EDWARD R	KEYSER-GARVER	1978	1580	H	400	H	400CTCN
FR AD 35	FR-73-5457	ALEXANDER, WAYNE	ROBERT CLINE	1978	1005	S	150	H	400CTCN
FR AD 37	FR-73-3234	BAUGHER, HARRY	ROBERT CLINE	1976	1020	S	100	H	400MTRL
FR AD 38	FR-73-0646	MASSER, MAHLON	KEYSER-GARVER	1973	1060	S	320	H	400MTRL
FR AD 39	FR-65-0149	FRED CO BD OF EDUC	ROBERT CLINE	1964	1050	F	115	T	400CTCN
FR AD 40	FR-73-3721	VICTOR CULLEN SCHOOL	C A CROMWELL	1976	1030	S	300	T	400CTCN
FR AD 41	FR-65-0149	FRED CO BD OF EDUC	ROBERT CLINE	1964	1050	F	--	U	400CTCN
FR AD 42	FR-65-0149	FRED CO BD OF EDUC	ROBERT CLINE	1964	1050	F	--	U	400CTCN
FR AD 43	FR-65-0149	FRED CO BD OF EDUC	ROBERT CLINE	1964	1050	F	--	--	400CTCN
FR AE 1	FR-00-0846	MYERS, EDWARD L	H & C WANTZ	1946	570	S	179	H	377FDCK
FR AE 3	FR-00-6384	KNOTT, AUSTIN J	H E WANTZ	1950	610	H	53	H	377FDCK
FR AE 4	FR-00-3738	TOYE, MRS	T OWINGS	1949	710	H	125	H	377LUDN
FR AE 5	FR-00-0855	ZURGABLE, HENERY T	C L WANTZ	1946	445	H	100	H,C	231GBRG
FR AE 6	--	RICHARDS	--	--	680	S	63	--	400CTCN
FR AE 7	--	HERRING, L A	--	--	545	H	27	H	231DIBS
FR AE 8	--	TELLIS	--	--	540	S	40	H	231DIBS
FR AE 9	FR-00-4141	FLORENCE, GEORGE D	H E WANTZ	1949	540	H	75	H	231GBRG
FR AE 10	FR-01-9863	MEADOWS, EDWARD	C A CROMWELL	1955	500	S	150	S	231GBRG
FR AE 11	--	MEADOWS, EDWARD	--	--	500	S	100	S,H	231GBRG
FR AE 12	--	MEADOWS, EDWARD	--	--	500	S	77	U	231GBRG
FR AE 13	--	MEADOWS, EDWARD	--	--	500	S	34	--	231GBRG
FR AE 14	FR-00-9906	MARSHALL, R T	L F EASTERDAY	1952	550	S	164	H	231GBRG
FR AE 16	FR-01-4611	MASSER, HARRY	WELDO FUNT	1954	1010	S	50	H	377LUDN
FR AE 17	FR-00-6376	LATE, HOWARD	WELDO FUNT	1950	950	S	87	H	400CTCN
FR AE 20	FR-01-7845	WORKING, GURNON	WELDO FUNT	1955	1100	S	35	H	400CTCN
FR AE 21	FR-01-3825	BRAUNER, FRANKLIN	BRAUNER	1954	500	V	42	H	231GBRG
FR AE 22	FR-01-4796	BRAUNER, WILLIAM	BRAUNER	1954	515	S	65	H	231GBRG
FR AE 23	FR-01-7037	LONG, CHARLES	HARRIS	1954	515	S	74	H	231GBRG
FR AE 24	FR-00-0095	ASH, JOSEPH	H & C WANTZ	1945	450	V	83	H	231GBRG
FR AE 26	FR-01-5358	WIVELL, CLARENCE	H & C WANTZ	1954	450	V	99	H	231GBRG
FR AE 27	FR-01-2899	CONDON, JAMES M	WELDO FUNT	1953	520	V	40	H	231GBRG
FR AE 28	--	MT ST MARYS COLLEGE	--	--	650	S	850	T	377WVRN
FR AE 29	--	MT ST MARYS COLLEGE	--	--	630	S	240	T	377WVRN
FR AE 31	--	CITY OF EMMITSBURG	--	1936	670	V	161	P	400CTCN
FR AE 32	--	CITY OF EMMITSBURG	--	--	700	S	47	U	400CTCN
FR AE 33	--	CITY OF EMMITSBURG	--	--	770	S	58	P	400CTCN
FR AE 34	--	CITY OF EMMITSBURG	--	1936	780	S	98	U	400CTCN
FR AE 35	FR-00-8937	OTT, LAWRENCE J	A R KEYSER	1951	620	S	23	H	377HRPR
FR AE 37	FR-65-0432	CITY OF EMMITSBURG	KOHL BROS	1965	770	S	212	P	400CTCN
FR AE 38	FR-69-0288	CITY OF EMMITSBURG	A R KEYSER	1969	680	V	250	P	400CTCN
FR AE 40	FR-73-5184	WOLF, SIDNEY J	KEYSER-GARVER	1977	920	H	325	H	377WVRN
FR AE 41	FR-73-5147	QUANCE, EARL	ROBERT CLINE	1977	1100	S	300	H	377LUDN
FR AE 42	FR-73-5784	HOWARD, KENNETH	D WOODWARD	1978	1000	S	200	H	377LUDN
FR AE 43	FR-73-3906	O'BRIEN, RICHARD	ROBERT CLINE	1976	560	H	170	H	377LUDN
FR AE 44	FR-73-8113	COOL, LEROY	JACK HARLEY	1980	590	S	125	H	400CTCN
FR AE 45	FR-73-5146	WIVELL, RONALD	ROBERT CLINE	1977	600	S	325	H	400CTCN
FR AE 46	FR-73-2025	HAHN, ALFRED	ROBERT CLINE	1974	548	H	320	H	231GBRG
FR AE 47	FR-73-2806	FITZGERALD, JAMES	C A CROMWELL	1975	540	F	433	H	231DIBS
FR AE 48	FR-73-3694	BAKER, JACOB	ROBERT CLINE	1976	543	F	275	H	231DIBS
FR AE 49	FR-73-4725	EYLER, H EUGENE	ROBERT CLINE	1977	570	S	200	H	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
35	6	X	15	R	03/12/1954	10.0	25	15	1.00	1	03/12/1954	Q	FR AD 2
33	6	X	70	R	07/31/1950	2.5	110	70	.06	6	07/31/1950	--	FR AD 3
45	6	X	35	R	01/05/1951	5.0	50	35	.33	.5	01/05/1951	--	FR AD 4
16	6	X	15	R	06/07/1954	10.0	40	15	.40	2	06/07/1954	--	FR AD 5
13	6	X	12	R	03/08/1954	5.0	30	12	.28	1	03/08/1954	--	FR AD 6
32	6	X	5	R	03/07/1952	10.0	25	5	.40	2	03/07/1952	--	FR AD 7
36	6	X	10	R	07/03/1952	10.0	15	10	2.00	1	07/03/1952	--	FR AD 8
20	6	X	10	R	07/10/1952	6.0	30	10	.30	1	07/10/1952	--	FR AD 9
45	6	X	30	R	10/01/1952	7.0	50	30	.35	1	10/01/1952	--	FR AD 10
--	6	X	5	E	06/13/1956	30.0	175	5	.1	--	06/13/1956	Q	FR AD 12
--	6	X	5	E	06/13/1956	30.0	--	5	--	--	06/13/1956	--	FR AD 13
--	6	X	5	E	06/13/1956	30.0	--	5	--	--	06/13/1956	--	FR AD 14
11	6	X	15	R	03/25/1954	8.0	28	15	.62	1	03/25/1954	--	FR AD 15
37	6	X	16	R	03/07/1955	8.0	40	16	.33	1	03/07/1955	--	FR AD 16
46	6	X	20	R	11/04/1955	12.0	35	20	.80	1	11/04/1955	--	FR AD 17
22	6	X	20	R	02/18/1955	8.0	31	20	.73	2	02/18/1955	--	FR AD 18
34	6	X	20	R	06/16/1956	10.0	50	20	.33	2	06/16/1956	--	FR AD 19
21	6	X	18	R	08/08/1956	15.0	45	18	.56	2	08/08/1956	--	FR AD 20
40	6	X	18	R	11/23/1956	10.0	36	18	.56	1	11/23/1956	--	FR AD 21
--	--	--	--	--	--	--	--	--	--	--	--	Q	FR AD 22
19	6	X	45	R	11/20/1973	4.0	--	45	--	1	11/20/1973	--	FR AD 23
20	6	X	10	R	09/08/1979	3.0	245	10	.01	1	09/08/1979	--	FR AD 24
39	6	X	30	R	03/21/1973	6.0	100	30	.09	2	03/21/1973	--	FR AD 25
41	6	X	25	R	10/22/1980	3.5	300	25	.01	3	10/22/1980	--	FR AD 26
20	6	X	20	R	07/24/1979	20.0	135	20	.17	2	07/24/1979	--	FR AD 27
41	6	X	20	R	03/02/1973	2.0	--	20	--	1	03/02/1973	--	FR AD 28
41	6	X	5	R	07/23/1979	10.0	150	5	.07	1	07/23/1979	--	FR AD 29
25	6	X	20	R	11/11/1975	8.0	100	20	.10	4	11/11/1975	--	FR AD 30
17	6	X	29	R	10/22/1974	30.0	35	29	5.00	2	10/22/1974	--	FR AD 31
39	6	X	48	R	08/07/1979	8.0	250	48	.04	1	08/07/1979	--	FR AD 32
17	6	X	52	R	07/05/1977	15.0	62	52	1.50	2	07/05/1977	--	FR AD 33
19	6	X	60	R	04/21/1978	2.0	90	60	.07	2	04/21/1978	--	FR AD 34
34	6	X	29	R	04/29/1978	25.0	150	29	.21	1	04/29/1978	--	FR AD 35
39	6	X	3	R	01/28/1976	10.0	100	3	.10	1	01/28/1976	--	FR AD 37
64	6	X	52	R	06/13/1973	3.0	--	52	--	1	06/13/1973	--	FR AD 38
43	6	X	45	R	09/01/1964	30.0	--	45	--	--	09/01/1964	--	FR AD 39
20	6	X	20	R	07/14/1976	7.0	295	20	.03	5	07/14/1976	--	FR AD 40
--	6	X	--	--	--	--	--	--	--	--	--	--	FR AD 41
--	6	X	--	--	--	--	--	--	--	--	--	--	FR AD 42
--	--	X	--	--	--	--	--	--	--	--	--	--	FR AD 43
75	6	X	16	R	09/27/1946	5.0	179	16	.03	.3	09/27/1946	--	FR AE 1
33	6	X	25	R	08/04/1950	10.0	--	25	--	.2	08/04/1950	--	FR AE 3
125	6	O	40.70	S	10/03/1955	20.0	100	40	.33	.5	04/02/1949	--	FR AE 4
6	6	X	22.25	S	08/26/1955	7.0	100	21	.09	.3	10/07/1946	--	FR AE 5
--	--	X	--	--	--	--	--	--	--	--	--	--	FR AE 6
--	48	--	23.75	S	09/13/1955	--	--	--	--	--	--	--	FR AE 7
--	--	--	19.23	S	09/13/1955	--	--	--	--	--	--	--	FR AE 8
10	8	X	20	R	07/12/1949	1.5	75	20	.03	.3	07/12/1949	--	FR AE 9
31	6	X	19.50	S	09/13/1955	10.0	94	37	.18	2	07/11/1955	--	FR AE 10
--	6	X	22.62	S	09/13/1955	--	--	--	--	--	--	--	FR AE 11
--	6	X	23.30	S	09/13/1955	--	--	--	--	--	--	--	FR AE 12
--	--	--	23.20	S	09/13/1955	--	--	--	--	--	--	--	FR AE 13
77	6	X	14	R	05/08/1952	1.0	164	14	.01	--	05/08/1952	--	FR AE 14
46	6	X	10	R	03/27/1954	6.0	40	10	.20	--	03/27/1954	--	FR AE 16
85	6	X	25.51	S	06/13/1956	20.0	57	52	4.00	1	08/08/1950	--	FR AE 17
19	6	X	12	R	02/15/1955	10.0	32	12	.50	--	02/15/1955	--	FR AE 20
32	6	X	10	R	02/18/1954	4.0	12	10	1.60	1	02/18/1954	--	FR AE 21
42	6	X	11	R	02/28/1954	3.0	14	11	1.00	1	02/28/1954	--	FR AE 22
23	6	X	20	R	12/11/1954	--	60	20	--	--	12/11/1954	--	FR AE 23
10	6	X	30	R	11/19/1945	15.0	--	30	--	--	11/19/1945	--	FR AE 24
16	6	X	21	R	06/09/1954	--	99	22	--	.3	06/09/1954	--	FR AE 26
38	6	X	10	R	08/03/1953	8.0	34	10	.33	2	08/03/1953	--	FR AE 27
--	6	--	10	E	--	80.0	--	--	--	--	09/21/1956	--	FR AE 28
--	6	--	20	E	--	--	--	--	--	--	--	--	FR AE 29
20	8	X	.70	S	11/09/1956	160.0	12	4	21.33	24	1956	--	FR AE 31
--	--	--	6.02	S	11/13/1956	--	--	--	--	--	--	--	FR AE 32
20	6	X	--	--	--	--	--	--	--	--	--	--	FR AE 33
20	6	X	7.16	S	11/13/1956	--	--	--	--	--	--	--	FR AE 34
23	6	O	16.52	S	11/13/1956	3.0	23	15	.38	.5	11/29/1951	--	FR AE 35
43	8	X	10	R	01/27/1965	109.0	175	10	.66	24	01/28/1965	--	FR AE 37
76	8	X	39	R	03/01/1969	100.0	--	39	--	48	03/01/1969	--	FR AE 38
41	6	X	45	R	12/06/1977	1.0	55	45	.10	2	12/06/1977	--	FR AE 40
105	6	X	87	R	11/11/1977	5.0	300	87	.02	1	11/11/1977	--	FR AE 41
49	6	X	50	R	08/18/1978	30.0	200	50	.20	2	08/18/1978	--	FR AE 42
72	6	X	35	R	08/12/1976	5.0	170	35	.04	1	08/12/1976	--	FR AE 43
21	6	X	30	R	12/12/1980	15.0	115	30	.18	2	12/12/1980	--	FR AE 44
48	6	X	325	R	09/17/1977	5.0	325	40	.02	1	09/17/1977	--	FR AE 45
32	6	X	30	R	07/20/1974	4.0	320	30	.01	--	07/20/1974	--	FR AE 46
21	6	X	15	R	08/14/1975	1.0	332	15	.0	5	08/14/1975	--	FR AE 47
20	6	X	22	R	07/01/1976	3.0	275	22	.01	1	07/01/1976	--	FR AE 48
179	6	X	40	R	06/25/1977	30.0	200	40	.19	1	06/25/1977	--	FR AE 49

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR AE 50	FR-71-0001	FRIENDS CR CH OF GOD	ROBERT HARLEY	1970	655	S	85	T	400CTCN
FR AE 51	FR-04-8064	SUMMIT LAKE CAMP	A R KEYSER	1962	1060	S	145	T	400CTCN
FR AE 52	FR-73-8689	SUMMIT LAKE CAMP	KEYSER-GARVER	1981	1060	S	335	T	400CTCN
FR AE 53	FR-73-8351	CITY OF EMMITSBURG	ROBERT CLINE	1981	910	S	400	P	400CTCN
FR AE 54	FR-73-8245	WIVELL, CLARENCE	KEYSER-GARVER	1981	450	V	225	C	231GBRG
FR AE 55	FR-03-6224	C F STOUTER OIL CO	A C REIDER	1958	450	V	117	N	231GBRG
FR AE 56	FR-73-8095	MT ST MARYS COLLEGE	ROBERT CLINE	1980	700	S	700	U	377WVRN
FR AE 57	FR-73-3688	MT ST MARYS COLLEGE	L F EASTERDAY	1975	495	V	300	T	231GBRG
FR AE 58	FR-73-2668	MT ST MARYS COLLEGE	L F EASTERDAY	1975	495	V	300	T	231GBRG
FR AE 59	FR-73-8096	MT ST MARYS COLLEGE	ROBERT CLINE	1980	493	V	425	T	231GBRG
FR AE 60	FR-73-8105	MT ST MARYS COLLEGE	ROBERT CLINE	1980	483	V	475	U	231GBRG
FR AF 1	FR-00-6054	TOMS CR CHURCH	H & C WANTZ	1950	430	S	46	T	231GBRG
FR AF 2	FR-00-6437	VALENTINE, FRANK	H & C WANTZ	1950	445	H	50	H	231GBRG
FR AF 3	FR-00-6478	SIMMONS, DENNIS C	H & C WANTZ	1950	420	S	103	H,S	231GBRG
FR AF 4	FR-00-4267	STARNER, G A	C FAIR	1949	460	H	66	H	231GBRG
FR AF 5	FR-01-7602	SHEELEY, NORMAN	C FAIR	1955	445	H	135	H	231GBRG
FR AF 6	FR-00-8553	HICKMAN, JOHN W	C FAIR	1951	490	H	81	H	231GBRG
FR AF 7	FR-01-3997	FROCK, CARL JR	C FAIR	1953	490	H	146	H	231GBRG
FR AF 8	FR-01-0211	ROUTZHAN, WILLIAM F	W SHOWERS	1952	420	S	100	H,C	231GBRG
FR AF 9	FR-00-0115	SPRINGER, MILTON G	C L WANTZ	1945	415	F	67	H	231GBRG
FR AF 10	FR-00-7713	WIVELL, WILLIAM H	C L WANTZ	1951	445	H	91	H	231GBRG
FR AF 11	FR-01-0212	COPENHAVER, CHARLES	W SHOWERS	1952	450	S	55	H,S	231GBRG
FR AF 12	FR-01-5405	FROCK, ROLAND L	C FAIR	1954	445	S	98	H	231GBRG
FR AF 13	FR-02-1846	GLASS, PAUL C	MILLER	1956	400	U	109	S	231GBRG
FR AF 14	FR-00-5620	MCNAIR, SCOTT JR	H & C WANTZ	1950	430	S	72	H,S	231GBRG
FR AF 15	FR-01-3861	MCNAIR, H S	H & C WANTZ	1953	450	V	114	H,S	231GBRG
FR AF 16	FR-01-8379	SANDERS, REGIS R	C FAIR	1955	425	S	70	S	231GBRG
FR AF 17	--	SANDERS, REGIS R	--	--	425	S	63	H	231GBRG
FR AF 18	FR-00-6418	HAMPSON, ROBERT E	H & C WANTZ	1950	425	S	120	H	231GBRG
FR AF 19	FR-01-6612	BAUMGARDNER, RALPH	H E WANTZ	1954	390	S	123	I	231GBRG
FR AF 20	--	BAUMGARDNER, RALPH	--	--	390	S	110	H	231GBRG
FR AF 21	FR-72-0027	SHARRER, MARSHALL V	ROBERT CLINE	1971	445	S	170	H	231DIBS
FR AF 22	FR-72-0106	BOWNE, JAMES D	ROBERT CLINE	1971	445	S	95	H	231DIBS
FR AF 23	FR-71-0473	KLING, JACK M	A R KEYSER	1971	420	H	202	H	231GBRG
FR AF 24	FR-03-5425	CITY OF EMMITSBURG	A R KEYSER	1959	405	S	161	Z	231GBRG
FR AF 25	FR-72-0319	TOPPER, JAMES L	A R KEYSER	1971	465	S	302	H	231GBRG
FR AF 26	FR-73-5865	FRAZIER, CARL	C A CROMWELL	1978	490	S	200	H	231DIBS
FR AF 27	FR-73-7155	CITY OF EMMITSBURG	KEYSER-GARVER	1979	385	G	365	U	231GBRG
FR AF 28	FR-73-2704	--	ROBERT CLINE	1975	415	S	145	H	231GBRG
FR AF 29	FR-73-2705	HOKE, THOMAS	ROBERT CLINE	1975	420	S	145	H	231GBRG
FR AF 30	FR-73-3321	HOKE, JOHN T	ROBERT CLINE	1976	420	S	120	D	231GBRG
FR AF 31	FR-73-6160	BAKER, MARION	W REICHART	1978	448	F	200	H	231GBRG
FR AF 32	FR-73-8650	KIGER, JAMES	R K ARDINGER	1981	445	F	225	H	231GBRG
FR AF 33	FR-73-4363	KRAFT, LEE H	ROBERT CLINE	1977	450	S	280	H	231GBRG
FR AF 34	FR-73-3771	HAWK, FRED	KEYSER-GARVER	1976	400	S	125	H	231GBRG
FR AF 35	FR-73-6332	PERRY, RALPH	ROBERT CLINE	1978	430	H	125	H	231DIBS
FR AF 36	FR-73-5601	ELDER, ARTHUR	ROBERT CLINE	1977	430	V	200	C	231GBRG
FR AF 37	FR-73-5970	BUCH, CHARLES	C A CROMWELL	1978	510	S	150	C	231GBRG
FR AF 38	FR-03-9421	VFW POST 6658	A R KEYSER	1960	395	S	100	R	231DIBS
FR AF 39	--	--	--	--	425	F	38	U	231GBRG
FR AG 1	FR-00-5983	BROOKS, J M	R C STERNER	1950	395	H	62	H	231GBRG 231DIBS
FR AG 2	FR-00-4398	SHOCKLEY, PETER L	C FAIR	1949	445	F	135	H	231GBRG
FR AG 3	--	SHOCKLEY, PETER L	--	--	445	F	100	S	231GBRG
FR AG 4	FR-73-3802	RUNION, HENRY	ROBERT CLINE	1976	453	F	170	H	231GBRG
FR AG 5	FR-73-4293	CHAPMAN, ROY	ROBERT CLINE	1977	453	F	170	H	231GBRG
FR BC 1	FR-00-7635	SPADE, FLOYD	JACK HARLEY	1951	1130	S	44	U	400MTRL
FR BC 2	FR-00-2633	SPANGLER, RICHARD	JACK HARLEY	1951	1110	S	60	H	400MTRL
FR BC 3	FR-00-8781	KLINE, PAUL	JACK HARLEY	1951	1260	S	33	H	400MTRL
FR BC 4	FR-00-1212	LEATHERMAN, CHARLES	J M HOLTZMAN	1947	1105	S	47	H	400MTRL
FR BC 5	FR-00-6683	SPANGLER, RICHARD	IRA ROCK	--	1110	S	22	U	400MTRL
FR BC 6	FR-01-4123	SPADE, FLOYD	C R COWAN	1954	1120	S	95	H	400MTRL
FR BC 7	FR-01-9307	BEAR, JAMES A	C R COWAN	1955	1160	S	90	H	400MTRL
FR BC 8	FR-02-1610	GROSSNICKLE, ABE	E R SMITH	1955	1390	F	66	H	400MTRL
FR BC 9	FR-02-1510	FRUSHOUR, KENNETH	E R SMITH	1955	1320	F	42	H	400MTRL
FR BC 10	FR-00-8732	BROWN, EVANS	JACK HARLEY	1951	1600	V	54	H	400MTRL
FR BC 11	FR-00-8731	TOMS, O'DAY	JACK HARLEY	1951	1580	V	40	H	400MTRL
FR BC 12	FR-01-6647	MCAFEE, HUNTER	W E MARTIN	1954	1620	S	56	H	400MTRL
FR BC 13	FR-01-9846	MCAFEE, ROSEANN	E R SMITH	1955	1670	S	48	H	400MTRL
FR BC 14	--	EARLY, CYRUS	I A FOGEL	--	1455	H	80	H,S	400MTRL
FR BC 15	FR-02-5165	DELAUTER, PAUL	WELDO FUNT	1956	1680	S	32	H	400CTCN
FR BC 16	--	PRYOR, ALBERT L	--	1940	1310	S	69	H,S	400CTCN
FR BC 17	FR-73-4742	CARTEE, HILDA	ROBERT CLINE	1977	1200	S	125	H	400MTRL
FR BC 18	FR-73-5903	KEYSER, GENE R	ROBERT CLINE	1978	1320	S	125	H	400CTCN
FR BC 19	FR-73-5252	WARFIELD, BERNARD	ROBERT CLINE	1977	1355	S	175	H	400CTCN
FR BC 20	FR-73-3588	KLINE, ROY	ROBERT CLINE	1976	1405	S	250	H	400CTCN
FR BC 21	FR-73-6096	PRYOR, ALBERT L	ROBERT CLINE	1978	1440	S	200	H	400CTCN
FR BC 22	FR-73-2154	KLINE, MARTIN	KEYSER-GARVER	1974	1500	S	442	H	400CTCN
FR BC 23	FR-73-2374	KLINE, EUGENE	KEYSER-GARVER	1975	1510	S	205	H	400CTCN
FR BC 24	FR-73-1280	HESSONG, JAMES	ROBERT CLINE	1973	1520	H	140	H	400CTCN
FR BC 25	FR-73-8274	KLINE, EUGENE	ROBERT CLINE	1981	1480	S	250	H	400MTRL

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
11	6	X	15	R	06/20/1970	8.0	--	15	--	1	06/20/1970	--	FR AE 50
35	6	X	10	R	07/02/1962	40.0	--	10	--	8	07/02/1962	--	FR AE 51
33	6	X	45	R	10/01/1981	6.0	300	45	0.02	3	10/01/1981	Q	FR AE 52
91	6	X	6	R	06/18/1981	20.0	220	6	.09	8	06/18/1981	Q	FR AE 53
81	6	X	100	R	03/23/1981	10.0	200	100	.10	4	03/23/1981	--	FR AE 54
--	6	X	23	R	09/15/1958	10.0	105	23	.12	2	09/15/1958	--	FR AE 55
28	6	X	60	R	12/03/1980	20.0	700	60	.03	5	12/03/1980	--	FR AE 56
22	6	X	20	R	07/31/1975	55.0	300	20	.20	3	07/31/1975	--	FR AE 57
21	6	X	30	R	07/30/1975	55.0	300	30	.20	3	07/30/1975	--	FR AE 58
50	8	X	40	R	11/29/1980	400.0	425	40	1.04	5	11/29/1980	--	FR AE 59
47	8	X	40	R	12/09/1980	500.0	475	40	1.15	5	12/09/1980	--	FR AE 60
42	6	X	12	R	07/03/1950	--	46	12	--	.6	07/03/1950	--	FR AF 1
42	6	X	25	R	08/26/1950	.5	--	25	--	--	08/26/1950	--	FR AF 2
32	6	X	15	R	09/04/1950	--	--	--	--	--	--	--	FR AF 3
6	6	X	6.81	S	04/04/1955	40.0	6	2	10.00	1	07/21/1949	Q	FR AF 4
12	6	X	27	R	02/09/1955	3.0	130	27	.03	1	02/09/1955	--	FR AF 5
23	6	X	40	R	09/10/1951	1.0	81	40	.02	.2	09/10/1951	--	FR AF 6
12	6	X	23	R	09/12/1953	9.0	140	23	.08	2	09/12/1953	--	FR AF 7
7	6	X	15	R	06/06/1952	30.0	75	15	.50	1	06/06/1952	--	FR AF 8
4	6	X	7	R	10/24/1945	3.0	67	7	.05	.4	10/24/1945	--	FR AF 9
30	6	X	20	R	05/09/1951	5.0	91	20	.07	.5	05/09/1951	--	FR AF 10
6	6	X	8	R	05/28/1952	80.0	40	8	2.50	.5	05/28/1952	--	FR AF 11
9	6	X	11	R	06/09/1954	8.0	75	11	.13	.5	06/09/1954	--	FR AF 12
16	6	X	20	R	01/12/1956	7.0	25	20	1.40	2	01/12/1956	--	FR AF 13
8	6	X	17	R	04/20/1950	15.0	--	--	--	.5	--	--	FR AF 14
8	6	X	38	R	12/08/1953	--	114	38	--	.3	12/08/1953	--	FR AF 15
10	6	X	40	R	03/28/1955	7.0	65	40	.28	.3	03/28/1955	--	FR AF 16
--	36	--	35	E	06/21/1956	--	--	--	--	--	--	--	FR AF 17
6	6	X	16	R	08/10/1950	--	120	16	--	.3	08/10/1950	--	FR AF 18
10	6	X	57.73	S	10/24/1956	.5	123	60	.01	3	11/17/1954	--	FR AF 19
--	--	X	60	R	10/24/1956	--	--	--	--	--	--	--	FR AF 20
40	6	X	30	R	07/27/1971	10.0	170	30	.07	1	07/27/1971	--	FR AF 21
40	6	X	40	R	09/06/1971	100.0	95	40	1.82	1	09/06/1971	--	FR AF 22
20	6	X	30	R	04/26/1971	50.0	200	30	.29	1	04/26/1971	Q	FR AF 23
23	6	X	30	R	07/21/1959	5.0	97	30	.08	3	07/21/1959	--	FR AF 24
36	6	X	25	R	11/18/1971	8.0	--	25	--	--	11/18/1971	--	FR AF 25
20	6	X	30	R	05/30/1978	15.0	195	30	.09	1	05/30/1978	--	FR AF 26
39	6	X	--	R	08/29/1979	65.0	15	0	4.48	--	08/29/1979	--	FR AF 27
31	6	O	20	--	--	15.0	145	20	.12	1	06/17/1975	--	FR AF 28
31	6	O	20	R	06/17/1975	15.0	145	20	.12	1	06/17/1975	--	FR AF 29
32	6	X	30	R	02/25/1976	15.0	120	30	.17	1	02/26/1976	--	FR AF 30
19	6	X	30	R	07/13/1978	4.0	160	30	.03	6	07/13/1978	--	FR AF 31
20	6	X	40	R	09/01/1981	15.0	70	30	.50	3	09/01/1981	--	FR AF 32
21	6	O	39	R	04/13/1977	6.0	280	39	.03	1	04/13/1977	--	FR AF 33
41	6	O	12	R	07/27/1976	12.0	50	40	1.20	2	07/27/1976	--	FR AF 34
19	6	O	22	R	09/28/1978	20.0	125	22	.19	1	09/28/1978	--	FR AF 35
20	6	O	60	R	10/06/1977	14.0	200	60	.10	1	10/06/1977	--	FR AF 36
20	6	X	40	R	05/30/1978	10.0	145	40	.10	1	05/30/1978	--	FR AF 37
24	6	X	20	R	06/23/1960	1.0	--	20	--	2	06/30/1960	--	FR AF 38
--	--	--	4.46	S	06/11/1982	--	--	--	--	--	--	--	FR AF 39
12	6	X	25.30	S	03/20/1951	6.0	--	18	--	--	06/06/1950	--	FR AG 1
14	6	X	40	R	07/29/1949	12.0	85	40	.27	1.5	07/29/1949	Q	FR AG 2
--	--	--	22.70	S	09/12/1955	--	--	--	--	--	--	--	FR AG 3
19	6	X	55	R	08/23/1976	6.0	170	55	.05	1	08/23/1976	--	FR AG 4
20	6	X	40	R	04/13/1977	15.0	170	40	.12	1	04/13/1977	--	FR AG 5
9	6	X	17	R	04/30/1951	3.0	30	17	.13	--	04/30/1951	--	FR BC 1
33	6	X	21	R	04/20/1951	20.0	21	21	--	--	04/20/1951	Q	FR BC 2
12	6	X	23	R	10/04/1951	2.5	28	23	.50	--	10/04/1951	--	FR BC 3
12	6	X	28	R	02/25/1947	5.0	39	28	.46	1	02/25/1947	Q	FR BC 4
--	--	--	--	--	--	--	--	--	--	--	--	--	FR BC 5
33	6	X	71	R	09/15/1954	9.0	95	71	.38	--	09/15/1954	Q	FR BC 6
26	6	X	72	R	05/30/1955	4.5	90	72	.25	2	05/30/1955	--	FR BC 7
23	6	X	21.16	S	04/26/1956	2.0	40	20	.11	1	12/26/1955	--	FR BC 8
20	6	X	22	R	12/12/1955	10.0	30	22	1.25	1	12/12/1955	--	FR BC 9
45	6	X	30	R	09/26/1951	30.0	30	30	--	1	09/26/1951	--	FR BC 10
25	6	X	24	R	09/28/1951	30.0	24	24	--	1	09/28/1951	--	FR BC 11
46	6	X	32	R	11/10/1954	20.0	32	32	--	6	11/10/1954	--	FR BC 12
36	6	X	34	R	07/23/1955	6.0	40	34	1.00	1	07/23/1955	--	FR BC 13
13	6	X	35.49	S	09/14/1956	9.0	--	30	--	--	--	--	FR BC 14
20	6	X	1.67	S	11/06/1955	15.0	20	8	1.25	2	11/02/1956	--	FR BC 15
--	--	X	27.61	S	10/25/1956	--	--	--	--	--	--	Q	FR BC 16
53	6	X	48	R	08/01/1977	10.0	125	48	.13	1	08/01/1977	--	FR BC 17
52	6	X	8	R	06/24/1978	20.0	125	8	.17	1	06/24/1978	--	FR BC 18
59	6	X	24	R	11/10/1977	15.0	175	24	.10	1	11/10/1977	--	FR BC 19
21	6	X	34	R	05/11/1976	10.0	250	34	.05	1	05/11/1976	--	FR BC 20
55	6	X	45	R	07/01/1978	4.0	200	45	.02	1	07/01/1978	--	FR BC 21
17	6	X	75	R	08/21/1974	.5	125	75	.01	3	08/21/1974	--	FR BC 22
18	6	X	49	R	01/27/1975	4.0	60	49	.36	2	01/27/1975	--	FR BC 23
20	6	X	70	R	10/16/1973	25.0	140	70	.36	1	10/16/1973	--	FR BC 24
63	6	X	38	R	04/09/1981	4.0	250	38	.02	1	04/09/1981	--	FR BC 25

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR BC 26	FR-73-5086	WARRENFELTZ, WAYNE	ROBERT CLINE	1977	1480	S	225	H	400MTRL
FR BC 27	FR-73-0821	KLINE, HOMER W	ROBERT CLINE	1973	1365	S	220	H	400MTRL
FR BC 28	FR-73-3004	BESORE, CHARLES	ROBERT CLINE	1975	1332	H	375	H	400CTCN
FR BC 29	FR-73-7057	BUHRMAN, NELSON	ROBERT CLINE	1979	1270	H	400	H	400MTRL
FR BC 30	FR-73-1665	KLINE, DOROTHY M	J U HARRIS	1974	1250	H	100	H	400MTRL
FR BC 31	FR-73-7025	LEATHERMAN, THOMAS E	ROBERT CLINE	1979	1220	S	150	H	400MTRL
FR BC 32	FR-73-3541	GROSSNICKLE, WILLIAM	ROBERT CLINE	1976	1135	S	100	H	400MTRL
FR BC 33	FR-73-4941	TWIGG, RICHARD	C A CROMWELL	1977	1125	S	116	H	400MTRL
FR BC 34	FR-73-7677	WOLF, WOODROW	D WOODWARD	1980	1145	S	300	H	400MTRL
FR BC 35	FR-73-5034	SPADE, ALAN F	ROBERT CLINE	1977	1180	S	125	H	400MTRL
FR BC 36	FR-73-5195	ELDRIDGE, STERLING	ROBERT CLINE	1978	1180	H	175	H	400MTRL
FR BC 37	FR-73-7526	BRANDENBURG, NEVIN	ROBERT CLINE	1980	1160	S	200	H	400MTRL
FR BC 38	FR-73-4220	WINFIELD, DONALD	D WOODWARD	1976	1125	S	180	H	400MTRL
FR BC 39	FR-73-0566	POSTON, PAUL L	ROBERT CLINE	1973	1420	H	75	H	400MTRL
FR BC 40	FR-73-2655	SALLER, ANDREW J	ROBERT CLINE	1975	1438	H	100	H	400MTRL
FR BC 41	FR-73-4093	BATLIFF, MIKE	ROBERT CLINE	1976	1442	S	125	H	400MTRL
FR BC 42	FR-73-2950	TAMBURELLO, NICHOLAS	KEYSER-GARVER	1975	1445	H	200	H	400MTRL
FR BC 43	FR-73-1373	SAUCIER, DONALD	ROBERT CLINE	1973	1417	S	120	H	400CTCN
FR BC 44	FR-73-1969	MALLORY, HARRY	ROBERT CLINE	1974	1442	S	100	H	400MTRL
FR BC 45	FR-73-1233	WEST PATRICK ASSOC	KEYSER-GARVER	1973	1442	S	322	H	400MTRL
FR BC 46	FR-73-1188	WEST PATRICK ASSOC	KEYSER-GARVER	1973	1445	S	130	H	400MTRL
FR BC 47	FR-73-1232	WEST PATRICK ASSOC	KEYSER-GARVER	1973	1445	S	154	H	400MTRL
FR BC 48	FR-73-2536	KLINE, WILLIAM	ROBERT CLINE	1975	1445	S	100	H	400MTRL
FR BC 49	FR-73-1643	ENGLISH, SCOTT	J U HARRIS	1974	1430	S	151	H	400MTRL
FR BC 50	FR-73-1051	WRIGHT, BRUCE	ROBERT CLINE	1973	1432	S	170	H	400MTRL
FR BC 51	FR-73-1657	HENLEY, F L	J U HARRIS	1974	1430	S	126	H	400MTRL
FR BC 52	FR-73-0743	WRIGHT, BRAD	ROBERT CLINE	1973	1400	S	70	H	400MTRL
FR BC 53	FR-73-1281	BRICKLY, CLARENCE 0	ROBERT CLINE	1973	1405	S	115	H	400MTRL
FR BC 54	FR-73-3192	HESSONG, STEVEN	ROBERT CLINE	1975	1502	S	200	H	400MTRL
FR BC 55	FR-73-8223	FISHER, RALPH	ROBERT CLINE	1981	1480	H	175	H	400MTRL
FR BC 56	FR-73-7041	DOUBLETREE ENTR	ROBERT CLINE	1979	1465	H	150	H	400MTRL
FR BC 57	FR-73-4811	FOX, ROBERT	ROBERT CLINE	1977	1445	S	175	U	400MTRL
FR BC 58	FR-73-6478	KLINE, GEORGE	ROBERT CLINE	1978	1408	S	175	H	400CTCN
FR BC 59	FR-73-4215	CLINE, KENNETH	ROBERT CLINE	1977	1340	S	210	H	400MTRL
FR BC 60	FR-73-1624	BROWN, GERALD J	ROBERT CLINE	1974	1378	S	122	H	400CTCN
FR BC 61	FR-73-4894	NANCE, GLADYS	ROBERT CLINE	1977	1360	S	125	H	400MTRL
FR BC 62	FR-73-1960	BROWN, STANLEY	ROBERT CLINE	1974	1315	S	130	H	400MTRL
FR BC 63	FR-73-2093	JEFFERY, GLEN	ROBERT CLINE	1974	1400	S	75	H	400MTRL
FR BC 64	FR-73-6454	STOTTLEMYER, ANDREW	D WOODWARD	1978	1460	S	100	H	400CTCN
FR BC 65	FR-73-2905	CONNOLLY, JOHN	ROBERT CLINE	1975	1515	S	225	H	400CTCN
FR BC 66	FR-73-7905	BUTTERWORTH, M JOSEPH	ROBERT CLINE	1980	1540	S	80	H	400CTCN
FR BC 67	FR-73-4038	KIMMEL, CHARLES	ROBERT CLINE	1976	1570	S	75	H	400CTCN
FR BC 68	FR-73-1933	BROWN, HIRAM	ROBERT CLINE	1974	1580	S	85	H	400CTCN
FR BC 69	FR-73-5251	TEGETHOFF, RICHARD	ROBERT CLINE	1978	1650	S	225	H	400CTCN
FR BC 70	FR-73-8037	BROWN, BARRY	ROBERT CLINE	1981	1600	S	250	H	400CTCN
FR BC 71	FR-73-1509	ECCARD, CHARLES	J SHAFFER JR	1973	1305	S	150	H	400MTRL
FR BC 72	FR-73-5754	SNYDER, LLOYD	ROBERT CLINE	1978	1195	S	400	H	400CTCN
FR BC 73	FR-73-4260	ROCK, JOHN	JACK HARLEY	1976	1220	S	250	H	400CTCN
FR BC 75	FR-73-3074	HENLEY, FRED	ROBERT CLINE	1975	1350	S	120	H	400MTRL
FR BC 76	FR-73-2528	HENLEY, FRED	ROBERT CLINE	1975	1335	S	150	H	400MTRL
FR BC 77	FR-73-2961	HENLEY, FRED	ROBERT CLINE	1975	1325	S	125	H	400MTRL
FR BC 78	FR-73-8041	COVELL, MARK	D WOODWARD	1981	1245	S	150	H	400MTRL
FR BC 80	FR-73-8350	LEWIS, MARK	D WOODWARD	1981	1220	S	125	H	400MTRL
FR BC 81	FR-73-5463	LYDARD, DALE L	C A CROMWELL	1978	1405	H	75	H	400MTRL
FR BC 82	FR-73-3967	MARKERS, MARY	C A CROMWELL	1977	1485	S	75	H	400MTRL
FR BC 83	FR-73-6569	HARNE, MARY	ROBERT CLINE	1978	1480	H	84	H	400MTRL
FR BC 84	FR-73-1482	JAMISON, DALE	ROBERT CLINE	1974	1482	H	120	H	400MTRL
FR BC 85	FR-73-7033	DUNCAN, ALLEN	ROBERT CLINE	1979	1470	S	125	H	400MTRL
FR BC 86	FR-73-1435	LUCAS, CATHERINE	ROBERT CLINE	1973	1620	V	30	H	400MTRL
FR BC 87	FR-73-1434	HARNE, LEE G	ROBERT CLINE	1973	1580	S	95	H	400MTRL
FR BC 88	FR-73-7585	TOMS, WAYNE	D WOODWARD	1980	1737	S	100	H	400MTRL
FR BC 89	FR-73-0845	FISHER, RONALD	D WOODWARD	1973	1642	V	125	H	400MTRL
FR BC 90	FR-73-4281	TOMS, CHARLES E	KEYSER-GARVER	1977	1610	S	85	H	400MTRL
FR BC 91	FR-73-2676	GREEN, GARY	W H LAMBERSON	1975	1800	S	215	H	400CTCN
FR BC 92	FR-73-1617	MINNICK, LEONARD	C A CROMWELL	1974	1840	S	75	H	400CTCN
FR BC 93	FR-73-3605	CASE, CLIFFORD	ROBERT CLINE	1976	1800	S	200	H	400CTCN
FR BC 94	FR-73-8345	SCHILDT, STACEY	ROBERT CLINE	1981	1710	S	500	H	400CTCN
FR BC 95	FR-71-0089	AMERICAN LEGION	KEN SULLIVAN	1970	1560	S	162	R	400CTCN
FR BC 96	FR-65-0699	GARFIELD CHURCH	A R KEYSER	1965	1545	S	116	T	400MTRL
FR BC 97	FR-71-0448	MT BETHEL ME CHURCH	A R KEYSER	1971	1710	S	70	T	400MTRL
FR BD 1	--	TOWN OF THURMONT	--	--	630	V	--	U	377HRPR
FR BD 2	--	TOWN OF THURMONT	--	--	640	V	400	U	377HRPR
FR BD 5	--	CATOCTIN MOUNTAIN PARK	--	1936	1645	S	40	T	400MTRL
FR BD 6	FR-01-8989	CATOCTIN MOUNTAIN PARK	COLUMBIA P&W	1955	1750	H	230	T	400CTCN
FR BD 7	FR-02-1967	CATOCTIN MOUNTAIN PARK	E R SMITH	1956	1150	V	76	U	400CTCN
	FR-02-5349		KOHL BROS	1956			180		
FR BD 8	FR-02-5350	CATOCTIN MOUNTAIN PARK	KOHL BROS	1956	1160	V	127	H	400CTCN
FR BD 9	--	KENDALL, CLYDE	C KENDALL	1953	820	S	30	H	377WVRN
FR BD 11	FR-00-5395	HUYETT, MELVIN	JACK HARLEY	1950	600	S	43	H	377LUDN
FR BD 12	FR-00-6300	SKATES, GEORGE P	IRA ROCK	1950	1460	V	65	H	400MTRL
FR BD 13	--	WETZEL, ALICE	---	--	860	V	39	H	400CTCN

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
43	6	X	39	R	09/23/1977	4.0	225	39	0.02	1	09/23/1977	--	FR BC 26
29	6	X	30	R	05/04/1973	5.0	220	30	.03	1	05/04/1973	--	FR BC 27
23	6	X	12	R	10/15/1975	1.0	375	12	.0	1	10/15/1975	--	FR BC 28
35	6	X	48	R	08/03/1979	2.0	400	48	.01	1	08/03/1979	--	FR BC 29
26	6	X	25	R	02/21/1974	12.0	90	25	.19	1	02/21/1974	--	FR BC 30
20	6	X	40	R	06/30/1979	3.0	150	40	.03	1	06/30/1979	--	FR BC 31
31	6	X	25	R	05/11/1976	8.0	100	25	.11	1	05/11/1976	--	FR BC 32
36	6	X	30	R	08/17/1977	10.0	110	30	.13	1	08/17/1977	--	FR BC 33
28	6	X	50	R	06/11/1980	6.0	300	50	.02	1	06/11/1980	--	FR BC 34
43	6	X	41	R	09/23/1977	40.0	125	41	.48	1	09/23/1977	--	FR BC 35
28	6	X	33	R	04/19/1978	10.0	195	33	.07	1	04/19/1978	--	FR BC 36
40	6	X	16	R	03/18/1980	5.0	200	16	.03	1	03/18/1980	--	FR BC 37
44	6	X	25	R	11/04/1976	12.0	130	25	.11	1	11/04/1976	--	FR BC 38
20	6	X	22	R	03/30/1973	10.0	75	22	.19	1	03/30/1973	--	FR BC 39
23	6	X	15	R	07/01/1975	7.0	100	15	.08	1	07/01/1975	--	FR BC 40
43	6	X	27	R	12/10/1976	10.0	125	27	.10	1	12/10/1976	--	FR BC 41
33	6	X	45	R	09/09/1975	4.0	55	45	.40	2	09/09/1975	--	FR BC 42
20	6	X	21	R	10/23/1973	50.0	120	21	.51	1	10/23/1973	--	FR BC 43
37	6	X	45	R	06/29/1974	10.0	100	45	.18	1	06/29/1974	--	FR BC 44
18	6	X	60	R	10/30/1973	1.0	--	60	--	1	10/30/1973	--	FR BC 45
56	6	X	45	R	10/25/1973	10.0	--	45	--	1	10/25/1973	--	FR BC 46
41	6	X	42	R	10/25/1973	50.0	--	42	--	1	10/25/1973	--	FR BC 47
39	6	X	18	R	03/20/1975	10.0	100	18	.12	1	03/20/1975	--	FR BC 48
18	6	X	50	R	02/09/1974	8.0	--	50	--	1	02/09/1974	--	FR BC 49
20	6	X	30	R	07/25/1973	5.0	170	30	.04	1	07/25/1973	--	FR BC 50
18	6	X	50	R	02/08/1974	20.0	--	50	--	1	02/08/1974	--	FR BC 51
32	6	X	35	R	04/24/1973	50.0	70	35	1.43	1	04/24/1973	--	FR BC 52
22	6	X	30	R	09/11/1973	20.0	115	30	.24	1	09/11/1973	--	FR BC 53
20	6	X	20	R	12/12/1975	3.0	200	20	.02	1	12/12/1975	--	FR BC 54
41	6	X	55	R	05/06/1981	10.0	175	55	.08	1	05/06/1981	--	FR BC 55
33	6	X	30	R	06/30/1979	5.0	150	30	.04	1	06/30/1979	--	FR BC 56
40	6	X	15	R	07/15/1977	12.0	175	15	.08	1	07/15/1977	--	FR BC 57
41	6	X	60	R	11/24/1978	7.0	175	60	.06	1	11/24/1978	--	FR BC 58
29	6	X	25	R	07/14/1977	20.0	210	25	.11	1	07/14/1977	--	FR BC 59
30	6	X	20	R	02/26/1974	5.0	122	20	.05	1	02/26/1974	--	FR BC 60
56	6	X	25	R	08/20/1977	12.0	125	25	.12	1	08/20/1977	--	FR BC 61
39	6	X	6	R	07/01/1974	20.0	130	6	.16	1	07/01/1974	--	FR BC 62
33	6	X	15	R	09/04/1974	6.0	75	15	.10	1	09/04/1974	--	FR BC 63
35	6	X	30	R	10/12/1978	18.0	100	30	.26	2	10/12/1978	--	FR BC 64
17	6	X	35	R	11/01/1975	2.0	225	35	.01	1	11/01/1975	--	FR BC 65
55	6	X	46	R	10/08/1980	20.0	80	46	.59	1	10/08/1980	--	FR BC 66
19	6	X	28	R	12/10/1976	15.0	75	28	.32	1	12/10/1976	--	FR BC 67
29	6	X	12	R	06/15/1974	40.0	85	12	.55	1	06/15/1974	--	FR BC 68
47	6	X	20	R	04/29/1978	4.0	225	20	.02	1	04/29/1978	--	FR BC 69
41	6	X	22	R	01/29/1981	3.0	250	22	.01	1	01/29/1981	--	FR BC 70
17	6	X	24	R	12/08/1973	9.0	41	24	.53	3	12/08/1973	--	FR BC 71
20	6	X	48	R	04/19/1978	1.0	400	48	.0	1	04/19/1978	--	FR BC 72
20	6	X	10	R	12/03/1976	3.0	230	10	.01	2	12/03/1976	--	FR BC 73
37	6	X	17	R	10/15/1975	25.0	120	17	.24	1	10/15/1975	--	FR BC 75
46	6	X	10	R	03/20/1975	5.0	150	10	.04	1	03/20/1975	--	FR BC 76
29	6	X	20	R	10/15/1975	7.0	125	20	.07	1	10/15/1975	--	FR BC 77
34	6	X	20	R	04/28/1981	40.0	150	20	.31	2	04/28/1981	--	FR BC 78
21	6	X	15	R	04/28/1981	25.0	125	15	.23	2	04/28/1981	--	FR BC 80
30	6	X	28	R	04/14/1978	20.0	70	28	.48	1	04/14/1978	--	FR BC 81
39	6	X	10	R	05/03/1977	10.0	70	10	.17	2	05/03/1977	--	FR BC 82
81	6	X	61	R	12/01/1978	20.0	84	61	.87	1	12/01/1978	--	FR BC 83
42	6	X	35	R	02/22/1974	6.0	120	35	.07	1	02/22/1974	--	FR BC 84
87	6	X	31	R	07/09/1979	12.0	125	31	.13	1	07/09/1979	--	FR BC 85
28	6	X	10	R	10/24/1973	25.0	30	10	1.25	1	10/24/1973	--	FR BC 86
43	6	X	30	R	12/28/1973	10.0	95	30	.15	1	12/28/1973	--	FR BC 87
21	6	X	30	R	06/10/1980	12.0	100	30	.17	2	06/10/1980	--	FR BC 88
20	6	X	20	R	08/30/1973	7.0	60	20	.18	1	08/30/1973	--	FR BC 89
41	6	X	40	R	03/02/1977	10.0	50	40	1.00	2	03/02/1977	--	FR BC 90
24	6	X	25	R	06/04/1975	4.0	150	25	.03	1	06/04/1975	--	FR BC 91
40	6	X	14	R	02/14/1974	12.0	70	14	.21	2	02/14/1974	--	FR BC 92
53	6	X	34	R	08/23/1976	6.0	200	34	.04	1	08/25/1976	--	FR BC 93
32	6	X	70	R	05/18/1981	1.0	500	70	.0	1	05/18/1981	--	FR BC 94
62	6	X	30	R	08/28/1970	40.0	--	30	--	2	08/28/1970	--	FR BC 95
39	6	X	40	R	06/07/1965	9.0	--	40	--	1	06/07/1965	--	FR BC 96
35	6	X	45	R	04/27/1971	30.0	--	45	--	1	04/27/1971	--	FR BC 97
--	--	--	13.61	S	10/01/1946	20.0	--	--	--	--	01/01/1955	O	FR BD 1
--	--	--	20.35	S	10/01/1946	--	--	--	--	--	--	--	FR BD 2
--	--	--	20	R	08/01/1954	8.5	--	--	--	--	07/01/1954	--	FR BD 5
57	8	X	12	R	06/07/1955	25.0	38	12	.96	24	06/07/1955	Q	FR BD 6
42	6	X	.87	S	04/17/1956	3.6	168	0	.02	24	04/19/1956	O	FR BD 7
28	6	X	--	R	07/11/1956	24.0	105	--	.23	24	07/11/1956	--	FR BD 8
30	36	W	13.91	S	05/11/1956	--	--	--	--	--	--	Q	FR BD 9
16	6	X	5	R	03/11/1950	2.0	34	5	.07	--	03/11/1950	--	FR BD 11
43	6	X	25	R	08/03/1950	15.0	30	25	3.00	5	08/03/1950	--	FR BD 12
39	36	W	11.97	S	06/13/1956	--	--	--	--	--	--	--	FR BD 13

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR BD 14	FR-01-0809	DELPHEY, ERNEST	A R KEYSER	1952	500	S	44	H	110MNWS
FR BD 15	FR-00-3530	CATOCTIN FURNACE SCH	C A CROMWELL	1949	535	F	163	T	377HRPR
FR BD 16	FR-00-0555	HARNE, LORRAINE G	HARRY GREEN	1946	500	S	40	H	110MNWS
FR BD 17	FR-01-7865	LAMPSI, A	C A CROMWELL	1955	525	S	47	H	110MNWS
FR BD 18	FR-01-7962	MILLER, GEORGE	C A CROMWELL	1955	500	S	50	H	377FDCK
FR BD 19	FR-01-0482	DEVILBISS, ROBERT	JACK HARLEY	1952	450	S	38	H	231GBRG
FR BD 20	FR-00-7083	SWEENEY, PAUL	WADE CORUN	1949	480	S	48	H	377FDCK
FR BD 21	FR-00-1033	KELLY, W R	J M HOLTZMAN	1946	540	S	77	H	231GBRG
FR BD 22	FR-00-4660	EICHELBERGER, GEORGE M	A R KEYSER	1949	580	S	52	C	110MNWS
FR BD 23	FR-00-4603	EICHELBERGER, GEORGE M	A R KEYSER	1949	580	S	52	H	110MNWS
FR BD 24	FR-00-7043	EICHELBERGER, GEORGE M	A R KEYSER	1950	565	S	114	H	110MNWS
FR BD 25	FR-00-8556	HURLEY, ARNOLD	JACK HARLEY	1951	1510	S	27	H	400CTCN
FR BD 27	FR-02-5351	CATOCTIN MOUNTAIN PARK	KOHL BROS	1956	1810	H	144	T	400CTCN
FR BD 28	--	TOWN OF THURMONT	--	1929	800	V	1000	U	377WVRN
FR BD 29	--	TOWN OF THURMONT	--	--	540	V	400	U	377HRPR
FR BD 30	FR-03-1559	CAMP AIRY	KOHL BROS	1958	720	S	161	R	377HRPR
FR BD 31	--	CATOCTIN MOUNTAIN PARK	KOHL BROS	1958	1825	H	150	T	400CTCN
FR BD 32	--	CATOCTIN MOUNTAIN PARK	KOHL BROS	1958	1850	H	250	U	400CTCN
FR BD 33	--	CATOCTIN MOUNTAIN PARK	KOHL BROS	1958	1825	H	250	T	400CTCN
FR BD 34	FR-03-2795	CATOCTIN MOUNTAIN PARK	KOHL BROS	1959	935	V	230	H,T,R	400CTCN
FR BD 35	FR-03-9187	CATOCTIN MOUNTAIN PARK	A R KEYSER	1960	1510	S	250	P	400CTCN
FR BD 36	FR-03-9186	CATOCTIN MOUNTAIN PARK	A R KEYSER	1960	1510	S	250	P	400CTCN
FR BD 37	FR-05-0745	CATOCTIN MOUNTAIN PARK	SYDNOR P&W	1963	1525	T	350	T	400CTCN
FR BD 38	FR-05-0746	CATOCTIN MOUNTAIN PARK	SYDNOR P&W	1963	1525	T	450	T	400CTCN
FR BD 40	FR-66-0492	CATOCTIN MOUNTAIN PARK	YORK DRILLING	1966	1510	S	180	--	400CTCN
FR BD 41	FR-66-0489	CATOCTIN MOUNTAIN PARK	YORK DRILLING	1966	1510	S	160	--	400CTCN
FR BD 42	--	CATOCTIN MOUNTAIN PARK	YORK DRILLING	1966	1480	S	120	U	400MTRL
FR BD 43	FR-66-0490	CATOCTIN MOUNTAIN PARK	YORK DRILLING	1966	1620	S	120	--	400MTRL
FR BD 44	FR-66-0491	CATOCTIN MOUNTAIN PARK	YORK DRILLING	1966	1580	S	247	--	400CTCN
FR BD 45	FR-69-0274	SMITH, MARY E	ROBERT CLINE	1969	465	F	320	H	231GBRG
FR BD 46	FR-70-0206	SWEENEY, ELMER	ROBERT CLINE	1969	525	S	75	H	231GBRG
FR BD 47	FR-69-0114	HARNE, ROBERT	ROBERT CLINE	1968	455	F	370	H	231GBRG
FR BD 48	FR-69-0437	HURLEY, ELLIS	A R KEYSER	1969	510	S	115	H	231GBRG
FR BD 49	FR-71-0428	CATOCTIN MOUNTAIN PARK	A R KEYSER	1971	820	V	202	H	377WVRN
FR BD 50	FR-71-0582	RODGERS, CARRIE	ROBERT CLINE	1971	450	F	68	H	231GBRG
FR BD 51	FR-71-0573	SWEENEY, ELMER	ROBERT CLINE	1971	455	F	45	H	231GBRG
FR BD 52	FR-72-0200	FRALEY, JAMES R	A R KEYSER	1971	520	S	121	H	231GBRG
FR BD 53	FR-69-0503	BEALL, CHARLES	ROBERT CLINE	1971	490	S	167	H	231GBRG
FR BD 55	FR-73-1875	TOMS, JAMES	ROBERT CLINE	1974	1770	S	200	H	400CTCN
FR BD 56	FR-73-7957	SEISER, CHARLES O	ROBERT CLINE	1980	1755	S	275	H	400CTCN
FR BD 57	FR-73-7134	FUNKHOUSER, NICKOLAS	ROBERT CLINE	1979	1755	S	500	H	400CTCN
FR BD 58	FR-73-5319	CLEMM, DENNIS L	ROBERT CLINE	1977	1740	S	320	H	400CTCN
FR BD 59	FR-73-7002	HINKE, M	C A CROMWELL	1979	1700	S	140	H	400CTCN
FR BD 60	FR-73-8178	SEISS CONST CO	ROBERT CLINE	1981	1565	S	300	H	400CTCN
FR BD 61	FR-73-7684	HINCHCLIFFE, MICHAEL	ROBERT CLINE	1980	1595	S	500	H	400CTCN
FR BD 62	FR-73-4679	HURLEY, ARNOLD	ROBERT CLINE	1977	1480	S	100	H	400CTCN
FR BD 63	FR-73-4678	HURLEY, ARNOLD	ROBERT CLINE	1977	1490	S	355	H	400CTCN
FR BD 64	FR-73-3904	HURLEY, ARNOLD	ROBERT CLINE	1976	1455	S	75	H	400CTCN
FR BD 65	FR-73-7902	GARDENHOUR, CHARLES E	ROBERT CLINE	1980	1380	S	100	H	400CTCN
FR BD 66	FR-73-7227	BRANDENBURG, RAY JR	ROBERT CLINE	1979	1555	S	200	H	400CTCN
FR BD 67	FR-73-2913	BRANDENBURG, RAY SR	JOHN SHAFF	1975	1530	S	125	H	400CTCN
FR BD 68	FR-73-2324	HURLEY, CATHERINE	ROBERT CLINE	1974	1480	S	95	H	400MTRL
FR BD 69	FR-73-6301	HURLEY, DALE	W B QUYNN	1978	1470	V	75	H	400MTRL
FR BD 70	FR-73-3162	FOX, DENNIS	ROBERT CLINE	1976	1480	S	75	H	400MTRL
FR BD 71	FR-73-1497	FOX, DENNIS	ROBERT CLINE	1974	1480	S	70	U	400MTRL
FR BD 74	FR-73-0670	MANAHAN, ROBERT	ROBERT CLINE	1973	1345	S	70	H	400MTRL
FR BD 75	FR-73-6930	SEISS, GARY	ROBERT CLINE	1979	607	V	175	H	377HRPR
FR BD 76	FR-73-6192	SEISS, GARY	ROBERT CLINE	1978	612	S	175	H	377HRPR
FR BD 77	FR-73-7395	SEISS CONST CO	ROBERT CLINE	1980	590	S	425	H	377HRPR
FR BD 78	FR-73-6553	CLABAUGH, JOHN	ROBERT CLINE	1978	610	H	400	H	377HRPR
FR BD 79	FR-73-6193	SEISS, GARY	ROBERT CLINE	1978	620	S	330	H	377HRPR
FR BD 80	FR-73-6191	SEISS, GARY	ROBERT CLINE	1978	625	S	200	H	377HRPR
FR BD 81	FR-73-4020	MARTIN BUILDERS	RALPH MAYNE	1977	625	S	120	H	377HRPR
FR BD 82	FR-73-2886	VAHLE, CHARLES	ROBERT CLINE	1975	640	S	150	H	377HRPR
FR BD 83	FR-73-4040	RHODES, CLINTON	ROBERT CLINE	1976	645	S	350	H	377HRPR
FR BD 84	FR-73-6555	LONG, WILLIAM J	ROBERT CLINE	1979	640	S	105	H	377HRPR
FR BD 85	FR-73-2186	LONG, FRANK JR	ROBERT CLINE	1974	665	S	300	H	377HRPR
FR BD 86	FR-73-7763	SEISS CONST CO	ROBERT CLINE	1980	625	S	126	H	377HRPR
FR BD 87	FR-73-7779	SEISS CONST CO	ROBERT CLINE	1980	630	S	300	H	377HRPR
FR BD 88	FR-73-7279	SEISS CONST CO	ROBERT CLINE	1979	635	H	175	H	377HRPR
FR BD 89	FR-73-8030	GERNARD, DAVID E	KEYSER-GARVER	1980	521	S	400	H	377FDCK
FR BD 90	FR-73-1356	FUSS, JAMES	L F EASTERDAY	1975	487	S	45	H	110MNWS
FR BD 91	FR-73-6843	SCRUTON, RALPH	ROBERT CLINE	1979	445	F	140	H	231GBRG
FR BD 92	FR-73-6488	LEAMAN, CHARLOTTE L	KEYSER-GARVER	1978	520	S	185	H	231GBRG
FR BD 93	FR-73-1053	SCHROCK, JAMES	ROBERT CLINE	1973	525	S	173	H	231GBRG
FR BD 94	FR-73-7216	BLUE MTN PARTNERSHIP	ROY HARLEY	1979	542	V	200	N	231GBRG
FR BD 95	FR-73-8549	CATOCTIN UN METH CH	ROBERT CLINE	1981	530	V	250	T	231GBRG
FR BD 96	--	CUNNINGHAM FALLS ST PK	--	--	1150	S	189	U	400CTCN
FR BD 97	FR-03-1047	CUNNINGHAM FALLS ST PK	A R KEYSER	1958	1083	S	115	H	400CTCN
FR BD 98	FR-72-0438	CUNNINGHAM FALLS ST PK	ROBERT CLINE	1972	1075	S	100	H	400CTCN

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
39	6	X	15	R	07/22/1952	10.0	30	15	0.67	1	07/22/1952	--	FR BD 14
150	6	X	6	R	01/06/1949	4.0	163	6	.03	1	01/06/1949	--	FR BD 15
10	6	X	18	R	09/30/1946	6.0	--	18	--	1	09/30/1946	--	FR BD 16
39	6	X	15	R	02/16/1955	15.0	15	15	--	1.5	02/16/1955	--	FR BD 17
43	6	X	15	R	02/18/1955	10.0	18	15	3.33	1	02/18/1955	--	FR BD 18
22	6	X	23	R	07/03/1952	10.0	28	23	2.00	--	07/03/1952	--	FR BD 19
33	6	X	16	R	10/18/1949	10.0	--	16	--	.5	10/18/1949	--	FR BD 20
36	6	X	22	R	12/19/1946	10.0	--	22	--	--	12/19/1946	--	FR BD 21
36	6	X	20	R	08/12/1949	15.0	30	20	1.50	1	08/12/1949	--	FR BD 22
36	6	X	25	R	08/01/1949	5.0	30	25	1.00	.5	08/01/1949	--	FR BD 23
8	6	X	50	R	11/13/1950	2.0	100	50	.04	.5	11/13/1950	--	FR BD 24
22	6	X	10	R	09/01/1951	8.0	--	10	--	1	09/01/1951	--	FR BD 25
11	6	X	10	R	11/20/1956	7.0	126	10	.06	24	11/20/1956	--	FR BD 27
--	--	--	--	--	--	--	--	--	--	--	--	--	FR BD 28
--	--	X	--	--	--	--	--	--	--	--	--	--	FR BD 29
62	6	X	13.45	S	07/28/1958	103.0	31	13	5.72	24	07/29/1958	--	FR BD 30
24	6	X	6	R	1958	22.0	140	6	.16	24	1958	--	FR BD 31
32	6	X	20	R	08/06/1958	5.0	--	20	--	--	08/06/1958	--	FR BD 32
31	6	X	85	R	10/30/1958	50.0	199	85	.44	--	10/30/1958	--	FR BD 33
18	6	X	5	R	02/05/1959	32.0	200	5	.16	24	02/05/1959	--	FR BD 34
66	8	X	--	--	--	33.9	--	--	--	12	06/09/1960	--	FR BD 35
59	8	X	1	R	06/09/1960	63.0	--	1	--	12	06/09/1960	--	FR BD 36
54	6	X	51	R	05/07/1963	23.0	--	51	--	8	05/07/1963	--	FR BD 37
86	6	X	50	R	05/21/1963	23.0	--	50	--	8	05/21/1963	--	FR BD 38
76	6	X	58.34	S	03/09/1966	40.0	88	58	1.38	24	03/17/1966	G,Q	FR BD 40
46	6	X	54.23	S	03/22/1966	33.0	--	54	.83	24	--	G,Q	FR BD 41
--	--	X	9	R	03/18/1966	26.0	--	9	--	2	03/18/1966	--	FR BD 42
27	6	X	27.11	S	03/30/1966	74.0	--	27	2.64	24	03/31/1966	G,Q	FR BD 43
46	6	X	20.41	S	05/16/1966	8.5	--	20	--	24	05/16/1966	G,Q	FR BD 44
52	6	X	40	R	03/21/1969	3.0	320	40	.01	1	03/21/1969	--	FR BD 45
72	5	X	35	R	12/18/1969	25.0	75	35	.63	1	12/18/1969	--	FR BD 46
98	6	X	40	R	09/30/1968	1.0	370	40	.0	1	09/30/1968	--	FR BD 47
81	6	X	30	R	07/31/1969	12.0	--	30	--	1	07/31/1969	--	FR BD 48
43	6	X	9.68	S	04/05/1971	19.0	22	10	1.50	3.2	04/05/1971	G	FR BD 49
63	5	X	22	R	06/12/1971	50.0	68	22	1.09	1	06/12/1971	--	FR BD 50
40	6	X	12	R	06/11/1971	50.0	45	12	1.52	1	06/11/1971	--	FR BD 51
115	6	X	48	R	10/08/1971	15.0	--	48	--	1	10/08/1971	--	FR BD 52
118	6	X	30	R	04/12/1971	12.0	167	30	.09	--	04/12/1971	--	FR BD 53
22	6	X	40	R	06/08/1974	2.0	200	40	.01	1	06/08/1974	--	FR BD 55
28	6	X	55	R	10/09/1980	4.0	275	55	.02	1	10/09/1980	--	FR BD 56
41	6	X	28	R	08/17/1979	1.0	500	28	.0	1	08/17/1979	--	FR BD 57
21	6	X	62	R	12/17/1977	1.0	320	62	.0	1	12/17/1977	--	FR BD 58
22	6	X	25	R	06/25/1979	5.0	135	25	.05	6	06/25/1979	--	FR BD 59
20	6	X	30	R	04/21/1981	2.0	300	30	.01	1	04/21/1981	--	FR BD 60
19	6	X	40	R	06/26/1980	1.0	500	40	.0	1	06/26/1980	--	FR BD 61
20	6	X	60	R	07/14/1977	8.0	100	60	.20	1	07/14/1977	--	FR BD 62
20	6	X	75	R	07/14/1977	8.0	355	75	.03	1	07/14/1977	--	FR BD 63
51	6	X	45	R	08/31/1976	20.0	75	50	.80	1	08/31/1976	--	FR BD 64
39	6	X	38	R	10/08/1980	20.0	100	38	.32	1	10/08/1980	--	FR BD 65
41	6	X	65	R	10/24/1979	3.0	200	65	.02	1	10/24/1979	--	FR BD 66
20	6	X	26	R	08/24/1975	10.0	51	26	.40	3	08/24/1975	--	FR BD 67
44	6	X	29	R	11/23/1974	15.0	95	29	.23	1	11/23/1974	--	FR BD 68
28	6	X	14	R	09/15/1978	30.0	70	14	.54	2	09/15/1978	--	FR BD 69
64	6	X	15	R	04/22/1976	15.0	75	15	.25	1	04/22/1976	--	FR BD 70
40	6	X	20	R	02/28/1974	20.0	70	20	.40	1	02/28/1974	--	FR BD 71
19	6	X	30	R	05/09/1973	30.0	70	30	.75	1	05/09/1973	--	FR BD 74
66	6	X	10	R	07/09/1979	10.0	175	10	.06	1	07/09/1979	--	FR BD 75
63	6	X	10	R	08/19/1978	15.0	175	10	.09	1	08/19/1978	--	FR BD 76
64	6	X	--	R	01/21/1980	--	--	--	--	--	--	--	FR BD 77
40	6	X	45	R	12/15/1978	2.0	400	45	.01	1	12/15/1978	--	FR BD 78
41	6	X	8	R	08/19/1978	4.0	330	8	.01	1	08/19/1978	--	FR BD 79
63	6	X	14	R	08/19/1978	20.0	200	14	.11	1	08/19/1978	--	FR BD 80
44	6	X	40	R	02/15/1977	10.0	120	40	.13	2	02/15/1977	--	FR BD 81
70	6	X	25	R	09/13/1975	5.0	150	25	.04	1	09/13/1975	--	FR BD 82
71	6	X	20	R	11/17/1976	6.0	350	20	.02	1	11/17/1976	--	FR BD 83
80	6	X	6	R	03/08/1979	25.0	105	6	.25	1	03/08/1979	--	FR BD 84
88	6	X	25	R	09/25/1974	3.0	300	25	.01	1	09/25/1974	--	FR BD 85
119	6	X	55	R	08/16/1980	15.0	126	55	.21	1	08/16/1980	--	FR BD 86
63	6	X	60	R	08/16/1980	3.0	300	60	.01	1	08/16/1980	--	FR BD 87
41	6	X	52	R	10/24/1979	15.0	175	52	.12	1	10/24/1979	--	FR BD 88
193	6	X	40	R	11/19/1980	2.0	380	40	.01	4	11/19/1980	--	FR BD 89
43	6	X	30	R	10/17/1975	5.0	45	30	.33	1	10/17/1975	--	FR BD 90
70	6	X	20	R	04/30/1979	75.0	140	20	.63	1	04/30/1979	--	FR BD 91
114	6	X	75	R	11/08/1978	20.0	175	75	.20	8	11/08/1978	--	FR BD 92
148	6	X	80	R	08/20/1973	25.0	173	80	.27	1	08/20/1973	--	FR BD 93
95	6	X	70	R	09/30/1979	5.0	140	70	.07	3	09/30/1979	--	FR BD 94
209	6	X	80	R	07/31/1981	8.0	250	80	.05	1	07/31/1981	--	FR BD 95
--	--	--	13.70	S	04/06/1982	--	--	--	--	--	--	--	FR BD 96
77	6	X	30	R	06/02/1958	20.0	50	30	1.00	3	06/02/1958	--	FR BD 97
74	6	X	8	R	03/30/1972	7.0	100	8	.08	--	03/30/1972	--	FR BD 98

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR BD 99	FR-02-7361	CUNNINGHAM FALLS ST PK	ROBERT CLINE	1957	600	S	175	H	231GBRG
FR BD 100	FR-04-3754	CUNNINGHAM FALLS ST PK	A R KEYSER	1962	650	S	308	H	377HRPR
FR BD 101	FR-04-3755	CUNNINGHAM FALLS ST PK	A R KEYSER	1961	630	S	50	U	377HRPR
FR BD 102	FR-04-2286	CAMP AIRY	W MILLER	1961	710	S	100	T	377HRPR
FR BD 103	--	IRONS, GORDON	--	1938	1505	S	100	R	400CTCN
FR BD 104	FR-73-3357	IRONS, GORDON	ROBERT CLINE	1976	1560	S	200	Z	400CTCN
FR BD 105	--	HART, JOHN	--	--	1485	S	85	H	400MTRL
FR BD 109	--	CATOCTIN MOUNTAIN PARK	NATL PK SERV	--	1410	S	10	U	400MTRL
FR BD 111	FR-81-1264	U S GEOLOGICAL SURVEY	KEYSER-GARVER	1983	1505	S	263	U	400MTRL
FR BD 112	FR-81-1263	U S GEOLOGICAL SURVEY	KEYSER-GARVER	1983	1505	S	105	U	400MTRL
FR BD 113	FR-81-1265	U S GEOLOGICAL SURVEY	KEYSER-GARVER	1983	1505	S	80	U	400MTRL
FR BD 114	FR-81-1284	U S GEOLOGICAL SURVEY	KEYSER-GARVER	1983	1488	S	145	U	400MTRL
FR BE 1	--	TOWN OF THURMONT	--	1936	510	F	192	P	377FDCK
FR BE 2	--	U S ARMY	U S ARMY	1955	455	V	112	U	377HRPR
FR BE 3	--	U S ARMY	U S ARMY	1955	450	S	151	U	377FDCK
FR BE 6	FR-01-0973	GRABLE, MERHLE	WELDO FUNT	1952	518	H	60	H	377FDCK
FR BE 7	FR-00-7349	OGLE, ROBERT	A R KEYSER	1951	402	H	136	H	231GBRG
FR BE 8	FR-00-0902	HILLSIDE TURKEY FARM	C L WANTZ	1946	415	S	191	H,S	231GBRG
FR BE 9	FR-00-6276	SAYLER, DAVID	A R KEYSER	1950	352	S	126	H	231GBRG
FR BE 10	FR-00-1071	FAMOUS, MARY E	H E WANTZ	1946	340	H	87	S	231NOXF
FR BE 11	FR-01-0906	PORTNER	WADE CORUN	1952	405	W	113	H	231GBRG
FR BE 12	FR-01-6416	DIETZ, FLORENCE	DAN TYLER	1954	500	F	45	H	377FDCK
FR BE 13	FR-01-5210	DERWART, ANDREW	JOHN SHAFF	1955	580	S	109	H	377HRPR
FR BE 14	FR-01-4247	MYERS, CHARLES F	H & C WANTZ	1954	620	V	117	H	377HRPR
FR BE 15	FR-00-0876	SHARER, CHARLES F	H & C WANTZ	1946	540	V	100	S	377HRPR
	FR-01-7363			1955					
FR BE 16	FR-00-8736	FOREST, CHARLES F	A R KEYSER	1951	570	V	45	H	377HRPR
FR BE 17	FR-01-3197	PORTNER, LEE D	R HARRIS	1953	545	S	33	H	377HRPR
FR BE 18	FR-01-1772	STULL, CLIFFORD	JACK HARLEY	1953	620	H	100	H	377HRPR
FR BE 19	FR-01-0810	SMITH, CHARLES	A R KEYSER	1952	670	U	--	H	377LUDN
FR BE 20	FR-01-8544	SMITH, CHARLES	WELDO FUNT	1955	750	S	50	N	377LUDN
FR BE 21	FR-02-3119	CHRIST, VICTOR	W MILLER	1956	450	V	75	H	231GBRG
FR BE 22	FR-02-1659	KEEPERS, RAYMOND	P A LEGORE	1910	475	V	65	H	231GBRG
FR BE 23	--	KEEPERS, RAYMOND	--	--	475	V	22	U	231GBRG
FR BE 24	FR-00-8707	WILDASIN, HAROLD M	H L WANTZ	1951	490	F	130	H	231GBRG
FR BE 25	FR-00-0974	WAYNANT, RICHARD E	C L WANTZ	1946	490	F	62	H	231GBRG
FR BE 26	FR-00-0913	SOVOCOOL, LESLIE	H E WANTZ	1946	440	F	94	H	231GBRG
FR BE 27	FR-01-2813	BLAIR, CLIFFORD	JACK HARLEY	1953	480	F	107	H	231GBRG
FR BE 28	FR-01-0506	WOOD, EUGENE	JACK HARLEY	1952	480	F	100	H	231GBRG
FR BE 29	FR-00-1021	SHARER, HARRY L	H & C WANTZ	1946	490	V	82	H	110MNWS
FR BE 30	FR-00-0956	FARMERS SUPPLY & SERV	C L WANTZ	1946	450	F	88	U	231GBRG
FR BE 31	--	GRACEHAM POST OFFICE	--	--	440	S	160	H	231GBRG
FR BE 32	--	HOMERICK	--	--	455	V	24	U	231GBRG
FR BE 33	--	KASS, RALPH E	--	1938	445	F	81	H,S	231GBRG
FR BE 34	--	CORNET, J E	--	--	390	S	100	H	231GBRG
FR BE 35	FR-04-0827	TOWN OF THURMONT	KOHL BROS	1960	495	F	303	U	377FDCK
									231GBRG
FR BE 36	FR-67-0623	MILLER, HENRY	A R KEYSER	1967	455	F	49	H	110MNWS
FR BE 37	FR-68-0349	WRIGHT, DAVID	A R KEYSER	1968	460	F	307	U	377FDCK
FR BE 38	FR-69-0518	TOWN OF THURMONT	A R KEYSER	1969	470	V	105	P	231GBRG
FR BE 39	FR-72-0327	TOWN OF THURMONT	A R KEYSER	1971	470	V	294	P	231GBRG
FR BE 40	FR-71-0513	MOSER, RUSSELL L	ROBERT CLINE	1971	440	H	210	H	231GBRG
FR BE 41	FR-71-0569	GIBSON, HARRY	A R KEYSER	1971	455	S	222	H	231GBRG
FR BE 42	FR-72-0090	CARBAUGH, JAMES	WELDO FUNT	1971	490	H	80	H	231GBRG
FR BE 43	FR-72-0241	LATE, HAROLD	ROBERT CLINE	1971	410	H	245	H	231GBRG
FR BE 44	FR-72-0105	SHARRER, DALE	ROBERT CLINE	1971	450	H	195	H	231GBRG
FR BE 45	FR-72-0311	FREE, MORRIS F	ROBERT CLINE	1971	380	S	170	H	231GBRG
FR BE 46	FR-73-0087	SEISS, THOMAS F	ROBERT CLINE	1972	460	S	170	H	231GBRG
FR BE 47	FR-73-0039	WASTLER, CHARLES	ROBERT CLINE	1972	460	S	170	H	231GBRG
FR BE 48	FR-71-0177	MORNINGSTAR, WILLIAM	ROBERT CLINE	1970	450	H	125	H	231GBRG
FR BE 49	--	YINGLING, PAUL	--	1950	490	H	--	H	231GBRG
FR BE 50	--	GEARHART, C V	--	1945	490	H	--	H	231GBRG
FR BE 51	--	MEIXNER, ALOIS	--	--	490	H	--	H	231GBRG
FR BE 52	FR-01-6703	NULL, MABLE	R HARRIS	1954	490	H	102	H	231GBRG
FR BE 53	FR-02-9011	TROUT, ALTON	A R KEYSER	1958	490	H	109	H	231GBRG
FR BE 54	--	LONG, M B	--	--	480	S	--	H	231GBRG
FR BE 55	--	SPRINGER, M V	--	--	480	S	35	H	231GBRG
FR BE 56	--	BOLLER, C H	--	--	470	S	34	H	231GBRG
FR BE 57	--	MILLER, RONNIE	--	--	460	V	100	H	231GBRG
FR BE 58	FR-02-8868	MORAVIAN CHURCH	A R KEYSER	1957	440	S	124	H	231GBRG
FR BE 59	FR-02-4989	BENTZ, JAMES	A R KEYSER	1956	460	S	100	H	231GBRG
FR BE 61	FR-71-0279	LONG, HAROLD L	ROBERT CLINE	1970	430	H	225	S,H	231GBRG
FR BE 62	FR-04-2001	THOMAS,BENNETT&HUNTER	KOHL BROS	1961	460	V	120	U	231GBRG
FR BE 63	FR-70-0419	TOWN OF THURMONT	KEN SULLIVAN	1970	470	V	102	U	231GBRG
FR BE 64	FR-03-9644	MANAHAN, DONALD	WELDO FUNT	1960	490	V	94	N	377FDCK
FR BE 65	FR-73-0549	GLADE V SEVENTH DAY CH	ROBERT CLINE	1973	518	S	170	T	377HRPR
FR BE 66	FR-73-2582	OTT, LAWRENCE	KEYSER-GARVER	1975	572	V	220	H	377FDCK
FR BE 67	FR-73-8471	MATHEWS, MARSHALL	ROBERT CLINE	1981	458	V	100	H	231GBRG
FR BE 68	FR-73-6221	GROVE, JOE	C A CROMWELL	1978	455	S	350	H	231GBRG
FR BE 69	FR-73-8212	SMITH, ALLEN	ROBERT CLINE	1981	503	V	68	H	231GBRG
FR BE 70	FR-73-6809	LAWLER, THOMAS	ROBERT CLINE	1979	510	S	175	H	231GBRG
FR BE 71	FR-73-2174	LAWLER, CARROLL	ROBERT CLINE	1974	495	S	275	H	231GBRG

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
91	6	X	60	R	09/27/1957	7.0	125	60	0.11	3	09/27/1957	--	FR BD 99
43	6	X	26	R	01/23/1962	20.0	69	26	.47	8	01/23/1962	--	FR BD 100
50	6	X	10	R	07/01/1961	25.0	--	10	--	4	07/01/1961	--	FR BD 101
40	6	X	25	R	04/03/1961	20.0	80	25	.36	1	04/03/1961	--	FR BD 102
--	6	X	15	R	01/01/1982	--	--	--	--	--	--	--	FR BD 103
--	--	--	--	--	--	--	--	--	--	--	--	--	FR BD 104
--	--	--	27.87	S	04/07/1983	--	--	--	--	--	--	Q	FR BD 105
10	4	O	1.88	S	07/05/1983	--	--	--	--	--	--	Q	FR BD 109
137	6	X	36.57	S	11/03/1983	65.0	73	35	1.73	3.3	12/01/1983	--	FR BD 111
82	6	X	33.81	S	11/21/1983	--	--	--	--	--	--	--	FR BD 112
56	6	X	20.98	S	12/29/1983	--	--	--	--	--	--	--	FR BD 113
84	6	X	4.50	S	12/01/1983	60.0	57	4	1.14	5	12/01/1983	--	FR BD 114
73	6	X	10	R	08/01/1954	150.0	--	10	--	--	08/01/1954	--	FR BE 1
19	7	X	--	--	--	--	--	--	--	--	--	C	FR BE 2
51	8	X	--	R	06/14/1955	155.0	44	0	3.49	--	06/13/1955	Q,C	FR BE 3
58	6	X	12	R	09/26/1952	5.0	50	12	.13	1	09/26/1952	--	FR BE 6
--	--	X	50	R	02/02/1951	5.0	100	50	.10	1	02/02/1951	--	FR BE 7
52	6	X	21	R	11/07/1946	20.0	42	21	.95	2.5	11/07/1946	--	FR BE 8
6	6	X	50	R	09/24/1950	6.0	90	50	.15	1	09/24/1950	--	FR BE 9
8	6	X	20	R	02/11/1946	6.0	87	20	.09	.5	02/11/1946	--	FR BE 10
6	6	X	28	R	11/06/1952	8.0	--	28	--	.5	11/06/1952	Q	FR BE 11
41	6	X	10	R	09/13/1954	10.0	32	10	.46	--	09/13/1954	--	FR BE 12
30	6	X	10	R	06/20/1955	10.0	20	10	1.00	--	06/20/1955	--	FR BE 13
90	6	X	18	R	02/25/1954	5.0	--	18	--	--	02/25/1954	--	FR BE 14
64	6	X	48	R	10/14/1946	25.0	69	67	12.50	.5	01/01/1955	--	FR BE 15
24	6	X	10	R	10/10/1951	4.0	34	10	.17	--	10/10/1951	--	FR BE 16
27	6	X	15	R	08/27/1953	4.0	25	15	.40	--	08/27/1953	--	FR BE 17
12	6	X	33	R	02/28/1953	15.0	39	33	2.50	--	02/28/1953	--	FR BE 18
69	6	X	20	R	08/20/1952	20.0	30	20	2.00	2	08/20/1952	--	FR BE 19
50	6	O	15	R	04/06/1955	6.0	42	15	.22	--	04/06/1955	--	FR BE 20
11	6	X	12	R	05/12/1956	--	--	--	--	--	--	--	FR BE 21
21	6	X	18	R	11/14/1955	20.0	40	18	.91	--	11/14/1955	--	FR BE 22
22	36	W	18.63	S	06/15/1956	--	--	--	--	--	--	--	FR BE 23
26	6	X	36	R	10/01/1951	2.0	--	36	--	.5	10/01/1951	--	FR BE 24
24	6	X	18	R	12/07/1946	--	--	--	--	--	--	--	FR BE 25
9	6	X	21	R	11/18/1946	2.2	94	21	.03	.3	11/18/1946	--	FR BE 26
12	6	X	15	R	07/15/1953	4.0	100	15	.05	--	07/15/1953	--	FR BE 27
12	6	X	31	R	07/16/1952	3.0	90	31	.05	--	07/16/1952	--	FR BE 28
74	6	X	18	R	12/23/1946	6.0	--	18	--	.5	12/23/1946	--	FR BE 29
2	6	X	16	R	11/26/1946	4.0	88	16	.06	.3	11/26/1946	--	FR BE 30
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 31
24	30	W	7.40	S	05/04/1956	--	--	--	--	--	--	--	FR BE 32
--	6	X	48.36	S	10/24/1956	--	--	--	--	--	--	--	FR BE 33
--	6	X	70	R	10/24/1956	--	--	--	--	--	--	--	FR BE 34
135	6	S	25	R	12/27/1960	350.0	72	25	7.00	22	12/27/1960	--	FR BE 35
49	6	O	13.60	S	09/14/1967	20.0	--	15	--	1	07/03/1967	--	FR BE 36
35	6	X	8.21	S	10/03/1969	2.0	--	--	--	1	04/29/1968	--	FR BE 37
29	8	X	5	R	07/16/1969	488.0	47	5	11.62	13	07/16/1969	A	FR BE 38
70	8	X	3.26	S	12/28/1971	830.0	55	5	16.60	48	12/21/1971	G,Q	FR BE 39
70	6	X	65	R	05/10/1971	50.0	210	65	.35	1	05/10/1971	Q	FR BE 40
41	6	X	40	R	06/21/1971	20.0	--	40	--	1	06/21/1971	--	FR BE 41
20	6	X	8	R	08/12/1971	20.0	24	8	1.25	2	08/12/1971	--	FR BE 42
45	6	X	25	R	10/12/1971	8.0	245	25	.04	1	10/12/1971	--	FR BE 43
20	6	X	20	R	08/19/1971	10.0	195	20	.06	1	08/19/1971	--	FR BE 44
20	6	X	60	R	11/20/1971	5.0	170	60	.05	1	11/20/1971	--	FR BE 45
42	6	X	45	R	08/16/1972	12.0	170	45	.10	1	08/16/1972	--	FR BE 46
42	6	X	35	R	07/27/1972	3.0	170	35	.02	1	07/27/1972	--	FR BE 47
40	6	X	40	R	10/15/1970	25.0	125	40	.29	1	10/15/1970	Q	FR BE 48
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 49
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 50
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 51
--	6	X	40	R	11/02/1954	--	--	--	--	--	--	--	FR BE 52
21	6	X	30	R	01/01/1958	8.0	50	30	.40	3	01/01/1958	--	FR BE 53
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 54
35	48	W	30	R	--	--	--	--	--	--	--	--	FR BE 55
34	48	W	30	--	--	--	--	--	--	--	--	--	FR BE 56
--	6	X	--	--	--	--	--	--	--	--	--	--	FR BE 57
20	6	X	40	R	10/05/1957	10.0	65	40	.40	2	10/05/1957	--	FR BE 58
13	6	X	10	R	10/05/1956	3.0	100	10	.03	1	10/05/1956	Q	FR BE 59
40	6	X	40	R	12/08/1970	25.0	225	40	.14	1	12/08/1970	--	FR BE 61
21	6	X	10	R	03/20/1961	25.0	80	10	.36	1	03/20/1961	--	FR BE 62
17	6	X	45	R	05/07/1970	5.0	--	45	--	1	05/07/1970	--	FR BE 63
55	6	X	8	R	07/19/1960	28.0	51	8	.65	--	07/19/1960	--	FR BE 64
84	6	X	40	R	02/27/1973	10.0	170	40	.08	1	02/27/1973	--	FR BE 65
41	6	X	18	R	04/11/1975	13.5	28	18	1.35	2	04/11/1975	--	FR BE 66
37	6	X	12	R	06/12/1981	10.0	100	12	.11	1	06/12/1981	--	FR BE 67
30	6	X	50	R	07/23/1978	3.0	150	50	.03	4	07/23/1978	--	FR BE 68
56	6	X	12	R	05/02/1981	40.0	68	12	.71	1	05/01/1981	--	FR BE 69
94	6	X	54	R	04/20/1979	25.0	175	54	.21	1	04/20/1979	--	FR BE 70
40	6	X	19	R	09/24/1974	10.0	275	19	.04	1	09/24/1974	--	FR BE 71

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR BE 72	FR-73-8626	TOWN OF THURMONT	KEYSER-GARVER	1981	468	V	400	P	231GBRG
FR BE 73	FR-73-8625	TOWN OF THURMONT	KEYSER-GARVER	1981	468	V	100	U	231GBRG
FR BE 74	FR-73-8674	TOWN OF THURMONT	KEYSER-GARVER	--	468	V	300	U	231GBRG
FR BE 75	FR-73-1748	MOSER, GEORGE L	ROBERT CLINE	1974	442	H	170	H	231GBRG
FR BE 76	FR-73-1611	SNYDER, DANIEL	ROBERT CLINE	1974	442	H	170	H	231GBRG
FR BE 77	FR-73-1689	FREE, EDWARD	ROBERT CLINE	1974	365	V	110	H	231GBRG
FR BE 78	FR-73-2280	MESSNER, DAVID L	C A CROMWELL	1975	385	V	125	H	231GBRG
FR BE 79	FR-73-2275	STOCKMAN, JAMES W	C A CROMWELL	1975	390	V	200	H	231GBRG
FR BE 80	FR-73-2914	DRONEBURG, RONALD	ROBERT CLINE	1975	497	H	225	H	231GBRG
FR BE 81	FR-73-4787	OLD LINE CONST CO	R HARLEY SR	1977	500	H	150	H	231GBRG
FR BE 82	FR-73-2569	GOSS, FREDERICK J	ROBERT CLINE	1975	515	H	145	H	231GBRG
FR BE 83	FR-73-2707	LEWIS, WILLIAM	ROBERT CLINE	1975	515	H	190	--	231GBRG
FR BE 84	FR-73-8542	STULL, MARY	ROBERT CLINE	1981	350	V	150	H	231GBRG
FR BE 85	FR-73-8534	KING, CALVIN	R ARDINGER	1981	361	V	175	H	231GBRG
FR BE 86	FR-73-4250	KIDD, ANNA B	KEYSER-GARVER	1977	360	V	205	H	231GBRG
FR BE 87	FR-73-8640	BUTT, IRVEN	ROBERT CLINE	1981	410	F	170	H	231GBRG
FR BE 88	FR-73-8508	KINNA, CALVIN	R K ARDINGER	1981	405	F	250	H	231GBRG
FR BE 89	FR-73-4570	GATES, RALPH	ROBERT CLINE	1977	390	V	220	H	231GBRG
FR BE 90	FR-73-1934	COYLE, MARY D	ROBERT CLINE	1974	440	V	200	H	231GBRG
FR BE 91	FR-73-4087	LAWYER, STRAFFORD	ROBERT CLINE	1976	445	S	200	S	231GBRG
FR BE 92	FR-73-4236	CREAGER, DONALD	KEYSER-GARVER	1976	470	V	300	H	231GBRG
FR BE 93	FR-73-8547	PIONEER BAPTIST CH	W B QUYNN	1981	500	H	180	T	231GBRG
FR BE 94	FR-73-5641	SAYLOR, DAVID	ROBERT CLINE	1978	490	S	200	H	231GBRG
FR BE 95	FR-73-7955	GREEN, RANDALL	ROBERT CLINE	1980	485	S	175	H	231GBRG
FR BE 96	FR-73-4654	KEENEY, FRANKLIN	ROBERT CLINE	1977	470	S	125	H	231GBRG
FR BE 97	FR-73-5634	DAMUTH, BROOKE	ROBERT CLINE	1978	495	S	200	H	231GBRG
FR BE 98	FR-73-6559	EYLER, EDWARD W	C A CROMWELL	1978	470	S	175	H	231GBRG
FR BE 99	FR-73-4476	KEILHOLTZ, ROBERT	ROBERT CLINE	1977	460	S	170	H	231GBRG
FR BE 100	FR-73-8346	OTT, RICHARD	ROBERT CLINE	1981	405	S	225	H	231GBRG
FR BE 101	FR-73-4359	HUBER, LOUIS	ROBERT CLINE	1977	464	H	145	H	231GBRG
FR BE 102	FR-73-6656	POOLE, KENNETH	C A CROMWELL	1979	463	S	140	H	231GBRG
FR BE 103	FR-73-6546	POOLE, KENNETH	C A CROMWELL	1979	473	S	200	H	231GBRG
FR BE 104	FR-73-5462	POOLE, KENNETH	C A CROMWELL	1977	464	S	150	H	231GBRG
FR BE 105	FR-73-7232	POOLE, KENNETH	W B QUYNN	1979	480	S	100	H	231GBRG
FR BE 106	FR-73-5401	POOLE, KENNETH	C A CROMWELL	1977	505	H	100	H	231GBRG
FR BE 107	FR-73-2784	POOLE, KENNETH	C A CROMWELL	1975	500	S	250	H	377FDCK
FR BE 108	FR-73-3991	WIVELL, ALLEN J	ROBERT CLINE	1976	540	V	100	H	377FDCK
FR BE 109	FR-73-4380	BAER, ROBERT M	ROBERT CLINE	1977	465	S	120	H	231GBRG
FR BE 110	FR-73-8203	KEILHOLTZ, ROBERT	ROBERT CLINE	1981	420	S	200	H	231GBRG
FR BE 111	FR-73-1955	AUSHERMAN CONST CO	ROBERT CLINE	1974	420	H	120	H	231GBRG
FR BE 112	FR-73-8299	MULLER, ROBERT	ROBERT CLINE	1981	412	V	170	H	231GBRG
FR BE 113	FR-73-6844	BROWN, RODNEY	ROBERT CLINE	1979	390	S	195	H	231GBRG
FR BE 114	FR-73-2813	LAWSON, MICHAEL	ROBERT CLINE	1975	410	H	145	H	231GBRG
FR BE 115	FR-73-8077	EISENSCHMID, WILLIAM	W B QUYNN	1981	395	V	220	H	231GBRG
FR BE 116	FR-73-5392	LONG, ROBERT	ROBERT CLINE	1977	405	F	170	H	231GBRG
FR BE 118	FR-73-7850	KUHN, RICHARD	W B QUYNN	1980	385	S	160	H	231GBRG
FR BE 119	FR-73-2240	KILLMEIER, RICHARD	ROBERT CLINE	1974	360	H	240	H,S	231NOXF
FR BE 120	FR-73-8819	TOWN OF THURMONT	EICHELBERGER	1984	460	V	400	U	231GBRG
FR BE 121	FR-73-8820	TOWN OF THURMONT	EICHELBERGER	1984	460	V	--	U	231GBRG
FR BF 1	FR-00-7615	FITEZ, ROBERT G	C L WANTZ	1951	430	S	103	H	231GBRG
FR BF 2	FR-00-8425	SHAVER, ROLAND E	H E WANTZ	1951	460	S	110	H	231GBRG
FR BF 3	FR-00-1790	MOSER, MAURICE H	H E WANTZ	1947	420	H	132	H	231GBRG
FR BF 4	FR-00-0582	WELTY, HOWARD	H E WANTZ	1946	430	S	82	H	231NOXF
FR BF 5	FR-00-9881	CHURCH OF THE BRETHREN	WADE CORUN	1952	415	H	68	H	231NOXF
FR BF 6	FR-02-0274	BAKER, RALPH	W SHOWERS	1955	400	S	--	H	231NOXF
FR BF 7	FR-01-9475	ANDERS, RAYMOND	H E WANTZ	1955	420	W	87	H	231NOXF
FR BF 8	FR-00-3937	DAUGHERTY, BAXTER C	C L WANTZ	1949	440	S	217	--	231NOXF
FR BF 9	FR-00-9882	KASS, JOHN	WADE CORUN	1952	445	V	92	H	231NOXF
FR BF 10	FR-00-8099	BROOKS, ADOLPH F	M UTERMAHLEN	1951	385	V	72	H	231NOXF
FR BF 11	--	MT TABOR PARK	--	--	425	F	46	R	231NOXF
FR BF 12	--	VALENTINE, CATHERINE	--	--	380	V	31	U	231NOXF
FR BF 13	--	VALENTINE, CATHERINE	--	--	380	V	21	U	231NOXF
FR BF 14	--	WESTERN MD RAILROAD	--	--	405	V	80	Z	231NOXF
FR BF 15	--	PASTERNAK	--	--	410	F	22	H	231NOXF
FR BF 16	FR-00-4897	CASTLE FARMS	H E WANTZ	1949	330	G	165	S	231NOXF
FR BF 17	--	CASTLE FARMS	--	--	340	G	48	S	231NOXF
FR BF 18	--	CASTLE FARMS	--	--	330	G	53	S	231NOXF
FR BF 19	FR-00-9384	DE BARRY, CLAUDE W	C L WANTZ	1952	405	H	201	S	231NOXF
FR BF 20	--	DE BARRY, CLAUDE W	C L WANTZ	--	405	H	39	H	231NOXF
FR BF 21	FR-72-0096	MOSER, GEORGE W	ROBERT CLINE	1971	450	H	170	H	231DIBS 231NOXF
FR BF 22	FR-72-0092	OHLER, GUY	A C REIDER	1971	370	H	95	H	231GBRG
FR BF 23	FR-71-0538	SEISS, FLOYD	ROBERT CLINE	1971	460	H	170	H	231NOXF
FR BF 24	FR-71-0405	HAHN, THOMAS H	C A CROMWELL	1971	410	H	85	H	231NOXF
FR BF 25	FR-72-0270	STAMBAUGH, M P	C A CROMWELL	1971	410	H	105	H	231NOXF
FR BF 26	FR-72-0371	AUSHERMAN, M L	ROBERT CLINE	1971	370	H	295	H	231NOXF
FR BF 27	FR-72-0298	KNIPPLE, FORREST	ROBERT CLINE	1971	460	H	145	H	231DIBS
FR BF 28	FR-66-0371	ROCKY RIDGE VFD	ROBERT CLINE	1966	440	S	205	T	231NOXF
FR BF 29	FR-73-7716	BURRIER, BARRY	JACK HARLEY	1980	460	H	125	H	231DIBS
FR BF 30	FR-73-2703	FOLLIN, JAMES	ROBERT CLINE	1975	383	S	175	H	231NOXF
FR BF 31	FR-73-2045	BURRIER, GARY	ROBERT CLINE	1974	440	S	150	H	231DIBS
FR BF 32	FR-73-2774	BOGGS, WALLACE	ROBERT CLINE	1975	360	S	100	H	231NOXF
FR BF 33	FR-73-7923	AMOSS, ROBERT	JOSEPH MAYNE	1980	442	F	200	H	231GBRG

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
30	8	X	44	R	10/29/1981	240.0	45	44	240.00	24	10/29/1981	--	FR BE 72
--	6	X	1.78	S	04/20/1982	--	--	--	--	--	--	O	FR BE 73
--	6	X	2.66	S	04/20/1982	--	--	--	--	--	--	--	FR BE 74
61	6	X	40	R	05/06/1974	6.0	170	40	.05	1	05/06/1974	--	FR BE 75
79	6	X	60	R	03/26/1974	8.0	170	60	.07	1	03/26/1974	--	FR BE 76
36	6	X	5	R	05/06/1974	30.0	110	5	.29	1	05/06/1974	--	FR BE 77
20	6	X	25	R	01/10/1975	10.0	120	25	.11	2	01/10/1975	--	FR BE 78
40	6	X	25	R	01/10/1975	10.0	120	25	.11	2	01/10/1975	--	FR BE 79
65	6	X	45	R	08/22/1975	10.0	225	45	.06	1	08/22/1975	--	FR BE 80
64	--	X	30	R	06/18/1977	10.0	75	30	.22	3	06/18/1977	--	FR BE 81
69	6	X	40	R	04/15/1975	15.0	145	40	.14	1	04/15/1975	--	FR BE 82
59	6	X	55	R	07/08/1975	10.0	190	55	.07	1	07/08/1975	--	FR BE 83
41	6	X	6	R	07/20/1981	10.0	150	6	.07	1	07/20/1981	--	FR BE 84
175	6	X	69	R	07/16/1981	15.0	90	69	.71	3	07/16/1981	--	FR BE 85
36	6	X	40	R	03/04/1977	4.0	50	40	.40	2	03/04/1977	--	FR BE 86
63	6	X	50	R	08/31/1981	10.0	170	50	.08	1	08/31/1981	--	FR BE 87
20	6	X	40	R	07/21/1981	17.0	70	40	.57	3	07/21/1981	--	FR BE 88
38	6	X	30	R	04/23/1977	8.0	220	30	.04	1	04/23/1977	--	FR BE 89
19	6	X	42	R	06/15/1974	7.0	200	42	.04	1	07/15/1974	--	FR BE 90
22	6	X	29	R	11/13/1976	15.0	200	29	.09	1	11/13/1976	--	FR BE 91
41	6	X	40	R	10/22/1976	3.0	50	40	.30	2	10/22/1976	--	FR BE 92
64	6	X	40	R	07/29/1981	15.0	175	40	.11	3	07/29/1981	--	FR BE 93
62	6	X	48	R	04/01/1978	12.0	200	48	.08	1	04/01/1978	--	FR BE 94
48	6	X	55	R	10/14/1980	15.0	175	55	.13	1	10/14/1980	--	FR BE 95
43	6	X	38	R	06/20/1977	30.0	125	38	.35	1	06/20/1977	--	FR BE 96
62	6	X	45	R	03/28/1978	8.0	200	45	.05	1	03/28/1978	--	FR BE 97
41	6	X	40	R	11/15/1978	8.0	100	40	.13	2	11/15/1978	--	FR BE 98
46	6	X	40	R	04/25/1977	10.0	170	40	.08	1	04/25/1977	--	FR BE 99
45	6	X	20	R	05/04/1981	8.0	225	20	.04	1	05/04/1981	--	FR BE 100
20	6	X	15	R	03/17/1977	15.0	145	15	.12	1	03/17/1977	--	FR BE 101
--	--	X	15	R	01/22/1979	10.0	135	15	.08	2	01/22/1979	--	FR BE 102
41	6	X	35	R	01/22/1979	10.0	195	35	.06	1	01/22/1979	--	FR BE 103
41	6	X	30	R	12/30/1977	15.0	145	30	.13	1	12/30/1977	--	FR BE 104
40	6	X	30	R	10/29/1979	25.0	90	30	.42	2	10/29/1979	--	FR BE 105
21	6	X	40	R	12/30/1977	10.0	90	40	.20	2	12/30/1977	--	FR BE 106
29	6	X	20	R	07/31/1975	2.0	225	20	.01	2	07/31/1975	--	FR BE 107
66	6	X	10	R	12/23/1976	8.0	100	10	.09	1	12/23/1977	--	FR BE 108
20	6	X	15	R	03/07/1977	10.0	120	15	.17	1	03/07/1977	--	FR BE 109
41	6	X	40	R	02/05/1981	6.0	200	40	.04	1	02/05/1981	--	FR BE 110
19	6	X	25	R	07/08/1974	20.0	120	25	.21	1	07/08/1974	--	FR BE 111
41	6	X	30	R	04/03/1981	15.0	170	30	.11	1	04/03/1981	--	FR BE 112
39	6	X	20	R	05/07/1979	15.0	195	20	.09	1	05/07/1979	--	FR BE 113
22	6	X	41	R	08/01/1975	50.0	145	41	.48	1	08/01/1975	--	FR BE 114
21	6	X	15	R	06/04/1981	20.0	215	15	.10	2	06/04/1981	--	FR BE 115
40	6	X	43	R	11/01/1977	20.0	170	43	.16	1	11/01/1977	--	FR BE 116
20	6	X	20	R	08/26/1980	7.0	160	20	.05	2	08/26/1980	--	FR BE 118
32	6	X	40	R	12/02/1974	30.0	240	40	.15	1	12/02/1974	--	FR BE 119
100	6	X	11.71	S	02/02/1984	--	--	--	--	--	--	G	FR BE 120
--	6	X	8.51	S	02/02/1984	300.0	--	--	--	--	02/02/1984	--	FR BE 121
8	6	X	10	R	04/10/1951	3.5	103	10	.04	.3	04/10/1951	--	FR BF 1
6	6	X	39	R	08/28/1951	1.0	110	39	.01	.2	08/28/1951	--	FR BF 2
132	6	X	41	R	09/03/1947	2.0	132	41	.02	.3	09/03/1947	--	FR BF 3
--	--	X	30	R	07/13/1946	5.5	82	30	.11	.5	07/13/1946	Q	FR BF 4
12	6	X	45.22	S	10/11/1955	10.0	40	21	.53	1	05/15/1952	--	FR BF 5
--	6	--	18.87	S	10/12/1955	--	--	--	--	--	--	--	FR BF 6
17	6	X	16	R	07/27/1955	6.0	87	16	.09	.5	07/27/1955	--	FR BF 7
10	6	X	37	R	05/27/1949	12.0	172	37	.09	1.5	05/27/1949	--	FR BF 8
12	6	X	23	R	06/04/1952	8.0	--	23	--	.5	06/04/1952	--	FR BF 9
10	6	X	12	R	06/28/1951	3.0	70	12	.05	.5	06/28/1951	--	FR BF 10
--	6	X	15.55	S	05/17/1956	--	--	--	--	--	--	--	FR BF 11
31	48	W	1.45	S	05/24/1956	--	--	--	--	--	--	--	FR BF 12
21	48	W	1.38	S	05/24/1956	--	--	--	--	--	--	--	FR BF 13
--	--	--	5.50	S	05/17/1956	--	--	--	--	--	--	--	FR BF 14
22	60	W	7.20	S	05/17/1956	--	--	--	--	--	--	--	FR BF 15
8	6	X	19	R	12/06/1949	15.0	115	19	.16	1	12/06/1949	--	FR BF 16
--	--	--	26.13	S	09/21/1956	--	--	--	--	--	--	--	FR BF 17
--	6	--	30	R	09/21/1956	--	--	--	--	--	--	--	FR BF 18
8	6	X	3	R	01/31/1952	3.5	201	3	.02	.5	01/31/1952	--	FR BF 19
--	6	--	15.00	S	09/26/1956	--	--	--	--	--	--	--	FR BF 20
40	6	X	45	R	10/16/1971	4.0	170	45	.03	1	10/16/1971	--	FR BF 21
36	6	X	25	R	08/26/1971	5.0	94	25	.07	1	08/26/1971	--	FR BF 22
20	6	X	25	R	05/24/1971	5.0	170	25	.03	1	05/24/1971	--	FR BF 23
21	6	X	45	R	04/15/1971	9.0	80	45	.26	2	04/15/1971	Q	FR BF 24
21	6	X	25	R	11/18/1971	7.0	100	25	.09	1	11/18/1971	--	FR BF 25
38	6	X	48	R	12/20/1971	7.0	295	48	.03	1	12/20/1971	--	FR BF 26
29	6	X	45	R	11/10/1971	5.0	145	45	.05	1	11/10/1971	--	FR BF 27
20	6	X	30	R	01/11/1966	20.0	--	30	--	1	01/11/1966	--	FR BF 28
22	6	X	30	R	07/11/1980	30.0	50	30	1.50	2	07/11/1980	--	FR BF 29
23	6	X	30	R	06/09/1975	10.0	--	--	.07	--	06/09/1975	--	FR BF 30
22	6	X	22	R	08/24/1974	6.0	150	22	.05	1	08/24/1974	--	FR BF 31
22	6	X	22	R	07/08/1975	20.0	100	22	.26	1	07/08/1975	--	FR BF 32
22	6	X	55	R	09/23/1980	15.0	--	55	--	2	09/23/1980	--	FR BF 33

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR BF 34	FR-73-7246	HARRIS, EMMA	ROBERT CLINE	1979	444	F	275	H	231GBRG
FR BF 35	FR-73-8269	SANDERS, JOHN	ROBERT CLINE	1981	445	H	220	H	231GBRG
FR BF 36	FR-73-7433	SMITH, WILLIAM	JACK HARLEY	1980	440	S	290	H	231NOXF
FR BG 1	FR-01-5339	GARBER	R HARRIS	1954	460	S	70	H	231NOXF
FR CB 1	FR-01-6375	BOWMAN, C R	DALE FRENCH	1954	1270	S	116	C	377HRPR
FR CB 2	FR-01-5545	ECHO LAKE CAMP	A R KEYSER	1954	1000	S	155	R	400CTCN
FR CB 3	--	ECHO LAKE CAMP	A R KEYSER	1955	950	S	70	R	400CTCN
FR CB 5	FR-00-5540	SNOOK, WILLARD	J M HOFFMAN	1950	1000	S	50	U	400CTCN
FR CB 6	FR-00-1678	GOODWIN, A W	J M HOLTZMAN	1947	980	S	88	H	400CTCN
FR CB 8	--	PLEASANT WALK U M CH	--	1907	1115	S	--	T	400MTRL
FR CB 9	FR-04-1469	WOLFE BROS CONS CO	C A CROMWELL	1961	1000	H	95	C	400MTRL
FR CB 11	FR-67-0047	MD STATE HIGHWAY ADM	AUSTIN GARVER	1966	1090	S	400	P	400MTRL
FR CB 12	FR-67-0047	MD STATE HIGHWAY ADM	AUSTIN GARVER	1966	1090	S	295	P	400MTRL
FR CB 13	FR-67-0047	MD STATE HIGHWAY ADM	AUSTIN GARVER	1966	1040	W	384	P	400MTRL
FR CB 14	FR-67-0047	MD STATE HIGHWAY ADM	AUSTIN GARVER	1966	1040	W	380	U	400MTRL
FR CB 15	FR-73-6655	MD STATE HIGHWAY ADM	ROBERT CLINE	1979	1040	W	300	P	400MTRL
FR CB 16	FR-73-6552	MASON-DIXON B S CAMP	R K ARDINGER	1978	915	S	145	C	400CTCN
FR CB 17	FR-73-5062	MOSER, CHARLES	ROY HARLEY	1977	860	S	300	H	400CTCN
FR CB 18	FR-05-7253	CATOCTIN FISH & GAME	A R KEYSER	1964	820	H	130	R	400CTCN
FR CB 19	FR-72-0700	CATOCTIN FISH & GAME	A R KEYSER	1972	820	H	302	H	400CTCN
FR CC 1	FR-01-8254	WOLF, LAUREN	E R SMITH	1955	1030	S	89	H	400CTCN
FR CC 2	FR-00-9075	HARSHMAN, RUSSELL	JACK HARLEY	1951	800	S	42	H	400MTRL
FR CC 3	FR-02-1916	STOTTLEMYER, A P	C R COWAN	1955	1030	V	92	U	400CTCN
FR CC 4	--	LEATHERMAN, H L	--	--	1070	H	53	H	400CTCN
FR CC 5	--	GROSSNICKLE, C F	--	--	780	H	23	U	400CTCN
FR CC 7	FR-01-1010	CLINE, GRAYSON	A R KEYSER	1952	1205	S	23	H,S	400MTRL
FR CC 8	--	FLOOK	--	--	685	H	--	--	400CTCN
FR CC 10	FR-02-0996	HARSHMAN, ALBERT G	C R COWAN	1955	650	S	40	H	400CTCN
FR CC 11	FR-01-9589	MOSER, W E	C R COWAN	1955	1105	S	125	H,S	400CTCN
FR CC 12	FR-01-9826	STOTTLEMEYER, CLAUDE	JACK HARLEY	1955	1125	S	74	H	400MTRL
FR CC 13	FR-02-2492	FAWLEY, CHARLES	JOHN SHAFF	1956	810	S	25	H	400CTCN
FR CC 14	--	MOSER, ROGER	--	--	695	S	41	H	400CTCN
FR CC 15	--	MARKER, GEORGE R	--	--	870	S	56	H	400CTCN
FR CC 16	--	KLINE, MERLE P	--	--	1285	S	23	H	400CTCN
FR CC 17	--	EASTERDAY, ROY L	--	--	920	V	29	H	400MTRL
FR CC 18	--	EASTERDAY, ROY L	L F EASTERDAY	1948	920	V	57	S	400MTRL
FR CC 19	--	BAKER, ENOGENE	--	--	1140	S	29	H	400MTRL
FR CC 20	FR-65-0338	ST MARKS LUTHERAN CH	A R KEYSER	1964	1120	S	190	C	400MTRL
FR CC 21	FR-69-0318	WOLFSVILLE RURITAN CL	ROBERT CLINE	1969	1050	S	145	R	400CTCN
FR CC 22	FR-73-5180	MASSER, GARY J	ROBERT CLINE	1977	1160	V	175	H	400CTCN
FR CC 23	FR-69-0219	WOLFSVILLE FIRE CO	ROBERT CLINE	1969	1050	S	400	F	400CTCN
FR CC 24	FR-73-1209	GIBSON, FLOYD	W H LAMBERSON	1973	1120	S	185	H	400CTCN
FR CC 25	FR-73-2187	LEWIS, GERALD	ROBERT CLINE	1974	1030	S	160	H	400MTRL
FR CC 26	FR-73-4218	BERE, EARL W	C A CROMWELL	1976	1030	S	425	H	400CTCN
FR CC 27	FR-73-6432	SCHULTZ, JAMES	ROY HARLEY	1978	1380	S	245	H	400CTCN
FR CC 28	FR-73-7949	CATOCTIN QUAKER CAMP	ROBERT CLINE	1980	1640	S	300	C	400CTCN
FR CC 29	FR-73-1215	NEFF, EVERETT	A R KEYSER	1974	1520	S	100	H	400CTCN
FR CC 30	FR-73-7086	SEISS CONST CO	ROBERT CLINE	1979	1727	S	150	H	377WVRN
FR CC 31	FR-73-1660	BAUER, RICHARD	J HARRIS	1974	1720	S	151	H	377WVRN
FR CC 32	FR-73-5408	O'REAR, GRADY	ROY HARLEY	1977	1685	S	175	H	377WVRN
FR CC 33	FR-73-2550	EASTERDAY, CHARLES I	ROBERT CLINE	1975	940	S	300	U	400MTRL
FR CC 34	FR-72-0403	C & P TELEPHONE CO	AUSTIN GARVER	1972	665	S	150	C	400CTCN
FR CC 35	FR-73-1215	NEFF, EVERETT	A R KEYSER	1973	1520	S	300	-	400CTCN
FR CD 1	FR-00-7200	STULL, RESLEY	A R KEYSER	1950	440	H	85	H	231NOXF
FR CD 2	FR-00-8108	WELTRY, CHESTER	A R KEYSER	1951	530	S	38	H	377HRPR
FR CD 3	FR-01-9198	CATOCTIN PARISH HOUSE	C A CROMWELL	1955	470	F	662	H	231GBRG
FR CD 4	FR-00-3423	BEAR, VERNON T	JOHN SHAFF	1948	440	F	78	H	231NOXF
FR CD 5	FR-01-6557	STULL, MARION	A R KEYSER	1954	440	F	82	H	231NOXF
FR CD 6	--	STULL, MARION	--	--	440	F	24	U	231NOXF
FR CD 7	FR-01-4072	HARPER, FRANK	R HARRIS	1953	405	V	62	H	231NOXF
FR CD 8	FR-01-0095	HEFFNER, CHARLES E	A R KEYSER	1952	470	F	48	H	110MNWS
FR CD 9	FR-00-6531	FISHER, HOWARD	A R KEYSER	1951	465	V	64	H	110MNWS
FR CD 10	FR-00-5576	RICE, ELLIS C	JACK HARLEY	1950	530	V	41	H	231NOXF
FR CD 11	FR-01-9957	GLADHILL, RICHARD	C A CROMWELL	1955	530	V	34	H	110MNWS
FR CD 12	FR-00-9108	RICE, MARION W	JACK HARLEY	1951	550	S	23	H,C	110MNWS
FR CD 13	FR-00-7020	RICE, LEWIS S	A R KEYSER	1950	580	F	21	H	110MNWS
FR CD 14	FR-01-2163	KEYSER, ROBERT L	A R KEYSER	1953	550	V	21	H	110MNWS
FR CD 15	FR-08-979A	RICE, ALVIE	A R KEYSER	1951	550	V	15	H	110MNWS
FR CD 17	FR-01-2388	MARTIN, HARRY	JACK HARLEY	1953	475	S	63	H	377HRPR
FR CD 18	FR-01-4940	BARNES, STANLEY S	DEWEY BROWN	1954	415	F	44	H	231NOXF
FR CD 19	FR-02-4278	RENNER, WILLIAM	A R KEYSER	1956	460	F	105	H	377FDCK
FR CD 20	FR-69-0021	BROWN, HUBERT	ROBERT CLINE	1968	405	S	270	H	367GROV
FR CD 21	FR-69-0524	CARTY, CHARLES W	HARRY GREEN	1969	505	S	67	H	377FDCK
FR CD 22	FR-70-0173	LEE SAYLOR INC	A R KEYSER	1969	460	H	122	H	377FDCK
FR CD 23	FR-69-0040	LEE SAYLOR INC	A R KEYSER	1968	450	S	130	H	377FDCK
FR CD 24	FR-69-0039	LEE SAYLOR INC	A R KEYSER	1968	450	S	115	H	377FDCK
FR CD 25	FR-70-0239	LEE SAYLOR INC	A R KEYSER	1970	450	S	182	H	377FDCK
FR CD 26	FR-71-0159	CARTY, JOSEPH	A R KEYSER	1970	470	V	52	H	377FDCK
FR CD 27	FR-72-0249	CAVETOWN PLANING MILL	C A CROMWELL	1971	440	V	125	H	231NOXF
FR CD 28	FR-72-0297	BOSWELL, STEVE	ROBERT CLINE	1971	490	H	170	H	231NOXF

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
41	6	X	2	R	11/01/1979	25.0	275	2	0.09	1	11/01/1979	--	FR BF 34
41	6	X	30	R	03/24/1981	5.0	220	30	.03	1	03/24/1981	--	FR BF 35
21	6	X	50	R	01/24/1980	5.0	285	50	.02	2	01/24/1980	--	FR BF 36
26	6	X	28	R	05/21/1954	--	--	--	--	--	--	--	FR BG 1
33	6	X	60	R	09/11/1954	5.0	90	60	.17	6	09/11/1954	--	FR CB 1
--	--	X	50	R	09/05/1954	2.0	155	50	.02	.5	09/05/1954	--	FR CB 2
28	6	X	35.00	S	04/25/1956	20.0	--	35	--	--	04/25/1956	--	FR CB 3
20	6	X	35	R	05/01/1950	1.0	50	35	.07	.5	05/01/1950	Q	FR CB 5
21	6	X	30	R	08/07/1947	4.0	--	30	--	1	08/07/1947	--	FR CB 6
9	60	W	3.94	S	03/11/1983	--	--	--	--	--	--	--	FR CB 8
29	6	X	25	R	03/24/1961	6.0	--	25	--	1	03/24/1961	--	FR CB 9
40	6	X	30	R	10/26/1966	14.0	--	30	--	8	10/26/1966	--	FR CB 11
45	6	X	30	R	10/27/1966	28.6	--	30	--	8	10/27/1966	--	FR CB 12
61	6	X	40	R	10/31/1966	30.6	--	40	--	8	10/31/1966	--	FR CB 13
31	6	X	30	R	11/03/1966	23.4	--	30	--	--	11/03/1966	--	FR CB 14
44	6	X	37	R	02/27/1979	35.0	300	37	.13	1	02/27/1979	--	FR CB 15
21	6	X	50	R	11/29/1978	10.0	145	50	.11	2	11/29/1978	--	FR CB 16
21	6	X	55	R	08/28/1977	2.0	240	55	.01	2	08/28/1977	--	FR CB 17
23	6	X	30	R	06/01/1964	5.0	--	30	--	1	06/01/1964	--	FR CB 18
38	6	X	40	R	06/06/1972	2.0	--	40	--	1	06/06/1972	O,Q	FR CB 19
23	6	X	20	R	04/16/1955	2.0	70	20	.04	2	04/16/1955	--	FR CC 1
24	6	X	15	R	11/21/1951	10.0	--	15	--	--	11/21/1951	--	FR CC 2
7	6	X	10	--	04/26/1956	6.0	89	10	.08	2	05/30/1956	Q	FR CC 3
--	6	X	3	R	04/26/1956	12.0	--	3	--	--	04/26/1956	--	FR CC 4
23	48	W	18	R	04/26/1956	--	--	--	--	--	--	--	FR CC 5
23	6	O	10	R	08/29/1952	20.0	10	10	--	.5	08/29/1952	--	FR CC 7
--	36	W	25	R	--	--	--	--	--	--	--	Q	FR CC 8
35	6	X	19	--	09/28/1955	10.0	31	19	.83	2	09/28/1955	--	FR CC 10
36	6	X	95	R	06/14/1955	16.0	125	95	.53	.5	06/14/1955	--	FR CC 11
30	6	X	6	R	06/30/1955	15.0	20	6	1.07	--	06/30/1955	--	FR CC 12
25	6	O	20	R	03/27/1956	5.0	25	20	1.00	2	03/27/1956	--	FR CC 13
--	6	--	25	E	09/27/1956	--	--	--	--	--	--	--	FR CC 14
24	36	--	23	E	09/27/1956	--	--	--	--	--	--	Q	FR CC 15
	6												
23	48	W	18.87	S	09/27/1956	--	--	--	--	--	--	Q	FR CC 16
29	36	W	20	E	09/27/1956	--	--	--	--	--	--	--	FR CC 17
--	6	X	32.34	S	09/27/1957	--	--	--	--	--	--	--	FR CC 18
29	48	W	23.80	S	10/25/1956	--	--	--	--	--	--	--	FR CC 19
17	6	X	45	R	11/20/1964	3.0	--	45	--	1	11/20/1964	--	FR CC 20
27	6	X	20	R	02/17/1969	4.0	145	20	.03	1	02/17/1969	--	FR CC 21
87	6	X	10	R	09/23/1977	30.0	175	10	.18	1	09/23/1977	--	FR CC 22
19	6	X	35	R	02/21/1969	1.0	400	35	.0	1	02/21/1969	--	FR CC 23
39	6	X	50	R	10/01/1973	5.0	165	50	.04	1	10/01/1973	--	FR CC 24
46	6	X	15	R	09/23/1974	10.0	160	15	.07	1	09/23/1974	--	FR CC 25
33	6	X	50	R	11/23/1976	10.0	200	50	.07	1	11/23/1976	--	FR CC 26
25	6	X	41	R	11/01/1978	12.0	63	41	.55	3	11/01/1978	--	FR CC 27
54	6	X	40	R	10/07/1980	15.0	300	40	.06	1	10/07/1980	--	FR CC 28
35	6	X	48	R	04/22/1974	3.0	58	48	.30	2	04/22/1974	--	FR CC 29
63	6	X	35	R	10/24/1979	8.0	150	35	.07	1	10/24/1979	--	FR CC 30
23	6	X	100	R	02/25/1974	8.0	--	100	--	1	02/25/1974	--	FR CC 31
19	6	X	31	R	11/08/1977	4.0	175	31	.04	3	11/08/1977	--	FR CC 32
62	6	X	12	R	05/27/1975	8.0	300	12	.03	8	05/27/1975	--	FR CC 33
86	6	X	30	R	01/27/1972	8.0	--	30	--	1	01/27/1972	--	FR CC 34
--	--	X	--	--	--	.0	--	--	--	--	11/23/1973	--	FR CC 35
22	6	X	18.55	S	05/04/1956	3.0	42	17	.12	1	12/23/1950	--	FR CD 1
25	6	X	20	R	06/25/1951	3.0	37	20	.18	1	06/25/1951	--	FR CD 2
60	6	X	15	R	07/21/1955	--	--	--	--	--	--	--	FR CD 3
22	6	X	4	R	11/28/1948	8.0	15	4	.73	6	11/28/1948	--	FR CD 4
14	6	X	40	R	08/27/1954	6.0	60	40	.30	1	08/27/1954	--	FR CD 5
--	--	W	11.23	S	06/12/1956	--	--	--	--	--	--	--	FR CD 6
42	6	X	25	R	12/23/1953	6.0	50	25	.24	--	12/23/1953	--	FR CD 7
46	6	X	--	--	--	10.0	15	13	5.00	1.5	05/01/1952	--	FR CD 8
60	6	X	35	R	01/16/1951	4.0	50	35	.27	1	01/16/1951	--	FR CD 9
41	6	X	25	R	03/31/1950	12.0	--	25	--	--	03/31/1950	--	FR CD 10
33	6	O	8	R	10/01/1955	8.0	22	8	.57	--	10/01/1955	--	FR CD 11
--	--	O	15	R	12/11/1951	5.0	--	15	--	--	12/11/1951	--	FR CD 12
21	6	O	10	--	11/05/1950	3.0	21	10	.27	.5	11/05/1950	--	FR CD 13
21	6	O	10	R	04/20/1953	4.0	--	10	--	.5	04/20/1953	--	FR CD 14
15	6	O	7	R	10/25/1951	4.0	12	7	.80	1	10/25/1951	--	FR CD 15
23	6	X	2	R	05/22/1953	5.0	55	2	.09	--	05/22/1953	--	FR CD 17
23	6	X	25	R	04/23/1954	5.0	--	25	--	.5	04/23/1954	--	FR CD 18
11	6	X	11.62	S	12/13/1956	5.0	90	20	.07	1	08/30/1956	--	FR CD 19
20	6	X	30	R	08/01/1968	2.0	270	30	.01	1	08/01/1968	--	FR CD 20
44	6	X	35	R	08/01/1969	3.0	60	35	.12	3	08/01/1969	--	FR CD 21
19	6	X	30	R	11/17/1969	25.0	--	30	--	1	11/17/1969	--	FR CD 22
40	6	X	40	R	09/13/1968	4.0	--	40	--	1	09/13/1968	--	FR CD 23
44	6	X	30	R	09/16/1968	5.0	--	30	--	1	09/16/1968	--	FR CD 24
17	6	X	30	R	02/27/1970	5.0	--	30	--	1	02/27/1970	--	FR CD 25
18	6	X	6.95	S	11/17/1970	300.0	--	10	--	1	09/29/1970	--	FR CD 26
21	6	X	35	R	11/18/1971	12.0	120	35	.14	2	11/18/1971	--	FR CD 27
130	6	X	28	R	11/03/1971	10.0	170	28	.07	1	11/03/1971	--	FR CD 28

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR CD 29	FR-72-0041	EATON, ROBERT W	ROBERT CLINE	1971	500	S	115	H	231NOXF
FR CD 30	FR-71-0410	ELLIS, RUSSELL S	A R KEYSER	1971	500	H	103	H	231NOXF
FR CD 31	FR-73-0145	SHOEMAKER, DONALD	A R KEYSER	1972	440	V	42	H	231NOXF
FR CD 32	FR-71-0058	HARPER, ROBERT E	ROBERT CLINE	1970	480	F	165	H	231NOXF
FR CD 33	FR-04-1470	LAMBERT, ARTHUR	DEWEY BROWN	1960	410	F	100	H	231NOXF
FR CD 34	FR-04-4485	WEBSTER, CHARLOTTE	A R KEYSER	1961	410	F	172	H	231NOXF
FR CD 35	--	DE GHETTO, WILLIAM	--	--	415	F	150	H	231NOXF
FR CD 36	--	WHITE, GAHLON	--	--	415	F	100	H	231NOXF
FR CD 37	FR-04-0949	BOWERS, EARL	A R KEYSER	1960	400	F	75	H	231NOXF
FR CD 39	FR-70-0430	HARRIOTT CHAPEL	KEN SULLIVAN	1970	475	V	520	T	231GBRG
FR CD 40	FR-04-1080	HUNTING CR FISHERIES	A R KEYSER	1961	423	V	300	Q	231GBRG
FR CD 41	FR-73-5051	TRESSELT, ERNEST F	KEYSER-GARVER	1977	415	V	400	Q	231GBRG
FR CD 42	FR-73-5052	TRESSELT, ERNEST F	KEYSER-GARVER	1977	390	V	405	Q	231GBRG
FR CD 43	FR-73-7861	TRESSELT, ERNEST F	KEYSER-GARVER	1980	425	V	325	Q	231GBRG
FR CD 44	FR-73-7937	TRESSELT, ERNEST F	KEYSER-GARVER	1980	410	V	305	Q	231GBRG
FR CD 45	FR-73-7935	TRESSELT, ERNEST F	KEYSER-GARVER	1980	390	V	305	Q	231GBRG
FR CD 46	FR-01-1354	TRESSELT, ERNEST F	JOHN SHAFF	1952	400	V	111	U	231GBRG
FR CD 47	FR-03-0054	CATOCTIN QUAKER CAMP	A R KEYSER	1958	1490	S	120	U	400CTCN
FR CD 48	FR-73-3700	MASSER, JOHN	C A CROMWELL	1977	1760	H	150	H	377WVRN
FR CD 49	FR-73-5072	SHAPIRO, PHILIP	C A CROMWELL	1978	1760	H	175	H	377WVRN
FR CD 50	FR-73-3375	FORSYTHE, HENRY	C A CROMWELL	1976	1750	H	150	H	377WVRN
FR CD 51	FR-73-8506	CUNNINGHAM FALLS ST PK	KEYSER-GARVER	1981	475	V	150	C	231GBRG
FR CD 52	FR-73-4858	MILLER, CLINTON	ROBERT CLINE	1977	470	V	175	H	231GBRG
FR CD 53	FR-73-8268	BROWN, HUBERT	ROBERT CLINE	1981	395	V	300	H	377FDCK
FR CD 54	FR-73-1803	BROWN, HUBERT	ROBERT CLINE	1974	440	V	400	H	377FDCK
FR CD 55	FR-73-4463	BROWN, HUBERT	ROBERT CLINE	1977	440	F	400	H	377FDCK
FR CD 56	FR-73-7399	BERLICH, LOUIS	KEYSER-GARVER	1979	420	S	625	H	377FDCK
FR CD 57	FR-73-0683	BROWN, HUBERT	ROBERT CLINE	1973	425	S	395	H	377FDCK
FR CD 58	FR-73-0682	BROWN, HUBERT	ROBERT CLINE	1973	425	S	300	H	377FDCK
FR CD 59	FR-73-2891	BROWN, HUBERT	ROBERT CLINE	1975	410	F	118	H	377FDCK
FR CD 60	FR-73-3367	BROWN, HUBERT	ROBERT CLINE	1976	420	F	95	H	231GBRG
FR CD 61	FR-73-7863	EASTERDAY, DON	ROBERT CLINE	1980	442	S	300	H	231GBRG
FR CD 62	FR-73-7554	FISHER, THOMAS	KEYSER-GARVER	1980	550	S	205	C,H	377HRPR
FR CD 63	FR-73-8055	REED, CLOWNIE	W B QUYNN	1981	580	S	180	H	377HRPR
FR CD 64	FR-73-1802	DEVILBISS, FRANKLIN	ROBERT CLINE	1974	430	S	80	H	231GBRG
FR CD 65	FR-73-8389	THOMPSON, HAYWARD	ROBERT CLINE	1981	425	F	200	H	231GBRG
FR CD 66	FR-73-8486	STULL, WILLIAM	ROBERT CLINE	1981	395	F	100	H	231GBRG
FR CD 67	FR-73-8472	BOWERS, JOHN	WAYNE HARLEY	1981	400	F	100	H	231GBRG
FR CD 68	FR-73-6646	MARTIN, LUTHER	ROBERT CLINE	1979	420	F	250	H	231GBRG
FR CD 69	FR-73-1153	KAUFFMAN, BETTY	ROBERT CLINE	1973	470	F	115	H	231GBRG
FR CD 70	FR-73-3449	RUFFNER, THOMAS	ROBERT CLINE	1976	475	F	165	H	231GBRG
FR CD 71	FR-73-0726	SKYLINE REALTY INC	C A CROMWELL	1973	470	F	100	H	231GBRG
FR CD 72	FR-73-2909	FORD, CHARLES	ROBERT CLINE	1975	460	F	95	H	231GBRG
FR CD 73	FR-73-8523	TREGONING, JOHN	W B QUYNN	1981	480	F	100	H	231GBRG
FR CD 74	FR-73-0153	LEWISTOWN SOCIAL CLUB	ROBERT CLINE	1972	530	S	120	C	377HRPR
FR CD 75	FR-70-0366	COLD DEER CLUB	ROBERT CLINE	1970	650	S	270	C	377WVRN
FR CD 76	FR-73-1607	SHREVE, WILLIAM	KEYSER-GARVER	1973	510	F	162	H	231GBRG
FR CD 77	FR-73-6227	GREEN, STERLING	ROBERT CLINE	1978	520	F	175	H	231GBRG
FR CD 78	FR-73-2327	JOHNSTON, FRANCIS	KEYSER-GARVER	1974	580	S	210	H	377WVRN
FR CD 79	FR-73-5768	RICE, RONALD	KEYSER-GARVER	1978	460	S	365	H	231GBRG
FR CD 80	FR-73-1011	STULL, WILLIAM	ROBERT CLINE	1973	440	S	120	H	231GBRG
FR CD 81	FR-73-8364	STULL, KENNETH	ROBERT CLINE	1981	480	S	350	H	377HRPR
FR CD 82	FR-73-4166	LEE SAYLOR INC	KEYSER-GARVER	1976	450	S	205	H	231GBRG
FR CD 83	FR-73-3697	LEE SAYLOR INC	KEYSER-GARVER	1976	455	S	342	H	231GBRG
FR CD 84	FR-73-7573	LEE SAYLOR INC	KEYSER-GARVER	1980	430	S	220	H	231GBRG
FR CD 85	FR-73-6410	LEE SAYLOR INC	KEYSER-GARVER	1978	430	S	185	H	231GBRG
FR CD 86	FR-73-8205	LEE SAYLOR INC	ROBERT CLINE	1981	425	S	300	H	231GBRG
FR CD 87	FR-73-7985	LEE SAYLOR INC	ROBERT CLINE	1980	440	F	300	H	231GBRG
FR CD 88	FR-65-0524	BETHEL LUTHERAN CHURCH	KEYSER-GARVER	1965	410	F	69	H	231GBRG
FR CD 89	FR-73-7399	BERLICH, LOUIS	KEYSER-GARVER	1979	420	S	--	H	377FDCK
FR CD 90	FR-73-7399	BERLICH, LOUIS	KEYSER-GARVER	1979	420	S	--	H	377FDCK
FR CD 91	FR-73-7399	BERLICH, LOUIS	KEYSER-GARVER	1979	420	S	--	H	377FDCK
FR CD 92	FR-73-7399	BERLICH, LOUIS	KEYSER-GARVER	1979	420	S	--	H	377FDCK
FR CE 1	--	WISE	--	--	350	S	20	S	231NOXF
FR CE 3	--	MCDEVITT	--	--	320	S	60	H	231NOXF
FR CE 4	--	MCDEVITT	--	--	340	S	100	S	231NOXF
FR CE 5	FR-01-3075	BAKER	A R KEYSER	1953	375	H	150	H	231NOXF
FR CE 6	FR-01-1684	ODEN, EDWARD	A R KEYSER	1953	330	F	264	H	367GROV
FR CE 7	--	SUMMERS, NELSON	--	--	310	W	29	U	377FDCK
FR CE 8	FR-02-2021	SUMMERS, NELSON	A R KEYSER	1956	310	W	275	H,S	377FDCK
FR CE 9	FR-02-1753	REEDER, RAYMOND	C A CROMWELL	1955	405	F	115	H	231NOXF
FR CE 10	FR-01-7308	ANDERS, WILLIAM	A R KEYSER	1954	440	F	113	H	231NOXF
FR CE 11	FR-01-6496	LEARY, DALTON E	R HARRIS	1954	320	H	105	H	231NOXF
FR CE 12	FR-00-9062	DAVIS, HENRY L	HARRY GREEN	1952	430	F	138	H,S	231NOXF
FR CE 13	FR-01-6631	WEST, C O	JAMES SHIRLEY	1954	375	S	126	H	231NOXF
FR CE 14	FR-01-3076	WHITMORE, EUGENE	A R KEYSER	1953	350	F	152	H,S	231NOXF
FR CE 15	--	WHITMORE, EUGENE	--	--0	350	F	147	H	231NOXF
FR CE 16	--	WHITMORE, SAM	ROBERT CLINE	--	355	F	44	S	231NOXF
FR CE 17	--	CUTSAIL, CHARLES	WADE CORUN	1952	430	F	89	H	231NOXF
FR CE 18	FR-69-0150	SPAHR, WILLIAM M	ROBERT CLINE	1968	350	F	395	H	367GROV

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
81	6	X	40	R	08/14/1971	100.0	115	40	1.33	1	08/14/1971	--	FR CD 29
86	6	X	20	R	04/07/1971	50.0	--	20	--	1	04/07/1971	--	FR CD 30
21	6	X	5.00	S	10/18/1972	100.0	--	35	--	1	09/06/1972	--	FR CD 31
83	5	X	30	R	08/07/1970	100.0	165	30	.74	1	08/07/1970	--	FR CD 32
14	6	X	50	R	12/20/1960	4.0	75	50	.16	1	12/20/1960	--	FR CD 33
15	6	X	25	R	09/01/1961	20.0	--	25	--	3	09/01/1961	--	FR CD 34
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CD 35
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CD 36
31	6	X	35	R	10/05/1960	12.0	--	35	--	--	10/05/1960	--	FR CD 37
109	6	X	--	R	06/08/1970	1.0	--	--	--	3	06/08/1970	--	FR CD 39
38	6	X	25	R	01/18/1961	20.0	--	25	--	10	01/18/1961	--	FR CD 40
23	6	X	10	R	08/09/1977	40.0	20	10	4.00	2	08/09/1977	--	FR CD 41
37	6	X	25	R	09/12/1977	70.0	35	25	7.00	2	09/12/1977	--	FR CD 42
26	6	X	20	R	08/29/1980	60.0	300	20	.21	3	08/29/1980	--	FR CD 43
41	6	X	10	R	10/06/1980	50.0	280	10	.19	4	10/06/1980	--	FR CD 44
26	6	X	15	R	10/07/1980	60.0	290	15	.22	4	10/07/1980	--	FR CD 45
--	6	X	8.00	S	11/22/1952	20.0	16	8	2.50	4	11/22/1952	--	FR CD 46
25	6	X	8	R	03/29/1958	20.0	20	8	1.67	3	03/29/1958	--	FR CD 47
20	6	X	40	R	02/21/1977	8.0	145	40	.08	2	02/21/1977	--	FR CD 48
25	6	X	40	R	04/20/1978	20.0	170	40	.15	2	04/20/1978	--	FR CD 49
20	6	X	30	R	03/27/1976	6.0	145	30	.05	2	03/27/1976	--	FR CD 50
52	6	X	6	R	06/29/1981	30.0	130	6	.24	4	06/29/1981	--	FR CD 51
39	6	X	3	R	08/08/1977	30.0	175	3	.17	1	08/08/1977	--	FR CD 52
41	6	X	15	R	03/12/1981	3.0	300	15	.01	1	03/12/1981	--	FR CD 53
25	6	X	20	R	05/06/1974	7.0	400	20	.02	1	05/06/1974	--	FR CD 54
41	6	X	45	R	03/17/1977	2.0	400	45	.01	1	03/17/1977	--	FR CD 55
39	6	X	40	R	12/18/1979	.5	200	40	.0	3	12/18/1979	--	FR CD 56
19	6	X	35	R	03/26/1973	1.0	395	35	.0	1	03/26/1973	--	FR CD 57
20	6	X	30	R	07/24/1973	1.0	300	30	.0	1	07/24/1973	--	FR CD 58
30	6	X	20	R	10/01/1975	50.0	118	20	.51	1	10/01/1975	--	FR CD 59
39	6	X	23	R	03/25/1976	12.0	95	23	.17	1	03/25/1976	--	FR CD 60
87	6	X	25	R	09/11/1980	2.0	300	25	.01	1	09/11/1980	--	FR CD 61
39	6	X	25	R	05/21/1980	20.0	90	25	.31	3	05/21/1980	--	FR CD 62
46	6	X	30	R	02/02/1981	5.0	180	30	.03	2	02/02/1981	--	FR CD 63
23	6	X	12	R	05/06/1974	15.0	80	12	.22	1	05/06/1974	--	FR CD 64
41	6	X	20	R	07/14/1981	30.0	200	20	.17	1	07/14/1981	--	FR CD 65
44	6	X	10	R	06/19/1981	15.0	100	10	.17	1	06/19/1981	--	FR CD 66
20	6	X	10	R	07/10/1981	75.0	15	10	15.00	2	07/10/1981	--	FR CD 67
65	6	X	35	R	02/08/1979	4.0	250	35	.02	1	02/08/1979	--	FR CD 68
78	6	X	18	R	09/06/1973	10.0	115	18	.10	1	09/06/1973	--	FR CD 69
96	6	X	20	R	04/27/1976	50.0	165	20	.35	1	04/27/1976	--	FR CD 70
64	6	X	30	R	06/13/1973	10.0	95	30	.15	1	06/13/1973	--	FR CD 71
66	6	X	25	R	09/04/1975	12.0	95	25	.17	1	09/04/1975	--	FR CD 72
58	6	X	30	R	07/09/1981	5.0	95	30	.08	2	07/09/1981	--	FR CD 73
39	6	X	10	R	09/07/1972	5.0	120	10	.05	1	09/07/1972	--	FR CD 74
32	6	X	2	R	05/09/1970	1.0	270	2	.0	1	05/09/1970	--	FR CD 75
141	6	X	43	R	12/03/1973	20.0	162	43	.17	1	12/03/1973	--	FR CD 76
133	6	X	41	R	08/10/1978	15.0	175	41	.11	1	08/10/1978	--	FR CD 77
96	6	X	29	R	12/09/1974	3.0	40	29	.27	2	12/09/1974	--	FR CD 78
60	6	X	20	R	04/25/1978	5.0	30	20	.50	2	04/25/1978	--	FR CD 79
46	6	X	10	R	07/20/1973	10.0	120	10	.09	1	07/20/1973	--	FR CD 80
114	6	X	45	R	05/28/1981	2.0	350	45	.01	1	05/28/1981	--	FR CD 81
40	6	X	20	R	10/27/1976	4.0	30	20	.40	2	10/27/1976	--	FR CD 82
41	6	X	65	R	06/30/1976	2.0	75	65	.20	2	06/30/1976	--	FR CD 83
60	6	X	30	R	04/21/1980	6.0	200	30	.04	3	04/21/1980	--	FR CD 84
45	6	X	55	R	10/10/1978	5.0	175	55	.04	4	10/10/1978	--	FR CD 85
41	6	X	5	R	02/16/1981	3.0	300	5	.01	1	02/16/1981	--	FR CD 86
46	6	X	38	R	10/17/1980	3.0	300	38	.01	1	10/17/1980	--	FR CD 87
30	6	X	30	R	07/01/1965	20.0	--	30	--	1	07/01/1965	--	FR CD 88
--	--	X	--	--	--	.0	--	--	--	--	12/18/1979	--	FR CD 89
--	--	X	--	--	--	.0	--	--	--	--	12/18/1979	--	FR CD 90
--	--	X	--	--	--	.0	--	--	--	--	12/18/1979	--	FR CD 91
--	--	X	--	--	--	.0	--	--	--	--	12/18/1979	--	FR CD 92
--	--	W	9.05	S	09/07/1951	--	--	--	--	--	--	--	FR CE 1
--	6	--	--	--	--	--	--	--	--	--	--	--	FR CE 3
--	6	--	--	--	--	--	--	--	--	--	--	--	FR CE 4
15	6	X	30	R	07/15/1953	10.0	50	30	.50	1	07/15/1953	--	FR CE 5
25	6	X	20	R	03/03/1953	2.0	100	20	.03	1	03/03/1953	Q	FR CE 6
29	42	W	23.12	S	01/18/1956	--	--	--	--	--	--	Q	FR CE 7
20	6	X	16	R	02/06/1956	10.0	16	14	4.00	8	03/15/1956	Q	FR CE 8
--	6	X	5	R	12/13/1955	9.0	6	5	9.00	2	12/13/1955	--	FR CE 9
24	6	X	6	R	12/07/1954	10.0	28	6	.46	5	12/07/1954	--	FR CE 10
24	6	X	45	R	09/24/1954	--	--	--	--	--	--	--	FR CE 11
15	6	X	50	R	06/16/1952	10.0	90	50	.25	1	06/16/1952	--	FR CE 12
12	6	X	30	R	10/29/1954	30.0	40	30	3.00	4	10/29/1954	--	FR CE 13
27	6	X	30	R	08/04/1953	4.0	75	30	.09	.5	08/04/1953	--	FR CE 14
--	6	--	27.45	S	07/18/1956	6.0	--	--	--	--	07/18/1956	--	FR CE 15
--	6	--	15	R	10/26/1956	--	--	--	--	--	--	--	FR CE 16
35	6	X	40	R	10/26/1956	--	--	--	--	--	--	--	FR CE 17
41	6	X	30	R	10/12/1968	1.5	395	30	.0	1	10/12/1968	--	FR CE 18

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR CE 20	FR-69-0384	CAVCO HOMES	C A CROMWELL	1969	345	F	58	H	367GROV
FR CE 21	FR-70-0124	RIPPEON, HARRY	C A CROMWELL	1969	320	F	145	H	367GROV
FR CE 22	FR-66-0596	STUP, JAMES M	A C REIDER	1966	340	H	325	U	367GROV
FR CE 23	FR-70-0289	STUP, JAMES M	ROBERT CLINE	1970	340	H	395	H	367GROV
FR CE 30	FR-71-0607	HIMES, THOMAS E	HARRY GREEN	1971	520	S	140	H	367GROV
FR CE 31	FR-72-0227	PERKINS, HAROLD R	A R KEYSER	1971	400	S	162	H	231NOXF
FR CE 32	FR-71-0437	CLARK, LAWRENCE	A R KEYSER	1971	370	H	223	H	231NOXF
FR CE 33	FR-72-0238	CHEW, ELSIE H	W REICHART	1972	530	V	868	H	367GROV
FR CE 34	FR-73-0175	LEWIS, DOROTHY	A R KEYSER	1972	320	F	100	H	231NOXF
FR CE 35	FR-73-0207	KOLB, PRESTON	ROBERT CLINE	1972	390	H	220	S	231NOXF
FR CE 36	FR-73-0190	PERRY, ROBERT	A R KEYSER	1972	390	S	295	H	231NOXF
FR CE 37	FR-73-0096	LYONS, J P	ROBERT CLINE	1972	450	H	170	H	231NOXF
FR CE 38	FR-73-0199	HILDEBRAND, WILLIAM	C A CROMWELL	1972	420	S	125	H	231NOXF
FR CE 39	FR-71-0104	STITELY, WILTON	ROBERT CLINE	1970	410	H	165	H	231NOXF
FR CE 40	FR-00-7543	STULL, NORMA	A R KEYSER	1951	400	H	55	H	231NOXF
FR CE 41	FR-01-1354	POWELL, ALBERT M	JOHN SHAFF	1952	405	H	110	H	231NOXF
FR CE 42	FR-04-3308	LEWISTOWN ELEM SCHOOL	A R KEYSER	1961	410	F	160	T	231NOXF
FR CE 43	FR-00-6465	BEESON, I J	JOHN SHAFF	1950	410	F	72	H	231NOXF
FR CE 44	--	GRIMES, I S	--	1957	400	H	100	H	231NOXF
FR CE 45	FR-02-9265	CESSNA, WILLIAM	A R KEYSER	1958	405	H	109	H	231NOXF
FR CE 46	FR-69-0054	WACHTER, REANY	A R KEYSER	1968	405	H	130	H	231NOXF
FR CE 47	--	DIXON, WILLIAM	--	--	410	F	100	H	231NOXF
FR CE 48	--	YOUNG, BLAINE	--	--	405	H	100	H	231NOXF
FR CE 49	FR-70-0112	HUTTON, ROBERT	ROBERT CLINE	1969	370	F	95	H	231NOXF
FR CE 50	FR-71-0519	GLYN-JONES, R I	ROBERT CLINE	1971	455	H	220	H	231NOXF
FR CE 51	FR-72-0645	REBURN, JOHN	ROBERT CLINE	1972	450	H	170	H	231NOXF
FR CE 52	FR-73-0086	WICKAM, WILLIAM	C A CROMWELL	1972	430	H	225	H	231NOXF
FR CE 53	FR-66-0111	ST PAULS CHURCH	A R KEYSER	1965	360	S	189	H	231NOXF
FR CE 54	FR-73-1626	CARTY, JOSEPH	ROBERT CLINE	1974	390	S	145	H	231GBRG
FR CE 55	FR-73-4505	PRICE, HARRY	ROBERT CLINE	1977	320	S	115	H	231GBRG
FR CE 56	FR-73-5410	STUDY, MELVIN	ROBERT CLINE	1977	310	S	170	H	231GBRG
FR CE 57	FR-73-2619	MARTIN, DONALD	ROBERT CLINE	1975	410	H	145	H	231GBRG
FR CE 58	FR-73-0978	TAYLOR, KENNETH	ROBERT CLINE	1973	390	H	120	H	231GBRG
FR CE 59	FR-73-6808	LEWISTOWN FIRE CO	KEYSER-GARVER	1979	395	F	505	C	231GBRG
FR CE 60	FR-73-6224	LEWISTOWN FIRE CO	KEYSER-GARVER	1979	400	F	--	--	231GBRG
FR CE 61	FR-73-8315	BAER, MARY	W B OUYNN	1981	400	F	100	H	231GBRG
FR CE 62	FR-73-6034	BAER, FRANCIS	C A CROMWELL	1978	385	F	180	H	231GBRG
FR CE 63	FR-73-1749	HILDEBRAND, WILLIAM	C A CROMWELL	1974	420	F	125	H	231GBRG
FR CE 64	FR-73-6539	BROWN, HUBERT	ROBERT CLINE	1978	370	S	180	H	231GBRG
FR CE 65	FR-73-5762	ROTHENHOEFER, ROGER	ROBERT CLINE	1978	380	F	250	H	231GBRG
FR CE 66	FR-73-5347	SPECK, RONALD	ROBERT CLINE	1978	380	S	270	H	231GBRG
FR CE 67	FR-73-2936	FISHER, NORMAN	ROBERT CLINE	1975	420	S	245	H	231GBRG
FR CE 68	FR-73-1296	AMBROSE, MELVIN T	ROBERT CLINE	1973	440	H	160	H	231GBRG
FR CE 69	FR-73-1344	MOSS, RICHARD	ROBERT CLINE	1973	430	H	170	H	231GBRG
FR CE 70	FR-73-8292	LUTHERAN CHURCH PARISH	ROBERT CLINE	1981	455	H	370	H	231GBRG
FR CE 71	FR-73-7767	HOKE, STEVEN	KEYSER-GARVER	1980	310	S	403	H	377FDCK
FR CE 72	FR-73-2485	MATTHIAS, DAVID	KEYSER-GARVER	1975	320	S	362	H	377FDCK
FR CE 73	FR-73-3155	MATTHIAS, DAVID	KEYSER-GARVER	1975	305	S	404	H	377FDCK
FR CE 74	FR-73-5610	MATTHIAS, DAVID	ROY F HARLEY	1978	310	F	250	H	377FDCK
FR CE 75	FR-73-4828	MATTHIAS, DAVID	KEYSER-GARVER	1977	315	F	160	H	367GROV
FR CE 76	FR-73-1041	WEBB, CECIL	KEYSER-GARVER	1973	300	S	100	H	377FDCK
FR CE 77	FR-73-3440	KAUFMAN, JOHN	ROBERT CLINE	1976	310	F	100	H	377FDCK
FR CE 78	FR-73-8438	FEDERLINE, MELVIN	ROBERT CLINE	1981	455	F	300	H	231GBRG
FR CE 79	FR-73-6095	GLADHILL, DONALD	C A CROMWELL	1978	455	S	125	H	231NOXF
FR CE 80	FR-73-7952	KAAS, CHARLES	ROBERT CLINE	1980	465	H	300	H	231NOXF
FR CE 81	FR-73-4843	MCELFRESH, JOHN	ROBERT CLINE	1977	460	H	220	H	231NOXF
FR CE 82	FR-73-6417	OLD LINE CONST	ROBERT CLINE	1978	360	S	220	H	231NOXF
FR CE 83	FR-73-7702	ODGERS, SCOTT	JOSEPH MAYNE	1980	370	S	225	H	231NOXF
FR CE 84	FR-73-5640	VALENTINE, ROBERT	ROBERT CLINE	1978	390	F	200	H	231NOXF
FR CE 85	FR-73-7756	BEACHLEY, JAMES	ROBERT CLINE	1980	410	F	225	H	231NOXF
FR CE 86	FR-73-0668	LUTH CH OF CREAGERSTN	ROBERT CLINE	1973	410	F	220	T	231NOXF
FR CE 87	FR-73-1496	CRUM, HILDA	ROBERT CLINE	1973	410	F	220	H	231NOXF
FR CE 88	FR-73-6581	KLOB, ROBERT	ROBERT CLINE	1978	380	H	150	H	231NOXF
FR CE 89	FR-73-5159	SATCHWELL, MARVIN	C A CROMWELL	1978	390	F	200	H	231GBRG
FR CE 90	FR-73-7983	RIDGE, ERNEST	JACK HARLEY	1980	390	S	207	H	231GBRG
FR CE 91	--	LUTHERAN CHURCH PARISH	--	1960	455	H	100	U	231GBRG
FR CF 1	FR-01-0039	TOWN OF WOODSBORO	COLUMBIA P&W	1952	380	F	200	P	367GROV
FR CF 2	FR-00-8238	RICE, JOHN	WADE CORUN	1951	610	S	--	H	300IJMV
FR CF 3	FR-01-0122	BUTT, RAYMOND O	A R KEYSER	1952	395	S	102	H,S	300IJMV
FR CF 4	FR-01-0423	HORNER, JAMES	WADE CORUN	1952	500	H	53	H	300IJMV
FR CF 7	FR-01-2558	PIERCE, EDWARD H	A R KEYSER	1953	380	S	95	H,C	377FDCK
FR CF 8	FR-01-3950	KLINE, LOUISE	C A CROMWELL	1954	360	S	50	U	377FDCK
FR CF 9	--	FLANIGAN, FLORENCE	C A CROMWELL	1955	440	S	97	U	367GROV
FR CF 10	FR-01-9773	FLANIGAN, FLORENCE	C A CROMWELL	1955	440	S	91	S	367GROV
			A R KEYSER	1955			115		
FR CF 11	--	FLANIGAN, FLORENCE	--	--	450	S	35	H,S	367GROV
FR CF 12	FR-01-3382	WIDNER, STUART	M UTERMAHLEN	1953	500	H	59	H	231NOXF
FR CF 13	--	DORCUS	--	--	380	S	20	U	377FDCK
FR CF 14	--	DORCUS	--	--	380	S	178	H,S	377FDCK
FR CF 15	--	DORCUS	--	--	380	S	95	U	377FDCK
FR CF 16	FR-01-8504	CRUM, MILLARD	C A CROMWELL	1955	370	H	60	H	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
16	6	X	--	--	--	30.0	--	--	--	2	04/18/1969	--	FR CE 20
77	6	X	60	R	10/06/1969	20.0	100	60	0.50	3	10/06/1969	--	FR CE 21
25	6	X	28	R	04/08/1966	3.5	325	28	.01	1	04/08/1966	--	FR CE 22
42	6	X	40	R	01/29/1970	3.0	395	40	.01	1	01/29/1970	--	FR CE 23
139	6	X	70	R	10/05/1971	10.0	100	70	.33	3	10/05/1971	--	FR CE 30
58	6	X	30	R	10/06/1971	6.0	--	30	--	1	10/06/1971	--	FR CE 31
43	6	X	30	R	04/15/1971	27.0	--	30	--	1	04/15/1971	--	FR CE 32
137	6	X	116.30	S	04/18/1972	.5	--	--	--	1	02/21/1972	--	FR CE 33
38	6	X	30	R	07/26/1972	15.0	--	30	--	1	07/26/1972	--	FR CE 34
23	6	X	57.17	S	10/18/1972	70.0	--	--	--	1	09/21/1972	--	FR CE 35
19	6	X	52.65	S	10/31/1972	12.0	--	--	--	1	09/18/1972	--	FR CE 36
20	6	X	50	R	08/14/1972	20.0	170	50	.17	1	08/14/1972	--	FR CE 37
21	6	X	25	R	09/11/1972	20.0	120	25	.21	3	09/11/1972	--	FR CE 38
34	6	X	48	R	08/26/1970	100.0	165	48	.86	1	08/26/1970	--	FR CE 39
16	6	X	10	R	03/12/1951	3.0	50	10	.08	1	03/12/1951	--	FR CE 40
5	6	X	8	R	11/22/1952	20.0	16	8	2.50	4	11/22/1952	Q	FR CE 41
21	6	X	30	R	06/01/1961	100.0	--	30	--	2	06/01/1961	--	FR CE 42
12	6	X	10	R	08/24/1950	10.0	18	10	1.25	6	08/24/1950	--	FR CE 43
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CE 44
26	6	X	26	R	01/09/1958	10.0	35	26	1.11	3	01/09/1958	--	FR CE 45
35	6	X	30	R	01/01/1968	8.0	--	30	--	1	01/01/1968	--	FR CE 46
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CE 47
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CE 48
27	6	X	28	R	10/03/1969	10.0	95	28	.15	1	10/03/1969	--	FR CE 49
20	6	X	40	R	05/15/1971	12.0	--	40	--	1	05/15/1971	--	FR CE 50
20	6	X	45	R	09/06/1972	8.0	165	45	.07	1	09/06/1972	--	FR CE 51
21	6	X	40	R	08/15/1972	5.0	220	40	.03	4	08/15/1972	--	FR CE 52
32	6	X	30	R	08/24/1965	10.0	--	30	--	1	08/24/1965	--	FR CE 53
20	6	X	60	R	02/11/1974	6.0	145	60	.08	1	02/11/1974	--	FR CE 54
39	6	X	6	R	04/11/1977	25.0	115	6	.23	1	04/11/1977	--	FR CE 55
27	6	X	15	R	11/19/1977	10.0	170	15	.07	1	11/19/1977	--	FR CE 56
22	6	X	20	R	05/23/1975	15.0	145	20	.12	1	05/23/1975	--	FR CE 57
27	6	X	22	R	09/08/1973	8.0	120	22	.08	1	09/08/1973	--	FR CE 58
39	6	X	42	R	07/20/1979	20.0	60	42	1.11	3	07/20/1979	--	FR CE 59
--	--	X	--	--	--	--	--	--	--	--	--	--	FR CE 60
20	6	X	25	R	04/06/1981	20.0	100	25	.27	2	04/06/1981	--	FR CE 61
55	6	X	30	R	06/06/1978	5.0	175	30	.03	2	06/06/1978	--	FR CE 62
20	6	X	30	R	05/20/1974	25.0	120	30	.28	1	05/20/1974	--	FR CE 63
36	6	X	35	R	11/09/1978	8.0	180	35	.06	1	11/09/1978	--	FR CE 64
20	6	X	54	R	05/02/1978	4.0	250	54	.02	1	05/02/1978	--	FR CE 65
40	6	X	32	R	01/06/1978	8.0	270	32	.03	1	01/06/1978	--	FR CE 66
20	6	X	45	R	08/25/1975	6.0	245	45	.03	1	08/25/1975	--	FR CE 67
23	6	X	30	R	09/19/1973	20.0	160	30	.15	1	09/19/1973	--	FR CE 68
22	6	X	51	R	11/28/1973	10.0	170	51	.08	1	11/28/1973	--	FR CE 69
41	6	X	50	R	03/28/1981	3.0	370	50	.01	1	03/28/1981	--	FR CE 70
39	6	X	30	R	09/02/1980	2.0	385	30	.01	3	09/02/1980	--	FR CE 71
38	6	X	60	R	01/24/1975	4.0	65	60	.80	2	01/24/1975	--	FR CE 72
62	6	X	30	R	11/18/1975	4.0	40	30	.40	2	11/18/1975	--	FR CE 73
40	6	X	30	R	01/06/1978	4.0	110	30	.05	3	01/06/1978	--	FR CE 74
27	6	X	20	R	10/24/1977	15.0	30	20	1.50	2	10/24/1977	--	FR CE 75
65	6	X	25	R	07/17/1973	30.0	--	25	--	1	07/17/1973	--	FR CE 76
22	6	X	35	R	05/11/1976	50.0	100	35	.77	1	05/11/1976	--	FR CE 77
41	6	X	35	R	07/07/1981	3.0	300	35	.01	1	07/07/1981	--	FR CE 78
20	6	X	35	R	08/09/1978	8.0	120	85	.09	2	08/09/1978	--	FR CE 79
40	6	X	60	R	10/06/1980	4.0	300	60	.02	1	10/06/1980	--	FR CE 80
20	6	X	45	R	07/21/1977	4.0	220	45	.02	1	07/21/1977	--	FR CE 81
39	6	X	42	R	10/12/1978	20.0	220	42	.11	1	10/12/1978	--	FR CE 82
23	6	X	5	R	07/10/1980	10.0	65	5	.17	2	07/10/1980	--	FR CE 83
20	6	X	40	R	03/28/1978	20.0	200	40	.13	1	03/28/1978	--	FR CE 84
39	6	X	58	R	06/23/1980	15.0	225	58	.09	1	07/23/1980	--	FR CE 85
20	6	X	52	R	05/03/1973	50.0	220	52	.30	1	05/03/1973	--	FR CE 86
22	6	X	55	R	11/14/1973	7.0	165	55	.06	1	11/14/1973	--	FR CE 87
39	6	X	60	R	12/19/1978	20.0	150	60	.22	1	12/19/1978	--	FR CE 88
21	6	X	25	R	04/17/1978	15.0	195	25	.09	2	04/17/1978	Q	FR CE 89
21	6	X	30	R	10/20/1980	50.0	40	30	5.00	2	10/20/1980	--	FR CE 90
--	6	--	--	--	--	--	--	--	--	--	--	--	FR CE 91
35	8	X	3	R	06/20/1952	150.0	45	3	3.57	64	06/20/1952	Q	FR CF 1
10	6	X	25	R	07/07/1951	10.0	25	25	--	1	07/07/1951	--	FR CF 2
13	6	X	30	R	05/14/1952	2.0	102	30	--	1	05/14/1952	--	FR CF 3
10	6	X	28	R	08/12/1952	15.0	40	28	1.25	.5	08/12/1952	--	FR CF 4
10	6	X	20	R	06/14/1953	20.0	25	20	4.00	1	06/14/1953	--	FR CF 7
20	6	X	20	R	01/06/1954	30.0	--	20	--	2	01/06/1954	--	FR CF 8
--	--	X	--	--	--	--	--	--	--	--	--	--	FR CF 9
80	8	X	12	R	07/01/1955	9.0	46	12	.27	1	07/01/1955	--	FR CF 10
35	36	W	22.53	S	10/07/1955	--	--	--	--	--	--	--	FR CF 11
8	6	X	40	R	09/25/1953	1.0	--	40	--	.2	09/25/1953	--	FR CF 12
--	--	--	8.50	S	10/12/1955	--	--	--	--	--	--	--	FR CF 13
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CF 14
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CF 15
24	6	X	18	R	04/20/1955	7.0	26	18	.88	2	04/20/1955	--	FR CF 16

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR CF 17	FR-01-8324	MATHEWS, RUSSELL M	T OWINGS	1955	550	S	66	H	300IJMV
FR CF 18	FR-00-4324	COLBERT, ERNEST C	C A CROMWELL	1949	600	H	96	H	300IJMV
FR CF 19	--	COLBERT, ERNEST C	--	--	600	H	40	U	300IJMV
FR CF 20	FR-01-3286	MISNER, JAMES	R HARRIS	1953	385	S	29	H	377FDCK
FR CF 21	--	STRINE, GREGG	--	--	390	F	65	H	377FDCK
FR CF 22	FR-00-3874	STUP, CHARLES	WADE CORUN	1949	430	W	82	H	377FDCK
FR CF 23	FR-00-7072	STRINE, EFFIE	WADE CORUN	1950	350	H	58	H	231NOXF
FR CF 24	FR-01-1696	FOGLE, CARMEN L	H E WANTZ	1953	510	H	123	H	377ANTM
FR CF 25	--	LOOKINGBILL	R HARRIS	--	460	S	--	H	231NOXF
FR CF 26	FR-01-6065	STITELY, N L	R HARRIS	1954	480	H	103	H	231NOXF
FR CF 27	FR-01-6064	MARTIN, C J	R HARRIS	1954	480	S	64	H	231NOXF
FR CF 28	FR-00-7504	MARTIN, RUSSELL W	WADE CORUN	1955	530	S	80	H	231NOXF
FR CF 29	FR-02-3178	GRUBER, HARRY	ALL MD P&W	1956	380	F	47	H	377FDCK
FR CF 30	FR-01-2165	WOODSBORO SAVINGS BANK	A R KEYSER	1953	325	F	88	U	377FDCK
FR CF 32	--	FILLERS	--	--	360	F	--	H	367GROV
FR CF 33	FR-01-7390	NASH, DAVID L	PAUL LEGORE	1955	590	S	110	H	300IJMV
FR CF 35	--	HOLT, GLENN	--	1954	520	F	98	H	377ANTM
FR CF 36	FR-68-0470	GILBERT, JOHN	ROBERT CLINE	1968	355	W	95	H	377FDCK
FR CF 37	FR-66-0440	LEGORE LIME CO	YORK DRILLING	1966	400	S	386	N	367GROV
FR CF 39	FR-69-0250	ANGLEBERGER, RUDELL	HARRY GREEN	1968	395	V	154	S	377FDCK
FR CF 40	FR-70-0254	LOOKINGBILL, CARMEN	C A CROMWELL	1969	450	S	145	H	367GROV
FR CF 41	FR-71-0581	CRABBS, EARL	A C REIDER	1971	430	S	110	H	231NOXF
FR CF 42	FR-72-0061	MERCER, JAMES C	A R KEYSER	1971	440	S	220	H	231NOXF
FR CF 43	FR-72-0107	STITELEY, DENNIS	A C REIDER	1971	510	H	120	H	231NOXF
FR CF 44	FR-72-0422	SMITH, KARL J	ROBERT CLINE	1972	500	H	170	H	231NOXF
FR CF 45	FR-71-0381	EAVES, GLENN	ROBERT CLINE	1971	470	H	160	S	231NOXF
FR CF 46	--	HAWKINS, EARL	--	--	418	F	19	U	367GROV
FR CF 47	FR-03-4608	TOWN OF WOODSBORO	A R KEYSER	1959	358	S	297	P	377FDCK
FR CF 48	FR-73-7972	KIRKPATRICK, RICHARD	W B QUYNN	1980	338	V	70	N	377FDCK
FR CF 49	FR-05-5162	LEHIGH PORTLAND CEMENT	YORK DRILLING	1963	420	S	348	N	377FDCK
FR CF 50	FR-72-0623	WIEKER, JOHN	ROBERT CLINE	1972	423	S	395	U	231NOXF
FR CF 51	FR-73-3804	WIEKER, JOHN	ROBERT CLINE	1976	430	S	225	H	231NOXF
FR CF 52	--	NEW MIDWAY SCHOOL	--	--	490	F	--	T	231NOXF
FR CF 53	FR-02-0905	SMITH BAKERIES	T OWINGS	1955	500	S	200	N	300IJMV
FR CF 54	FR-73-6805	KAUFMAN, MERHL	KEYSER-GARVER	1979	490	S	150	C	231NOXF
FR CG 1	--	NICODEMUS, JESSE N	--	1946	600	H	43	H	300IJMV
FR CG 2	--	NICODEMUS, JESSE N	JOHN GREENE	1949	600	F	71	H	300IJMV
FR CG 3	FR-01-8739	FROWNFELTER, RUSSELL	ED BROWN	1955	595	F	100	H	300IJMV
FR CG 4	FR-00-3471	GRABILL, CARVILLE T	R A HINER	1948	605	F	100	H	300IJMV
FR CG 5	FR-00-9383	KEEFER, BERNARD	WADE CORUN	1952	410	S	81	H	231NOXF
FR CG 6	FR-01-2220	KEENEY, THOMAS	WADE CORUN	1953	600	F	58	H	300IJMV
FR CG 7	FR-00-2276	KEEFER, EARL F	H & C WANTZ	1948	430	S	98	S	231NOXF
FR CG 8	FR-00-9080	BAKER, JOHN W	H & C WANTZ	1951	610	S	70	H	231NOXF
FR CG 9	FR-01-3951	KEEFER, EARL F	C A CROMWELL	1953	440	S	--	H	231NOXF
FR CG 10	FR-01-9359	KEEFER, EARL F	W SHOWERS	1955	470	S	120	H	231NOXF
FR CG 11	--	SAGER, ELMER	WANTZ	1931	500	S	349	H,S	300WKFD
FR CG 12	--	FOGLE, PAUL	H & C WANTZ	1931	470	V	64	H,S	300WKFD
FR CG 13	--	HOY, JAMES	--	--	550	S	149	H,S	300SMCK
FR CG 14	--	KNOTT, STEPHEN V	ED BROWN	1946	550	H	64	S	300IJMV
FR CG 15	--	KNOTT, STEPHEN V	--	--	550	H	19	H	300IJMV
FR CG 16	FR-05-3176	WIGHT, DANIEL	A C REIDER	1963	475	S	250	H,S	300WKFD 300SMCK
FR CG 17	--	WIGHT, DANIEL	L F EASTERDAY	1966	490	S	270	U	300WKFD 300SMCK
FR CG 18	--	WIGHT, DANIEL	L F EASTERDAY	1966	480	S	260	U	300WKFD 300SMCK
FR CG 19	--	WIGHT, DANIEL	L F EASTERDAY	1966	490	S	120	U	300WKFD
FR CG 20	FR-72-0131	HEVNER, LARRY	ROBERT CLINE	1971	530	V	165	H	231GBRG
FR CG 21	FR-73-2208	BOHN, AUSTIN	ROBERT CLINE	1974	560	S	110	C	300IJMV
FR CG 22	FR-73-1870	UN METHODIST CHURCH	RAY BROWN	1974	505	S	125	T	300IJMV
FR CG 23	FR-73-3785	JOHNSVILLE RURITAN	KEYSER-GARVER	1976	505	F	145	R	300IJMV
FR CG 24	FR-73-7880	KEEFER, KENNETH	S BOLLINGER	1981	565	H	280	H	300IJMV
FR CG 25	FR-73-7207	SAYLOR, DENNIS	W B QUYNN	1979	565	H	220	H	300IJMV
FR CG 26	FR-73-1307	DRAKE, JAMES	KEYSER-GARVER	1973	540	H	402	H	300IJMV
FR CG 27	FR-73-1932	WACHTER, MARY	A C REIDER	1974	515	S	180	H	300IJMV
FR CG 28	FR-73-3634	HOUCK, RAYMOND	ROBERT CLINE	1976	465	S	395	H	300IJMV
FR CG 29	FR-73-8152	DYKER, JOHN	ROBERT CLINE	1981	540	S	220	H	300IJMV
FR CH 1	--	FOGLE, CHARLES J	--	--	725	S	46	H	300IJMV
FR CH 2	FR-73-3174	KIDD, ARLIE	KEYSER-GARVER	1975	695	S	282	H	300IJMV
FR CH 3	FR-73-3860	IDEAL HOMES INC	A C REIDER	1976	700	S	153	H	300IJMV
FR CH 4	FR-73-0550	COOK, LESLIE	KEYSER-GARVER	1973	700	S	500	H	300IJMV
FR CH 5	FR-73-2050	FERGUSON, ROBERT	KEYSER-GARVER	1974	570	S	182	H	300SMCK
FR DB 1	FR-00-7477	HINDS, R H	JACK HARLEY	1951	620	H	49	S	400CTCN
FR DB 2	--	HINDS, R H	--	--	600	S	30	H,S	400CTCN
FR DB 4	FR-00-3293	SMITH, ELMER	J M HOLTZMAN	1949	1280	S	70	H	400CTCN
FR DB 5	FR-00-3218	HAUPT, HARLEN	J M HOLTZMAN	1948	1330	S	70	H	400CTCN
FR DB 6	FR-73-4556	THOMPSON, GEORGE	ROY HARLEY	1977	690	H	150	H	400CTCN
FR DB 7	FR-73-6540	BEACHLEY, M R	ROBERT CLINE	1978	580	S	100	H	400PCMB
FR DB 8	FR-70-0284	MD DEPT NAT RESOURCES	C A CROMWELL	1970	1000	S	130	R	377WVRN
FR DB 9	FR-73-3223	MOSER, EVERETT	JOHN SHAFF	1975	560	S	250	N	400CTCN
FR DC 1	FR-00-6004	MOCK, H J	WADE CORUN	1950	850	S	50	H	400CTCN
FR DC 2	--	GLADHILL FURNITURE CO	ED BROWN	--	570	S	104	U	400CTCN
FR DC 3	FR-02-0551	MYERS, OSCAR	E R SMITH	1955	600	S	58	H	400GBGG

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
48	6	X	5	R	03/24/1955	8.0	52	5	0.17	0.5	03/24/1955	Q	FR CF 17
10	8	X	34	R	07/16/1949	6.0	76	34	.14	1	07/16/1949	--	FR CF 18
40	36	--	34.45	S	10/12/1955	--	--	--	--	--	--	--	FR CF 19
26	6	X	18	R	09/08/1953	6.0	22	18	1.50	--	09/08/1953	--	FR CF 20
--	6	X	--	--	--	--	--	--	--	--	--	--	FR CF 21
12	6	X	19	R	05/07/1949	7.0	19	19	--	1	05/07/1949	--	FR CF 22
8	6	X	--	--	--	10.0	--	--	--	.5	12/07/1950	--	FR CF 23
18	6	X	27	R	05/02/1953	.5	--	27	--	.2	05/02/1953	--	FR CF 24
--	--	X	--	--	--	--	--	--	--	--	--	--	FR CF 25
28	6	X	30	R	08/27/1954	--	--	--	--	--	--	--	FR CF 26
8	6	X	12	R	08/17/1954	--	--	--	--	--	--	--	FR CF 27
15	6	X	30	R	03/12/1951	15.0	60	30	.50	.5	03/12/1951	--	FR CF 28
14	6	X	20	R	05/28/1956	25.0	20	20	--	2	05/28/1956	--	FR CF 29
12	6	X	20	R	06/05/1953	20.0	25	20	4.00	1	06/05/1953	--	FR CF 30
--	6	--	--	--	--	--	--	--	--	--	--	--	FR CF 32
31	6	X	53	R	01/13/1955	10.0	90	53	.27	2	01/13/1955	--	FR CF 33
13	6	X	--	--	--	--	--	--	--	--	--	--	FR CF 35
23	6	X	10	R	07/03/1968	50.0	95	10	.59	1	07/03/1968	--	FR CF 36
62	6	X	--	--	--	2.0	--	--	--	5	01/28/1966	--	FR CF 37
34	6	X	30	R	12/12/1968	6.0	150	30	.05	4	12/12/1968	--	FR CF 39
42	6	X	25	R	12/28/1969	10.0	65	25	.25	3	12/28/1969	--	FR CF 40
21	6	X	32	R	07/23/1971	5.0	109	32	.07	1	07/23/1971	--	FR CF 41
25	6	X	33	R	08/02/1971	8.0	--	33	--	1	08/02/1971	--	FR CF 42
22	6	X	60	R	09/25/1971	5.0	119	60	.09	1	09/25/1971	--	FR CF 43
55	6	X	38	R	02/07/1972	4.0	170	38	.03	1	02/07/1972	--	FR CF 44
44	6	X	20	R	03/09/1971	100.0	160	20	.71	1	03/09/1971	--	FR CF 45
19	48	W	14.40	S	04/21/1982	--	--	--	--	--	--	O	FR CF 46
21	8	X	3	R	07/23/1959	20.0	178	3	.11	72	07/23/1959	--	FR CF 47
53	6	X	15	R	10/20/1980	100.0	60	15	2.22	2	10/20/1980	O,Q	FR CF 48
42	6	X	--	--	--	5.0	226	--	--	16	12/12/1963	--	FR CF 49
19	6	X	38	R	07/27/1972	15.0	395	38	.04	1	07/27/1972	O	FR CF 50
20	6	X	38	R	07/15/1976	7.0	225	38	.04	1	07/15/1976	--	FR CF 51
--	--	--	--	--	--	--	--	--	--	--	--	O,Q	FR CF 52
124	6	X	38	R	11/14/1955	110.0	150	38	.98	8	11/14/1955	--	FR CF 53
77	6	X	40	R	04/25/1979	60.0	140	40	.60	3	04/25/1979	--	FR CF 54
--	--	W	37.56	S	06/28/1946	7.0	--	--	--	--	06/28/1946	O,Q	FR CG 1
11	6	X	27	R	08/01/1949	4.5	--	--	--	--	10/01/1949	--	FR CG 2
36	6	X	40	R	04/21/1955	6.0	--	40	--	--	04/21/1955	--	FR CG 3
--	6	X	36	R	12/18/1948	7.0	36	36	--	.5	12/18/1948	--	FR CG 4
21	6	X	22	R	02/05/1952	10.0	60	22	.26	1	02/05/1952	O,Q	FR CG 5
21	6	X	24	R	05/04/1953	12.0	39	24	.80	--	05/04/1953	--	FR CG 6
8	6	X	10	R	02/21/1948	1.8	--	10	--	.3	02/21/1948	--	FR CG 7
17	6	X	28	R	11/19/1951	--	--	--	--	--	--	--	FR CG 8
--	6	X	31	R	12/24/1953	7.0	86	31	.13	--	12/24/1953	--	FR CG 9
17	6	X	48	R	07/05/1955	14.0	--	48	--	--	07/05/1955	--	FR CG 10
--	6	X	--	--	--	8.0	--	--	--	--	--	--	FR CG 11
--	6	X	--	--	--	25.0	--	--	--	--	--	--	FR CG 12
--	6	--	70.00	S	09/27/1956	--	--	--	--	--	--	--	FR CG 13
--	6	--	20	R	11/14/1956	--	--	--	--	--	--	--	FR CG 14
19	36	W	16.76	S	11/14/1956	--	--	--	--	--	--	--	FR CG 15
18	6	X	30	R	09/02/1963	2.5	249	30	.01	1	09/02/1963	--	FR CG 16
--	--	--	--	--	--	.5	--	--	--	--	03/01/1966	--	FR CG 17
--	--	X	--	--	--	1.0	--	--	--	--	03/01/1966	--	FR CG 18
--	--	--	--	--	--	--	--	--	--	--	--	--	FR CG 19
41	6	X	10	R	09/01/1971	8.0	165	10	.05	1	09/01/1971	--	FR CG 20
75	6	X	8	R	09/16/1974	3.0	110	8	.03	1	09/16/1974	--	FR CG 21
20	6	--	40	R	05/01/1974	12.0	120	40	.15	2	05/01/1974	--	FR CG 22
61	6	X	30	R	10/13/1976	6.0	40	30	.60	2	10/13/1976	--	FR CG 23
20	6	X	35	R	05/28/1981	1.0	280	35	.0	6	05/28/1981	--	FR CG 24
20	6	X	30	R	11/12/1979	3.0	210	30	.02	3	11/12/1979	--	FR CG 25
36	6	X	--	--	--	1.0	--	--	--	1	09/08/1973	--	FR CG 26
45	6	X	35	R	09/11/1974	2.0	170	35	.02	3	09/11/1974	--	FR CG 27
63	6	X	66	R	07/01/1976	1.0	395	66	.0	1	07/01/1976	--	FR CG 28
41	6	X	25	R	01/29/1981	4.0	220	25	.02	1	01/29/1981	O,Q	FR CG 29
--	6	--	--	--	--	--	--	--	--	--	--	Q	FR CH 1
38	6	X	48	R	12/17/1975	2.0	58	48	.20	2	12/17/1975	--	FR CH 2
20	6	X	26	R	10/01/1976	3.0	140	26	.03	6	10/01/1976	--	FR CH 3
24	6	X	35	R	06/05/1973	2.0	--	35	--	1	06/05/1973	--	FR CH 4
44	--	X	95	R	10/15/1974	3.0	105	95	.30	2	10/15/1974	--	FR CH 5
14	6	X	6	R	04/14/1951	35.0	6	6	--	--	04/14/1951	Q	FR DB 1
30	36	W	2	E	04/01/1955	--	--	--	--	--	--	Q	FR DB 2
21	6	X	39	R	10/25/1949	6.0	58	39	.32	1	10/25/1949	Q	FR DB 4
51	6	X	39	R	10/18/1948	5.0	59	39	.25	1	10/18/1948	--	FR DB 5
41	6	X	50	R	07/09/1977	5.0	97	50	.11	3	07/09/1977	--	FR DB 6
48	6	X	35	R	12/02/1978	20.0	100	35	.31	1	12/02/1978	--	FR DB 7
54	6	X	35	R	03/27/1970	15.0	110	35	.20	3	03/27/1970	--	FR DB 8
82	6	X	31	R	11/01/1975	15.0	96	31	.23	3	11/01/1975	--	FR DB 9
7	6	X	33.75	S	10/17/1955	8.0	14	14	--	.8	06/16/1950	--	FR DC 1
--	6	--	50	R	--	15.0	--	50	--	--	--	--	FR DC 2
36	6	X	44	R	08/29/1955	10.0	49	44	2.00	1	08/29/1955	--	FR DC 3

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMPLETED	ALTITUDE (FT)	TOPO SETTING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DC 4	FR-01-2162	LEONARD, FRED A	A R KEYSER	1953	1080	H	112	H	400CTCN
FR DC 5	FR-01-2160	TULLIS, E C	A R KEYSER	1953	1060	H	113	H	400CTCN
FR DC 6	FR-01-1210	CROUSE, G F	A R KEYSER	1953	1000	S	130	H	400CTCN
FR DC 7	FR-00-9503	GLADHILL, WILBUR	A R KEYSER	1952	700	S	66	H	400PCMB
FR DC 8	FR-00-6422	GLADHILL, GUY	A R KEYSER	1950	620	S	21	H	400CTCN
FR DC 9	FR-01-9697	ROUTZAHN, PAUL A	A L SMITH	1955	625	F	93	H	400CTCN
FR DC 10	FR-00-6161	MARKER, HOWARD	JOHN SHAFF	1950	560	S	129	H	400GBGG
FR DC 11	FR-01-1938	MARKER, AUSTIN	JOHN SHAFF	1953	580	H	50	H	400GBGG
FR DC 12	FR-01-8227	BEACHLEY, PARK A	A R KEYSER	1955	500	V	60	H	400GBGG
FR DC 13	FR-01-0944	RUDY'S MOTEL	JACK HARLEY	1952	500	S	69	C	400CTCN
FR DC 14	FR-00-5695	SHEFFER, FRANK	JACK HARLEY	1950	480	S	45	H	377LUDN
FR DC 15	FR-00-9088	BOYER, RUTHLAND	A R KEYSER	1951	465	S	103	H	400CTCN
FR DC 16	FR-01-8163	TOWN OF MIDDLETOWN	JOHN SHAFF	1955	645	F	130	P	400CTCN
FR DC 17	FR-00-8920	SAMPSELL, J B	JOHN SHAFF	1951	615	S	67	U	400CTCN
FR DC 18	--	SAMPSELL, J B	--	1947	615	S	55	H	400CTCN
FR DC 19	FR-00-7979	BIRELEY, W P	A R KEYSER	1951	600	H	117	H	377LUDN
FR DC 20	--	THAYER	--	--	415	V	40	H	400GBGG
FR DC 23	--	BLACK, THELMA	--	--	460	S	19	U	400GBGG
FR DC 25	--	MOSER, H	--	--	1050	H	178	U	400CTCN
FR DC 26	FR-00-6424	SWEET, WILLIAM	A R KEYSER	1950	980	S	95	H	400CTCN
FR DC 27	--	BRADDOCK WATER CO, INC	ED BROWN	--	830	S	100	U	--
FR DC 28	--	BLICKENSTAFF, DAMON	--	1940	680	S	76	H	400CTCN
FR DC 30	--	HOUSE, J W	A R KEYSER	1956	785	H	230	H	400CTCN
FR DC 31	--	SOUTH MTN CREAMERY	KOHL BROS	1925	470	S	375	U	400CTCN
FR DC 37	FR-04-8794	TOWN OF MIDDLETOWN	A R KEYSER	1962	640	V	465	P	400CTCN
FR DC 38	FR-65-0491	TOWN OF MIDDLETOWN	A R KEYSER	1965	640	V	160	P	400CTCN
FR DC 39	FR-65-0491	TOWN OF MIDDLETOWN	A R KEYSER	1965	640	V	160	P	400CTCN
FR DC 40	FR-69-0071	GULF OIL CO	ROBERT CLINE	1968	600	H	395	C	400CTCN
FR DC 41	FR-70-0509	ALBAN TRACTOR CO	W H LAMBERSON	1970	610	H	375	U	400CTCN
FR DC 42	FR-73-7278	BIDLE BROTHERS CO	KEYSER-GARVER	1979	610	H	220	N	400CTCN
FR DC 43	FR-69-0500	ALBAN TRACTOR CO	JERRY HARLEY	1969	570	S	286	U	400CTCN
FR DC 44	FR-69-0500	ALBAN TRACTOR CO	JERRY HARLEY	1969	560	S	614	N	400CTCN
FR DC 45	FR-73-8007	TOWN OF MIDDLETOWN	ROBERT CLINE	1980	640	S	475	P	400CTCN
FR DC 46	FR-73-8006	TOWN OF MIDDLETOWN	ROBERT CLINE	1980	640	S	400	P	400CTCN
FR DC 47	FR-73-8006	TOWN OF MIDDLETOWN	ROBERT CLINE	1980	640	S	500	U	400CTCN
FR DC 48	FR-73-6400	TOWN OF MIDDLETOWN	ROBERT CLINE	1978	700	H	300	P	400CTCN
FR DC 49	FR-73-6399	TOWN OF MIDDLETOWN	ROBERT CLINE	1978	700	H	425	P	400CTCN
FR DC 50	FR-73-6398	TOWN OF MIDDLETOWN	ROBERT CLINE	1978	700	H	450	P	400CTCN
FR DC 51	FR-73-1944	TOWN OF MIDDLETOWN	ROBERT CLINE	1974	645	V	500	P	400CTCN
FR DC 52	FR-73-1943	TOWN OF MIDDLETOWN	ROBERT CLINE	1974	645	V	265	P	400CTCN
FR DC 53	FR-73-1706	TOWN OF MIDDLETOWN	ROBERT CLINE	1974	650	V	215	U	400CTCN
FR DC 54	FR-73-1602	TOWN OF MIDDLETOWN	KEYSER-GARVER	1974	660	V	304	U	400CTCN
FR DC 55	FR-66-0605	FOUNTAINDALE SERVICES	KEYSER-GARVER	1966	790	S	265	P	400CTCN
FR DC 56	FR-69-0207	FOUNTAINDALE SERVICES	ROBERT CLINE	1968	670	S	220	P	400CTCN
FR DC 57	FR-73-0070	FOUNTAINDALE SERVICES	ROBERT CLINE	1973	660	W	300	P	400CTCN
FR DC 58	FR-73-2825	FOUNTAINDALE SERVICES	ROBERT CLINE	1975	620	S	300	P	400CTCN
FR DC 59	FR-73-2824	FOUNTAINDALE SERVICES	ROBERT CLINE	1975	620	S	150	P	400CTCN
FR DC 60	FR-73-3729	FOUNTAINDALE SERVICES	KEYSER-GARVER	1976	580	S	205	P	400CTCN
FR DC 61	FR-73-7558	FOUNTAINDALE SERVICES	ROBERT CLINE	1980	615	S	675	P	400CTCN
FR DC 62	FR-73-8045	FOUNTAINDALE SERVICES	ROBERT CLINE	1981	700	S	642	P	400CTCN
FR DC 63	FR-04-6540	C & P TELEPHONE CO	KEYSER-GARVER	1962	720	S	130	C	400CTCN
FR DC 64	FR-72-0051	BRADDOCK HEIGHTS COMM	ROBERT CLINE	1972	865	S	290	R	400CTCN
FR DC 65	--	COWELL, DENNIS	--	1870	460	S	32	S	400CTCN
FR DD 1	--	U S ARMY	--	--	325	F	--	T	377FDCK 231NOXFB
FR DD 2	--	U S ARMY	--	1943	350	F	--	U	377FDCK
FR DD 3	FR-01-0805	U S ARMY	A R KEYSER	1952	375	S	140	T	231NOXFB
FR DD 4	--	U S ARMY	--	1943	320	F	800	U	377FDCK
FR DD 5	--	CITY OF FREDERICK	--	--	540	F	996	U	377HRPR
FR DD 6	--	CITY OF FREDERICK	--	--	560	S	1140	U	377HRPR
FR DD 7	FR-00-6768	LANTZ, WILLIAM	JOHN SHAFF	1950	690	S	154	H	377LUDN
FR DD 8	FR-00-9443	LANTZ, WILLIAM	JOHN SHAFF	1952	730	S	100	C	377LUDN
FR DD 9	FR-02-2652	MCCAVETT	L F EASTERDAY	1956	500	S	209	H	377HRPR
FR DD 10	--	BRADDOCK WATER CO, INC	G A CULLEN A R KEYSER	1913 1960	730	S	510 500	U	377LUDN
FR DD 13	FR-01-5755	BRADDOCK WATER CO. INC	C A CROMWELL	1954	910	V	85	P	400CTCN
FR DD 14	FR-01-5111	DUTROW, CLAUDE H	A R KEYSER	1954	480	S	85	H	377HRPR
FR DD 15	FR-00-3580	PENNINGTON, L B	JACK HARLEY	1949	480	S	124	H	377ANTM
FR DD 16	FR-00-7489	ANDREWS, WALTER L	A R KEYSER	1951	510	H	88	H	377HRPR
FR DD 17	FR-00-8522	MATHEWS, WILLIAM D	A R KEYSER	1951	530	H	122	H	377HRPR
FR DD 18	FR-00-8327	WHIPP, HARVEY	JACK HARLEY	1951	680	S	88	H	377LUDN
FR DD 19	--	WHIPP, HARVEY	--	--	680	S	53	U	377LUDN
FR DD 20	FR-00-5369	PENN, ROBERT F	JACK HARLEY	1950	790	S	90	H	377LUDN
FR DD 21	FR-01-1215	THOMPSON, LEONARD M	A R KEYSER	1952	680	S	105	H	377LUDN
FR DD 22	FR-01-2513	KORRELL, CHARLES	JACK HARLEY	1953	570	H	130	H	377HRPR
FR DD 23	FR-01-1590	KORRELL, GRAEON	JACK HARLEY	1953	580	H	90	H	377HRPR
FR DD 24	FR-01-4599	BLANK, HARVEY	R HARRIS	1954	550	H	80	H	377HRPR
FR DD 25	FR-01-3047	SHAFFER, LESTER	JACK HARLEY	1953	450	S	93	H	231NOXF
FR DD 26	FR-01-4022	RHODERICK, M E	JOHN SHAFF	1953	400	F	70	H	231NOXF
FR DD 27	--	KEMP, AUSTIN	--	--	400	S	74	H	231NOXF
FR DD 28	FR-01-8971	BLANK, MILTON	R HARRIS	1955	570	S	80	H	377HRPR
FR DD 29	FR-00-7021	BRUST, HERMAN B	A R KEYSER	1950	750	S	62	H	377LUDN

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
14	6	X	20	R	05/12/1953	3.0	110	20	0.03	1	05/12/1953	--	FR DC 4
15	6	X	15	R	04/16/1953	8.0	35	15	.40	1	04/16/1953	--	FR DC 5
13	6	X	30	R	04/04/1953	2.0	125	30	.02	2	04/04/1953	Q	FR DC 6
45	6	X	15	R	02/08/1952	10.0	25	15	1.00	1	02/08/1952	Q	FR DC 7
21	6	O	5	R	08/14/1950	7.0	12	5	2.33	.5	08/14/1950	--	FR DC 8
8	6	X	33	R	07/15/1955	10.0	33	33	--	1	07/15/1955	Q	FR DC 9
56	6	X	35	R	07/01/1950	10.0	35	35	--	4	07/01/1950	--	FR DC 10
50	6	O	10	R	03/31/1953	5.0	10	10	--	1	03/31/1953	--	FR DC 11
--	--	--	30	R	02/14/1955	8.0	35	30	1.60	2	02/14/1955	--	FR DC 12
12	6	X	14	R	09/03/1952	10.0	60	14	.22	--	09/03/1952	Q	FR DC 13
21	6	X	6	R	04/22/1950	10.0	33	6	.37	--	04/22/1950	Q	FR DC 14
38	6	X	30	R	11/21/1951	10.0	50	30	.50	2	11/21/1951	--	FR DC 15
--	8	X	35.29	S	10/18/1955	30.0	60	30	1.00	72	04/30/1955	Q	FR DC 16
67	6	O	16.69	S	10/18/1955	5.0	45	38	.71	1.5	11/03/1955	--	FR DC 17
55	6	O	20.10	S	10/18/1955	--	--	--	--	--	--	--	FR DC 18
17	6	X	30	R	05/30/1951	6.0	50	30	.30	--	05/30/1951	Q	FR DC 19
40	36	W	7.65	S	10/20/1955	--	--	--	--	--	--	--	FR DC 20
19	36	W	9.88	S	10/21/1955	--	--	--	--	--	--	--	FR DC 23
--	6	X	68.18	S	10/17/1955	--	--	--	--	--	--	O	FR DC 25
10	6	X	45	R	07/12/1950	1.0	90	45	.02	--	07/12/1950	--	FR DC 26
--	--	--	50	R	01/01/1942	25.0	--	--	--	--	--	--	FR DC 27
--	6	--	35	E	09/05/1956	--	--	--	--	--	--	Q	FR DC 28
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DC 30
--	6	X	60	R	--	30.0	--	60	--	--	01/01/1925	--	FR DC 31
42	6	X	40	R	09/14/1962	60.0	--	40	--	2	09/14/1962	--	FR DC 37
32	6	X	9	R	03/10/1965	40.0	--	9	--	2	03/10/1965	--	FR DC 38
44	6	X	10	R	03/11/1965	60.0	--	10	--	2	03/11/1965	Q	FR DC 39
46	6	X	30	R	08/20/1968	4.0	395	30	.01	1	08/20/1968	--	FR DC 40
44	6	X	50	R	07/01/1970	4.0	180	50	.03	1	07/01/1970	O	FR DC 41
41	6	X	46	R	10/19/1979	20.0	185	46	.14	2	10/19/1979	--	FR DC 42
19	6	X	35	R	07/03/1969	8.0	286	35	--	1	07/03/1969	O	FR DC 43
20	6	X	20	R	06/27/1969	3.0	--	20	--	1	06/27/1969	--	FR DC 44
63	6	X	18	R	11/14/1980	40.0	475	18	.09	1	11/14/1980	--	FR DC 45
84	6	X	18	R	11/14/1980	40.0	400	18	.11	1	11/14/1980	--	FR DC 46
63	6	X	-1	Z	04/26/1982	6.0	500	5	.01	1	11/14/1980	--	FR DC 47
80	6	X	105	R	10/07/1978	12.0	300	105	.06	1	10/07/1978	--	FR DC 48
86	6	X	66	R	10/03/1978	12.0	425	66	.03	2	10/03/1978	--	FR DC 49
80	6	X	89	R	10/07/1978	15.0	450	89	.04	1	10/07/1978	--	FR DC 50
54	6	X	10	R	03/25/1974	30.0	500	10	.06	2	03/25/1974	--	FR DC 51
37	6	X	10	R	03/20/1974	75.0	265	10	.29	2	03/20/1974	--	FR DC 52
33	6	X	10	R	03/19/1974	10.0	215	10	.05	2	03/19/1974	--	FR DC 53
31	6	X	20	R	02/12/1974	22.0	304	20	.08	1	02/12/1974	--	FR DC 54
23	6	X	30	R	05/18/1966	25.0	265	30	.11	1	05/18/1966	--	FR DC 55
70	6	X	30	R	11/02/1968	30.0	220	30	.16	1	11/02/1968	--	FR DC 56
76	6	X	30	R	06/18/1978	30.0	300	30	.11	1	06/18/1973	--	FR DC 57
97	6	X	7	R	08/01/1975	30.0	300	7	.10	1	08/01/1975	--	FR DC 58
54	6	X	6	R	08/01/1975	35.0	150	6	.24	1	08/01/1975	--	FR DC 59
37	6	X	35	R	07/02/1976	35.0	45	35	3.50	2	07/02/1976	--	FR DC 60
70	6	X	20	R	04/07/1980	15.0	675	20	.02	1	04/07/1980	--	FR DC 61
105	6	X	15	R	02/27/1981	30.0	642	15	.05	5	02/27/1981	--	FR DC 62
23	6	X	22	R	04/06/1962	20.0	--	22	--	24	04/06/1962	--	FR DC 63
49	6	X	50	R	01/19/1972	15.0	290	50	.06	1	01/19/1972	--	FR DC 64
--	--	W	13.04	S	07/28/1982	--	--	--	--	--	--	O,Q	FR DC 65
--	--	--	--	--	--	75.0	--	--	--	--	11/09/1954	Q	FR DD 1
--	8	--	--	--	--	--	--	--	--	--	--	--	FR DD 2
45	6	X	34.62	S	09/25/1953	65.0	--	30	--	3	09/12/1952	Q	FR DD 3
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DD 4
--	--	--	3.61	S	11/09/1956	70.0	--	--	--	--	01/01/1946	--	FR DD 5
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DD 6
154	6	O	53	R	10/09/1950	5.0	73	53	.25	2	10/09/1950	--	FR DD 7
100	8	O	40	R	03/10/1952	2.0	94	40	.04	3	03/10/1952	--	FR DD 8
23	6	X	39	R	05/02/1956	3.0	209	--	--	--	04/30/1956	--	FR DD 9
8	8	X	4.13	S	12/03/1962	10.0	--	15	--	--	01/01/1913	--	FR DD 10
42	6	X	5	R	07/24/1954	50.0	11	5	8.33	1.2	07/24/1954	--	FR DD 13
27	6	X	30	R	06/03/1954	10.0	60	30	.33	2	06/03/1954	--	FR DD 14
--	--	X	6	R	02/04/1949	3.0	110	6	.03	--	02/04/1949	--	FR DD 15
35	6	X	35	R	03/10/1951	3.0	70	30	.09	1	03/10/1951	--	FR DD 16
9	6	X	20	R	08/22/1951	2.5	40	20	.13	1	08/22/1951	--	FR DD 17
12	6	X	49.10	S	06/15/1956	2.5	77	48	.09	--	07/24/1951	--	FR DD 18
53	30	W	45.59	S	06/15/1956	--	--	--	--	--	--	--	FR DD 19
6	8	X	36	R	02/18/1950	3.5	80	36	.08	--	02/18/1950	--	FR DD 20
18	6	X	20	R	10/15/1952	1.0	100	20	.01	.5	10/15/1952	--	FR DD 21
28	6	X	30	R	06/03/1953	15.0	50	30	.75	--	06/03/1953	--	FR DD 22
22	6	X	25	R	01/14/1953	3.0	80	25	.06	--	01/14/1953	--	FR DD 23
13	6	X	35	R	04/26/1954	5.0	70	35	.14	--	04/26/1954	--	FR DD 24
23	6	X	23	R	10/16/1953	12.0	76	23	.23	--	10/16/1953	--	FR DD 25
60	6	X	--	--	--	3.0	--	--	--	4	12/02/1953	--	FR DD 26
--	6	--	--	--	--	--	--	--	--	--	--	--	FR DD 27
17	5	X	--	--	--	--	--	--	--	--	--	--	FR DD 28
21	6	X	30	R	10/20/1950	6.0	45	30	.40	1	10/20/1950	--	FR DD 29

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DD 30	FR-00-3728	BLANK, M L	JACK HARLEY	1949	550	S	70	H	377HRPR
FR DD 31	FR-00-9943	ETZLER, JOHN M	A R KEYSER	1952	690	S	104	H	377LUDN
FR DD 32	FR-01-2243	DUTROW, NORMAN	R HARRIS	1953	580	H	108	H	377HRPR
FR DD 33	FR-01-8452	JONES, PAUL O	A R KEYSER	1956	450	H	75	H	231NOXF
FR DD 34	--	BRITTAIN, SPENCER	A R KEYSER	1956	430	H	86	H	231NOXF
FR DD 35	FR-00-5057	MARTZ. WALTER A	A R KEYSER	1949	380	H	100	S	231NOXF
FR DD 36	--	MARTZ. WALTER A	--	--	360	S	67	H	231NOXF
FR DD 37	FR-00-9916	MARTZ. WALTER C	A R KEYSER	1952	390	H	90	H	231NOXF
FR DD 40	FR-00-8873	ZION REFORMED CHURCH	A R KEYSER	1951	325	V	34	T	231NOXF
FR DD 41	FR-00-8581	TYERYAR, HERBERT G	A R KEYSER	1951	400	S	69	H	231NOXF
FR DD 42	--	STUP	--	--	380	V	19	H	231NOXF
FR DD 43	FR-01-6558	ZIMMERMAN, HOWARD	A R KEYSER	1954	450	F	25	H	110MNWS
FR DD 44	FR-01-8451	BROSIUS HOMES CORP	A R KEYSER	1955	490	S	214	P	377HRPR
FR DD 45	FR-01-0139	WILSON, BENJAMIN	JACK HARLEY	1952	340	H	81	H	231NOXF
FR DD 46	FR-00-9076	STOCKMAN, REUBEN	JACK HARLEY	1951	430	S	65	H	377TMSN
FR DD 47	FR-01-0382	LAYMAN, CLIFTON	JACK HARLEY	1952	640	H	160	H	377HRPR
FR DD 48	FR-00-9421	KUHN, SILAS	A R KEYSER	1952	600	S	135	H	377HRPR
FR DD 49	FR-00-6680	LEBHER, JOSEPH	A R KEYSER	1950	650	H	128	H	377ANTM
FR DD 50	FR-01-2439	SHEPLEY, THOMAS	JACK HARLEY	1953	480	H	75	H	377ANTM
FR DD 51	FR-01-2438	GILBERT, HARP	JACK HARLEY	1953	480	S	77	H	377HRPR
FR DD 52	FR-01-3309	HAMILTON, GEORGE	A R KEYSER	1953	560	S	100	H	377HRPR
FR DD 53	FR-01-7490	REMSBURG. HARRY	JACK HARLEY	1955	640	S	36	H	377LUDN
FR DD 54	FR-00-8026	SCHMITT, C B	JACK HARLEY	1951	1000	S	60	H	377LUDN
FR DD 55	--	SCHMITT, C B	--	--	1000	S	27	U	377LUDN
FR DD 56	FR-00-9476	SCHMITT, C G	A R KEYSER	1952	1020	S	55	U	377LUDN
			JACK HARLEY	1952			80		
FR DD 57	FR-01-1901	YINGLING, J R	JACK HARLEY	1953	990	S	84	H	377LUDN
FR DD 58	FR-01-7441	LERNER, M L	R HARRIS	1954	1130	S	74	H	377LUDN
FR DD 59	FR-01-4519	ROSE'S RESTAURANT	A R KEYSER	1954	380	S	125	C	231NOXF
FR DD 60	FR-01-2164	COOK, GALE W	A R KEYSER	1953	380	S	30	C	231NOXF
FR DD 61	FR-00-4759	LUCKY'S TRAILER CT	WADE CORUN	1949	370	S	41	H	231NOXF
FR DD 62	--	LUCKY'S TRAILER CT	A R KEYSER	1953	380	S	92	P	231NOXF
FR DD 63	FR-01-9348	MASSER'S MOTEL	A R KEYSER	1955	410	F	214	C	377FDCK
FR DD 64	--	MASSER'S MOTEL	A R KEYSER	1951	410	F	163	C	377FDCK
FR DD 65	FR-02-2294	STULL. RESLEY	JACK HARLEY	1956	420	F	56	H	231NOXF
FR DD 66	FR-01-3077	HARNWELL, ANNA J	A R KEYSER	1953	325	V	92	H	231NOXF
FR DD 67	FR-00-3647	DAN-DEE RESTAURANT	C A CROMWELL	1948	930	S	30	U	400CTCN
FR DD 68	FR-01-1300	DAN-DEE MOTEL	JACK HARLEY	1952	945	S	76	C,H	400CTCN
FR DD 69	--	MONOCACY BROADCASTING	C A CROMWELL	--	1710	H	97	C	377LUDN
FR DD 70	FR-01-0807	SMITH, CHARLES M	A R KEYSER	1952	500	S	98	H	377HRPR
FR DD 71	--	SMITH, CHARLES M	C A CROMWELL	--	500	S	90	U	377HRPR
FR DD 72	--	SMITH, CHARLES M	--	--	500	S	41	U	377HRPR
FR DD 73	FR-01-0812	TOMS, ALTON J	A R KEYSER	1952	600	S	140	H	377HRPR
FR DD 74	--	DUVALL, C A	--	--	660	V	21	U	377WVRN
FR DD 76	FR-01-1056	LOY, J R	A R KEYSER	1952	620	H	105	H	377HRPR
FR DD 77	FR-00-9493	HAYWARD, E A	A R KEYSER	1952	515	H	73	H	377HRPR
FR DD 79	FR-04-9969	BRADDOCK WATER CO, INC	A R KEYSER	1962	960	S	455	P	400CTCN
FR DD 81	--	BRADDOCK WATER CO, INC	ED BROWN	1926	700	S	54	P	377LUDN
FR DD 82	FR-04-5773	YELLOW SPRGS ELEM SCH	A R KEYSER	1961	510	V	200	T	377FDCK
FR DD 83	--	MARTZ, HAROLD	WADE CORUN	1952	460	S	84	U	377ANTM
FR DD 84	FR-70-0032	MARTZ. HAROLD	ROBERT CLINE	1969	420	V	320	U	231NOXF
FR DD 85	FR-70-0232	MARTZ. HAROLD	ROBERT CLINE	1969	450	S	220	U	377ANTM
FR DD 86	FR-70-0232	MARTZ, HAROLD	ROBERT CLINE	1969	430	S	129	S,H	231NOXF
									377FDCK
FR DD 88	FR-69-0034	LONG. ROLAND	A R KEYSER	1968	445	F	204	S	377HRPR
FR DD 89	FR-70-0417	BRUCHEY, MARILYN	A R KEYSER	1970	530	S	255	H	377FDCK
FR DD 90	FR-70-0355	FREDERICK COMM COLLEGE	L F EASTERDAY	1970	360	F	160	Z	377FDCK
FR DD 91	FR-70-0017	CLOVERHILL CIVIC ASSOC	ROBERT CLINE	1969	360	S	245	R	377FDCK
FR DD 92	FR-69-0430	SPURRIER, KENNETH	ROBERT CLINE	1969	370	V	45	H	377FDCK
FR DD 93	FR-69-0183	REESE, ELMA	ROBERT CLINE	1968	370	V	70	H	377FDCK
FR DD 94	FR-70-0151	WEISS, WILLIAM	ROBERT CLINE	1969	385	F	220	H	377FDCK
FR DD 95	FR-70-0353	BIDDINGER, FRANCIS	ROBERT CLINE	1970	380	F	145	H	377FDCK
FR DD 96	FR-70-0380	MORGAN & KELLER, INC	A R KEYSER	1970	380	V	150	H	377FDCK
FR DD 97	FR-70-0031	MORGAN & KELLER, INC	A R KEYSER	1969	380	S	162	H	377FDCK
FR DD 98	FR-70-0236	MORGAN & KELLER, INC	A R KEYSER	1970	370	F	90	H	377FDCK
FR DD 99	FR-70-0093	CHURCH OF THE NAZARENE	A R KEYSER	1969	380	F	98	H	367GROV
FR DD 100	FR-70-0470	STOUFFER, STEPHAN A	A R KEYSER	1970	370	F	100	H	377FDCK
FR DD 101	FR-70-0060	SWARTWOOD, WAYNE	A R KEYSER	1969	380	F	142	H	377FDCK
FR DD 102	FR-69-0429	RITMILLER, JOHN	ROBERT CLINE	1969	380	F	320	H	367GROV
FR DD 103	FR-69-0479	WELCH, JAMES	ROBERT CLINE	1969	380	F	81	H	367GROV
FR DD 104	FR-70-0023	REID, ROBERT	ROBERT CLINE	1969	380	F	195	H	367GROV
FR DD 105	FR-70-0024	DAMSTEEGT, VERNON	ROBERT CLINE	1969	380	F	102	H	367GROV
FR DD 106	FR-70-0073	SAUNDERS, ROBERT	ROBERT CLINE	1969	380	F	210	H	367GROV
FR DD 107	FR-70-0113	REDDICLIFF, JACK	ROBERT CLINE	1969	375	F	220	H	367GROV
FR DD 108	FR-70-0362	AUSHERMAN CONST CO	ROBERT CLINE	1970	380	F	88	H	367GROV
FR DD 109	FR-69-0334	JOHNSON, DONALD	ROBERT CLINE	1969	375	F	58	H	377FDCK
FR DD 110	FR-69-0247	LAMB, NEIL	ROBERT CLINE	1969	380	F	240	H	377FDCK
FR DD 111	FR-69-0372	FERGUSON. ROBERT	ROBERT CLINE	1969	380	F	95	H	377FDCK
FR DD 112	FR-69-0331	TAVERES, ALFRED	ROBERT CLINE	1969	375	F	395	H	377FDCK
FR DD 113	FR-69-0067	BAUSUM, HOWARD	ROBERT CLINE	1968	375	F	315	H	377FDCK
FR DD 114	FR-69-0215	ADAMS, MERHL A	ROBERT CLINE	1968	375	F	60	H	377FDCK
FR DD 115	FR-69-0530	LUSCRI, BRUNO	ROBERT CLINE	1969	380	F	145	H	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
30	6	X	35	R	03/18/1949	6.0	55	35	0.30	--	03/18/1949	--	FR DD 30
12	6	X	30	R	05/02/1952	2.0	104	30	.03	1	05/02/1952	--	FR DD 31
12	6	X	30	R	05/02/1953	--	--	--	--	--	--	--	FR DD 32
25	6	X	32	R	04/28/1955	9.0	48	32	.56	1	04/28/1955	--	FR DD 33
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DD 34
14	6	X	25	R	12/06/1949	6.0	80	25	.11	1	12/06/1949	--	FR DD 35
--	6	X	24.96	S	06/06/1956	--	--	--	--	--	--	--	FR DD 36
15	6	X	10	R	04/12/1952	5.0	86	10	.07	1	04/12/1952	--	FR DD 37
--	--	X	2	R	09/06/1951	3.0	30	2	.11	1	09/06/1951	--	FR DD 40
33	6	X	20	R	09/01/1951	4.0	50	20	.13	.5	09/01/1951	--	FR DD 41
19	36	W	--	--	--	--	--	--	--	--	--	--	FR DD 42
25	6	O	10	R	09/02/1954	4.0	23	10	.31	1	09/02/1954	--	FR DD 43
100	6	X	25	R	05/04/1955	50.0	50	25	2.00	23	05/04/1955	--	FR DD 44
75	6	X	60	R	05/12/1952	15.0	--	60	--	--	05/12/1952	--	FR DD 45
24	6	X	9.47	S	06/15/1956	10.0	40	30	1.00	--	11/26/1951	--	FR DD 46
22	6	X	43	R	06/21/1952	2.0	150	43	.02	--	06/21/1952	--	FR DD 47
16	6	X	33.80	S	08/28/1956	.5	130	25	.01	.5	01/17/1952	--	FR DD 48
20	6	X	50	R	09/28/1950	2.5	120	50	.04	1	09/28/1950	--	FR DD 49
15	6	X	33	R	05/30/1953	8.0	65	33	.25	--	05/30/1953	--	FR DD 50
23	6	X	30	R	07/27/1953	4.0	65	30	.11	--	07/27/1953	--	FR DD 51
11	6	X	10	R	09/16/1953	5.0	50	10	.13	--	09/16/1953	--	FR DD 52
20	6	X	9	R	01/22/1955	5.0	30	9	.24	--	01/22/1955	--	FR DD 53
36	6	X	20	R	09/12/1951	15.0	--	20	--	--	09/12/1951	--	FR DD 54
27	48	X	13.51	S	09/05/1956	--	--	--	--	--	--	--	FR DD 55
33	6	X	25	R	02/27/1952	3.0	50	25	.12	1	02/27/1952	--	FR DD 56
50	6	X	22	R	03/11/1953	3.0	25	22	.06	--	03/11/1953	--	FR DD 57
67	6	X	48	R	12/29/1954	--	--	--	--	--	--	--	FR DD 58
16	6	X	35	R	05/14/1954	10.0	70	35	.29	1	05/14/1954	--	FR DD 59
22	6	X	15	R	07/24/1953	20.0	20	15	4.00	1	07/24/1953	--	FR DD 60
32	6	X	17	R	11/03/1949	15.0	19	17	7.50	--	11/03/1949	--	FR DD 61
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DD 62
28	8	X	10	R	09/30/1955	10.0	180	10	.06	--	09/30/1955	--	FR DD 63
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DD 64
22	6	X	8	R	03/09/1956	10.0	22	8	.71	--	03/09/1956	Q	FR DD 65
9	6	X	10	R	09/09/1953	25.0	--	10	--	2	09/09/1953	--	FR DD 66
30	5	O	--	R	03/02/1948	--	--	--	--	--	--	--	FR DD 67
23	6	X	17	R	11/05/1952	12.0	--	17	--	--	11/05/1952	--	FR DD 68
--	6	X	50	R	--	--	--	--	--	--	--	--	FR DD 69
39	6	X	20.98	S	11/08/1956	2.0	80	10	.03	.5	08/12/1952	--	FR DD 70
--	6	--	--	--	--	--	--	--	--	--	--	--	FR DD 71
41	48	W	5.45	S	11/08/1956	--	--	--	--	--	--	--	FR DD 72
14	6	X	20	R	08/26/1952	1.5	120	20	.02	1	08/26/1952	--	FR DD 73
--	6	--	8.51	S	11/08/1956	4.4	9	8	17.60	.4	11/08/1956	--	FR DD 74
9	6	X	30	R	09/27/1952	20.0	40	30	2.00	1	09/27/1952	--	FR DD 76
18	6	X	20	R	02/08/1952	6.0	30	20	.60	1	02/08/1952	Q	FR DD 77
62	6	X	12	R	09/27/1962	40.0	--	12	--	3	09/27/1962	--	FR DD 79
--	6	--	3.43	S	12/03/1962	--	--	--	--	--	--	--	FR DD 81
46	6	X	35	R	12/09/1961	35.0	--	35	--	8	12/09/1961	--	FR DD 82
--	6	X	--	--	--	3.0	--	--	--	--	--	--	FR DD 83
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 84
--	--	X	--	--	--	3.0	--	--	--	--	--	--	FR DD 85
83	6	X	50	R	12/12/1969	100.0	129	50	1.27	1	12/12/1969	--	FR DD 86
39	6	X	35	R	08/20/1968	5.0	--	35	--	1	08/20/1968	--	FR DD 88
124	6	X	51	R	05/20/1970	15.0	--	51	--	2	05/20/1970	--	FR DD 89
48	6	X	30	R	03/27/1970	12.0	160	30	.09	1	03/27/1970	--	FR DD 90
25	5	X	15	R	07/23/1969	5.0	245	15	.02	1	07/23/1969	--	FR DD 91
28	6	X	30	R	05/05/1969	50.0	45	30	3.33	1	05/05/1969	--	FR DD 92
49	6	X	35	R	10/29/1968	50.0	70	35	1.43	1	10/29/1968	--	FR DD 93
57	5	X	35	R	11/06/1969	3.0	220	35	.02	1	11/06/1969	--	FR DD 94
40	5	X	35	R	04/07/1970	20.0	145	35	.18	1	04/07/1970	--	FR DD 95
18	6	X	--	--	--	40.0	--	--	--	1	05/04/1970	--	FR DD 96
17	6	X	30	R	11/15/1969	20.0	--	30	--	1	11/15/1969	--	FR DD 97
38	6	X	--	--	--	50.0	--	--	--	1	05/05/1970	--	FR DD 98
83	6	X	45	R	09/29/1969	40.0	--	45	--	1	09/29/1969	--	FR DD 99
39	6	X	20	R	08/24/1970	50.0	--	20	--	1	08/24/1970	--	FR DD 100
86	6	X	35	R	11/10/1969	8.0	--	35	--	1	11/10/1969	--	FR DD 101
61	6	X	40	R	06/02/1969	5.0	320	40	.02	1	06/02/1969	--	FR DD 102
74	6	X	40	R	06/06/1969	100.0	81	40	2.44	1	06/06/1969	--	FR DD 103
73	5	X	35	R	08/22/1969	10.0	195	35	.06	1	08/22/1969	--	FR DD 104
102	6	O	35	R	09/13/1969	8.0	102	35	.12	1	09/13/1969	--	FR DD 105
50	5	X	40	R	09/19/1969	6.0	210	40	.04	1	09/19/1969	--	FR DD 106
40	6	X	35	R	10/10/1969	4.0	220	35	.02	1	10/10/1969	--	FR DD 107
86	5	X	35	R	04/29/1970	30.0	88	35	.57	1	04/29/1970	--	FR DD 108
48	6	X	40	R	03/03/1969	20.0	58	40	1.11	1	03/03/1969	--	FR DD 109
20	6	X	40	R	01/25/1969	6.0	240	40	.03	1	01/25/1969	--	FR DD 110
41	6	X	35	R	05/01/1969	15.0	95	35	.25	1	05/01/1969	--	FR DD 111
44	6	X	35	R	04/07/1969	2.0	395	35	.01	1	04/07/1969	--	FR DD 112
41	6	X	35	R	08/28/1968	50.0	315	35	.18	1	08/28/1968	--	FR DD 113
20	6	X	30	R	11/19/1968	50.0	60	30	1.67	1	11/19/1968	--	FR DD 114
28	6	X	35	R	07/02/1969	20.0	145	35	.18	1	07/02/1969	--	FR DD 115

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DD 116	FR-69-0529	SANDBOWER, ROBERT	ROBERT CLINE	1969	380	F	220	H	377FDCK
FR DD 117	FR-69-0428	HAYS, SAMUEL	ROBERT CLINE	1969	375	F	83	H	377FDCK
FR DD 118	FR-70-0295	BRUCHEY, GEORGE	ROBERT CLINE	1970	380	F	133	H	367GROV
FR DD 119	FR-70-0393	HARNER, NICKEY	ROBERT CLINE	1970	380	F	70	H	367GROV
FR DD 120	FR-69-0362	JOHNSON, ROGER	ROBERT CLINE	1969	380	F	145	H	367GROV
FR DD 121	FR-70-0328	BARNETT, OTHA F	ROBERT CLINE	1970	385	F	220	H	367GROV
FR DD 122	FR-70-0370	CARROLL, NORMAN	ROBERT CLINE	1970	375	F	100	H	367GROV
FR DD 123	FR-69-0373	HOUSE, GILMORE	ROBERT CLINE	1969	400	H	80	H	367GROV
FR DD 124	FR-69-0046	MASTRINO, MILLARD	ROBERT CLINE	1968	390	F	105	H	367GROV
FR DD 125	FR-69-0213	BRADICICH, JOHN M	ROBERT CLINE	1968	390	F	395	H	367GROV
FR DD 126	FR-70-0202	JOHNSON, RONALD	ROBERT CLINE	1969	400	H	100	H	367GROV
FR DD 127	FR-69-0427	PRESSLER, AUDREY	ROBERT CLINE	1969	390	F	365	H	377FDCK
FR DD 128	FR-69-0374	SCHULTZ, ALBERT	ROBERT CLINE	1969	390	F	245	H	377FDCK
FR DD 129	FR-69-0478	WADE, LEWIS	ROBERT CLINE	1969	380	F	85	H	377FDCK
FR DD 130	FR-67-0289	SIMMONS, WILLIAM	ROBERT CLINE	1966	400	H	170	H	367GROV
FR DD 131	FR-69-0531	MILLER, TERRY	ROBERT CLINE	1969	390	F	185	H	377FDCK
FR DD 132	FR-70-0072	MCDONALD, GILMORE	ROBERT CLINE	1969	390	F	180	H	377FDCK
FR DD 133	FR-70-0359	AUSHERMAN CONST CO	ROBERT CLINE	1970	390	F	70	H	377FDCK
FR DD 134	FR-70-0155	SUMMERS, WILLIAM C	C A CROMWELL	1970	395	V	45	H	377FDCK
FR DD 135	FR-72-0124	TOMS, LEE C	ROBERT CLINE	1971	330	S	90	H	231NOXF
FR DD 136	FR-71-0560	BURGESS, CHRISTOPHER R	C A CROMWELL	1971	420	H	105	H	231NOXF
FR DD 137	FR-72-0014	WEEDY, KIM	C A CROMWELL	1971	410	H	105	H	231NOXF
FR DD 138	FR-72-0015	TROUT, ARTHUR	C A CROMWELL	1971	410	H	105	H	231NOXF
FR DD 139	FR-72-0332	O'NEAL, ROBERT A	ROBERT CLINE	1971	380	H	220	H	231NOXF
FR DD 140	FR-72-0474	MARTZ, CLARENCE	ROBERT CLINE	1972	400	S	80	H	231NOXF
FR DD 141	FR-72-0157	KELLER, CHARLES	A R KEYSER	1971	420	S	122	S	231NOXF
FR DD 142	FR-69-0420	B P OIL CO	W H LAMBERSON	1969	395	S	285	H	231NOXF
FR DD 143	FR-72-0458	S & P MODULAR HOMES	ROBERT CLINE	1972	380	H	120	H	231NOXF
FR DD 144	FR-72-0490	CORSELIUS, NEIL	ROBERT CLINE	1972	385	H	195	H	231NOXF
FR DD 145	FR-72-0497	TYERYAR, RICHARD	ROBERT CLINE	1972	410	H	120	H	231NOXF
FR DD 146	FR-72-0541	MORMON CHURCH	A R KEYSER	1972	420	H	130	T	231NOXF
FR DD 147	FR-72-0730	KELLER, CHARLES	A R KEYSER	1972	440	S	160	H	231NOXF
FR DD 148	--	URBAN SYSTEMS DEV	A R KEYSER	1972	370	H	355	U	367GROV
FR DD 149	--	URBAN SYSTEMS DEV	A R KEYSER	1972	365	H	--	U	367GROV
FR DD 150	--	URBAN SYSTEMS DEV	A R KEYSER	1972	370	H	205	P	367GROV
FR DD 151	--	URBAN SYSTEMS DEV	A R KEYSER	1972	370	H	--	U	367GROV
FR DD 152	--	URBAN SYSTEMS DEV	A R KEYSER	1972	370	F	--	U	367GROV
FR DD 153	--	URBAN SYSTEMS DEV	A R KEYSER	1972	375	H	205	U	367GROV
FR DD 154	FR-72-0637	MCHUGH, EDWARD L	A R KEYSER	1972	390	H	182	H	231NOXF
FR DD 155	FR-70-0170	SKYLINE, REALTY	ROBERT CLINE	1969	410	S	145	H	231NOXF
FR DD 156	FR-70-0511	FREE, RAYMOND P	C A CROMWELL	1970	380	H	165	H	231NOXF
FR DD 157	FR-69-0344	LEE, MARK W	C A CROMWELL	1969	390	H	165	H	231NOXF
FR DD 158	FR-71-0585	DRAYER, ALLEN D	C A CROMWELL	1971	395	H	180	H	231NOXF
FR DD 159	FR-70-0102	MILLER	J HARRIS	1969	390	H	100	H	231NOXF
FR DD 160	FR-70-0465	MIDT, S C	C A CROMWELL	1970	380	S	160	H	231NOXF
FR DD 161	FR-69-0426	BECKLEY, RICHARD	C A CROMWELL	1969	380	S	65	H	231NOXF
FR DD 162	FR-73-0398	MOORE	J HARRIS	1972	390	H	170	H	231NOXF
FR DD 163	FR-66-0412	WIVELL, ROBERT	J HARRIS	1966	390	H	165	H	231NOXF
FR DD 164	FR-66-0822	BOSTON, GEORGE	C A CROMWELL	1966	380	S	185	H	231NOXF
FR DD 165	FR-69-0408	COOPER	C A CROMWELL	1969	385	V	125	H	231NOXF
FR DD 166	--	--	--	--	385	V	--	H	231NOXF
FR DD 167	FR-71-0500	DONAHUE	ROBERT CLINE	1971	385	S	195	H	231NOXF
FR DD 168	FR-69-0436	HAHN, CHARLES E	CHAS DRIVER	1969	385	H	108	H	231NOXF
FR DD 169	--	BOSTON, MILLARD	C A CROMWELL	--	390	H	--	H	231NOXF
FR DD 170	FR-66-0810	MARSHALL, CARL	C A CROMWELL	1966	390	H	165	H	231NOXF
FR DD 171	--	SOS, A J	--	--	390	H	--	H	231NOXF
FR DD 172	--	SUNDERGILL, J E	A R KEYSER	--	390	H	--	H	231NOXF
FR DD 173	FR-04-4282	WILES, FRANKLIN	JOSEPH MAYNE	1962	390	H	135	H	231NOXF
FR DD 174	FR-72-0459	GIFFIN, D L	ROBERT CLINE	1972	380	H	220	H	231NOXF
FR DD 175	FR-69-0333	HAHN, DONALD	ROBERT CLINE	1969	380	H	165	H	231NOXF
FR DD 176	FR-69-0438	BRADDOCK WATER CO, INC	A R KEYSER	1969	725	S	400	P	377LUDN
FR DD 177	FR-73-5317	REMSBERG, ROYAL	ROBERT CLINE	1978	1030	S	225	H	377LUDN
FR DD 179	FR-05-1109	GAMBRILL STATE PARK	ROBERT CLINE	1963	1420	S	190	P	377LUDN
FR DD 180	FR-73-2531	GAMBRILL STATE PARK	ROBERT CLINE	1975	1220	S	275	P	400CTCN
FR DD 181	FR-73-1900	APOSTOLIC LIGHTHOUSE	C A CROMWELL	1974	980	S	125	T	400CTCN
FR DD 182	FR-73-1770	SHERIDAN GARDENS	KEYSER-GARVER	1974	540	S	400	H,I	377HRPR
FR DD 183	FR-73-8382	SHERIDAN GARDENS	KEYSER-GARVER	1981	500	S	205	I	377HRPR
FR DD 184	FR-72-0481	BRADDOCK GRANGE	ROBERT CLINE	1972	505	H	150	C	377ANTM
FR DD 185	FR-73-8305	VFW CLUB OF FREDERICK	KEYSER-GARVER	1981	385	S	485	C	377FDCK
FR DD 186	--	VFW CLUB OF FREDERICK	--	--	385	S	--	I	377FDCK
FR DD 187	FR-65-0593	AMOCO OIL CO	C A CROMWELL	1965	380	F	125	U	377FDCK
FR DD 188	FR-04-2737	TRIANGLE ENTERPRISES	ROBERT CLINE	1961	375	F	205	C	377FDCK
FR DD 189	FR-01/2146	KELLER, CHARLES	JOHN SHAFF	1953	410	F	--	U	377FDCK
FR DD 190	FR-03-7629	BARBARA FRITCHIE REST	C A CROMWELL	1960	415	F	64	U	377TMSN
FR DD 191	FR-73-0071	HI-WAY LIQUORS	ROBERT CLINE	1972	460	S	220	C	377HRPR
FR DD 192	FR-73-8185	DUTROW, CLAUDE	ROBERT CLINE	1981	480	S	425	C	377HRPR
FR DD 193	FR-73-1455	EASTVIEW COUNTRY CLUB	J HARRIS	1974	580	S	101	C	377HRPR
	FR-73-6570		R HARLEY SR	1978			250		
FR DD 194	FR-73-8151	EASTVIEW COMMUNITY CTR	ROBERT CLINE	1981	580	S	525	C	377HRPR
FR DD 195	FR-71-0357	TOWN & COUNTRY REST	C A CROMWELL	1971	530	S	186	C	377HRPR
FR DD 196	FR-73-1778	QUYNN, JOHN	C A CROMWELL	1974	320	F	125	I	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
20	6	X	40	R	07/01/1969	7.0	220	40	0.04	1	07/01/1969	--	FR DD 116
37	6	X	38	R	05/27/1969	50.0	83	38	1.11	1	05/27/1969	--	FR DD 117
71	6	X	35	R	03/02/1970	10.0	133	35	.10	1	03/02/1970	--	FR DD 118
27	6	X	32	R	05/25/1970	100.0	70	32	2.63	1	05/25/1970	--	FR DD 119
61	6	X	35	R	03/28/1969	40.0	145	35	.36	1	03/28/1969	--	FR DD 120
78	6	X	40	R	03/09/1970	5.0	220	40	.03	1	03/09/1970	--	FR DD 121
95	6	X	32	R	05/16/1970	20.0	100	32	.29	1	05/16/1970	--	FR DD 122
61	6	X	35	R	04/30/1969	40.0	80	35	.89	1	04/30/1969	--	FR DD 123
69	6	X	35	R	08/10/1968	25.0	105	35	.36	1	08/10/1968	--	FR DD 124
84	6	X	40	R	11/16/1968	5.0	395	40	.01	1	11/16/1968	--	FR DD 125
53	6	X	35	R	12/09/1969	15.0	100	35	.23	1	12/09/1969	--	FR DD 126
44	6	X	35	R	05/08/1969	4.0	365	35	.01	1	05/08/1969	--	FR DD 127
50	6	X	35	R	04/29/1969	4.0	245	35	.02	1	04/29/1969	--	FR DD 128
31	6	X	50	R	06/07/1969	50.0	85	35	1.00	1	06/07/1969	--	FR DD 129
115	6	X	45	R	10/21/1966	100.0	170	45	.80	1	10/21/1966	--	FR DD 130
30	6	X	35	R	07/05/1969	15.0	185	35	.10	--	07/05/1969	--	FR DD 131
35	6	X	35	R	09/20/1969	50.0	180	35	.35	1	09/20/1969	--	FR DD 132
35	6	X	30	R	05/13/1970	50.0	70	30	1.25	1	05/13/1970	--	FR DD 133
28	6	X	25	R	02/27/1970	20.0	40	25	1.33	5	02/27/1970	--	FR DD 134
40	6	X	20	R	08/31/1971	6.0	90	20	.09	1	08/31/1971	--	FR DD 135
21	6	X	30	R	06/14/1971	12.0	100	30	.17	1	06/14/1971	--	FR DD 136
22	6	X	30	R	07/09/1971	15.0	90	30	.25	1	07/09/1971	--	FR DD 137
22	6	X	30	R	07/09/1971	15.0	95	30	.23	1	07/09/1971	--	FR DD 138
40	6	X	45	R	12/22/1971	2.0	220	45	.01	1	12/22/1971	--	FR DD 139
50	6	X	10	R	03/07/1972	40.0	80	10	.57	1	03/07/1972	--	FR DD 140
47	6	X	40	R	08/31/1971	50.0	--	40	--	1	08/31/1971	--	FR DD 141
67	6	X	60	R	05/06/1969	6.0	250	60	.03	1	05/06/1969	--	FR DD 142
41	6	X	25	R	03/20/1972	4.0	120	25	.04	1	03/20/1972	--	FR DD 143
41	6	X	55	R	04/01/1972	6.0	195	55	.04	1	04/01/1972	--	FR DD 144
34	6	X	35	R	03/31/1972	20.0	120	35	.24	1	03/31/1972	--	FR DD 145
30	6	X	18	R	05/20/1972	30.0	--	18	--	1	05/20/1972	Q	FR DD 146
39	6	X	35	R	07/07/1972	15.0	--	35	--	1	07/07/1972	--	FR DD 147
20	6	X	--	--	--	7.0	--	--	--	--	--	--	FR DD 148
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 149
20	8	X	33	R	08/07/1972	100.0	--	33	--	24	08/07/1972	--	FR DD 150
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 151
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 152
22	6	X	23.75	S	08/07/1972	4.0	--	--	--	--	--	--	FR DD 153
22	6	X	38	R	05/25/1972	5.0	--	38	--	1	05/25/1972	--	FR DD 154
42	6	X	38	R	11/01/1969	50.0	145	38	.47	1	11/01/1969	--	FR DD 155
21	6	X	45	R	06/30/1970	5.0	160	45	.04	2	06/30/1970	--	FR DD 156
21	6	X	45	R	03/07/1969	7.0	--	45	--	2	03/07/1969	--	FR DD 157
21	6	X	65	R	09/27/1971	10.0	175	65	.09	3	09/27/1971	--	FR DD 158
30	6	X	25	R	07/24/1969	5.0	90	25	.08	1	07/24/1969	--	FR DD 159
18	6	X	40	R	06/12/1970	8.0	150	40	.07	2	06/12/1970	--	FR DD 160
19	6	X	30	R	05/08/1969	12.0	--	30	--	3	05/08/1969	--	FR DD 161
36	6	X	40	R	11/24/1972	6.0	130	40	.07	1	11/24/1972	--	FR DD 162
41	6	X	50	R	01/20/1966	5.0	158	50	.05	1	01/20/1966	--	FR DD 163
19	6	X	65	R	06/29/1966	8.0	--	65	--	2	06/29/1966	--	FR DD 164
19	6	X	40	R	04/30/1969	7.0	--	40	--	2	04/30/1969	--	FR DD 165
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DD 166
61	6	X	35	R	05/12/1971	12.0	195	35	.08	1	05/12/1971	--	FR DD 167
24	6	X	50	R	07/18/1969	6.0	90	50	.15	1	07/18/1969	--	FR DD 168
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DD 169
13	6	X	70	R	06/24/1966	3.0	--	70	--	3	06/24/1972	--	FR DD 170
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DD 171
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 172
13	6	X	40	R	01/25/1962	3.0	--	40	--	2	01/25/1962	--	FR DD 173
43	6	X	52	R	04/12/1972	7.0	220	52	.04	1	04/12/1972	--	FR DD 174
20	6	X	40	R	03/06/1969	50.0	155	40	.44	1	03/06/1969	--	FR DD 175
--	--	X	40	R	05/20/1969	8.0	--	40	--	2	05/20/1969	--	FR DD 176
34	6	X	54	R	01/07/1978	9.0	225	54	.05	1	01/07/1978	--	FR DD 177
27	6	X	30	R	04/01/1963	20.0	--	30	--	8	04/01/1963	--	FR DD 179
59	6	X	50	R	04/21/1975	8.0	275	50	.04	8	04/21/1975	--	FR DD 180
21	6	X	15	R	05/30/1974	20.0	120	15	.19	1	05/30/1974	--	FR DD 181
38	6	X	29	R	04/11/1974	2.0	400	29	.01	3	04/11/1974	--	FR DD 182
48	6	X	20	R	05/15/1981	20.0	200	20	.11	3	05/15/1981	--	FR DD 183
23	6	X	35	R	03/18/1972	5.0	150	35	.04	1	03/18/1972	--	FR DD 184
62	6	X	50	R	04/02/1981	9.0	450	50	.02	3.5	04/02/1981	--	FR DD 185
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DD 186
50	6	X	15	R	04/29/1965	10.0	--	15	--	3	04/29/1965	--	FR DD 187
19	6	X	100	R	04/01/1961	1.0	--	100	--	2	04/01/1961	Q	FR DD 188
21	6	X	18	R	06/02/1953	30.0	18	18	--	5	06/02/1953	--	FR DD 189
60	6	O	20	R	01/16/1960	40.0	20	20	--	2	01/16/1960	--	FR DD 190
44	6	X	10	R	07/17/1972	1.0	220	10	.01	1	07/17/1972	--	FR DD 191
40	6	X	16	R	01/24/1981	3.0	425	16	.01	1	01/24/1981	--	FR DD 192
33	6	X	10	R	02/08/1974	1.0	200	40	.01	3	12/27/1978	--	FR DD 193
41	6	X	1	R	10/28/1981	2.0	525	1	.0	1	10/28/1981	--	FR DD 194
18	6	X	2	R	03/06/1971	4.0	185	2	.02	5	03/06/1971	--	FR DD 195
20	6	X	25	R	04/22/1974	12.0	120	25	.13	2	04/22/1974	--	FR DD 196

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DD 197	FR-73-2750	GRACE PLEASANT HILL AS	KEYSER-GARVER	1975	445	H	122	T	231NOXF
FR DD 198	FR-69-0203	FISHER, FREDERICK	ROBERT CLINE	1969	320	F	220	P	231NOXF
FR DD 199	FR-67-0245	FAITH UN CH OF CHRIST	JERRY HARLEY	1966	410	H	145	T	231NOXF
FR DD 200	FR-73-6528	ZIMMERMAN, EDWARD R	KEYSER-GARVER	1978	380	S	205	H	231NOXF
FR DD 201	FR-73-5582	OFFUTT, PAUL	ROY HARLEY	1978	370	S	125	H	231NOXF
FR DD 202	FR-73-2467	STONE, DONALD	ROBERT CLINE	1975	380	S	120	H	231NOXF
FR DD 203	FR-73-3446	O'NEAL, WILLIAM	KEYSER-GARVER	1976	385	H	203	H	231NOXF
FR DD 204	FR-73-4963	HILDEBRAND, WILLIAM	C A CROMWELL	1977	390	H	150	H	231NOXF
FR DD 205	FR-73-4034	GRANT, JOHN	C A CROMWELL	1977	395	H	175	H	231NOXF
FR DD 206	FR-69-0546	RICE, ELLSWORTH	JERRY HARLEY	1969	945	S	450	C	377LUDN
FR DD 207	FR-73-8075	DAN-DEE RESTAURANT	KEYSER-GARVER	1980	945	S	145	C	400CTCN
FR DD 208	FR-73-0669	GULF OIL CORP	ROBERT CLINE	1973	380	S	270	U	377FDCK
FR DD 209	FR-73-2513	BRADDOCK LUTHERAN CH	ROBERT CLINE	1975	640	H	295	T	377HRPR
FR DD 210	FR-73-8075	DAN-DEE RESTAURANT	KEYSER-GARVER	1980	945	S	300	U	400CTCN
FR DD 211	FR-73-8151	EASTVIEW COMMUNITY CTR	ROBERT CLINE	1981	580	S	320	U	377HRPR
FR DD 212	FR-73-8151	EASTVIEW COMMUNITY CTR	ROBERT CLINE	1981	580	S	395	U	377HRPR
FR DE 1	FR-01-2231	U. S. ARMY	A R KEYSER	1953	340	F	87	H	377FDCK
FR DE 3	FR-01-0978	BRUNNER, CHARLES W	JOHN SHAFF	1952	485	H	41	H	300IJMV
FR DE 4	FR-01-0120	HOFFMAN, EDWARD	WADE CORUN	1952	390	S	97	H	377ANTM
FR DE 5	FR-01-2735	FINNEYFROCK, HARRY	R HARRIS	1953	445	H	40	H	377ANTM
FR DE 6	FR-01-3826	BUCKEY, GUY E	JACK HARLEY	1954	310	F	40	U	377FDCK
FR DE 7	FR-01-6280	STAUFFER, FRANK N	JAMES SHIRLEY	1954	310	F	123	H,S	367GROV
FR DE 8	--	STAUFFER, FRANK N	--	--	310	F	15	U	367GROV
FR DE 9	FR-01-5852	ROUTZAHN, CHARLES	JAMES SHIRLEY	1954	320	S	65	H	367GROV
FR DE 10	FR-00-9930	RIPPEON, HARRY S	JACK HARLEY	1952	320	S	111	H	367GROV
FR DE 11	FR-00-4190	ZIMMERMAN, RALPH L	WADE CORUN	1949	290	F	83	H	367GROV
FR DE 12	FR-01-4256	STALEY, NEVIN W	A R KEYSER	1954	310	F	84	H	377FDCK
FR DE 13	FR-00-8891	SANITARY PRODUCTS	T OWINGS	1951	300	F	70	U	367GROV
FR DE 14	--	TOWN OF WALKERSVILLE	--	--	320	F	400	U	367GROV
FR DE 15	FR-01-6192	BUCKEY, GUY E	JAMES SHIRLEY	1954	310	F	71	H	367GROV
FR DE 16	FR-01-7513	WACHTER, EDWARD W	C A CROMWELL	1955	325	S	55	H	377FDCK
FR DE 17	FR-00-8269	RITTER, NICHOLAS J	A R KEYSER	1951	280	S	43	H	377FDCK
FR DE 18	FR-01-6740	DUNN, JAMES	R HARRIS	1954	385	H	79	H	231NOXF
FR DE 19	--	BECKLEY, PERRY	--	--	290	W	18	H,C	377FDCK
FR DE 20	FR-01-7512	BECKLEY'S MOTEL	C A CROMWELL	1955	300	S	37	C,H	377FDCK
FR DE 21	FR-00-4439	SCHULTZ, ROBERT C	A R KEYSER	1949	300	H	22	U	377FDCK
FR DE 22	--	SCHULTZ, ROBERT C	A R KEYSER	1955	300	H	--	H	377FDCK
FR DE 23	--	CLEMSON, CLAUDE C	--	--	275	H	104	H	377FDCK
FR DE 24	--	CLEMSON, CLAUDE C	--	--	275	H	35	U	377FDCK
FR DE 25	FR-00-9424	CLEMSON, CLAUDE C	A R KEYSER	1952	280	H	100	C	377FDCK
FR DE 26	FR-02-3104	CARMACK, JAMES W	JACK HARLEY	1956	320	S	70	H	377FDCK
FR DE 27	--	EBERT ICE CREAM CO	ED BROWN	1930	290	F	200	U	377FDCK
FR DE 28	--	EBERT ICE CREAM CO	JARBOE GROVE	1930	305	S	735	C	377FDCK
FR DE 29	--	EBERT ICE CREAM CO	H L EBERT	1930	290	V	30	N	377FDCK
FR DE 30	--	EBERT ICE CREAM CO	N L EBERT	1930	300	S	235	U	377FDCK
FR DE 31	--	EBERT ICE CREAM CO	H L EBERT	1930	300	S	350	U	377FDCK
FR DE 32	--	EBERT ICE CREAM CO	ED BROWN	1924	310	F	68	U	377FDCK
FR DE 33	--	RODERICK, HAROLD E	I E FOGEL	1931	325	V	72	S	367GROV
FR DE 34	FR-02-2022	RODERICK, HAROLD E	A R KEYSER	1956	325	V	330	H,S	367GROV
FR DE 35	--	GLADE VALLEY MILLING	PAYTON BROWN	1906	300	V	--	U	367GROV
FR DE 36	--	EAVES, JOHN L	I A FOGEL	1932	300	V	169	H,S	377FDCK
FR DE 37	FR-01-5831	BURRIER, CHARLES D	JAMES SHIRLEY	1954	320	S	96	H	367GROV
FR DE 38	--	HAHN, WALTER J	--	--	305	H	63	H	367GROV
FR DE 39	--	HAHN, WALTER J	--	--	305	S	155	U	367GROV
FR DE 40	FR-01-6562	HAHN, WALTER J	A R KEYSER	1954	305	S	105	S	367GROV
FR DE 41	--	ROSENSTOCK, BENJAMIN	JARBOE GROVE	1929	290	F	90	H,S	367GROV
FR DE 43	--	ROSENSTOCK, BENJAMIN	A R KEYSER	1969	320	H	595	S,H	377FDCK
FR DE 44	--	TOWN OF WALKERSVILLE	DEWEY BROWN	1965	290	V	92	P	367GROV
FR DE 45	--	MERCER, ADAM E	--	--	310	F	31	U	367GROV
FR DE 46	--	TOWN OF WALKERSVILLE	--	--	310	F	134	U	367GROV
FR DE 47	FR-65-0017	TOWN OF WALKERSVILLE	A R KEYSER	1964	310	F	165	P	367GROV
FR DE 48	FR-66-0555	TOWN OF WALKERSVILLE	A R KEYSER	1966	295	V	72	U	367GROV
FR DE 49	FR-70-0002	WRIGHT, HORACE C	C A CROMWELL	1969	360	F	105	H	377FDCK
FR DE 50	--	MICROBIOLOGICAL ASSC	--	1903	295	V	69	Z	367GROV
FR DE 51	FR-04-4852	MICROBIOLOGICAL ASSC	HARRY GREEN	1961	305	S	175	Z	367GROV
FR DE 52	FR-69-0375	MARTIN, GEORGE J	ROBERT CLINE	1969	345	H	160	H	377FDCK
FR DE 53	FR-69-0419	STULL, MONROE	A R KEYSER	1969	290	F	280	C	377FDCK
FR DE 54	FR-69-0018	BECKLEY, PERRY R	C A CROMWELL	1968	305	S	103	C	377FDCK
FR DE 55	FR-69-0414	BLUE RIDGE HOMES	A R KEYSER	1969	295	S	100	H	377FDCK
FR DE 56	--	CRUM, BRUCE	--	--	320	H	60	H	377FDCK
FR DE 57	FR-70-0019	CRUM, BRUCE	ROBERT CLINE	1969	320	H	80	S	377FDCK
FR DE 58	FR-70-0020	MOORE, CASPER C	ROBERT CLINE	1969	305	H	70	H	377FDCK
FR DE 59	FR-68-0080	FRED BUSINESS PROP	A R KEYSER	1967	350	H	294	U	377FDCK
FR DE 60	FR-68-0080	FRED BUSINESS PROP	A R KEYSER	1967	350	H	204	U	377FDCK
FR DE 61	FR-68-0080	FRED BUSINESS PROP	A R KEYSER	1967	350	H	204	N	377FDCK
FR DE 62	--	FRED BUSINESS PROP	A R KEYSER	1967	350	H	150	U	377FDCK
FR DE 63	FR-05-2808	FRED BUSINESS PROP	YORK DRILLING	1963	330	H	300	U	377FDCK
FR DE 64	FR-05-2808	FRED BUSINESS PROP	YORK DRILLING	1963	330	H	260	U	377FDCK
FR DE 65	FR-05-2808	FRED BUSINESS PROP	YORK DRILLING	1963	330	H	230	U	377FDCK
FR DE 66	FR-05-2808	FRED BUSINESS PROP	YORK DRILLING	1963	215	V	80	N	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
40	6	X	32	R	12/18/1975	6.0	42	32	0.60	2	12/18/1975	--	FR DD 197
134	6	X	40	R	04/02/1969	40.0	220	40	.22	1	04/02/1969	--	FR DD 198
21	6	X	60	R	10/14/1966	20.0	--	60	--	1	10/14/1966	--	FR DD 199
39	6	X	48	R	12/06/1978	40.0	195	48	.27	5	12/06/1978	--	FR DD 200
19	6	X	30	R	01/29/1978	5.0	85	30	.09	3	01/29/1978	--	FR DD 201
39	6	X	20	R	01/29/1975	10.0	120	20	.10	1	01/29/1975	--	FR DD 202
39	6	X	45	R	04/26/1976	8.0	55	45	.80	2	04/26/1976	--	FR DD 203
20	6	X	35	R	08/24/1977	10.0	140	35	.10	2	08/24/1977	--	FR DD 204
75	6	X	35	R	03/03/1977	7.0	170	35	.05	3	03/03/1977	--	FR DD 205
40	6	X	45	R	07/25/1969	6.0	--	45	--	1	07/25/1969	--	FR DD 206
41	6	X	45	R	12/11/1980	12.0	100	45	.22	4	12/11/1980	--	FR DD 207
30	6	X	8	R	04/20/1973	10.0	270	8	.04	1	04/20/1973	O	FR DD 208
82	6	X	62	R	02/21/1975	1.0	295	62	.0	1	02/21/1975	--	FR DD 209
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 210
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 211
--	--	X	--	--	--	--	--	--	--	--	--	--	FR DD 212
18	6	X	13.01	S	09/24/1953	25.0	25	20	5.00	3	04/24/1953	--	FR DE 1
--	6	X	39.77	S	10/24/1955	5.0	20	18	2.50	4	10/01/1952	--	FR DE 3
14	6	X	20	R	06/09/1952	10.0	25	20	2.00	1	06/09/1952	--	FR DE 4
34	6	X	15	R	06/26/1953	10.0	--	15	--	--	06/26/1953	--	FR DE 5
28	6	X	25	R	01/15/1954	10.0	--	25	--	--	01/15/1954	--	FR DE 6
51	6	X	30	R	09/07/1954	45.0	--	30	--	6	09/07/1954	--	FR DE 7
15	48	W	--	--	--	--	--	--	--	--	--	--	FR DE 8
59	6	X	32	R	08/11/1954	22.0	40	32	2.75	1.5	08/11/1954	--	FR DE 9
18	6	X	30	R	04/23/1952	2.5	100	30	.04	--	04/23/1952	--	FR DE 10
6	6	X	16	R	06/25/1949	10.0	--	16	--	.5	06/25/1949	--	FR DE 11
23	6	X	30	R	02/02/1954	15.0	30	30	--	1	02/02/1954	--	FR DE 12
21	12	X	15	R	11/29/1951	100.0	15	15	--	12	11/29/1951	--	FR DE 13
70	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 14
45	6	X	48	R	08/25/1954	30.0	48	48	--	3	08/25/1954	Q	FR DE 15
18	6	X	5	R	01/12/1955	13.0	5	5	--	1	01/12/1955	Q	FR DE 16
21	6	X	15	R	07/05/1951	10.0	20	15	2.00	1.5	07/05/1951	--	FR DE 17
23	6	X	30	R	10/09/1954	--	--	--	--	--	--	--	FR DE 18
18	--	W	13.55	S	06/11/1956	--	--	--	--	--	--	--	FR DE 19
30	6	X	12	R	01/19/1955	10.0	--	12	--	2	01/19/1955	--	FR DE 20
4	6	X	10	R	08/05/1949	10.0	--	10	--	.5	08/05/1949	--	FR DE 21
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DE 22
--	6	--	--	--	--	--	--	--	--	--	--	--	FR DE 23
35	48	W	17.32	S	06/07/1956	--	--	--	--	--	--	--	FR DE 24
14	6	X	30	R	01/29/1952	20.0	--	30	--	1	01/29/1952	--	FR DE 25
19	6	X	20	R	05/01/1956	6.0	60	20	.15	--	05/01/1956	--	FR DE 26
--	--	X	28	R	01/01/1930	80.0	--	28	--	--	01/01/1930	--	FR DE 27
--	8	X	41.50	S	08/29/1956	30.0	--	28	--	--	01/01/1930	--	FR DE 28
--	--	X	--	--	--	30.0	--	--	--	--	01/01/1930	--	FR DE 29
--	8	X	20	R	01/01/1930	30.0	--	20	--	--	01/01/1930	--	FR DE 30
--	--	X	--	--	--	30.0	--	--	--	--	01/01/1930	--	FR DE 31
--	8	X	--	--	--	50.0	--	--	--	--	01/01/1924	--	FR DE 32
--	6	X	27.14	S	08/31/1956	10.0	--	--	--	--	01/01/1931	--	FR DE 33
26	6	X	25	R	02/05/1956	100.0	30	25	20.00	2	02/05/1956	--	FR DE 34
56	8	X	10	R	--	60.0	--	10	--	--	--	Q	FR DE 35
59	36	X	36.70	S	08/31/1956	15.0	--	--	--	--	01/01/1932	--	FR DE 36
26	6	X	27	R	07/22/1954	22.0	70	27	.51	1	07/22/1954	--	FR DE 37
--	6	X	37.91	S	09/17/1956	--	--	--	--	--	--	--	FR DE 38
--	6	X	100	R	--	--	--	--	--	--	--	--	FR DE 39
52	6	X	50	R	09/06/1954	10.0	60	50	1.00	--	09/06/1954	--	FR DE 40
--	6	X	35	R	01/01/1929	7.0	--	35	--	--	01/01/1929	--	FR DE 41
123	6	X	72.79	S	05/13/1969	22.0	--	80	--	--	05/01/1969	--	FR DE 43
--	--	X	16	R	01/01/1969	100.0	24	16	12.50	--	01/01/1969	--	FR DE 44
31	48	W	21.00	S	07/28/1964	--	--	--	--	--	--	--	FR DE 45
--	6	X	23.75	S	07/24/1964	--	--	--	--	--	--	O	FR DE 46
14	8	X	24.13	S	07/27/1964	135.0	35	24	11.97	6	07/27/1964	--	FR DE 47
56	8	X	15	R	04/10/1966	250.0	20	15	50.00	48	04/10/1966	Q	FR DE 48
47	6	X	30	R	07/14/1969	7.0	100	30	.10	2	07/14/1969	--	FR DE 49
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 50
12	8	X	22	R	11/17/1961	50.0	24	22	25.00	8	11/17/1961	--	FR DE 51
26	6	X	40	R	03/01/1969	3.0	160	40	.03	1	03/01/1969	--	FR DE 52
42	8	X	40	R	05/16/1969	2.0	--	40	--	1	05/16/1969	--	FR DE 53
16	6	X	--	--	--	30.0	--	--	--	3	07/18/1968	--	FR DE 54
33	6	X	40	R	05/27/1969	5.0	--	40	--	1	05/27/1969	--	FR DE 55
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 56
48	6	X	35	R	07/17/1969	100.0	80	35	2.22	1	07/17/1969	--	FR DE 57
41	6	X	30	R	07/18/1969	30.0	70	30	.75	1	07/18/1969	--	FR DE 58
24	6	X	30	R	09/01/1967	1.0	--	30	--	1	09/01/1967	--	FR DE 59
20	6	X	30	R	09/05/1967	1.0	--	30	--	1	09/05/1967	--	FR DE 60
20	6	X	23	R	09/06/1967	8.0	--	24	--	1	09/06/1967	--	FR DE 61
21	6	X	30	R	09/08/1967	2.0	--	30	--	1	09/08/1967	--	FR DE 62
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 63
--	6	X	--	--	--	1.0	--	--	--	--	08/22/1963	--	FR DE 64
--	6	X	--	--	--	1.5	--	--	--	--	08/26/1963	--	FR DE 65
21	6	X	--	--	--	60.0	--	--	--	--	07/31/1963	--	FR DE 66

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DE 69	FR-70-0149	FRED BUSINESS PROP	JOHN SHAFF	1969	315	V	100	N	377FDCK
FR DE 72	--	GLADE VALLEY FARMS	--	--	310	H	--	S	377FDCK
FR DE 73	--	GLADE VALLEY FARMS	--	--	310	S	--	S	377FDCK
FR DE 74	FR-65-0279	GLADE VALLEY FARMS	A R KEYSER	1964	330	H	150	S	377FDCK
FR DE 75	--	GLADE VALLEY FARMS	A R KEYSER	1964	310	S	145	S	377FDCK
FR DE 76	FR-65-0280	GLADE VALLEY FARMS	A R KEYSER	1964	305	V	70	H	377FDCK
FR DE 80	FR-70-0220	MID-ATL SOARING ASSOC	ROBERT CLINE	1969	290	F	62	H	377FDCK
FR DE 83	FR-72-0037	TOWN OF WALKERSVILLE	A R KEYSER	1971	290	V	300	P	367GROV
FR DE 84	FR-72-0701	URBAN SYSTEMS DEVEL	A R KEYSER	1972	340	V	400	U	367GROV
FR DE 85	FR-72-0701	URBAN SYSTEMS DEVEL	A R KEYSER	1972	335	V	415	U	367GROV
FR DE 86	FR-73-0701	URBAN SYSTEMS DEVEL	A R KEYSER	1972	330	V	415	U	367GROV
FR DE 87	FR-67-0147	CLOROX CO	A C REIDER	1967	270	F	87	-	367GROV
FR DE 88	FR-73-3024	SHARPE'S FLOWERS INC	KEYSER-GARVER	1975	310	F	82	I	377FDCK
FR DE 89	FR-68-0044	FREDERICK CHRISTIAN CH	ROBERT CLINE	1967	340	F	150	T	377FDCK
FR DE 90	FR-73-3249	RAMSBURG, GUY	KEYSER-GARVER	1975	300	F	282	C	377FDCK
FR DE 91	FR-72-0514	B P OIL CORP	W H LAMBERSON	1972	320	F	105	C	377FDCK
FR DE 92	FR-73-5459	FREDERICK ELECTRIC CO	ROY HARLEY	1977	320	F	175	J	377FDCK
FR DE 93	FR-73-6446	FREDERICK ELECTRIC CO	ROY HARLEY	1978	280	F	250	U	377FDCK
FR DE 94	FR-73-6530	FREDERICK ELECTRIC CO	ROY HARLEY	1978	325	F	250	U	377FDCK
FR DE 95	FR-03-0030	BECKLEY'S MOTEL	C A CROMWELL	1958	290	F	76	C	377FDCK
FR DE 96	FR-65-0448	AMOCO OIL CO	A R KEYSER	1965	300	F	130	C	377FDCK
FR DE 97	FR-73-0110	RESTHAVEN MEM GARDEN	A R KEYSER	1972	310	H	320	C,H	377FDCK
FR DE 98	FR-72-0396	FEDDERS CORP	KEYSER-GARVER	1972	300	H	500	U	377FDCK
FR DE 99	FR-72-0396	FEDDERS CORP	KEYSER-GARVER	1972	300	H	702	N	377FDCK
FR DE 100	FR-72-0396	FEDDERS CORP	KEYSER-GARVER	1972	300	H	462	N	377FDCK
FR DE 101	FR-72-0396	FEDDERS CORP	KEYSER-GARVER	1972	290	S	500	N	377FDCK
FR DE 102	FR-72-0187	CALVARY CH OF GOD	KEYSER-GARVER	1971	305	H	400	T	367GROV
FR DE 103	FR-73-0377	MICROBIOLOGICAL ASSC	KEYSER-GARVER	1972	290	F	85	U	367GROV
FR DE 104	--	MICROBIOLOGICAL ASSC	A R KEYSER	1972	290	F	200	U	367GROV
FR DE 105	--	TOWN OF WALKERSVILLE	L F EASTERDAY	1982	295	F	120	P	367GROV
FR DE 106	FR-73-7866	HILDEBRAND, WILLIAM	W B QUYNN	1980	390	H	160	H	231NOXF
FR DE 107	FR-73-5024	BROWN, HUBERT	ROBERT CLINE	1977	360	S	95	H	231NOXF
FR DF 1	--	SUMMERS, SAMUEL	--	--	395	V	24	H,S	300IJMV
FR DF 2	FR-01-4895	STEVENS, GEORGE	JACK HARLEY	1954	560	H	86	H	300LBRN
FR DF 3	FR-01-2571	RIPPEON, ARTHUR	R HARRIS	1953	520	H	70	H,S	300IJMV
FR DF 4	--	RIPPEON, ARTHUR	--	1929	520	S	89	U	300IJMV
FR DF 5	--	CRUM	--	--	535	W	18	H	300IJMV
FR DF 7	--	SMITH	C A CROMWELL	1956	540	H	--	-	300IJMV
FR DF 8	FR-01-4828	EADER, GRANISON L	L F EASTERDAY	1954	520	H	73	H	300IJMV
FR DF 9	--	SHOEMAKER, E L	R HARRIS	1954	535	S	81	H	300IJMV
FR DF 10	FR-00-6996	DELAUTER, WILLIAM T	WADE CORUN	1950	465	H	100	C	300IJMV
FR DF 12	FR-01-0250	BOYER, C W	JACK HARLEY	1952	490	H	56	H	300IJMV
FR DF 13	FR-01-2477	SUMMERS, ETHAN P	R HARRIS	1953	525	H	74	H	300LBRN
FR DF 14	FR-00-6275	STITELY, RICHARD K	A R KEYSER	1950	500	S	123	H	300IJMV
FR DF 15	--	LIBERTYTOWN ELEM SCH	--	1941	580	H	95	T	300LBRN
FR DF 16	--	LIBERTYTOWN ELEM SCH	--	1927	580	H	180	U	300LBRN
FR DF 17	--	EDWARDS	--	--	320	S	30	H	377FDCK
FR DF 18	--	GROSSWEIN, L	--	--	470	H	11	U	300LBRN
FR DF 19	FR-00-0014	AVALON RESTAURANT	JOHN GREENE	1945	465	H	120	U	300IJMV
FR DF 20	FR-69-0302	LEHIGH PORTLND CEMENT	ROBERT CLINE	1969	330	S	95	H	377FDCK
FR DF 23	FR-69-0151	C & M REALTY	ROBERT CLINE	1968	360	S	47	H	300FDCK
FR DF 26	FR-65-0328	MT PLEASANT COM HALL	CHAS DRIVER	1965	425	S	110	H	377ANTM
FR DF 27	FR-73-6714	BARNES' STORE	KEYSER-GARVER	1979	450	S	505	C	300IJMV
FR DF 28	FR-73-4224	HAUGH, BERNICE	ROBERT CLINE	1976	490	S	270	C	300IJMV
FR DF 29	FR-68-0099	GIRL SCOUT COUNCIL	L F EASTERDAY	1967	600	S	260	H,F	300IJMV
FR DF 30	FR-73-7635	PLEASANTS, WILLIAM	ROBERT CLINE	1980	600	H	150	C	300IJMV
FR DF 31	FR-66-0670	HARTZLER FUNERAL HOME	FROUNFELTER	1966	540	S	100	C,H	300LBRN
FR DF 32	FR-67-0566	DORSEY CHAPEL	C A CROMWELL	1967	460	H	105	T	300GLRM
FR DF 33	FR-72-0433	LAKE LINGANORE ASSOC	KEYSER-GARVER	1972	490	H	302	C	300IJMV
FR DF 34	--	LAKE LINGANORE ASSOC	KEYSER-GARVER	1981	400	S	245	R	300LBRN
FR DF 35	FR-73-0852	LAKE LINGANORE ASSOC	KEYSER-GARVER	1973	570	S	302	U	300SMCK
FR DF 36	FR-73-6714	BARNES' STORE	KEYSER-GARVER	1979	450	S	300	U	300IJMV
FR DF 37	FR-73-6714	BARNES' STORE	KEYSER-GARVER	1979	450	S	300	-	300IJMV
FR DF 38	FR-73-6714	BARNES' STORE	KEYSER-GARVER	1979	450	S	300	U	300IJMV
FR DF 39	FR-73-6714	BARNES' STORE	KEYSER-GARVER	1979	450	S	405	U	300IJMV
FR DG 2	--	SMITH, ORVILLE E	--	--	500	W	90	H,Z	300IJMV
FR DG 3	--	RIPPEON, HARVEY	--	--	415	V	--	C,H	300SMCK
FR DG 4	--	ETZLER	--	--	620	H	94	H	300IJMV
FR DG 5	--	SMITH, WORMAN C	--	--	430	W	36	H,S	300WKFD
FR DG 6	--	FRITZ, PAUL O	--	1938	485	H	65	H	300LBRN
FR DG 7	--	HITCHCOCK	M UTERMAHLEN	1953	500	S	42	H	300IJMV
FR DG 8	FR-00-5297	GERTS, OTTO	JACK HARLEY	1950	510	S	62	H	300IJMV
FR DG 9	--	SIMPSON, F L	WADE CORUN	1949	505	H	57	S	300IJMV
FR DG 10	--	GRAY, ARTHUR	--	--	485	V	47	H	--
FR DG 12	--	HILL, WELDON	--	--	580	H	19	H	300IJMV
FR DG 13	FR-00-3840	UNIONIVLLE METH CHURCH	ED BROWN	1949	460	H	90	T	300IJMV
FR DG 14	FR-00-9936	DUDDERAR, CLIFTON P	DEWEY BROWN	1952	550	W	71	H	300IJMV
FR DG 15	FR-01-1579	STALEY, FRANCIS	A R KEYSER	1953	490	T	90	H	300IJMV
FR DG 16	--	SAPPINGTON, CORA	--	--	455	S	27	H	300SMCK
FR DG 17	--	NICODEMUS	--	--	445	H	--	H	300SMCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
27	6	X	22	R	11/27/1969	30.0	38	22	1.88	3	11/27/1969	--	FR DE 69
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 72
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DE 73
43	6	X	35	R	10/17/1964	20.0	--	35	--	1	10/17/1964	--	FR DE 74
47	6	X	40	R	10/01/1964	20.0	--	40	--	--	10/01/1964	--	FR DE 75
37	6	X	20	R	10/24/1964	25.0	--	20	--	1	10/24/1964	--	FR DE 76
53	5	X	36	R	12/08/1969	100.0	62	36	3.85	1	12/08/1969	--	FR DE 80
93	8	X	14	R	01/09/1972	950.0	25	13	79.17	48	01/11/1972	G,Q	FR DE 83
26	6	X	-1.70	S	08/07/1972	70.0	--	--	--	--	07/01/1972	--	FR DE 84
20	6	X	5.20	S	08/07/1972	125.0	--	--	--	--	07/01/1972	--	FR DE 85
20	6	X	.20	S	08/07/1972	15.0	--	--	--	--	07/01/1972	--	FR DE 86
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DE 87
41	6	X	15	R	10/27/1975	100.0	25	15	10.00	2	10/27/1975	--	FR DE 88
29	6	X	45	R	07/27/1967	15.0	150	45	.14	.5	07/27/1967	--	FR DE 89
40	6	X	35	R	12/22/1975	3.0	45	35	.30	2	12/22/1975	--	FR DE 90
29	6	X	20	R	04/20/1972	15.0	85	20	.23	1	04/20/1982	--	FR DE 91
39	6	X	26	R	09/29/1977	36.0	78	26	.69	2	09/29/1977	--	FR DE 92
24	6	X	38	R	11/17/1978	7.5	178	38	.05	5	11/17/1978	--	FR DE 93
19	6	X	37	R	11/21/1978	10.0	110	37	.14	5	11/21/1978	--	FR DE 94
15	6	X	13	R	01/24/1958	60.0	13	13	--	2	01/24/1958	--	FR DE 95
24	6	X	25	R	04/15/1965	10.0	--	25	--	1	04/15/1965	--	FR DE 96
37	6	X	30	R	08/08/1972	4.0	--	30	--	1	08/08/1972	--	FR DE 97
46	6	X	40	R	08/07/1972	20.0	--	40	--	6	08/07/1972	--	FR DE 98
40	8	X	30	R	08/25/1972	20.0	--	30	--	--	08/25/1972	--	FR DE 99
40	8	X	35	R	05/12/1972	55.0	--	35	--	6	05/12/1972	--	FR DE 100
41	8	X	35	R	08/16/1972	81.0	--	--	--	6	08/16/1972	--	FR DE 101
63	6	X	40	R	09/16/1971	1.0	--	40	--	1	09/16/1971	--	FR DE 102
49	8	X	25	R	11/29/1972	200.0	--	25	--	48	11/29/1972	--	FR DE 103
--	8	X	12.69	S	05/06/1982	--	--	--	--	--	--	O	FR DE 104
37	10	X	9	R	06/24/1982	525.0	11	9	262.50	24	06/24/1982	--	FR DE 105
73	6	X	30	R	09/08/1980	10.0	150	30	.08	2	09/08/1980	--	FR DE 106
40	6	X	36	R	10/29/1977	6.0	95	36	.10	1	10/29/1977	--	FR DE 107
24	36	W	19	R	01/01/1954	--	--	--	--	--	--	Q	FR DF 1
23	6	X	20	R	04/23/1954	15.0	45	20	.60	--	04/23/1954	Q	FR DF 2
10	6	X	32	R	06/16/1953	--	--	--	--	--	--	--	FR DF 3
8	6	X	47.00	S	12/23/1955	--	--	--	--	--	--	--	FR DF 4
18	42	--	--	--	--	--	--	--	--	--	--	--	FR DF 5
45	48	W	32.18	S	01/13/1956	--	--	--	--	--	--	--	FR DF 7
		X											
--	--	X	26	R	04/17/1954	5.0	73	26	.11	--	04/17/1954	Q	FR DF 8
20	6	X	40	R	04/13/1954	5.0	75	40	.14	--	04/13/1954	--	FR DF 9
8	6	X	40	R	11/16/1950	10.0	40	40	--	.2	11/16/1950	--	FR DF 10
13	6	X	10	R	06/02/1952	6.0	49	10	.15	--	06/02/1952	--	FR DF 12
19	6	X	30	R	06/26/1953	--	--	--	--	--	--	Q	FR DF 13
21	6	X	40	R	07/22/1950	2.0	119	40	.03	1	07/22/1950	--	FR DF 14
--	6	X	--	--	--	--	--	--	--	--	--	Q	FR DF 15
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DF 16
--	--	W	--	--	--	--	--	--	--	--	--	--	FR DF 17
--	--	--	10.00	S	04/20/1956	--	--	--	--	--	--	--	FR DF 18
--	6	--	30	R	07/01/1945	.5	--	30	--	--	07/01/1945	--	FR DF 19
35	6	X	20	R	01/22/1969	10.0	95	20	.13	1	01/22/1969	O,Q	FR DF 20
42	6	X	22	R	10/12/1968	50.0	47	22	2.00	1	10/12/1968	--	FR DF 23
--	6	X	40	R	01/15/1965	10.0	100	40	.17	.8	01/15/1965	--	FR DF 26
40	6	X	45	R	03/14/1979	1.0	125	45	.01	8	03/14/1979	--	FR DF 27
53	6	X	19	R	11/18/1976	2.0	270	19	.01	1	11/18/1976	--	FR DF 28
28	6	X	60	R	09/05/1967	2.0	260	60	.01	1	09/05/1967	--	FR DF 29
80	6	X	20	R	05/22/1980	12.0	150	20	.09	1	05/22/1980	--	FR DF 30
19	6	X	45	R	04/14/1966	8.0	45	45	--	2	04/14/1966	--	FR DF 31
15	6	X	--	--	--	5.0	40	--	--	1.5	05/20/1967	--	FR DF 32
59	6	X	35	R	03/02/1972	45.0	--	35	--	1	03/02/1972	--	FR DF 33
78	6	X	25	R	05/18/1981	15.0	200	25	.09	4	05/18/1981	--	FR DF 34
26	6	X	30	R	05/26/1973	3.0	--	30	--	1	05/26/1973	O	FR DF 35
--	--	X	--	--	--	.0	--	--	--	--	03/14/1979	--	FR DF 36
--	--	X	--	--	--	.0	--	--	--	--	03/14/1979	--	FR DF 37
--	--	X	--	--	--	.0	--	--	--	--	03/14/1979	--	FR DF 38
--	--	X	--	--	--	.0	--	--	--	--	03/14/1979	--	FR DF 39
--	6	--	--	--	--	--	--	--	--	--	--	--	FR DG 2
--	--	W	1.00	S	09/08/1955	--	--	--	--	--	--	--	FR DG 3
--	6	X	83.20	S	08/20/1955	--	--	--	--	--	--	Q	FR DG 4
10	36	X	18	R	--	--	--	--	--	--	--	--	FR DG 5
--	6	X	13.65	S	09/08/1955	--	--	--	--	--	--	Q	FR DG 6
20	6	X	34	R	01/01/1953	15.0	--	34	--	--	01/01/1953	--	FR DG 7
23	6	X	25	R	01/30/1950	6.0	52	25	.22	--	01/30/1950	Q	FR DG 8
12	6	X	20	R	08/02/1949	12.0	--	20	--	1	08/02/1949	--	FR DG 9
--	--	X	6.83	S	08/29/1955	--	--	--	--	--	--	--	FR DG 10
19	36	W	11.40	S	08/29/1955	--	--	--	--	--	--	--	FR DG 12
50	6	X	40	R	05/06/1949	10.0	75	40	.29	1	05/06/1949	--	FR DG 13
42	6	X	35	R	04/23/1952	5.0	--	35	--	.5	04/23/1952	--	FR DG 14
22	6	X	30	R	01/08/1953	15.0	46	30	.94	1	01/08/1953	Q	FR DG 15
--	--	W	22.50	S	10/16/1955	--	--	--	--	--	--	--	FR DG 16
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DG 17

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR DG 18	--	PRYOR, C	--	--	450	H	45	H	300SMCK
FR DG 19	--	DISNEY, EARL	I FOGEL	--	430	H	186	U	300SMCK
FR DG 20	FR-73-1486	GIST FRATERNAL CLUB	ROBERT CLINE	1974	520	S	70	C	300IJMV
FR DG 21	FR-66-0509	LIBERTYTOWN FIRE CO	KEYSER-GARVER	1966	500	S	114	F,H	300IJMV
FR DG 22	FR-73-3184	F & M BANK	C A CROMWELL	1976	510	F	250	C	300IJMV
FR DG 23	FR-73-6120	KEYS CHAPEL CHURCH	ROBERT CLINE	1978	610	S	320	T	300IJMV
FR DG 24	FR-73-6129	BEST, WILLIAM	KEYSER-GARVER	1978	520	S	125	H	300IJMV
FR DG 25	FR-73-7371	GETZANDANNER, RICHARD	KEYSER-GARVER	1979	450	S	110	H	300IJMV
FR DG 26	FR-73-5285	SIX, DONALD	C A CROMWELL	1977	490	S	225	H	300IJMV
FR DG 27	FR-73-7780	STULL, ROBERT	KEYSER-GARVER	1980	550	H	125	H	300IJMV
FR DG 28	FR-71-0125	LOCUST GROVE CHURCH	A C REIDER	1970	440	S	100	T	300IJMV
FR DG 29	FR-73-2413	LINGANORE HIGH SCH	ROBERT CLINE	1974	540	H	400	T	300LBRN
FR DG 30	FR-73-2406	LINGANORE HIGH SCH	ROBERT CLINE	1974	530	S	300	T	300LBRN
FR DH 1	--	RIPPIN	--	--	685	S	60	H	300MRBG
FR DH 3	--	BEACHLEY	--	--	550	H	110	H	300IJMV
FR DH 4	--	CANTWELL, H W	HOFFMAN WELL	1955	645	S	70	H,C	300IJMV
FR DH 5	--	CANTWELL, H W	--	--	645	S	34	U	300IJMV
FR DH 6	FR-73-2510	MORRIS, ALLEN N	KEYSER-GARVER	1975	560	F	202	H	300IJMV
FR DH 7	FR-73-1866	WINSTEAD, SAMUEL	L F EASTERDAY	1974	585	H	160	H	300IJMV
FR DH 8	FR-73-2480	DEVILBISS, NEWELL	KEYSER-GARVER	1975	660	S	162	H	300IJMV
FR DH 9	FR-73-7660	MCDANIEL, HELEN	L F EASTERDAY	1980	660	H	120	H	300IJMV
FR DH 10	FR-73-0847	KING, JAMES	ROBERT CLINE	1973	690	H	220	H	300IJMV
FR DH 11	FR-73-4013	TRIAD HOME BLDRS	ROBERT CLINE	1976	710	H	320	H	300IJMV
FR DH 12	FR-73-4261	TRIAD HOME BLDRS	ROBERT CLINE	1977	700	S	320	H	300IJMV
FR DH 13	FR-73-5893	ALLEN, RUSSELL W	G EDGAR HARR	1978	705	H	300	H	300IJMV
FR DH 14	FR-73-7541	HUMBERT, WILLIAM	JACK HARLEY	1980	700	S	200	H	300IJMV
FR DH 15	FR-73-4405	EVANS, THOMAS	KEYSER-GARVER	1977	700	S	183	H	300IJMV
FR DH 16	FR-73-6155	ENSOR, JAMES	KEYSER-GARVER	1978	700	H	320	H	300IJMV
FR DH 17	FR-73-8316	CHAFFMAN, DOUGLAS	W B QUYNN	1981	585	S	100	H	300IJMV
FR DH 18	FR-73-4066	YINGLING, RAYMOND	C A CROMWELL	1977	640	S	150	H	300IJMV
FR DH 19	FR-73-2892	WILLIS, WAYNE	G EDGAR HARR	1975	760	H	200	H	300IJMV
FR DH 20	FR-73-1735	WILLIS, HERBERT	RALPH MAYNE	1974	760	S	120	U	300IJMV
FR DH 21	FR-73-2094	WILLIS, HERBERT	RALPH MAYNE	1974	740	S	120	H	300IJMV
FR DH 22	FR-73-6790	SMITH, JAMES	RALPH MAYNE	--	740	H	240	H	300IJMV
FR DH 23	FR-73-0945	THIEBES, GEORGE	DANA KYKER	1973	780	S	370	U	300IJMV
FR DH 24	FR-73-1442	CRAIG, MALCOM	JOSEPH MAYNE	1973	720	H	140	H	300IJMV
FR DH 25	FR-73-4142	GANSKE, WILLIAM	D JOHNSON	1976	680	H	122	H	300IJMV
FR DH 26	FR-73-2696	MCGINNIS, LAWRENCE	B FEEZER	1975	660	S	105	H	300IJMV
FR DH 27	FR-73-1912	EVERETT, RICHARD	JOSEPH MAYNE	1974	650	H	116	H	300IJMV
FR DH 28	FR-73-6154	NICHOLSON, ROBERT	B FEEZER	1978	645	S	190	H	300IJMV
FR DH 29	FR-73-3464	WALLACE, DENNIS	L F EASTERDAY	1976	560	S	105	H	300IJMV
FR DH 30	FR-73-0547	MOORE, RAY	L F EASTERDAY	1973	610	S	160	H	300IJMV
FR DH 31	FR-73-2247	MITCHELL, DAVID	ROBERT CLINE	1974	600	S	220	H	300IJMV
FR DH 32	FR-73-5284	SIX, DONALD	C A CROMWELL	1977	620	S	150	H	300IJMV
FR DH 33	FR-73-2642	FLEMMING, LESLIE	C A CROMWELL	1975	640	H	200	H	300IJMV
FR DH 34	FR-73-5114	LEDFORD, MARK	RALPH MAYNE	1977	600	S	185	H	300IJMV
FR DH 35	FR-73-2748	LEDFORD, MARK	RALPH MAYNE	1975	620	S	110	H	300IJMV
FR DH 36	FR-73-3887	LEDFORD, DAVID	D JOHNSON	1976	660	S	100	H	300IJMV
FR DH 37	FR-73-1784	LARRICK, RICHARD	A EDMONDSON	1974	690	S	74	H	300MRBG
FR DH 38	FR-73-2112	CASEY, JERRY	A EDMONDSON	1974	740	S	100	H	300MRBG
FR DH 39	FR-73-1790	LARRICK, PAUL	A EDMONDSON	1974	790	H	100	H	300MRBG
FR DH 40	FR-73-3427	CROUT, JOHN	A C REIDER	1976	765	H	95	H	300MRBG
FR DH 41	FR-73-5722	KENDALL, ALLEN	L F EASTERDAY	1978	760	H	180	H	300MRBG
FR DH 42	FR-73-7531	DERTZBOUGH, FRANK	L F EASTERDAY	1980	770	S	300	H	300MRBG
FR DH 43	FR-73-2255	THIEBES, GEORGE	JOSEPH MAYNE	1974	780	S	105	H	300IJMV
FR DH 44	FR-73-6403	JENKINS, DANIEL H	WW REICHART	1978	600	S	125	H	300SMCK
FR DH 45	FR-73-8527	DEEDS, HOWARD	KEN KOHLER	1981	610	H	230	U	300SMCK
FR DH 46	FR-73-1824	MILLIGAN, DONALD	ROBERT CLINE	1974	665	H	65	H	300IJMV
FR DH 47	FR-73-7157	OVERHOLTZER, PHILLIP	ROBERT CLINE	1979	725	H	145	H	300IJMV
FR DH 48	FR-73-2566	SMITH, CHARLES	C A CROMWELL	1975	670	H	100	H	300SMCK
FR DH 49	FR-73-8312	DEL-MAR DEVEL CO	H DILLON	1981	660	S	205	H	300SMCK
FR DH 50	FR-73-6764	TARR, WILSON	DANA KYKER	1979	685	S	150	H	300SMCK
FR DH 51	FR-73-7437	HANCOCK, CARL	DANA KYKER	1980	660	H	328	U	300IJMV
FR DH 52	FR-73-7472	TARR, WILSON	DANA KYKER	1980	705	S	455	H	300IJMV
FR DH 53	FR-73-7414	WARNKEN, PAUL	DANA KYKER	1980	680	S	145	H	300IJMV
FR DH 54	FR-73-5209	LUDWIG, HAROLD	C C CAMPBELL	1977	790	S	365	H	300IJMV
FR DH 55	FR-73-4349	OLD LINE CONST CO	JACK HARLEY	1977	800	H	300	H	300IJMV
FR DH 56	FR-73-4535	NICKOLES, THOMAS	L F EASTERDAY	1977	805	H	220	H	300IJMV
FR DH 57	FR-73-6130	WILBUR, CHARLES	L F EASTERDAY	1978	800	H	200	H	300IJMV
FR DH 58	FR-73-5474	DUERR, THOMAS	L F EASTERDAY	1978	790	S	260	H	300IJMV
FR DH 59	FR-73-6754	HAMMOND, JAMES	A C REIDER	1979	800	H	120	H	300IJMV
FR DH 60	FR-73-4351	WELSH, FRANK	KEYSER-GARVER	1970	860	S	303	H	300IJMV
FR DH 61	FR-73-1417	SCHUTZ, OSCAR	A EDMONDSON	1973	885	H	100	H	300IJMV
FR DH 62	FR-73-3041	FOUSEK, JACK	C A CROMWELL	1975	860	S	250	H	300IJMV
FR DH 63	FR-73-2594	CUTTER, JOHN	ROBERT CLINE	1975	845	S	120	H	300IJMV
FR DH 64	FR-73-3117	LOWE, DAVID	A C REIDER	1975	825	H	85	H	300MRBG
FR DH 65	FR-73-7192	LAWSON, JAMES	KEYSER-GARVER	1979	760	S	300	H	300MRBG
FR DH 66	FR-73-4305	SMITH, LEO	B FEEZER	1976	785	S	120	H	300MRBG
FR EA 1	FR-00-9422	WEBBER, JAMES G	A R KEYSER	1951	520	S	69	H,S	400PCMB
FR EA 2	FR-00-1476	COOPER, WILLIAM	D F MYERS	1947	505	S	43	H	400PCMB

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
--	6	X	--	--	--	--	--	--	--	--	--	Q	FR DG 18
24	6	X	30	R	--	5.0	--	30	--	--	--	--	FR DG 19
64	6	X	26	R	02/11/1974	10.0	70	26	0.23	1	02/11/1974	--	FR DG 20
62	6	X	30	R	03/28/1966	20.0	--	30	--	1	03/28/1966	O,Q	FR DG 21
26	6	--	30	R	01/02/1976	3.0	245	30	.01	3	01/02/1976	--	FR DG 22
35	--	X	80	R	08/05/1978	1.0	320	80	.0	1	08/05/1978	--	FR DG 23
59	6	X	55	R	08/07/1978	15.0	110	55	.27	3	08/07/1978	--	FR DG 24
61	6	X	12	R	11/21/1979	80.0	75	12	1.27	4	11/21/1979	--	FR DG 25
20	6	X	40	R	12/29/1977	4.0	220	40	.02	3	12/29/1977	--	FR DG 26
61	6	X	20	R	09/16/1980	30.0	100	20	.38	3	09/16/1980	--	FR DG 27
46	6	X	25	R	09/29/1970	10.0	35	25	1.00	1	09/29/1970	--	FR DG 28
55	6	X	105	R	10/19/1974	10.0	400	105	.03	1	10/19/1974	--	FR DG 29
22	6	X	15	R	10/25/1974	15.0	300	15	.05	1	10/25/1974	--	FR DG 30
--	6	X	--	--	--	--	--	--	--	--	--	--	FR DH 1
--	--	--	--	--	--	--	--	--	--	--	--	--	FR DH 3
16	6	X	30	R	08/28/1955	--	--	--	--	--	--	--	FR DH 4
34	36	--	26.98	S	08/29/1955	--	--	--	--	--	--	--	FR DH 5
59	6	X	35	R	03/06/1975	4.0	45	35	.40	2	03/06/1975	--	FR DH 6
21	6	X	40	R	07/08/1974	15.0	160	40	.13	2	07/08/1974	--	FR DH 7
80	6	X	78	R	02/07/1975	7.0	80	78	3.50	2	02/07/1975	--	FR DH 8
27	6	X	30	R	06/06/1980	20.0	120	30	.22	3	06/06/1980	--	FR DH 9
55	6	X	61	R	06/29/1973	2.0	220	61	.01	1	06/29/1973	--	FR DH 10
39	6	X	30	R	02/11/1976	1.0	320	30	.0	1	02/11/1976	--	FR DH 11
40	6	X	30	R	02/11/1977	5.0	320	30	.02	1	02/11/1977	--	FR DH 12
62	6	X	49	R	05/24/1978	4.0	112	49	.06	6	05/24/1978	--	FR DH 13
21	6	X	40	--	04/15/1980	5.0	90	40	.10	2	04/15/1980	--	FR DH 14
18	6	X	23	--	04/04/1977	5.0	33	23	.50	2	04/04/1977	--	FR DH 15
39	6	X	45	R	09/06/1978	1.5	310	45	.01	6	09/06/1978	--	FR DH 16
61	6	X	20	R	04/10/1981	60.0	80	20	1.00	2	04/10/1981	--	FR DH 17
44	6	X	35	R	04/18/1977	12.0	145	35	.11	2	04/18/1977	--	FR DH 18
47	6	X	50	R	09/16/1975	5.0	54	50	1.25	6	09/16/1975	--	FR DH 19
20	6	X	40	R	04/12/1974	1.0	--	--	--	2	04/12/1974	--	FR DH 20
20	6	X	40	R	08/06/1974	1.0	120	40	.01	2	08/06/1974	--	FR DH 21
21	6	X	45	R	08/15/1979	3.0	240	45	.02	6	08/15/1979	--	FR DH 22
126	6	X	61	R	06/29/1973	2.0	260	61	.01	8	06/29/1973	--	FR DH 23
28	6	X	60	R	12/14/1973	4.0	140	60	.05	2	12/14/1973	--	FR DH 24
35	6	X	60	R	10/28/1976	10.0	60	60	--	2	10/28/1976	--	FR DH 25
29	6	X	45	R	07/05/1975	8.0	60	45	.53	6	07/05/1975	--	FR DH 26
21	6	X	30	R	06/26/1974	10.0	30	30	--	2	06/26/1974	--	FR DH 27
21	6	X	60	R	07/18/1978	5.0	150	60	.06	6	07/18/1978	--	FR DH 28
39	6	X	40	R	05/05/1976	25.0	105	40	.39	2	05/05/1976	--	FR DH 29
20	6	X	40	R	03/01/1973	5.0	160	40	.04	1	03/01/1973	--	FR DH 30
39	6	X	55	R	10/07/1974	2.0	220	55	.01	1	10/07/1974	--	FR DH 31
20	6	X	40	R	12/29/1977	5.0	220	40	.03	3	12/29/1977	--	FR DH 32
22	6	X	30	R	06/06/1975	3.0	195	30	.02	2	06/06/1975	--	FR DH 33
44	6	X	50	R	12/16/1977	2.0	185	50	.02	4	12/16/1977	--	FR DH 34
21	6	X	40	R	08/15/1975	5.0	110	40	.07	2	08/15/1975	--	FR DH 35
41	6	X	41	R	09/15/1976	10.0	41	41	--	1	09/15/1976	--	FR DH 36
48	6	X	25	R	08/01/1974	25.0	30	25	5.00	3	08/01/1974	--	FR DH 37
22	6	X	40	R	10/25/1974	9.0	60	40	.45	3	10/25/1974	--	FR DH 38
20	6	X	50	R	08/01/1974	8.0	75	50	.32	2	08/01/1974	--	FR DH 39
33	6	X	42	R	04/01/1976	10.0	60	42	.56	6	04/01/1976	--	FR DH 40
92	6	X	65	R	04/17/1978	3.0	180	65	.03	3	04/17/1978	--	FR DH 41
40	6	X	60	R	03/25/1980	2.0	300	60	.01	3	03/25/1980	--	FR DH 42
58	6	X	30	R	10/03/1974	30.0	100	30	.43	2	10/03/1974	--	FR DH 43
19	6	X	43	R	10/10/1978	6.0	120	43	.08	1	10/10/1978	--	FR DH 44
50	6	X	43	R	08/04/1981	2.0	120	43	.03	6	08/04/1981	--	FR DH 45
48	6	X	35	R	05/31/1974	20.0	65	35	.67	1	05/31/1974	--	FR DH 46
112	6	X	60	R	09/18/1979	30.0	145	60	.35	1	09/18/1979	--	FR DH 47
33	6	X	25	R	04/29/1975	15.0	90	25	.23	--	04/29/1975	--	FR DH 48
38	6	X	25	R	08/15/1981	10.0	150	25	.08	6	08/15/1981	--	FR DH 49
40	6	X	59	R	06/13/1979	7.0	91	59	.22	6	06/13/1979	--	FR DH 50
126	6	X	100	R	02/05/1980	4.0	218	100	.03	6	02/05/1980	--	FR DH 51
82	6	X	100	R	03/25/1980	2.0	363	100	.01	6	03/25/1980	--	FR DH 52
67	6	X	61	R	01/17/1980	30.0	110	61	.61	4	01/17/1980	--	FR DH 53
41	6	X	40	R	09/23/1977	4.0	105	40	.06	6	09/23/1977	--	FR DH 54
40	6	X	50	R	01/28/1977	2.0	270	50	.01	2	01/28/1977	--	FR DH 55
19	6	X	40	R	05/23/1977	2.0	220	40	.01	2	05/23/1977	--	FR DH 56
19	6	X	50	R	07/24/1978	3.0	200	50	.02	4	07/24/1978	--	FR DH 57
20	6	X	60	R	01/04/1978	2.0	260	60	.01	2	01/04/1978	--	FR DH 58
71	6	X	30	R	03/26/1979	5.0	73	30	.12	6	03/26/1979	--	FR DH 59
38	6	X	60	R	02/03/1970	1.5	70	60	.15	2	02/03/1970	--	FR DH 60
21	6	X	40	R	10/28/1973	7.0	60	40	.35	3	10/28/1973	--	FR DH 61
25	6	X	25	R	12/02/1975	1.0	245	25	.01	3	12/02/1975	--	FR DH 62
35	6	X	30	R	05/28/1975	3.0	120	30	.03	1	05/28/1975	--	FR DH 63
41	6	X	30	R	12/24/1975	10.0	50	30	.50	3	12/24/1975	--	FR DH 64
46	6	X	29	R	10/17/1979	4.0	250	29	.02	3	10/17/1979	--	FR DH 65
23	6	X	60	R	12/31/1976	8.0	90	60	.27	6	12/31/1976	--	FR DH 66
20	6	X	25	R	11/25/1951	3.0	50	25	.12	--	11/25/1951	--	FR EA 1
33	6	X	23	R	05/30/1947	2.5	--	23	--	--	05/30/1947	--	FR EA 2

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR EA 3	FR-73-7244	SPRIGGS, ALFRED F	JOHN SHAFF	1979	560	S	115	H	400PCMB
FR EB 1	FR-01-1628	WOLFE, GEORGE	JOHN SHAFF	1953	545	S	76	H	400PCMB
FR EB 2	FR-00-7296	BEACHLEY, CHARLES D	A R KEYSER	1951	500	F	62	H	400PCMB
FR EB 3	FR-01-2454	GUYTON, D M	FLOYD CORUN	1953	520	H	72	H	400PCMB
FR EB 4	FR-01-7298	ARNOLD, ROBERT	J W AMBROSE	1954	530	H	108	U	400PCMB
FR EB 5	FR-00-5035	ARNOLD, THOMAS	JOHN SHAFF	1949	525	H	100	H	400PCMB
FR EB 6	FR-01-5504	STALEY, ROBERT	JOHN SHAFF	1954	585	F	100	H	400CTCN
FR EB 7	--	STALEY, ROBERT	--	--	560	F	24	U	400CTCN
FR EB 8	--	STALEY, ROBERT	JOHN SHAFF	1949	560	F	202	U	400CTCN
FR EB 9	FR-00-6664	CLAGGETT, T W	JACK HARLEY	1950	490	S	75	S	400PCMB
FR EB 10	FR-01-6104	CLAGGETT, T W	C A CROMWELL	1954	465	S	100	H,S	400PCMB
FR EB 11	FR-00-5083	CRANE, SAMUEL	JOHN SHAFF	1949	550	F	70	H	400PCMB
FR EB 12	FR-00-4902	PLEASANT VIEW CHURCH	JOHN SHAFF	1949	525	F	80	U	400PCMB
FR EB 13	--	CONNER, T E	T E CONNER	1949	565	F	28	H	400CTCN
FR EB 14	FR-00-4189	DECK, CHARLES	WADE CORUN	1949	465	F	85	H	400PCMB
FR EB 15	FR-01-1539	KEFAUVER, FRANK	JOHN SHAFF	1952	575	F	65	H	400CTCN
FR EB 16	FR-01-1023	GUYTON, MAURICE	JOHN SHAFF	1952	540	F	64	H	400PCMB
FR EB 17	FR-00-1263	GREENWOOD, ROBERT	J M HOLTZMAN	1947	525	V	77	H	400PCMB
FR EB 18	FR-01-6158	HAWAIIAN CLUB	JOHN SHAFF	1954	520	H	99	C	400PCMB
FR EB 19	FR-00-9113	HARGETT, EMORY	WADE CORUN	1951	465	F	54	H	400PCMB
FR EB 20	FR-01-1627	COATES, ROBERT	JOHN SHAFF	1953	520	S	56	C	400PCMB
FR EB 21	FR-01-1383	COATES, ROBERT	JOHN SHAFF	1952	520	H	50	H	400PCMB
FR EB 22	--	MORRISON, J E	--	--	545	F	55	H,S	400PCMB
FR EB 24	--	FAUBLE, WILLIAM E	--	1935	505	S	39	H	400PCMB
FR EB 25	--	STEPLER, HOWARD	--	--	555	F	108	H	400PCMB
FR EB 27	--	EVERETT	--	--	550	F	37	U	400PCMB
FR EB 28	--	GATHLAND STATE PARK	--	--	1020	H	54	R	377WVRN
FR EB 29	FR-73-7365	SHACKELFORD, ALLEN	JACK HARLEY	1979	545	V	250	H	400PCMB
FR EB 30	FR-73-6310	SMITH BUILDING CONTR	W B OUYNN	1978	525	V	125	H	400PCMB
FR EB 31	FR-73-3222	BITTLE, ROY	ROBERT CLINE	1976	520	V	150	H	400PCMB
FR EB 32	FR-73-2314	SHAFER, JOHN A	JOHN SHAFF	1975	520	V	125	H	400PCMB
FR EB 33	FR-68-0108	PLEASANT VIEW CH	JOHN SHAFF	1967	530	H	87	T	400PCMB
FR EB 34	FR-73-1806	ST MARYS CHURCH	DANA KYKER	1974	530	S	203	T	400PCMB
FR EB 35	FR-04-5596	MD CO-OP MILK HAULERS	L F EASTERDAY	1962	505	H	183	N	400PCMB
FR EB 36	FR-73-7910	FAITH BAPTIST CHURCH	ROBERT CLINE	1980	500	S	300	T	400PCMB
FR EB 37	FR-02-8130	GATHLAND STATE PARK	JOHN SHAFF	1958	950	S	255	U	377WVRN
FR EB 38	FR-04-5900	GATHLAND STATE PARK	A R KEYSER	1962	960	S	205	H	377WVRN
FR EC 1	FR-00-4714	BOWLUS, J W	JOHN SHAFF	1949	465	S	100	H	400PCMB
FR EC 3	--	AHALT, C E	--	--	370	H	75	H	400PCMB
FR EC 5	FR-01-7340	KILLAR, HENRY	JOHN SHAFF	1954	490	F	110	H	400PCMB
FR EC 6	FR-01-9689	LEE'S DINER	A L SMITH	1955	595	H	165	C	377HRPR
FR EC 7	FR-00-5018	BAKER, EMERY	WADE CORUN	1949	510	F	58	H	400PCMB
FR EC 8	FR-01-0328	BAKER, HARRY R	A R KEYSER	1952	350	V	70	H	400PCMB
FR EC 9	FR-00-4357	RICE, I C	A R KEYSER	1949	575	F	71	H	400PCMB
FR EC 10	FR-01-2891	BOWLUS, JOHN S	JACK HARLEY	1953	460	S	131	S	400PCMB
FR EC 11	FR-01-9524	CORUN, DORIS	A L SMITH	1955	575	F	62	H	400CTCN
FR EC 12	FR-00-8294	WEEDON, EDWARD	WADE CORUN	1951	420	S	58	H,S	377ANTM
FR EC 13	FR-00-8295	WEEDON, HOWARD	WADE CORUN	1951	450	S	60	H,S	377ANTM
FR EC 14	FR-00-3756	SUMMERS, HARRY	JOHN SHAFF	1949	555	F	72	C	400CTCN
FR EC 15	FR-00-6783	STOCKMAN, PAUL B	JACK HARLEY	1950	450	S	83	H	400PCMB
FR EC 16	FR-01-9825	LAKIN, H D	JACK HARLEY	1955	440	F	76	H	400CTCN
FR EC 17	FR-00-7902	HILLSIDE MOTEL	JACK HARLEY	1951	595	H	86	C	377HRPR
FR EC 18	--	MAR-LU-RIDGE CAMP	--	--	800	S	200	R	377WVRN
FR EC 19	FR-05-1571	MAR-LU-RIDGE CAMP	A R KEYSER	1963	580	S	145	R	377HRPR
FR EC 20	FR-72-0469	FRED CO LAND INVEST	A R KEYSER	1972	590	S	255	U	400CTCN
FR EC 21	FR-72-0469	FRED CO LAND INVEST	A R KEYSER	1972	580	S	220	U	400CTCN
FR EC 22	FR-72-0469	FRED CO LAND INVEST	A R KEYSER	1972	590	S	302	U	400CTCN
FR EC 23	FR-72-0469	FRED CO LAND INVEST	A R KEYSER	1972	540	S	262	U	400CTCN
FR EC 24	FR-73-2468	FRED CO METRO COMM	KEYSER-GARVER	1975	460	S	302	U	400PCMB
FR EC 25	FR-68-0100	FRED CO BD OF EDUC	ROBERT CLINE	1967	545	H	220	T	400PCMB
FR EC 26	FR-73-0448	AUSHERMAN, E W	ROBERT CLINE	1972	580	F	345	P	400CTCN
FR EC 27	FR-73-0108	AUSHERMAN, E W	ROBERT CLINE	1972	580	F	345	U	400CTCN
FR EC 28	FR-73-0106	AUSHERMAN, E W	ROBERT CLINE	1972	580	F	370	U	400CTCN
FR EC 29	FR-66-0841	HIGH'S DAIRY STORE	KEYSER-GARVER	1966	600	H	159	H	400CTCN
FR EC 30	FR-70-0052	REMSBERG. MERHL	C A CROMWELL	1969	575	S	288	H	400CTCN
FR EC 31	FR-73-1751	SCHAMEL, HARRY	C A CROMWELL	1974	590	F	175	C	400CTCN
FR EC 32	FR-72-0230	EXXON CORPORATION	W H LAMBERSON	1971	580	S	125	C	400CTCN
FR EC 33	FR-69-0379	JEFFERSON RURITAN	JERRY HARLEY	1969	560	S	145	H	400CTCN
FR EC 34	FR-01-2029	JEFFERSON MOTEL	WADE CORUN	1953	600	S	67	C	400PCMB
FR EC 35	FR-68-0070	CONCORD TRAILER PK	KEYSER-GARVER	1967	520	S	324	P	377HRPR
FR EC 36	FR-73-3302	CONCORD TRAILER PK	KEYSER-GARVER	1976	480	S	350	P	377HRPR
FR EC 37	FR-70-0221	POLING. KENNETH	L F EASTERDAY	1970	800	S	320	P	377LUDN
FR EC 38	FR-70-0192	POLING. KENNETH	L F EASTERDAY	1969	740	S	300	U	377LUDN
FR EC 39	FR-70-0457	POLING. KENNETH	L F EASTERDAY	1970	720	S	400	P	377LUDN
FR EC 40	FR-73-2888	STORM, PETER	ROBERT CLINE	1975	720	S	395	H	400CTCN
FR EC 41	FR-69-0070	MAR-LU CONF CENTER	JERRY HARLEY	1968	720	S	200	T	377LUDN
FR EC 42	FR-73-7958	FRED CO 4-H CAMP	L F EASTERDAY	1980	590	S	300	U	377HRPR
FR ED 1	--	HIMES, JOSEPH	--	1929	400	S	70	U	231NOXF
FR ED 2	--	HIMES, JOSEPH	--	1930	420	S	615	H	231NOXFB 231NOXF
FR ED 5	FR-01-8970	WHITTINGTON, HARRY L	R HARRIS	1955	525	H	93	H	377HRPR

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
84	6	X	46	R	10/01/1979	12.0	80	46	0.35	3	10/01/1979	--	FR EA 3
76	6	O	12	R	02/11/1953	8.0	30	12	.44	2	02/11/1953	Q	FR EB 1
62	6	O	35	R	01/25/1951	3.0	50	35	.20	1	01/25/1951	--	FR EB 2
24	6	X	33.75	S	10/18/1955	6.0	60	40	.30	1	06/12/1953	Q	FR EB 3
22	6	X	50	R	12/13/1954	30.0	78	50	1.07	2	12/13/1954	--	FR EB 4
22	6	X	30.70	S	10/18/1955	10.0	60	30	.33	6	12/01/1949	Q	FR EB 5
20	6	X	8	R	06/14/1954	20.0	12	8	5.00	10	06/14/1954	--	FR EB 6
24	96	W	7.54	S	12/22/1955	5.0	--	--	2.00	8	01/01/1955	--	FR EB 7
24	6	X	6.64	S	12/22/1955	--	--	--	--	--	--	Q	FR EB 8
23	6	X	8	R	09/01/1950	9.0	60	8	.17	--	09/01/1950	--	FR EB 9
20	6	X	14	R	08/05/1954	7.0	85	14	.10	1	08/05/1954	--	FR EB 10
26	6	X	30	R	11/25/1949	4.0	40	30	.40	5	11/25/1949	--	FR EB 11
30	6	X	15	R	10/11/1949	5.0	18	15	1.67	1	10/11/1949	--	FR EB 12
28	48	W	4.83	S	12/22/1955	--	--	--	--	--	--	--	FR EB 13
85	6	O	22	R	06/17/1949	10.0	--	22	--	1	06/17/1949	--	FR EB 14
12	6	X	35	R	12/18/1952	8.0	50	35	.53	4	12/18/1952	--	FR EB 15
18	6	X	25	R	09/12/1952	10.0	--	25	--	6	09/12/1952	--	FR EB 16
15	6	X	42	R	03/17/1947	5.0	68	42	.19	1	03/17/1947	--	FR EB 17
22	6	X	30	R	05/27/1954	20.0	30	30	--	1	05/27/1954	Q	FR EB 18
12	6	X	37.87	S	12/14/1955	8.0	25	25	--	.5	11/20/1951	Q	FR EB 19
56	6	O	10	R	01/14/1953	3.0	40	10	.10	4	01/14/1953	Q	FR EB 20
50	6	O	12	R	11/10/1952	6.0	18	12	1.00	4	11/10/1952	--	FR EB 21
--	6	--	16.76	S	08/27/1956	4.0	--	--	--	--	--	--	FR EB 22
39	36	W	31	R	05/15/1956	--	--	--	--	--	--	--	FR EB 24
--	6	--	40	E	--	7.0	--	40	--	--	--	Q	FR EB 25
37	36	W	8.61	S	09/21/1956	--	--	--	--	--	--	--	FR EB 27
--	6	--	38.70	S	07/19/1956	--	--	--	--	--	--	--	FR EB 28
34	6	X	30	R	12/21/1979	4.0	240	30	.02	2	12/21/1979	--	FR EB 29
20	6	X	10	R	10/05/1978	12.0	25	10	.80	2	10/05/1978	--	FR EB 30
55	6	X	16	R	04/02/1976	20.0	150	16	.15	1	04/02/1976	--	FR EB 31
28	6	X	12	R	03/04/1975	12.0	31	12	.63	3	03/04/1975	--	FR EB 32
22	6	X	20	R	09/15/1967	8.0	24	20	2.00	2	09/15/1967	O,Q	FR EB 33
33	6	X	50	R	05/03/1974	2.0	155	50	.02	2	05/03/1974	O,Q	FR EB 34
20	6	X	40	R	01/30/1962	10.0	60	40	.50	--	01/30/1962	--	FR EB 35
65	6	X	38	R	09/23/1980	6.0	300	38	.02	1	09/23/1980	--	FR EB 36
26	6	X	15	R	01/29/1958	15.0	--	--	--	15	01/29/1958	--	FR EB 37
39	6	X	160	R	01/01/1962	6.0	195	160	.17	8	01/01/1962	--	FR EB 38
100	6	O	10	R	10/02/1949	2.0	40	10	.07	6	10/02/1949	--	FR EC 1
--	6	--	40	R	11/01/1951	5.0	--	--	--	--	11/01/1951	--	FR EC 3
35	6	X	21.71	S	12/14/1955	10.0	12	8	2.50	6	12/06/1954	--	FR EC 5
165	6	O	85	R	07/05/1955	10.0	--	85	--	5	07/05/1955	--	FR EC 6
14	6	X	25	R	11/09/1949	15.0	--	25	--	.5	11/09/1949	--	FR EC 7
30	6	X	9.19	S	12/15/1955	20.0	15	10	4.00	1	06/08/1952	Q	FR EC 8
22	6	X	28.16	S	12/14/1955	3.0	55	30	.12	.5	07/13/1949	Q	FR EC 9
23	6	X	30	R	07/08/1953	2.0	110	30	.03	--	07/08/1953	Q	FR EC 10
40	6	X	41	R	06/03/1955	10.0	--	41	--	.5	06/03/1955	Q	FR EC 11
9	6	X	25	R	07/09/1951	15.0	40	25	1.00	1	07/09/1951	--	FR EC 12
10	6	X	45	R	07/06/1951	15.0	60	45	1.00	1	07/06/1951	--	FR EC 13
12	6	X	22.56	S	12/16/1955	5.0	35	25	.50	4	03/14/1949	Q	FR EC 14
24	6	X	30	R	09/21/1950	6.0	60	30	.20	--	09/21/1950	Q	FR EC 15
23	6	X	30	R	07/08/1955	14.0	67	30	.38	--	07/08/1955	Q	FR EC 16
72	6	X	33	R	08/24/1951	4.0	74	33	.10	--	08/24/1951	--	FR EC 17
--	6	X	--	--	--	--	--	--	--	--	--	--	FR EC 18
20	6	X	25	R	05/01/1963	12.0	--	25	--	2	05/01/1963	--	FR EC 19
23	6	X	6.98	S	04/18/1972	20.0	--	--	--	1	04/01/1972	--	FR EC 20
21	6	X	2.52	S	04/18/1972	46.0	--	--	--	8	04/01/1972	--	FR EC 21
20	6	X	20	R	03/05/1972	40.0	--	20	--	1	04/01/1972	--	FR EC 22
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EC 23
38	6	X	10	R	02/28/1975	2.0	30	10	.10	3	02/28/1975	O	FR EC 24
88	6	X	60	R	08/29/1967	50.0	220	60	.31	1	08/29/1967	--	FR EC 25
100	6	X	20	R	05/11/1972	30.0	134	20	.26	24	05/11/1972	--	FR EC 26
93	6	X	22	R	06/05/1972	15.0	345	22	.05	1	06/05/1972	--	FR EC 27
87	6	X	18	R	06/01/1972	12.0	370	18	.03	1	06/01/1972	O	FR EC 28
57	6	X	30	R	07/24/1966	7.0	--	30	--	1	07/24/1966	--	FR EC 29
25	6	X	30	R	08/11/1969	5.0	285	30	.02	5	08/11/1969	--	FR EC 30
61	6	X	45	R	04/26/1974	12.0	170	45	.10	2	04/26/1974	--	FR EC 31
89	6	X	25	R	10/04/1971	10.0	115	25	.11	1	10/04/1971	--	FR EC 32
40	6	X	43	R	04/08/1969	11.0	--	43	--	1	04/08/1969	--	FR EC 33
21	6	X	28	R	06/27/1953	10.0	44	28	.63	1	06/27/1953	--	FR EC 34
56	6	X	30	R	08/16/1967	10.0	--	30	--	1	08/16/1967	--	FR EC 35
49	6	X	25	R	02/13/1976	50.0	35	25	5.00	2	02/13/1976	--	FR EC 36
26	6	X	40	R	05/28/1970	7.0	280	40	.03	1	05/28/1970	--	FR EC 37
40	6	X	35	R	10/24/1969	4.0	300	35	.02	1	10/24/1969	--	FR EC 38
50	6	X	40	R	06/02/1970	12.0	400	40	.03	1	06/02/1970	--	FR EC 39
33	6	X	29	R	09/29/1975	1.0	395	29	.0	1	09/29/1975	--	FR EC 40
23	6	X	26	R	09/17/1968	10.0	--	26	--	1	09/17/1968	--	FR EC 41
19	6	X	83.36	S	08/30/1982	2.0	300	60	.01	2	08/22/1980	--	FR EC 42
--	6	X	19.78	S	11/09/1954	--	--	--	--	--	--	--	FR ED 1
615	8	O	--	--	--	150.0	--	--	--	--	--	--	FR ED 2
21	6	X	--	--	--	--	--	--	--	--	--	--	FR ED 5

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR ED 6	FR-01-7553	FRYE, LAWRENCE	L F EASTERDAY	1955	280	F	81	H	377FDCK
FR ED 7	FR-00-3418	DEGRANGE, LACY	DEWEY BROWN	1948	290	F	67	H,S	377FDCK
FR ED 8	FR-01-7866	YOUNKINS, ANDREW	C A CROMWELL	1955	310	F	48	H	377FDCK
FR ED 9	FR-02-1637	ETZLER, RODGER	A L SMITH	1955	300	F	115	S	377FDCK
FR ED 10	FR-00-3474	DIXON, MARY	DEWEY BROWN	1948	280	F	72	H	377FDCK
FR ED 11	--	ROGERS, ANNIE	--	--	295	F	41	U	377FDCK
FR ED 12	FR-01-1013	BELL, HARRIET E	A R KEYSER	1952	290	F	146	H	377FDCK
FR ED 13	--	GAVER, J W	--	--	415	F	92	H	231NOXF
FR ED 14	--	ZIMMERMAN, LESTER	--	1956	385	H	22	H	377FDCK
FR ED 15	FR-01-0155	ZIMMERMAN, HOWARD D	A R KEYSER	1952	490	H	76	H	377ANTM
FR ED 16	FR-00-9627	FONT, BOWYER B	A R KEYSER	1952	410	H	82	H	231NOXF
FR ED 17	FR-10-560A	FAMILY DR-IN THEATRE	WADE CORUN	1952	390	F	68	C	231NOXF
FR ED 18	--	COOKLEY	A R KEYSER	1954	430	F	136	H	231NOXF
FR ED 19	--	SMITH, FRED	JACK HARLEY	--	450	F	65	H	231NOXF
FR ED 20	FR-00-6051	MONOCACY BROADCASTING	A R KEYSER	1950	440	H	76	C	231NOXF
FR ED 21	FR-01-1685	ROSE TOURIST COURT	A R KEYSER	1953	405	S	93	U	231NOXF
FR ED 22	FR-02-0807	ZIMMERMAN, PRESTON	AUSTIN SMITH	1955	530	H	84	S	377ANTM
FR ED 23	--	ZIMMERMAN, PRESTON	--	--	530	H	90	H	377ANTM
FR ED 24	--	ZIMMERMAN, PRESTON	--	--	470	H	90	H	377ANTM
FR ED 25	FR-01-5110	TUMBLEBROOK FARMS	A R KEYSER	1954	320	S	150	H	377FDCK
FR ED 26	--	HICKS	C A CROMWELL	1955	325	H	40	H	377FDCK
FR ED 27	FR-00-4032	STALEY, E	ED BROWN	1949	320	H	45	H	377FDCK
FR ED 28	--	DUDROW, R A	--	--	280	S	21	H	377FDCK
FR ED 29	FR-00-3354	ABRECHT, NILES E	DEWEY BROWN	1948	320	F	106	U	377FDCK
FR ED 30	FR-01-2389	HARLEY, CHARLES F	JACK HARLEY	1953	320	F	103	H	377FDCK
FR ED 31	FR-00-4681	SUMMERS, MARTIN L	C A CROMWELL	1949	320	F	116	H	377FDCK
FR ED 32	--	SUMMERS, MARTIN L	DEWEY BROWN	1925	320	F	106	U	377FDCK
FR ED 33	--	IDEAL FARMS	JARBOE GROVE	1932	340	H	100	C	377FDCK
FR ED 34	--	IDEAL FARMS	--	--	340	H	170	U	377FDCK
FR ED 35	FR-00-2909	IDEAL FARMS	W B HILTON	1948	340	H	55	C	377FDCK
FR ED 36	FR-00-2910	IDEAL FARMS	W B HILTON	1948	340	H	90	C	377FDCK
FR ED 37	FR-01-6075	IDEAL FARMS	W B HILTON	1954	340	H	58	U	377FDCK
FR ED 38	FR-02-0351	IDEAL FARMS	W B HILTON	1955	340	W	82	C	377FDCK
FR ED 39	FR-01-7707	WOLFE, ORVAL	JACK HARLEY	1955	620	S	150	H	377HRPR
FR ED 40	FR-00-8982	KING, CHARLES T	A R KEYSER	1951	425	S	102	H	231NOXF
FR ED 41	FR-00-1555	PRIOR, W A	CHAS SELDERS	1947	285	S	370	H	367GROV
FR ED 43	--	MORAN, WILLIAM	JARBOE GROVE	--	265	V	90	H	377FDCK
FR ED 44	FR-02-1468	WILES, ALLEN E	JACK HARLEY	1955	440	W	67	H	231NOXF
FR ED 45	FR-01-2019	ROCKWELL, PAUL A	JACK HARLEY	1953	450	H	90	H	231NOXF
FR ED 46	FR-01-6434	HARDY, F A	JACK HARLEY	1954	450	H	108	H	231NOXF
FR ED 47	FR-01-0814	BOWERS, JOHN	A R KEYSER	1952	440	H	60	H	231NOXF
FR ED 48	FR-00-8444	STODSGILL, D R	JACK HARLEY	1951	440	H	70	H	231NOXF
FR ED 49	FR-01-0507	LARSON, EDGAR	JACK HARLEY	1952	455	H	90	H	231NOXF
FR ED 50	FR-01-0628	GREMILLION, GARDNER G	JACK HARLEY	1952	455	H	77	H	231NOXF
FR ED 51	FR-01-0813	WATERS, FRANKLIN	A R KEYSER	1952	450	H	70	H	231NOXF
FR ED 52	--	MINNICK, HOWARD	R HARRIS	1954	450	H	80	H	231NOXF
FR ED 53	--	SMITH, HOWARD	--	--	450	F	70	U	231NOXF
FR ED 54	--	SMITH, HOWARD	--	--	450	F	30	U	231NOXF
FR ED 55	--	ROGERS, ANNIE	--	--	280	S	24	H	367GROV
FR ED 56	--	ROGERS, ANNIE	--	--	290	V	11	U	377FDCK
FR ED 57	FR-00-9521	HARPER, WELDON	A R KEYSER	1952	370	V	82	H	377FDCK
FR ED 58	FR-02-3704	HAMMOND, JOHN	A R KEYSER	1956	450	S	87	H	377ANTM
FR ED 60	FR-02-5622	ALPHA PORTLAND CEMENT	A R KEYSER	1957	290	F	156	N	367GROV
FR ED 61	FR-02-6835	ALPHA PORTLAND CEMENT	A R KEYSER	1957	300	F	77	U	367GROV
FR ED 62	FR-02-6836	ALPHA PORTLAND CEMENT	A R KEYSER	1958	305	F	87	N	367GROV
FR ED 63	--	ALPHA PORTLAND CEMENT	A R KEYSER	1958	290	F	166	N	367GROV
FR ED 72	--	FISHER, ALTON	A R KEYSER	1950	270	H	150	H	367GROV
FR ED 73	--	FISHER, ALTON	A R KEYSER	1953	280	H	150	H	367GROV
FR ED 74	FR-71-0285	FISHER, ALTON	A R KEYSER	1970	280	H	475	U	367GROV
FR ED 75	FR-71-0285	FISHER, ALTON	A R KEYSER	1970	270	H	300	U	367GROV
FR ED 76	FR-71-0285	FISHER, ALTON	A R KEYSER	1970	260	S	455	U	367GROV
FR ED 77	FR-71-0285	FISHER, ALTON	A R KEYSER	1970	270	H	772	U	367GROV
FR ED 78	--	CLEMSON, PAUL	A R KEYSER	1957	270	V	60	U	367GROV
FR ED 79	FR-70-0076	CLEMSON, PAUL	A R KEYSER	1969	270	V	220	S,H	367GROV
FR ED 80	FR-71-0246	INTERSTATE HOUSING	A R KEYSER	1970	370	V	202	U	231NOXF
FR ED 81	FR-71-0246	INTERSTATE HOUSING	A R KEYSER	1970	370	V	102	U	231NOXF
FR ED 85	FR-72-0112	BURDETTE, CHARLES W	ROBERT CLINE	1971	345	V	125	H	231NOXF
FR ED 86	FR-72-0291	ANGLEBERGER, STEVE	ROBERT CLINE	1971	400	S	95	H	231NOXF
FR ED 87	FR-72-0001	STUPP, GEORGE	A R KEYSER	1971	430	H	140	H	231NOXF
FR ED 88	FR-66-0688	GREMILLION, GARDNER G	A R KEYSER	1966	460	H	130	H	231NOXF
FR ED 89	FR-73-7406	MULLINIX ENTP	KEYSER-GARVER	1980	420	F	245	C	231NOXF
FR ED 90	FR-73-4329	FRED CO METRO COMM	KEYSER-GARVER	1977	280	H	380	U	367GROV
FR ED 91	FR-73-4333	FRED CO METRO COMM	KEYSER-GARVER	1977	280	H	500	U	367GROV
FR ED 92	FR-73-4336	FRED CO METRO COMM	KEYSER-GARVER	1977	280	H	260	U	367GROV
FR ED 93	FR-73-4385	FRED CO METRO COMM	KEYSER-GARVER	1977	290	S	300	U	377FDCK
FR ED 94	FR-73-4382	FRED CO METRO COMM	KEYSER-GARVER	1977	290	S	300	U	377FDCK
FR ED 95	FR-73-4341	FRED CO METRO COMM	KEYSER-GARVER	1977	260	S	220	U	367GROV
FR ED 96	FR-72-0641	POLING, KENNETH	L F EASTERDAY	1972	840	S	300	P	377LUDN
FR ED 97	FR-81-0932	MISKELL, BIRTRAND	ROBERT CLINE	1983	460	S	300	H	377ANTM
FR ED 98	FR-73-1919	PEOPLES BAPTIST CH	ROBERT CLINE	1974	500	S	300	T	377HRPR

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
43	6	X	28	R	02/27/1955	10.0	39	28	0.91	--	02/27/1955	--	FR ED 6
33	6	X	--	--	--	3.0	--	--	--	.5	11/21/1948	--	FR ED 7
30	6	X	20	R	02/21/1955	15.0	21	20	15.00	1	02/21/1955	--	FR ED 8
2	6	X	25	R	12/10/1955	15.0	50	25	.60	.2	12/10/1955	Q	FR ED 9
35	6	X	50	R	12/03/1948	3.0	--	50	--	.5	12/03/1948	--	FR ED 10
--	6	--	5.29	S	03/22/1956	--	--	--	--	--	--	--	FR ED 11
27	6	X	30	R	11/22/1952	2.0	140	30	.02	1	11/22/1952	--	FR ED 12
--	6	--	42	R	11/01/1955	10.0	--	--	--	--	--	--	FR ED 13
22	36	W	12.70	S	05/09/1956	--	--	--	--	--	--	Q	FR ED 14
24	6	X	36	R	05/23/1952	8.0	--	36	--	1	05/23/1952	--	FR ED 15
15	6	X	15	R	03/03/1952	10.0	20	15	2.00	1	03/03/1952	--	FR ED 16
12	6	X	15	R	10/13/1952	10.0	50	15	.29	1	10/13/1952	--	FR ED 17
16	6	X	--	--	--	--	--	--	--	--	--	--	FR ED 18
--	6	--	7.09	S	07/02/1956	7.0	--	--	--	--	--	--	FR ED 19
22	6	X	35	R	04/30/1950	3.0	50	35	.20	1	04/30/1950	--	FR ED 20
25	6	X	23.41	S	08/28/1956	10.0	25	10	.67	1	03/10/1953	--	FR ED 21
40	6	X	48.47	S	08/27/1956	10.0	--	--	--	.4	09/13/1955	--	FR ED 22
60	36	W	48.83	S	08/27/1956	--	--	--	--	--	--	--	FR ED 23
90	6	O											
--	6	--	60	R	01/01/1955	--	--	--	--	--	--	--	FR ED 24
37	6	X	50	R	05/10/1954	12.0	100	50	.24	2	05/10/1954	--	FR ED 25
--	6	--	--	--	--	--	--	--	--	--	--	--	FR ED 26
20	6	X	25	R	06/09/1949	10.0	32	25	1.43	1	06/09/1949	--	FR ED 27
21	36	W	17.23	S	08/29/1956	--	--	--	--	--	--	--	FR ED 28
24	6	X	70	R	11/12/1948	3.0	--	70	--	.5	11/12/1948	--	FR ED 29
15	6	X	23	R	05/27/1953	3.0	90	23	.05	--	05/27/1953	--	FR ED 30
10	6	X	30.74	S	08/28/1956	14.0	72	70	7.00	2	09/09/1949	--	FR ED 31
--	6	X	--	--	--	--	--	--	--	--	--	--	FR ED 32
--	6	--	15	R	01/01/1932	10.0	--	--	--	--	--	--	FR ED 33
--	6	--	--	--	--	4.5	--	--	--	--	--	--	FR ED 34
30	6	X	20	R	01/01/1948	30.0	20	20	--	1	01/01/1948	--	FR ED 35
35	6	X	30	R	01/03/1948	20.0	40	30	2.00	1	01/03/1948	--	FR ED 36
26	6	X	26.60	S	08/29/1956	20.0	42	31	1.82	2	08/22/1954	--	FR ED 37
14	6	X	12	R	08/22/1955	20.0	58	12	.44	2	08/22/1955	--	FR ED 38
12	6	X	57	R	02/04/1955	2.5	140	57	.03	--	02/04/1955	--	FR ED 39
24	6	X	29.16	S	08/30/1956	20.0	60	30	.67	3	11/15/1951	--	FR ED 40
34	8	--	31	R	08/30/1956	2.2	240	27	.01	2.5	07/25/1947	--	FR ED 41
--	6	X	19	E	08/30/1956	5.0	--	--	--	--	--	--	FR ED 43
57	6	X	29.71	S	07/02/1956	10.0	20	10	1.00	--	12/01/1955	--	FR ED 44
--	--	X	17.55	S	07/02/1956	15.0	--	10	--	--	04/06/1953	--	FR ED 45
25	6	X	18.00	S	06/29/1956	16.0	30	15	1.07	--	09/15/1954	G	FR ED 46
10	6	X	10	R	07/28/1952	10.0	40	10	.33	1.2	07/28/1952	--	FR ED 47
--	6	X	13.33	S	07/02/1956	15.0	25	8	.88	--	08/22/1951	--	FR ED 48
21	6	X	19.46	S	07/02/1956	20.0	8	8	--	--	07/10/1952	--	FR ED 49
12	6	X	3	R	08/22/1952	4.0	70	3	.06	--	08/22/1952	--	FR ED 50
--	--	X	20	R	07/25/1952	--	--	--	--	--	--	--	FR ED 51
40	6	X	--	--	--	--	--	--	--	--	--	--	FR ED 52
5	4	X	10.50	S	06/29/1956	--	--	--	--	--	--	--	FR ED 53
26	48	W	10.65	S	06/29/1956	1.0	--	--	--	--	06/29/1956	--	FR ED 54
		O											
24	48	W	21.90	S	08/16/1956	--	--	--	--	--	--	--	FR ED 55
11	36	W	1.98	S	08/16/1956	--	--	--	--	--	--	--	FR ED 56
30	6	X	30	R	02/23/1952	8.0	50	30	.40	1	02/23/1952	--	FR ED 57
13	6	X	55	R	07/09/1956	20.0	60	55	4.00	1	07/09/1956	--	FR ED 58
54	6	X	37	R	01/15/1957	250.0	--	37	--	24	01/05/1957	--	FR ED 60
77	8	O	25	R	05/18/1957	173.0	--	25	--	48	05/20/1957	--	FR ED 61
77	8	X	38	R	02/04/1964	200.0	43	38	42.55	24	02/09/1958	--	FR ED 62
70	8	X	29	R	02/05/1964	125.0	31	29	50.00	24	02/05/1964	--	FR ED 63
--	6	X	--	--	--	15.0	--	--	--	--	01/01/1950	--	FR ED 72
--	6	X	--	--	--	--	--	--	--	--	--	--	FR ED 73
--	--	X	--	--	--	--	--	--	--	--	--	--	FR ED 74
--	--	X	--	--	--	--	--	--	--	--	--	--	FR ED 75
83	6	X	13.65	S	11/17/1970	15.0	--	100	--	1	11/01/1970	--	FR ED 76
22	6	X	35	R	11/17/1970	2.0	--	35	--	1	11/17/1970	--	FR ED 77
27	6	X	--	--	--	70.0	--	--	--	--	03/01/1957	--	FR ED 78
62	6	X	20	R	10/23/1969	100.0	--	20	--	2	10/23/1969	--	FR ED 79
70	6	X	6	R	04/01/1972	160.0	100	7	1.72	8	04/01/1972	--	FR ED 80
84	6	X	11	R	04/01/1972	140.0	100	11	1.57	8	04/01/1972	--	FR ED 81
20	6	X	6	R	08/23/1971	100.0	125	6	.84	1	08/23/1971	--	FR ED 85
54	6	X	46	R	12/30/1971	50.0	95	46	1.02	1	12/30/1971	--	FR ED 86
42	6	X	50	R	07/07/1971	50.0	--	50	--	1	07/07/1971	--	FR ED 87
83	6	X	25	R	05/31/1966	50.0	125	25	.50	1	05/31/1966	--	FR ED 88
39	6	X	45	R	01/07/1980	8.0	185	45	.06	3	01/07/1980	O,Q	FR ED 89
--	--	X	--	--	--	.0	--	--	--	--	01/03/1977	--	FR ED 90
--	--	X	--	--	--	.0	--	--	--	--	01/06/1977	--	FR ED 91
--	--	X	--	--	--	.0	--	--	--	--	01/26/1977	--	FR ED 92
--	--	X	--	--	--	4.0	--	--	--	--	01/24/1977	--	FR ED 93
--	--	X	--	--	--	10.0	--	--	--	--	01/21/1977	--	FR ED 94
35	6	X	--	--	--	.5	--	--	--	--	01/27/1977	--	FR ED 95
20	6	X	100	R	06/02/1972	3.0	300	100	.02	2	06/02/1972	--	FR ED 96
--	--	--	--	--	--	--	--	--	--	--	--	--	FR ED 97
39	6	X	30	R	07/13/1974	7.0	300	30	.03	1	07/13/1974	--	FR ED 98

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR ED 99	FR-73-5603	BRADSHAW, JOHN	ROBERT CLINE	1978	420	F	525	I	231NOXF
FR ED 100	FR-73-8585	ST JOHNS SCHOOL	KEYSER-GARVER	1981	430	H	325	T	231NOXF 377FDCK
FR ED 101	FR-05-6406	VALLEY TRAILER PK	KEYSER-GARVER	1964	390	F	235	P	231NOXF
FR ED 102	FR-71-0127	BEDFORD THEATRES	ROBERT CLINE	1970	395	F	220	C	231NOXF
FR ED 103	FR-73-5883	ST LUKES LUTH CH	L F EASTERDAY	1978	355	S	140	H	231NOXF
FR ED 104	FR-69-0442	MT ZION LUTH CHURCH	KEYSER-GARVER	1969	460	S	85	T	377ANTM
FR ED 105	FR-73-4429	FOGLE, PAUL	ROBERT CLINE	1977	400	F	110	C	231NOXF
FR ED 106	FR-73-2647	TUSCARORA RACQ CLUB	KEYSER-GARVER	1975	400	F	120	C	231NOXF
FR ED 107	FR-81-0311	FRED CO BD OF COMM	L F EASTERDAY	1982	270	F	160	U	367GROV
FR ED 108	FR-81-0312	FRED CO BD OF COMM	L F EASTERDAY	1982	260	S	120	U	367GROV
FR ED 109	FR-72-0304	FRED CO BD OF COMM	A R KEYSER	1972	270	F	102	U	367GROV
FR ED 110	FR-72-0304	FRED CO BD OF COMM	A R KEYSER	1972	270	F	82	U	367GROV
FR ED 111	FR-72-0304	FRED CO BD OF COMM	A R KEYSER	1972	260	S	102	U	367GROV
FR ED 112	--	FRED CO BD OF COMM	A R KEYSER	--	260	S	134	U	367GROV
FR ED 113	FR-65-0439	FLINKOTE CO	ROBERT CLINE	1965	285	F	195	N	367GROV
FR ED 114	FR-73-0406	FRED CO BD OF COMM	A R KEYSER	--	295	F	--	U	377FDCK
FR ED 115	FR-73-0406	FRED CO BD OF COMM	A R KEYSER	--	300	F	--	U	377FDCK
FR EE 1	--	PUTMAN, MRS ROY	--	--	330	F	58	U	377FDCK
FR EE 2	FR-00-0772	HARDING. CONSTANCE	COLUMBIA P&W	1946	290	F	155	H,S	367GROV
FR EE 3	FR-00-1461	ROUTZAHN FURN & APPL	COLUMBIA P&W	1947	305	F	350	C,H	367GROV
FR EE 4	--	THE EVEREDY CO	ED BROWN	1941	280	F	61	F	377FDCK
FR EE 5	--	CHESTNUT FARMS DAIRY	--	--	270	F	42	U	367GROV
FR EE 6	--	CHESTNUT FARMS DAIRY	--	1910	275	F	120	C	377FDCK
FR EE 7	--	CHESTNUT FARMS DAIRY	--	--	275	F	106	C	377FDCK
FR EE 8	--	GUYSMITH, PAUL	JARBOE GROVE	--	250	S	100	H,S	377ANTM
FR EE 9	--	BETSY ROSS TRAILER CT	--	--	310	F	150	U	367GROV
FR EE 10	FR-02-1848	CHESSIE SYSTEM	DANIEL MYERS	1956	270	S	100	C	377FDCK
FR EE 11	FR-01-1459	RICE, HERMAN	JACK HARLEY	1952	290	S	109	H	377FDCK
FR EE 12	FR-02-0132	HAHN, CHARLES	A L SMITH	1955	330	S	83	H	377ANTM
FR EE 13	FR-00-3369	SPORTSMENS CLUB	WADE CORUN	1949	360	V	253	R	300IJMV
FR EE 14	--	LINDSAY, WILLIAM	JOHN SHAFF	1955	440	S	50	H	377ANTM
FR EE 15	FR-01-3945	BOWERS, WOODROW	L F EASTERDAY	1953	360	S	105	H	377ANTM
FR EE 16	--	PERKINS, ANNIE	--	--	420	H	25	H	231DIBS
FR EE 17	--	MONTGOMERY, RAYNER	--	--	430	W	60	S	300URBN
FR EE 18	--	MONTGOMERY, JOHN	--	--	500	H	90	H	300IJMV
FR EE 19	FR-01-6696	BAGENT, W E	JACK HARLEY	1954	400	S	76	H	300IJMV
FR EE 20	FR-01-2390	KLINE, ROLAND	JACK HARLEY	1953	510	F	95	H	300URBN
FR EE 21	FR-66-0082	MT CARMEL METH CHURCH	JACK HARLEY	1955	360	S	74	T	300IJMV
	FR-01-9202		L F EASTERDAY	1965			74		
FR EE 22	FR-00-3648	HOFFMAN, ESTON H	DEWEY BROWN	1949	360	V	68	H	300IJMV
FR EE 23	FR-00-5222	WEEDON, ROBERT D	JACK HARLEY	1950	440	H	100	H	300IJMV
FR EE 24	FR-00-9475	MAIN, RICHARD L	A R KEYSER	1952	410	S	108	H	300IJMV
FR EE 25	--	MAIN, ROGER L	--	--	310	S	85	H	377ANTM
FR EE 26	--	ABRECHT, NILES E	--	--	320	F	106	H	377FDCK
FR EE 27	FR-01-7930	SHIELDS TRAILER SALES	HARRY GREEN	1955	310	F	282	C	367GROV
FR EE 28	FR-02-3529	NORWOOD, IRVING E	A R KEYSER	1956	310	F	116	H	367GROV
FR EE 29	--	NORWOOD, IRVING E	ED BROWN	1949	310	F	68	H	367GROV
FR EE 30	FR-01-7435	ODEN, THOMAS	JAMES SHIRLEY	1955	310	F	87	H	367GROV
FR EE 31	--	PRIOR, W A	GLADHILL	1952	295	V	92	H	367GROV
FR EE 32	--	YOUNG. JULIA	JARBOE GROVE	--	400	H	162	H	377ANTM
FR EE 33	--	MOSBERG, MILTON	--	--	325	F	365	H,S	377FDCK
FR EE 34	--	MOSBERG. MILTON	--	1931	315	F	187	H	377FDCK
FR EE 35	FR-00-9749	ESWORTHY, CRAIG E	JACK HARLEY	1952	330	F	90	H	377FDCK
FR EE 36	FR-02-1782	CROUSE, GLENN	JACK HARLEY	1956	325	F	87	H	377FDCK
FR EE 37	FR-02-0723	SIER, JAMES	JACK HARLEY	1955	280	V	117	H	377ANTM
FR EE 38	FR-02-7730	NED ZEILER TRAILER CT	A R KEYSER	1957	310	F	305	P	367GROV
FR EE 39	FR-04-0692	NED ZEILER TRAILER CT	A R KEYSER	1960	310	F	611	U	367GROV
FR EE 40	FR-04-2240	NED ZEILER TRAILER CT	ED BROWN	1961	310	F	200	U	367GROV
FR EE 41	FR-04-2713	NED ZEILER TRAILER CT	ED BROWN	1961	310	F	200	U	367GROV
FR EE 42	FR-04-2858	NED ZEILER TRAILER CT	ED BROWN	1961	310	F	--	P	367GROV
	FR-66-0657		L F EASTERDAY	1966			60		
FR EE 43	--	FREDERICK EQUIPMENT	--	--	310	F	80	U	377FDCK
FR EE 44	FR-68-0075	FREDERICK EQUIPMENT	A R KEYSER	1967	310	F	165	C	377FDCK
FR EE 45	FR-67-0530	H B MELLOTT ESTATE	G EDGAR HARR	1967	315	F	292	N	367GROV
FR EE 46	FR-67-0530	H B MELLOTT ESTATE	G EDGAR HARR	1967	315	F	110	U	367GROV
FR EE 47	FR-67-0530	H B MELLOTT ESTATE	G EDGAR HARR	1967	315	F	292	U	367GROV
FR EE 48	FR-67-0530	H B MELLOTT ESTATE	G EDGAR HARR	1967	315	F	125	U	367GROV
FR EE 49	FR-02-5830	MARKS MOBILE HOMES	A R KEYSER	1957	315	F	140	C	367GROV
FR EE 50	FR-02-6152	GOLD DUST INN	A R KEYSER	1957	315	F	82	U	367GROV
FR EE 51	FR-05-0544	FRED BUSINESS PROP	A R KEYSER	1963	315	F	235	C,H	367GROV
FR EE 52	FR-04-7888	A T & T CO	ED BROWN	1962	310	F	95	H	367GROV
	FR-68-0084		L F EASTERDAY	1967			180		
FR EE 53	FR-04-6747	MICRO-FRETS INC	A R KEYSER	1962	315	F	110	U	367GROV
FR EE 54	FR-66-0737	MICRO-FRETS INC	L F EASTERDAY	1966	315	F	590	C	367GROV
FR EE 55	FR-68-0183	MICRO-FRETS INC	L F EASTERDAY	1967	315	F	520	C	367GROV
FR EE 56	FR-05-7311	FISHER DISTRIBUTING	C A CROMWELL	1964	310	F	115	C	367GROV
FR EE 57	FR-68-0191	FISHER DISTRIBUTING	G EDGAR HARR	1967	310	F	110	U	367GROV
FR EE 58	FR-68-0191	FISHER DISTRIBUTING	G EDGAR HARR	1967	310	F	105	U	367GROV
FR EE 59	FR-68-0191	FISHER DISTRIBUTING	G EDGAR HARR	1967	310	F	130	C	367GROV
FR EE 60	FR-05-0773	B & P MOTOR EXPRESS	A R KEYSER	1963	315	F	665	C	367GROV
FR EE 61	FR-02-5961	SHIELDS TRAILER CT	A R KEYSER	1957	315	F	180	U	367GROV
FR EE 62	FR-65-0399	SUPERIOR CONCRETE	YORK DRILLING	1965	310	F	340	U	367GROV
FR EE 63	FR-65-0459	SUPERIOR CONCRETE	YORK DRILLING	1965	310	F	270	U	367GROV

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
105	6	X	48	R	03/07/1978	12.0	525	48	0.03	1	03/07/1978	Q	FR ED 99
62	6	X	80	R	08/17/1981	10.0	305	80	.04	4.5	08/17/1981	--	FR ED 100
33	6	X	20	R	04/15/1964	15.0	--	20	--	2	04/15/1964	--	FR ED 101
23	6	X	25	R	09/15/1970	30.0	220	25	.15	1	09/15/1970	--	FR ED 102
57	6	X	65	R	05/18/1978	7.0	140	65	.09	2	05/18/1978	--	FR ED 103
37	6	X	30	R	05/29/1969	10.0	--	30	--	1	05/29/1969	--	FR ED 104
104	6	X	39	R	04/12/1977	25.0	110	39	.35	1	04/12/1977	--	FR ED 105
90	6	X	51	R	06/16/1975	45.0	61	51	4.50	2	06/16/1975	--	FR ED 106
22	6	X	50	R	06/25/1982	80.0	160	50	.73	3	06/25/1982	--	FR ED 107
23	6	X	30	R	06/25/1982	100.0	120	30	1.11	3	06/25/1982	--	FR ED 108
53	6	X	--	--	--	30.0	--	--	--	--	09/05/1972	--	FR ED 109
18	8	X	--	--	--	200.0	--	--	8.00	48	09/05/1972	--	FR ED 110
18	8	X	--	--	--	200.0	--	--	28.57	48	09/07/1972	--	FR ED 111
--	8	X	--	--	--	--	--	--	--	--	--	G	FR ED 112
36	6	X	55	R	01/01/1965	50.0	--	55	--	1	01/01/1965	--	FR ED 113
--	8	--	--	--	--	--	--	--	--	--	--	--	FR ED 114
--	6	--	--	--	--	--	--	--	--	--	--	O	FR ED 115
58	43	W	50.30	S	10/23/1946	--	--	--	--	--	--	O	FR EE 1
110	6	X	42.42	S	03/21/1951	30.0	60	30	1.00	8	09/04/1946	Q	FR EE 2
195	6	X	30	R	08/01/1947	40.0	150	30	.33	8	08/01/1947	--	FR EE 3
30	6	X	13	R	01/01/1941	275.0	21	13	34.38	--	01/01/1941	--	FR EE 4
--	6	X	12.91	S	11/09/1954	--	--	--	--	--	--	--	FR EE 5
--	--	X	30	R	11/01/1954	--	--	--	--	--	--	--	FR EE 6
--	8	X	16.85	S	11/09/1954	--	--	--	--	--	--	--	FR EE 7
--	6	X	40	R	--	10.0	--	--	--	--	--	--	FR EE 8
20	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 9
32	6	X	45	R	02/21/1956	30.0	50	45	6.00	2	02/21/1956	--	FR EE 10
15	6	X	60	R	12/01/1952	14.0	95	60	.40	--	12/01/1952	--	FR EE 11
37	6	X	40	R	07/30/1955	10.0	--	40	--	.5	07/30/1955	--	FR EE 12
12	6	X	8	R	11/01/1948	12.0	--	8	--	1.5	11/01/1948	--	FR EE 13
23	6	X	26	R	11/20/1955	10.0	--	26	--	3	11/20/1955	--	FR EE 14
17	6	X	40	R	12/18/1953	3.0	105	40	.05	--	12/18/1953	--	FR EE 15
--	--	--	12.80	S	02/13/1956	--	--	--	--	--	--	--	FR EE 16
--	6	--	14.00	S	04/06/1956	--	--	--	--	--	--	--	FR EE 17
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EE 18
6	--	X	12	R	10/06/1954	5.0	40	12	.18	--	10/06/1954	--	FR EE 19
6	--	X	16	R	05/18/1953	4.0	80	16	.06	--	05/18/1953	--	FR EE 20
40	6	X	35	R	08/18/1965	5.0	55	35	.25	.5	08/18/1965	--	FR EE 21
11	6	X	40	R	03/05/1949	3.0	--	40	--	.5	03/05/1949	--	FR EE 22
6	6	X	45	R	01/14/1950	3.0	70	45	.12	--	01/14/1950	--	FR EE 23
57	6	X	30	R	02/05/1952	10.0	50	30	.50	1	02/05/1952	--	FR EE 24
--	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 25
46	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 26
24	6	X	60	R	03/02/1955	4.0	--	60	--	5	03/02/1955	--	FR EE 27
22	6	X	54.20	S	08/29/1956	5.0	--	60	--	2	08/29/1956	--	FR EE 28
--	6	--	--	--	--	.1	--	--	--	--	08/29/1956	--	FR EE 29
78	6	X	57	R	01/05/1955	10.0	70	57	.77	4	01/05/1955	--	FR EE 30
--	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 31
--	6	X	--	--	--	5.0	--	--	--	--	--	--	FR EE 32
--	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 33
--	6	X	30	R	11/06/1956	--	--	--	--	--	--	--	FR EE 34
15	6	X	63	R	04/09/1952	10.0	--	63	--	--	04/09/1952	--	FR EE 35
22	6	X	41	R	01/04/1956	10.0	60	41	.53	--	01/04/1956	--	FR EE 36
8	6	X	38	R	09/20/1955	10.0	100	38	.16	--	09/20/1955	--	FR EE 37
19	6	X	50	R	08/24/1957	50.0	75	50	2.00	3	08/24/1957	--	FR EE 38
--	6	X	--	--	--	--	--	--	--	--	--	--	FR EE 39
8	6	X	153	R	04/18/1961	2.0	--	153	--	--	04/18/1961	--	FR EE 40
7	6	X	--	--	--	.0	--	--	--	--	--	--	FR EE 41
29	6	X	24.43	S	04/15/1969	35.0	54	45	3.89	6	07/08/1966	--	FR EE 42
80	48	W	36.59	S	04/15/1969	--	--	--	--	--	--	--	FR EE 43
22	6	X	81.93	S	04/15/1969	100.0	--	60	--	1	08/23/1967	--	FR EE 44
22	6	X	76.10	S	08/16/1967	52.0	115	76	1.32	24	08/16/1967	--	FR EE 45
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 46
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 47
20	6	X	62.34	S	03/11/1970	10.0	--	85	--	3	05/22/1967	O	FR EE 48
11	6	X	50	R	03/07/1957	100.0	70	50	5.00	4	03/07/1957	--	FR EE 49
31	6	X	32	R	03/18/1957	100.0	--	32	--	3	03/18/1957	--	FR EE 50
74	6	X	40	R	05/01/1963	--	--	--	--	--	--	--	FR EE 51
53	6	X	80	R	08/13/1967	50.0	180	80	.50	.5	08/13/1967	--	FR EE 52
45	6	X	30	R	03/01/1962	100.0	--	30	--	3	03/01/1962	--	FR EE 53
95	6	X	85	R	07/01/1966	2.0	590	85	.0	.5	07/01/1966	--	FR EE 54
92	6	X	90	R	11/15/1967	.5	520	90	.0	.5	11/15/1967	--	FR EE 55
34	6	X	64	R	07/20/1964	25.0	--	64	--	3	07/20/1964	--	FR EE 56
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 57
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 58
86	6	X	80	R	11/17/1967	5.0	100	80	.25	8	11/17/1967	--	FR EE 59
27	6	X	40	R	05/01/1963	3.0	--	40	--	6	05/01/1963	--	FR EE 60
11	6	X	35	R	03/14/1957	300.0	60	35	5.46	5	03/14/1957	--	FR EE 61
182	5	X	--	--	--	6.0	200	--	--	10	01/12/1965	--	FR EE 62
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 63

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR EE 64	FR-65-0459	SUPERIOR CONCRETE	YORK DRILLING	1965	310	F	120	N	367GROV
FR EE 65	FR-68-0176	GULF OIL CO	ROBERT CLINE	1967	315	F	62	C	367GROV
FR EE 66	FR-69-0209	AULT, HENRY	L F EASTERDAY	1968	310	F	100	U	367GROV
FR EE 67	FR-69-0209	AULT, HENRY	L F EASTERDAY	1968	310	F	310	C	367GROV
FR EE 68	FR-68-0401	EXXON CORPORATION	A R KEYSER	1968	310	F	200	C	377FDCK
FR EE 69	FR-03-4498	MAZOR, HAZEL	C A CROMWELL	1959	310	F	178	U	367GROV
FR EE 70	FR-03-3535	FRED LIVESTOCK AUCTION	HOFFMAN WELL	1959	290	V	75	U	367GROV
	FR-68-0148		L F EASTERDAY	1967			100		
FR EE 71	FR-68-0148	FRED LIVESTOCK AUCTION	L F EASTERDAY	1967	290	V	200	F,C	367GROV
FR EE 72	FR-68-0468	MAZOR, HAZEL	C A CROMWELL	1968	310	F	207	C	367GROV
FR EE 73	FR-03-1766	MAY, JOSEPH	A R KEYSER	1958	315	F	600	C	367GROV
FR EE 74	FR-69-0393	SERVICE GLASS & MIRROR	A R KEYSER	1969	285	V	160	C	377FDCK
FR EE 75	FR-69-0354	HILLSIDE MOTORS	C A CROMWELL	1969	320	H	120	C	367GROV
FR EE 76	--	PLUNKETT, JOHN	--	--	310	F	--	U	367GROV
FR EE 77	FR-68-0020	PLUNKETT, JOHN	G EDGAR HARR	1967	310	F	155	H	367GROV
FR EE 78	--	SOUTH STATES COOP	--	--	310	F	80	U	367GROV
FR EE 79	--	SOUTH STATES COOP	--	--	310	F	--	C,H	367GROV
FR EE 80	--	MD-VA MILK PRODUCERS	--	--	310	F	96	U	367GROV
FR EE 81	FR-65-0440	MD-VA MILK PRODUCERS	A R KEYSER	1965	310	F	125	U	367GROV
FR EE 82	FR-01-6779	LEASE, HARRY	JAMES SHIRLEY	1954	310	F	103	H	367GROV
FR EE 83	FR-69-0392	KLINE, JOEL	ROBERT CLINE	1969	310	F	195	C	377FDCK
FR EE 84	FR-70-0005	REICHS FORD LANDFILL	A R KEYSER	1969	420	V	115	U	300URBN
FR EE 85	FR-65-0413	CORNING PACKAGING CO	DWIGHT MOODY	1965	275	V	251	U	377FDCK
FR EE 86	FR-65-0413	CORNING PACKAGING CO	DWIGHT MOODY	1965	275	V	193	U	377FDCK
FR EE 87	FR-70-0304	AULT, HENRY J	ROBERT CLINE	1970	315	H	395	C	367GROV
FR EE 88	FR-70-0299	BETSY ROSS TRAILER CT	HARRY GREEN	1970	310	F	72	P	377FDCK
FR EE 89	FR-73-1028	RAMADA INN	KEYSER-GARVER	1973	290	H	365	U	367GROV
FR EE 90	FR-73-3847	MD STATE HIGHWAY ADM	KEYSER-GARVER	1976	290	S	145	U	367GROV
FR EE 91	FR-73-4409	FRED CO METRO COMM	KEYSER-GARVER	1977	310	H	300	U	377FDCK
FR EE 92	FR-73-4332	FRED CO METRO COMM	KEYSER-GARVER	1977	310	H	400	U	377FDCK
FR EE 93	FR-73-4338	FRED CO METRO COMM	KEYSER-GARVER	1977	310	W	300	U	377FDCK
FR EE 94	FR-73-4410	FRED CO METRO COMM	KEYSER-GARVER	1977	310	H	380	U	377FDCK
FR EE 95	FR-73-4331	FRED CO METRO COMM	KEYSER-GARVER	1977	255	V	300	U	377FDCK
FR EE 96	FR-73-4346	FRED CO METRO COMM	KEYSER-GARVER	1977	240	S	250	U	377FDCK
FR EE 97	FR-73-4340	FRED CO METRO COMM	KEYSER-GARVER	1977	250	S	400	U	377FDCK
FR EE 98	FR-73-4334	FRED CO METRO COMM	KEYSER-GARVER	1977	250	S	300	U	377FDCK
FR EE 99	FR-73-4337	FRED CO METRO COMM	KEYSER-GARVER	1977	250	S	665	H	377FDCK
FR EE 101	FR-01-5173	COLT & DIXON CO	JOHN GREENE	1954	290	F	160	U	377FDCK
FR EE 102	FR-73-4499	FRED CO METRO COMM	KEYSER-GARVER	1977	290	F	200	U	367GROV
FR EE 103	FR-73-1093	STUP, VERNON	ROBERT CLINE	1973	305	F	82	C	377FDCK
FR EE 104	FR-71-0354	MD-VA MILK PRODUCERS	KEYSER-GARVER	1971	310	F	100	U	367GROV
FR EE 105	FR-04-3161	HIGHS DAIRY INC	A R KEYSER	1961	275	F	190	U	367GROV
FR EE 106	FR-73-0750	KLINE PAVING CO	ROBERT CLINE	1973	320	F	86	U	367GROV
FR EE 107	FR-73-1284	KLINE PAVING CO	ROBERT CLINE	1973	315	F	170	C	367GROV
FR EE 108	FR-72-0210	SHIELDS TRAILER CT	ROBERT HARLEY	1972	315	F	835	U	367GROV
FR EE 109	FR-73-2370	BETSY ROSS TRAILER CT	KEYSER-GARVER	1974	310	F	214	U	367GROV
FR EE 110	FR-73-0739	LOWES INC	ROBERT CLINE	1973	295	F	70	U	367GROV
FR EE 111	FR-04-3498	WICKS LUMBER CO	ROBERT CLINE	1961	290	F	435	C	377FDCK
FR EE 112	FR-73-6453	FLINTKOTE CO	C A CROMWELL	1979	300	S	270	N	367GROV
FR EE 113	FR-73-8325	FRED CITY SPRING WKS	ROBERT CLINE	1981	295	F	275	N	367GROV
FR EE 114	FR-72-0519	CLINE, NEVIN	JERRY HARLEY	1972	295	F	200	C	377FDCK
FR EE 115	FR-72-0520	MARTIN, JOHN	JERRY HARLEY	1972	275	S	142	N	377FDCK
FR EE 116	FR-73-1697	AUSHERMAN, ERNEST	ROBERT CLINE	1974	290	S	225	N	377FDCK
FR EE 117	FR-73-4168	WALTZ, N E	ROBERT CLINE	1976	280	S	75	C	377FDCK
FR EE 118	FR-73-4829	SCHAWN SALES INC	ROBERT CLINE	1977	290	H	375	C	377FDCK
FR EE 119	FR-73-3248	CLINE & DUVALL, INC	ROBERT CLINE	1976	280	S	450	C	377FDCK
FR EE 120	FR-73-7584	QUALITY INSULATION	ROBERT CLINE	1980	290	H	225	C	377FDCK
FR EE 121	FR-73-5955	KING, WALTER	ROBERT CLINE	1978	290	H	425	C	377FDCK
FR EE 122	FR-73-5190	BITTLE & FOUT INC	ROBERT CLINE	1977	275	S	300	N	377FDCK
FR EE 123	FR-73-4554	FRED CO METRO COMM	KEYSER-GARVER	1977	270	F	200	P	367GROV
FR EE 124	FR-73-4555	FRED CO METRO COMM	KEYSER-GARVER	1977	265	F	350	U	367GROV
FR EE 125	FR-73-2639	ARABY CIVIC ASSOC	ROBERT CLINE	1975	450	H	300	R	300IJMV
FR EE 126	FR-73-7186	5TH REG ARMORY	JOHN SHAFF	1979	260	S	125	H	377FDCK
FR EE 127	FR-67-0335	ST JAMES AME CHURCH	KEYSER-GARVER	1966	410	S	300	T	300IJMV
FR EE 128	FR-73-6740	MAIN, HARRY	KEYSER-GARVER	1979	400	S	405	C	300IJMV
FR EE 129	FR-73-1739	YMCA DAY CAMP	KEYSER-GARVER	1974	390	S	300	R	300URBN
FR EE 130	FR-71-0217	FR CO LANDFILL	ROBERT CLINE	1970	460	S	220	C	300IJMV
FR EE 131	FR-73-6453	FLINTKOTE CO	C A CROMWELL	1979	300	S	220	U	367GROV
FR EE 132	FR-73-6453	FLINTKOTE CO	C A CROMWELL	1979	300	S	515	U	367GROV
FR EF 1	FR-01-5094	NEW MKT GRANGE HALL	L F EASTERDAY	1954	550	S	75	T	300SMCK
FR EF 2	--	NEW MARKET ELEM SCH	--	1932	540	H	96	T	300SMCK
FR EF 3	FR-00-7037	STALL	JACK HARLEY	1950	530	H	80	H	300SMCK
FR EF 4	FR-01-2496	MULLINEAUX, STANLEY	L F EASTERDAY	1953	400	H	100	H	300LBRN
FR EF 5	FR-01-3946	GROSSNICKEL, MILLARD	L F EASTERDAY	1953	645	S	54	H	300IJMV
FR EF 6	--	MONROVIA CANNING CO	--	--	430	V	--	N	300URBN
FR EF 7	--	MONROVIA CANNING CO	--	--	430	V	103	U	300URBN
FR EF 8	--	MONROVIA CANNING CO	ED BROWN	--	430	V	--	N	300URBN
FR EF 9	--	MONROVIA CANNING CO	ED BROWN	--	430	V	54	U	300URBN
FR EF 10	--	JACKSON, E W	--	--	565	H	110	H	300URBN
FR EF 11	FR-00-8552	BRANDENBURG. MARSHALL	L F EASTERDAY	1951	500	V	32	H	300SMCK
FR EF 12	FR-01-8831	DROMENBURG. MARGARET	L F EASTERDAY	1955	390	S	91	H	300IJMV

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
24	6	X	21	R	02/03/1965	52.0	80	21	0.88	12	02/03/1965	--	FR EE 64
23	6	X	35	R	10/31/1967	60.0	63	35	2.14	1	10/31/1967	--	FR EE 65
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EE 66
50	6	X	75.58	S	12/18/1968	8.0	300	9	.03	.5	12/06/1968	G	FR EE 67
71	6	X	30	R	05/22/1968	10.0	--	30	--	1	05/22/1968	--	FR EE 68
28	6	X	35	R	05/25/1959	4.0	--	35	--	--	05/25/1959	--	FR EE 69
33	6	X	68.71	S	04/15/1969	1.1	65	40	.04	1	03/01/1959	--	FR EE 70
111	6	X	50	R	10/19/1967	15.0	80	50	.50	.5	10/19/1967	--	FR EE 71
33	6	X	50	R	07/05/1968	10.0	--	50	--	3	07/05/1968	--	FR EE 72
18	6	X	100	R	08/04/1958	5.0	--	100	--	4	08/04/1958	--	FR EE 73
21	6	X	19.56	S	04/17/1969	7.0	--	--	--	1	04/01/1969	--	FR EE 74
46	6	X	90.13	S	04/17/1969	8.0	--	--	--	2	04/16/1969	--	FR EE 75
--	--	W	--	--	--	--	--	--	--	--	--	--	FR EE 76
21	6	X	81	R	07/19/1967	5.0	140	81	.09	6	07/19/1967	--	FR EE 77
--	--	--	--	--	--	--	--	--	--	--	--	--	FR EE 78
--	--	--	--	--	--	--	--	--	--	--	--	--	FR EE 79
--	--	--	--	--	--	50.0	--	--	--	--	01/01/1957	--	FR EE 80
13	6	X	46.09	S	07/30/1970	10.0	--	35	--	2	01/13/1965	--	FR EE 81
32	6	X	30	R	11/26/1954	45.0	--	30	--	2	11/26/1954	--	FR EE 82
20	6	X	83.21	S	04/29/1969	4.0	--	--	--	1	04/01/1969	--	FR EE 83
29	6	X	25	R	07/15/1969	6.0	--	25	--	1.2	07/15/1969	G	FR EE 84
37	8	X	8	R	01/16/1965	238.0	134	8	1.90	147.5	01/16/1965	--	FR EE 85
17	6	X	7	R	01/19/1965	70.0	140	7	.53	12	01/19/1965	--	FR EE 86
20	6	X	80	R	03/17/1970	1.0	315	80	.0	1	03/17/1970	--	FR EE 87
22	6	X	40	R	07/01/1970	25.0	--	40	--	--	07/01/1970	--	FR EE 88
74	8	X	45	R	07/17/1973	142.0	206	45	.88	24	07/17/1973	--	FR EE 89
41	6	X	38.50	S	05/01/1977	150.0	58	48	15.00	2	10/19/1976	--	FR EE 90
--	--	X	--	--	--	5.0	--	--	--	--	02/04/1977	--	FR EE 91
--	6	X	--	--	--	30.0	--	--	--	--	01/01/1977	--	FR EE 92
--	6	X	--	--	--	35.0	--	--	--	--	02/03/1977	--	FR EE 93
--	6	X	--	--	--	10.0	--	--	--	--	02/01/1977	--	FR EE 94
22	6	X	--	--	--	40.0	--	--	--	--	01/01/1977	--	FR EE 95
--	--	X	--	--	--	.5	--	--	--	--	01/01/1977	--	FR EE 96
--	6	X	--	--	--	5.0	--	--	--	--	02/02/1977	--	FR EE 97
--	6	X	--	--	--	.5	--	--	--	--	02/04/1977	--	FR EE 98
37	6	X	27	R	02/24/1977	10.0	41	27	.71	6	02/24/1977	--	FR EE 99
16	8	X	30	R	07/20/1954	30.0	160	30	.23	24	07/20/1954	--	FR EE 101
39	6	X	45	R	03/25/1977	40.0	55	45	4.00	2	03/25/1977	--	FR EE 102
59	6	X	65	R	08/02/1973	20.0	82	65	1.18	1	08/02/1973	--	FR EE 103
43	6	X	61	R	02/25/1971	50.0	100	61	1.28	1	02/25/1971	O	FR EE 104
29	8	X	16	R	06/20/1961	250.0	29	16	19.23	48	06/20/1961	--	FR EE 105
51	6	X	70	R	04/13/1973	12.0	86	70	.75	1	04/13/1973	--	FR EE 106
51	6	X	80	R	09/01/1973	40.0	170	80	.44	1	09/01/1973	--	FR EE 107
16	6	X	20	R	04/17/1972	200.0	825	20	.25	8	04/17/1972	--	FR EE 108
79	6	X	66	R	11/17/1974	15.0	70	66	3.75	31	11/17/1974	--	FR EE 109
59	6	X	50	R	04/06/1973	50.0	70	50	2.50	1	04/06/1973	--	FR EE 110
20	6	X	20	R	06/30/1961	3.0	--	20	--	2	06/30/1961	--	FR EE 111
31	6	X	15	R	01/09/1979	20.0	265	15	.08	1	01/09/1979	--	FR EE 112
--	--	--	41	R	04/27/1981	3.0	275	41	.01	1	04/27/1981	--	FR EE 113
22	6	X	19	R	04/18/1972	7.0	--	19	--	1	04/18/1972	--	FR EE 114
19	6	X	20	R	04/20/1972	8.0	--	20	--	1	04/20/1972	--	FR EE 115
21	6	X	35	R	03/09/1974	15.0	225	35	.08	1	03/09/1974	--	FR EE 116
28	6	X	10	R	11/04/1976	20.0	75	10	.31	1	11/04/1976	--	FR EE 117
29	6	X	20	R	06/28/1977	2.0	375	20	.01	1	06/28/1977	--	FR EE 118
19	6	X	12	R	03/06/1976	6.0	450	12	.01	1	03/06/1976	--	FR EE 119
39	6	X	10	R	05/06/1980	10.0	225	20	.05	1	05/06/1980	--	FR EE 120
39	6	X	20	R	06/08/1978	2.0	425	20	.01	1	06/08/1978	--	FR EE 121
20	6	X	18	R	09/19/1977	5.0	300	18	.02	1	09/19/1977	--	FR EE 122
40	8	X	35	R	04/18/1977	75.0	190	35	.48	6	04/18/1977	--	FR EE 123
18	6	X	35	R	04/29/1977	35.0	340	35	.12	6	04/29/1977	O	FR EE 124
31	6	X	20	R	06/25/1975	1.0	300	20	.0	1	06/25/1975	--	FR EE 125
61	8	X	18	R	09/10/1979	50.0	41	18	2.17	5	09/10/1979	O,Q	FR EE 126
23	6	X	30	R	11/10/1966	1.0	--	30	--	1	11/10/1966	--	FR EE 127
19	6	X	30	R	02/16/1979	.8	395	30	.0	5	02/16/1979	--	FR EE 128
24	6	X	33	R	04/17/1974	50.0	43	33	5.00	2	04/17/1974	--	FR EE 129
60	6	X	20	R	10/19/1970	3.0	220	20	.02	1	10/19/1970	--	FR EE 130
--	--	X	--	--	--	.0	--	--	--	--	01/09/1979	--	FR EE 131
--	--	X	--	--	--	.0	--	--	--	--	01/09/1979	--	FR EE 132
30	6	X	15	R	05/18/1954	10.0	20	15	2.00	--	05/18/1954	Q	FR EF 1
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EF 2
24	6	X	9	R	11/11/1950	4.0	65	9	.07	--	11/11/1950	--	FR EF 3
--	6	X	22	R	06/03/1953	1.0	100	22	.01	--	06/03/1953	--	FR EF 4
30	6	X	20	R	12/05/1953	5.0	54	20	.15	--	12/05/1953	--	FR EF 5
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EF 6
--	6	X	16.13	S	04/19/1956	--	--	--	--	--	--	--	FR EF 7
--	6	--	1	R	--	35.0	--	1	--	--	--	--	FR EF 8
--	--	--	1	R	--	5.0	--	1	--	--	--	--	FR EF 9
--	6	X	70	R	11/01/1955	--	--	--	--	--	--	--	FR EF 10
--	--	--	2	R	08/31/1951	5.0	32	2	.17	--	08/31/1951	Q	FR EF 11
10	6	X	30	R	05/20/1955	1.0	91	30	.02	--	05/20/1955	--	FR EF 12

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR EF 13	FR-00-0105	HATCHER, J E	JOHN GREENE	1945	490	S	112	H,S	300URBN
FR EF 14	FR-01-9251	SMITH, A J	L F EASTERDAY	1955	535	H	119	H	300URBN
FR EF 15	FR-01-8208	EXXON CORPORATION	ED BROWN	1955	560	H	80	U	300URBN
FR EF 16	--	HILLTOP LIQUORS	ED BROWN	1955	555	H	90	C	300URBN
FR EF 17	--	BURDETTE, G P	DEWEY BROWN	1940	470	S	50	H	300URBN
FR EF 18	FR-01-4602	LUHN, AUSTIN W	R HARRIS	1954	545	S	75	H	300URBN
FR EF 19	--	LUHN, AUSTIN W	--	--	545	S	67	U	300URBN
FR EF 20	FR-01-3641	QUINN, HOWARD U	L F EASTERDAY	1953	600	S	--	H	300URBN
FR EF 21	FR-00-9628	RIPPEON, BERNARD F	A R KEYSER	1952	450	S	50	H	300LBRN
FR EF 23	FR-02-1936	CRICKENBERGER, L H	L F EASTERDAY	1956	510	S	167	H	300SMCK
FR EF 24	FR-00-9090	BAUBLITZ, HERMAN J	A R KEYSER	1951	535	H	79	H	300SMCK
FR EF 25	--	STULL, EMORY W	--	1885	535	H	29	H	300SMCK
FR EF 26	FR-73-0852	LAKE SPRING WATER CO	KEYSER-GARVER	1973	270	S	442	U	300LBRN
FR EF 27	FR-73-0852	LAKE SPRING WATER CO	KEYSER-GARVER	1973	340	S	300	U	300URBN
FR EF 28	FR-71-0369	LAKE SPRING WATER CO	KEYSER-GARVER	1971	350	S	400	P	300LBRN
FR EF 29	FR-73-3442	NEW MARKET MIDDLE SCH	C A CROMWELL	1976	520	S	310	T	300URBN
FR EF 30	FR-73-3424	NEW MARKET MIDDLE SCH	RALPH MAYNE	1976	540	S	120	T	300URBN
FR EF 31	FR-73-3455	NEW MARKET MIDDLE SCH	C A CROMWELL	1976	545	S	310	T	300URBN
FR EF 32	FR-04-6476	NEW MARKET ELEM SCHOOL	LARRY MORGAN	1962	540	H	400	T	300URBN
FR EF 33	FR-73-4879	C & P TELEPHONE CO	L F EASTERDAY	1977	540	S	60	C	300URBN
FR EF 34	FR-69-0051	SIMPSON METH CHURCH	C A CROMWELL	1968	520	S	104	T	300URBN
FR EF 35	FR-67-0472	MEALEY, CARL	JERRY HARLEY	1967	540	S	265	C	300URBN
FR EF 36	FR-73-2439	EXXON CORPORATION	L F EASTERDAY	1974	570	S	180	C	300URBN
FR EF 37	FR-73-2401	THOMPSON, WILLIAM	L F EASTERDAY	1974	565	S	100	U	300URBN
FR EF 38	FR-68-0045	EBENEZER CHURCH	DENNY BROWN	1967	530	S	100	T	300IJMV
FR EF 39	FR-73-5336	FIRST BAPTIST CH	KEYSER-GARVER	1977	530	H	150	T	300URBN
FR EF 40	FR-67-0495	WILCOM, CHARLES	DENNY BROWN	1967	565	F	77	C	300URBN
FR EF 41	FR-71-0438	FRED CO BD OF EDUC	L F EASTERDAY	1971	540	W	200	T	300IJMV
FR EF 42	FR-73-0851	LAKE SPRING WATER CO	KEYSER-GARVER	1973	455	S	300	P	300IJMV
FR EF 43	FR-73-6080	MARTIN BUILDING INC	RALPH MAYNE	1978	485	H	225	H	300IJMV
FR EF 44	FR-73-6614	THOMPSON, WILLIAM	L F EASTERDAY	1979	570	S	140	C	300URBN
FR EF 45	FR-71-0369	LAKE SPRING WATER CO	KEYSER-GARVER	1977	350	S	200	P	300LBRN
FR EF 46	FR-71-0369	LAKE SPRING WATER CO	KEYSER-GARVER	1977	350	S	300	P	300LBRN
FR EF 47	FR-71-0099	FRED CO BD OF EDUC	KEYSER-GARVER	1970	540	W	230	T	300IJMV
FR EF 48	FR-71-0099	FRED CO BD OF EDUC	KEYSER-GARVER	1970	620	H	--	U	300IJMV
FR EF 49	FR-71-0099	FRED CO BD OF EDUC	KEYSER-GARVER	1970	610	H	--	U	300IJMV
FR EG 1	--	HOOD, J W	--	--	690	H	58	H,S	300MRBG
FR EG 2	--	JONES, CHARLES	--	1898	840	H	60	H	300MRBG
FR EG 3	FR-00-5996	RHINECKER, EDGAR	DEWEY BROWN	1950	710	S	70	H	300MRBG
FR EG 4	FR-00-9856	DERR	L F EASTERDAY	1952	640	S	29	C	300MRBG
FR EG 6	FR-01-9806	HAHN, HARRY E	L F EASTERDAY	1955	470	S	42	C	300IJMV
FR EG 7	FR-01-4023	GOETZ	HARRY GREEN	1954	625	S	90	H	300MRBG
FR EG 8	FR-01-4468	FREDERICK M E CHURCH	L F EASTERDAY	1954	660	H	120	T	300MRBG
FR EG 9	FR-01-6528	C & P TELEPHONE CO	L F EASTERDAY	1954	835	S	90	C	300MRBG
FR EG 10	FR-00-3495	DRIVER, JOHN	ED BROWN	1948	600	H	110	H	300MRBG
FR EG 11	--	SPENCER, JOHN M	--	--	720	H	87	H	300MRBG
FR EG 12	--	GARDNER, FRANK A	--	--	645	W	29	H,S	300MRBG
FR EG 14	--	JACOBS, C P	--	--	560	H	85	H,Z	300SMCK
FR EG 15	--	KOLB, PAUL R	--	--	550	S	64	H	300URBN
FR EG 16	FR-01-1208	TREGONING, CHARLES N	JOHN SHAFF	1954	430	H	72	H	300LBRN
FR EG 17	--	MYERS, GEORGE A	DEWEY BROWN	1945	600	W	107	H,S	300MRBG
FR EG 18	--	HARNE, GEORGE	L F EASTERDAY	1953	630	S	90	H	300MRBG
FR EG 19	FR-67-0319	HOPE VALLEY CAMP	L F EASTERDAY	1966	540	S	70	R	300IJMV
FR EG 20	FR-73-7721	HURLEY, FRANCIS	ROBERT CLINE	1980	585	S	145	H	300MRBG
FR EG 21	FR-73-7932	HENRY, STEVEN	W B QUYNN	1980	620	S	200	H	300MRBG
FR EG 22	FR-73-6811	BLIZZARD, JOHN	KEYSER-GARVER	1979	640	S	205	H	300MRBG
FR EG 23	FR-73-7432	THRIFT, PAUL	W B QUYNN	1980	670	S	140	H	300MRBG
FR EG 24	FR-73-3233	WINTER, JOSEPH	ROBERT CLINE	1976	680	H	120	H	300MRBG
FR EG 25	FR-73-3587	BELT, ARTHUR	ROBERT CLINE	1976	670	H	145	H	300MRBG
FR EG 26	FR-73-6968	KNOTT, THOMAS	JOSEPH MAYNE	1979	700	S	125	H	300MRBG
FR EG 27	FR-73-8016	KNOTT, DAVID	KEYSER-GARVER	1980	720	H	165	H	300MRBG
FR EG 28	FR-73-6991	DEAL, GEORGE J	JOSEPH MAYNE	1979	590	S	145	H	300MRBG
FR EG 29	FR-05-0709	HOBBS, MEHRL	DENNY BROWN	1963	610	S	44	C	300MRBG
FR EG 30	FR-73-3962	WILLARD CHEM CORP	L F EASTERDAY	1977	720	S	120	N	300MRBG
FR EG 31	FR-73-3963	WILLARD CHEM CORP	L F EASTERDAY	1977	720	F	140	N	300MRBG
FR EG 32	FR-73-3964	WILLARD CHEM CORP	L F EASTERDAY	1978	710	F	205	N	300MRBG
FR EG 33	FR-73-0148	HUBBLE, BILL	L F EASTERDAY	1972	840	F	120	C	300MRBG
FR EH 1	--	TOWN OF MT AIRY	ED BROWN	1925	660	V	125	P	300MRBG
FR EH 2	--	TOWN OF MT AIRY	--	1930	660	V	96	P	300MRBG
FR EH 3	FR-00-8430	LOVING	L F EASTERDAY	1951	675	H	106	H	300MRBG
FR EH 4	--	LOVING	--	--	645	S	--	H	300MRBG
FR EH 5	FR-01-8296	BLAYLOCK, HAROLD L	L F EASTERDAY	1955	600	V	53	H	300MRBG
FR EH 6	FR-01-8854	U S GEOLOGICAL SURVEY	ED BROWN	1955	660	V	55	U	300MRBG
FR EH 7	FR-01-9181	U S GEOLOGICAL SURVEY	ED BROWN	1955	660	V	89	U	300MRBG
FR EH 8	FR-01-9182	U S GEOLOGICAL SURVEY	ED BROWN	1955	660	V	80	U	300MRBG
FR EH 9	FR-01-9183	U S GEOLOGICAL SURVEY	ED BROWN	1955	660	V	100	U	300MRBG
FR EH 10	FR-73-2380	TOWN OF MT AIRY	L F EASTERDAY	1974	650	V	260	P	300MRBG
FR EH 11	FR-81-0088	TOWN OF MT AIRY	KEYSER-GARVER	1981	650	S	103	U	300MRBG
FR EH 12	FR-81-0087	TOWN OF MT AIRY	KEYSER-GARVER	1981	645	S	200	U	300PRTB
FR EH 13	FR-81-0090	TOWN OF MT AIRY	KEYSER-GARVER	1981	680	S	180	P	300MRBG

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
--	--	X	40	R	10/24/1945	10.0	40	40	--	.2	10/24/1945	--	FR EF 13
23	6	X	45	R	05/24/1955	10.0	69	45	0.42	--	05/24/1955	--	FR EF 14
30	6	X	32	R	04/29/1955	20.0	65	32	.61	1	04/29/1955	--	FR EF 15
--	6	--	86	R	01/01/1955	--	--	--	--	--	--	--	FR EF 16
22	--	X	--	--	--	--	--	--	--	--	--	--	FR EF 17
24	6	X	30	R	04/07/1954	7.0	60	30	.23	--	04/07/1954	--	FR EF 18
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EF 19
16	6	X	70	R	11/10/1953	8.0	80	70	.80	--	11/10/1953	--	FR EF 20
6	6	X	28	R	02/23/1952	10.0	35	28	1.43	1	02/23/1952	--	FR EF 21
8	6	X	24.69	S	08/27/1956	2.0	167	20	.01	--	02/16/1956	--	FR EF 23
18	6	X	20	R	11/18/1951	5.0	40	20	.25	1	11/18/1951	--	FR EF 24
29	36	W	4.82	S	05/17/1960	--	--	--	--	--	--	--	FR EF 25
21	6	X	30	R	05/24/1973	3.0	--	30	--	1	05/24/1973	O	FR EF 26
38	8	X	30	R	05/22/1973	5.0	--	30	--	1	05/22/1973	--	FR EF 27
40	6	X	32	R	03/23/1971	12.0	--	32	--	1	03/23/1971	--	FR EF 28
49	6	X	30	R	08/25/1976	5.0	300	30	.02	24	08/25/1976	--	FR EF 29
20	6	X	50	R	05/17/1976	10.0	120	50	.14	2	05/17/1976	--	FR EF 30
49	6	X	30	R	08/25/1976	5.0	300	30	.02	24	08/25/1976	--	FR EF 31
46	6	X	30	R	05/01/1962	11.0	--	30	--	2	05/01/1962	--	FR EF 32
24	6	X	20	R	07/15/1977	40.0	60	40	1.00	2	07/15/1977	--	FR EF 33
12	6	X	25	R	08/08/1968	15.0	--	25	--	2	08/08/1968	--	FR EF 34
46	6	X	15	R	04/07/1967	8.0	--	15	--	1	04/07/1967	--	FR EF 35
30	6	X	30	R	11/18/1974	10.0	180	30	.07	1	11/18/1974	Q	FR EF 36
19	6	X	30	R	12/12/1974	15.0	100	30	.21	1	12/12/1974	--	FR EF 37
44	6	X	65	R	08/02/1967	6.0	80	65	.40	1	08/02/1967	--	FR EF 38
60	6	X	30	R	11/17/1977	20.0	40	30	2.00	2	11/17/1977	--	FR EF 39
58	6	X	45	R	04/12/1967	2.0	77	45	.06	2	04/12/1967	O,Q	FR EF 40
22	6	X	10	R	04/05/1971	10.0	190	10	.06	8	04/05/1971	--	FR EF 41
--	--	X	--	--	--	--	--	--	--	--	--	--	FR EF 42
21	6	X	50	R	06/30/1978	2.0	225	50	.01	8	06/30/1978	--	FR EF 43
33	6	X	25	R	01/17/1979	6.0	140	25	.05	2	01/17/1979	--	FR EF 44
--	--	X	--	--	--	.0	--	--	--	--	03/17/1977	--	FR EF 45
31	6	X	45	R	03/17/1977	3.5	--	45	--	1	03/17/1977	--	FR EF 46
20	6	X	12	R	09/19/1970	10.0	--	12	--	1	09/19/1970	--	FR EF 47
--	6	X	46.89	S	07/15/1982	--	--	--	--	--	--	--	FR EF 48
--	6	X	52.74	S	12/23/1982	--	--	--	--	--	--	O	FR EF 49
42	36	X	38.20	S	06/13/1955	--	--	--	--	--	--	--	FR EG 1
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EG 2
10	6	X	50	R	11/16/1950	3.0	--	50	--	--	11/16/1950	--	FR EG 3
15	6	X	3.50	S	09/22/1955	4.0	29	4	.16	--	04/10/1952	--	FR EG 4
24	6	X	15	R	07/15/1955	10.0	16	15	10.00	--	07/15/1955	--	FR EG 6
7	6	X	30	R	02/15/1954	10.0	40	30	1.00	1	02/15/1954	--	FR EG 7
--	6	X	40	R	03/19/1954	3.0	120	40	.04	--	03/19/1954	--	FR EG 8
32	6	X	30	R	09/21/1954	12.0	54	30	.50	--	09/21/1954	--	FR EG 9
10	6	X	30	R	12/28/1948	10.0	98	30	.15	1	12/28/1948	--	FR EG 10
--	6	--	67	R	07/01/1955	--	--	--	--	--	--	Q	FR EG 11
--	--	--	--	--	--	--	--	--	--	--	--	--	FR EG 12
--	6	--	--	--	--	--	--	--	--	--	--	Q	FR EG 14
--	6	--	18.90	S	09/08/1955	--	--	--	--	--	--	--	FR EG 15
--	6	--	30	R	11/04/1952	2.0	66	42	.08	2	11/04/1952	--	FR EG 16
17	6	X	29.16	S	11/14/1956	--	--	--	--	--	--	--	FR EG 17
--	6	--	--	--	--	--	--	--	--	--	--	--	FR EG 18
21	6	X	20	R	10/27/1966	30.0	70	20	.60	.5	10/27/1966	--	FR EG 19
61	6	X	60	R	07/17/1980	8.0	145	60	.09	1	07/17/1980	--	FR EG 20
31	6	X	25	R	11/07/1980	4.0	200	25	.02	2	11/07/1980	--	FR EG 21
61	6	X	65	R	02/24/1979	4.0	190	65	.03	4	02/24/1979	--	FR EG 22
42	6	X	35	R	01/30/1980	15.0	135	35	.15	2	01/30/1980	--	FR EG 23
57	6	X	61	R	02/27/1976	7.0	120	61	.12	1	02/27/1976	--	FR EG 24
57	6	X	46	R	08/06/1976	6.0	145	46	.06	1	08/06/1976	--	FR EG 25
40	6	X	30	R	06/06/1979	6.0	125	30	.06	2	06/06/1979	--	FR EG 26
39	6	X	52	R	11/11/1980	4.0	140	52	.05	4	11/11/1980	--	FR EG 27
44	6	X	40	R	06/13/1979	10.0	135	40	.10	2	06/13/1979	--	FR EG 28
30	6	X	30	R	03/20/1963	10.0	35	30	2.00	.5	03/20/1963	--	FR EG 29
63	6	X	35	R	03/18/1977	45.0	120	35	.53	2	03/18/1977	--	FR EG 30
45	6	X	40	R	03/18/1977	60.0	140	100	.60	2	03/18/1977	--	FR EG 31
72	6	X	40	R	08/20/1976	10.0	205	40	.06	2	08/20/1978	--	FR EG 32
19	6	X	45	R	08/29/1972	10.0	120	45	.13	1	08/29/1972	O,Q	FR EG 33
34	8	X	6	R	01/01/1925	60.0	8	6	30.00	1.2	01/01/1925	Q	FR EH 1
30	8	X	20	R	01/01/1930	106.0	60	20	2.65	--	01/01/1930	--	FR EH 2
--	6	X	30	R	08/14/1951	8.0	80	30	.16	--	08/14/1951	--	FR EH 3
--	6	--	--	--	--	--	--	--	--	--	--	Q	FR EH 4
11	6	X	10	R	03/26/1955	8.0	35	10	.32	--	03/26/1955	Q	FR EH 5
38	6	X	11.23	S	05/23/1955	24.7	--	--	2.47	.5	05/01/1955	--	FR EH 6
38	6	X	11.48	S	05/23/1955	24.5	--	--	5.44	.3	05/01/1955	--	FR EH 7
42	6	X	9.83	S	05/23/1955	26.7	--	--	10.68	.8	05/01/1955	--	FR EH 8
49	6	X	12.59	S	05/23/1955	26.7	--	--	3.56	.8	05/01/1955	--	FR EH 9
23	8	X	10.50	S	01/15/1975	284.0	34	10	12.19	6.5	12/20/1974	--	FR EH 10
24	6	X	30	R	10/29/1981	40.0	90	30	.67	4	10/29/1981	O	FR EH 11
40	6	X	40	R	10/30/1981	15.0	180	40	.11	4	10/30/1981	--	FR EH 12
62	8	X	40	R	11/03/1981	100.0	160	40	.83	9	11/03/1981	--	FR EH 13

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR EH 14	FR-81-0089	TOWN OF MT AIRY	KEYSER-GARVER	1981	660	S	143	U	300MRBG
FR EH 15	--	TOWN OF MT AIRY	--	1910	670	F	89	U	300MRBG
FR EH 16	FR-73-5289	WARD DEVELOP CO	KEYSER-GARVER	1977	620	S	185	H	300MRBG
FR EH 17	FR-73-7903	JOHNSON, LARRY	ROBERT CLINE	1980	605	S	150	H	300MRBG
FR EH 18	FR-73-6871	PAYNE, GEORGE	JOSEPH MAYNE	1979	600	S	185	H	300MRBG
FR EH 19	FR-73-5295	WARD DEVELOP CO	KEYSER-GARVER	1978	680	S	265	H	300MRBG
FR EH 20	FR-73-5298	WARD DEVELOP CO	KEYSER-GARVER	1978	710	S	345	H	300GLRM
FR EH 21	FR-73-5294	WARD DEVELOP CO	KEYSER-GARVER	1978	720	H	285	H	300GLRM
FR EH 22	FR-73-1345	CHRISTOFFEL, WILLIAM	KEYSER-GARVER	1973	740	H	350	H	300GLRM
FR FB 1	FR-00-5176	MAHONEY, ROBERT V	WADE CORUN	1950	480	H	63	H	400PCMB
FR FB 2	FR-00-1475	EAGLE, C M	D F MEYERS	1947	425	H	115	H,S	400PCMB
FR FB 3	FR-00-7202	STAUFFER, RALPH	A R KEYSER	1950	480	F	88	H	400PCMB
FR FB 4	FR-01-5833	QUINN, JOHN T	JOHN SHAFF	1954	300	S	80	H	400PCMB
FR FB 5	FR-00-8422	COOPER, DENNIS R	A R KEYSER	1951	285	S	109	H	400PCMB
FR FB 6	FR-00-6532	COOPER, LEVIN	A R KEYSER	1950	270	S	50	H	400PCMB
FR FB 7	FR-00-6426	COOPER, LEVIN	A R KEYSER	1950	315	S	112	H	400PCMB
FR FB 8	FR-00-7905	WOOD, H L	JOHN SHAFF	1951	525	F	70	H	400PCMB
FR FB 9	FR-02-3312	KELLER, D L	ALL MD P&W	1956	360	S	67	U	400PCMB
FR FB 11	--	TOWN OF BRUNSWICK	HARPER	1908	340	V	315	U	400PCMB
FR FB 13	FR-73-5481	ENFIELD, BERTRAM	ROBERT CLINE	1978	483	H	125	H	400PCMB
FR FB 14	FR-73-6100	BRUNS ASSEMBLY OF GOD	ROBERT CLINE	1978	467	H	325	C	400PCMB
FR FB 15	FR-72-0104	TOWN OF BRUNSWICK	KEYSER-GARVER	1971	230	G	537	C	400PCMB
FR FB 16	FR-69-0535	TOWN OF BRUNSWICK	JOHN SHAFF	1969	230	G	125	U	400PCMB
FR FB 17	FR-73-3627	TOWN OF BRUNSWICK	ROBERT CLINE	1976	230	G	350	P	400PCMB
FR FB 18	FR-73-2326	SHRUM, CHARLES R	ROBERT CLINE	1974	420	H	295	H	400PCMB
FR FB 19	FR-73-5109	CRONE, DWIGHT	R HARLEY SR	1977	420	H	350	H	400PCMB
FR FC 1	--	KORZENDORFER, WILLIAM	--	--	240	S	28	H	231NOXF
FR FC 2	FR-01-2644	WRIGHT, LAKE	W B HILTON	1953	290	S	102	H	400CTCN
FR FC 3	FR-01-2644	WRIGHT, LAKE	W B HILTON	1953	290	S	86	U	400CTCN
FR FC 4	FR-01-4941	KOLB, BERNARD	DEWEY BROWN	1954	305	S	94	H	231NOXF
FR FC 5	--	NUSS, JOHN	JOHN SHAFF	1952	440	S	53	H	400PCMB
FR FC 6	FR-01-1009	KING, T B	A R KEYSER	1952	375	S	93	H	377TMSN
FR FC 7	--	BELL, WILLIAM	--	--	280	S	38	H	400PCMB
FR FC 9	FR-01-0314	HILDEBRAND, HARRY	JOHN SHAFF	1952	410	S	71	H	400PCMB
FR FC 10	FR-01-1214	RUTHERFORD, L E	A R KEYSER	1952	225	S	33	H	400CTCN
FR FC 11	--	REED, C E	--	--	475	S	92	H	400CTCN
FR FC 14	FR-01-0806	ASSEMBLY OF GOD CHURCH	A R KEYSER	1952	245	S	77	H	400CTCN
FR FC 16	FR-05-1703	APPLIED ELECTRO MECH	W B HILTON	1963	240	F	46	C	231NOXF
FR FC 17	FR-68-0224	APPLIED ELECTRO MECH	A R KEYSER	1967	240	F	98	C	231NOXF
FR FC 18	FR-03-6663	TODD STEEL INC	A R KEYSER	1959	250	F	150	N	231NOXF
FR FC 19	FR-67-0394	TODD STEEL INC	C A CROMWELL	1967	250	F	130	N	231NOXF
FR FC 20	FR-68-0025	POINT OF ROCKS ESTATES	HARRY GREEN	1968	250	F	305	U	231NOXF
FR FC 21	FR-68-0025	POINT OF ROCKS ESTATES	HARRY GREEN	1968	250	F	225	U	231NOXF
FR FC 23	--	C & O CANAL NATL PARK	HOFFMAN WELL	1969	210	T	50	U	231NOXF
FR FC 24	--	C & O CANAL NATL PARK	HOFFMAN WELL	1969	220	T	135	H	231NOXF
FR FC 25	FR-69-0376	POINT OF ROCKS ESTATES	HARRY GREEN	1969	330	H	400	U	377TMSN
FR FC 26	FR-69-0376	POINT OF ROCKS ESTATES	HARRY GREEN	1969	320	V	345	P	377TMSN
FR FC 27	FR-69-0377	POINT OF ROCKS ESTATES	HARRY GREEN	1969	230	V	65	H	231NOXF
FR FC 28	FR-03-7290	FRED CO BD OF EDUC	A R KEYSER	1960	295	S	423	U	377TMSN
FR FC 29	--	C & O CANAL NATL PARK	W H LAMBERSON	1969	220	T	203	U	400CTCN
FR FC 30	--	C & O CANAL NATL PARK	W H LAMBERSON	1969	220	T	150	H	400CTCN
FR FC 31	FR-72-0029	POINT OF ROCKS ESTATES	A R KEYSER	1971	310	H	583	P	377TNSN 377ANTM
FR FC 32	FR-72-0165	BARBAR & ROSS CO	C A CROMWELL	1971	250	F	75	C	231NOXF
FR FC 33	FR-72-0255	FRED CO FISH & GAME	A R KEYSER	1971	240	S	115	H	231NOXF
FR FC 34	FR-66-0697	PHILLIPS, DAVID	C A CROMWELL	1966	240	V	165	H	231NOXF
FR FC 35	FR-65-0592	CLEAVERS FOOD SERVICE	A R KEYSER	1965	255	S	70	C	231NOXF
FR FC 36	FR-03-3501	MAR-LU-RIDGE CAMP	A R KEYSER	1969	1130	H	735	U	377WVRN 400CTCN
FR FC 37	FR-03-3876	MAR-LU-RIDGE CAMP	A R KEYSER	1959	1130	H	355	U	377WVRN 400CTCN
FR FC 38	FR-03-5168	MAR-LU-RIDGE CAMP	A R KEYSER	1959	600	S	140	T	377WVRN
FR FC 39	FR-04-8622	MAR-LU-RIDGE CAMP	A R KEYSER	1962	560	S	170	T	377WVRN
FR FC 40	FR-73-6728	CAMPBELL, MICHAEL	ROBERT CLINE	1979	425	H	150	H	400PCMB
FR FC 41	FR-73-7571	STONESIFER, WAYNE	ROBERT CLINE	1980	420	H	150	H	400PCMB
FR FC 42	FR-73-2259	BEAN, DONALD	--	1974	422	H	122	H	400PCMB
FR FC 43	FR-73-1094	FREE, RAYMOND P	C A CROMWELL	1973	425	H	125	H	400PCMB
FR FC 44	FR-73-2114	BURGEE, CARROLL	ROBERT CLINE	1974	440	H	250	H	400PCMB
FR FC 45	FR-73-1508	MYERS, MERVIL E	ROBERT CLINE	1973	460	H	220	H	400PCMB
FR FC 46	FR-73-2995	BENSON, RONALD	ROBERT CLINE	1975	440	H	180	H	400PCMB
FR FC 47	FR-73-2795	ATHEY, RUBY K	ROBERT CLINE	1975	424	H	200	H	400PCMB
FR FC 48	FR-73-5265	MCLAIN, CHARLES	C A CROMWELL	1977	410	S	150	H	400PCMB
FR FC 49	FR-73-2641	BEACHLY, ROBERT	C A CROMWELL	1975	420	H	150	H	400PCMB
FR FC 50	FR-73-6521	KELLER, JAMES H	C A CROMWELL	1978	420	S	150	H	400PCMB
FR FC 51	FR-73-5163	NALLY, DONALD	C A CROMWELL	1977	425	H	320	H	400PCMB
FR FC 52	FR-65-0445	N AM HOUSING CORP	JERRY HARLEY	1965	250	F	98	N	231NOXF
FR FC 53	FR-73-6533	STD BLDG SYSTEMS	ROBERT CLINE	1978	260	F	525	N	231NOXF
FR FC 54	FR-73-0622	BLUMENAUER, ROBERT	ROBERT CLINE	1973	230	F	73	U	400CTCN
FR FC 55	FR-70-0474	MAR-LU RIDGE CAMP	KEYSER-GARVER	1970	560	S	282	T	377HRPR
FR FD 1	FR-00-1216	TRANS-TECH INC	ED BROWN CHAS SELDERS	1939 1947	305	F	230 954	U	377FDCK
FR FD 2	--	TRANS-TECH INC	ED BROWN	1916	305	F	150	U	377FDCK
FR FD 3	--	TRANS-TECH INC	W B HILTON	1911	305	F	77	U	377FDCK
FR FD 4	--	TRANS-TECH INC	ED BROWN	1938	305	F	60	U	377FDCK

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
40	6	X	40	R	10/28/1981	7.0	133	40	0.08	4	10/28/1981	--	FR EH 14
--	8	X	43.28	S	12/03/1981	--	--	--	--	--	--	O	FR EH 15
60	6	X	50	R	12/14/1977	7.0	60	50	.70	2	12/14/1977	--	FR EH 16
80	6	X	40	R	09/30/1980	10.0	150	40	.09	1	09/30/1980	--	FR EH 17
73	6	X	55	R	05/28/1979	10.0	185	55	.08	2	05/28/1979	--	FR EH 18
67	6	X	50	R	03/10/1978	8.0	75	50	.32	2	03/10/1978	--	FR EH 19
42	6	X	40	R	03/08/1978	3.0	335	40	.01	5	03/08/1978	--	FR EH 20
64	6	X	50	R	03/02/1978	4.0	75	50	.16	2	03/02/1978	--	FR EH 21
23	6	X	60	R	10/09/1973	1.0	--	60	--	1	10/09/1973	--	FR EH 22
12	6	X	12	R	02/04/1950	15.0	41	12	.52	--	02/04/1950	Q	FR FB 1
41	6	X	24	R	05/19/1947	2.5	32	24	.31	--	05/19/1947	--	FR FB 2
13	6	X	35	R	12/19/1950	4.0	67	35	.13	1	12/19/1950	--	FR FB 3
80	6	O	20	R	07/05/1954	5.0	50	20	.17	6	07/05/1954	--	FR FB 4
107	6	X	30	R	07/30/1951	3.0	90	30	.05	1	07/30/1951	--	FR FB 5
12	6	X	20	R	08/14/1950	3.0	35	20	.20	.5	08/14/1950	--	FR FB 6
42	6	X	55	R	07/24/1950	3.0	82	55	.11	1.5	07/24/1950	--	FR FB 7
70	6	O	20	R	05/14/1951	5.0	30	20	.50	2	05/14/1951	--	FR FB 8
9	6	X	25	R	05/28/1956	7.0	47	25	.32	2	05/28/1956	--	FR FB 9
12	8	X	5	R	--	100.0	--	5	--	--	--	O	FR FB 11
50	6	X	31	R	01/07/1978	12.0	125	31	.13	1	01/07/1978	--	FR FB 13
41	6	X	28	R	08/26/1978	10.0	325	28	.03	1	08/26/1978	--	FR FB 14
40	6	X	16	R	08/24/1971	30.0	--	16	--	1	08/24/1971	--	FR FB 15
37	6	X	17	--	06/01/1969	15.0	40	17	.65	4	06/01/1969	O	FR FB 16
28	6	X	9	R	04/21/1976	15.0	350	9	.04	1	04/21/1976	--	FR FB 17
45	6	X	33	R	11/09/1974	2.0	295	33	.01	1	11/09/1974	--	FR FB 18
20	6	X	40	R	09/20/1977	2.0	285	40	.01	2	09/20/1977	--	FR FB 19
28	52	W	16.06	S	10/22/1946	--	--	--	--	--	--	O	FR FC 1
102	6	O	--	--	--	--	--	--	--	--	--	--	FR FC 2
86	6	O	--	--	--	.0	--	--	--	--	07/01/1953	--	FR FC 3
23	6	X	--	--	--	10.0	--	--	--	.5	05/05/1954	--	FR FC 4
--	6	--	--	--	--	--	--	--	--	--	--	Q	FR FC 5
77	6	X	30	R	09/17/1952	30.0	--	30	--	1	09/17/1952	--	FR FC 6
38	--	W	26.84	S	12/15/1955	--	--	--	--	--	--	--	FR FC 7
71	6	O	40	R	05/26/1952	3.0	55	40	.20	2.5	05/26/1952	--	FR FC 9
33	6	O	10	R	10/09/1952	5.0	25	10	.33	1	10/09/1952	--	FR FC 10
36	6	X	9.79	S	12/21/1955	--	--	--	--	--	--	--	FR FC 11
77	6	O	20	R	08/12/1952	10.0	40	20	.50	1	08/12/1952	Q	FR FC 14
32	6	X	15	R	06/03/1963	35.0	--	15	--	--	06/03/1963	--	FR FC 16
70	6	X	15	R	12/19/1967	100.0	--	15	--	4	12/19/1967	--	FR FC 17
22	6	X	40	R	11/07/1959	10.0	--	40	--	3	11/07/1959	--	FR FC 18
31	6	X	--	--	--	20.0	--	--	--	2	01/07/1967	--	FR FC 19
25	6	X	30	R	05/01/1968	5.0	--	30	--	4	05/01/1968	--	FR FC 20
30	6	X	25	R	05/01/1968	20.0	80	25	.36	8	05/01/1968	--	FR FC 21
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FC 23
41	6	X	19	R	04/01/1969	40.0	--	--	--	2	03/01/1969	G,Q	FR FC 24
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FC 25
30	6	X	25	R	07/01/1969	25.0	325	25	.08	5	07/01/1969	--	FR FC 26
36	6	X	24	R	07/01/1969	50.0	40	24	3.13	4	07/01/1969	--	FR FC 27
307	6	X	63	R	01/14/1960	50.0	--	63	--	5	01/14/1960	--	FR FC 28
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FC 29
42	6	X	22	R	05/01/1969	7.0	--	--	--	--	05/28/1969	Q	FR FC 30
157	6	X	70	R	07/20/1971	25.0	--	70	--	1	07/20/1971	Q	FR FC 31
44	6	X	25	R	10/28/1971	40.0	50	25	1.60	5	10/28/1971	--	FR FC 32
41	6	X	36	R	10/20/1971	40.0	--	36	--	1	10/20/1971	Q	FR FC 33
14	6	X	40	R	05/12/1966	40.0	--	40	--	1	05/12/1966	--	FR FC 34
31	6	X	15	R	05/05/1965	20.0	70	15	.36	1	05/05/1965	--	FR FC 35
17	6	X	190	R	06/16/1969	.1	--	190	--	--	06/16/1969	--	FR FC 36
12	6	X	355	R	06/16/1959	.0	--	--	--	--	06/16/1959	--	FR FC 37
35	6	X	14	R	06/22/1959	12.0	72	14	.21	3	06/22/1959	--	FR FC 38
22	6	X	30	R	06/01/1962	4.0	--	30	--	2	06/01/1962	--	FR FC 39
60	6	X	40	R	03/26/1979	20.0	150	40	.18	1	03/26/1979	--	FR FC 40
60	6	X	37	R	04/17/1980	30.0	150	37	.27	1	04/17/1980	--	FR FC 41
50	6	X	42	R	11/06/1974	12.0	52	42	1.20	2	11/06/1974	--	FR FC 42
20	6	X	30	R	10/03/1973	8.0	120	30	.09	1	10/03/1973	--	FR FC 43
42	6	X	40	R	08/10/1974	4.0	250	40	.02	1	08/10/1974	--	FR FC 44
41	6	X	50	R	12/10/1973	3.0	220	50	.02	1	12/10/1973	--	FR FC 45
58	6	X	38	R	10/14/1975	10.0	180	38	.07	1	10/14/1975	--	FR FC 46
47	6	X	35	R	07/16/1975	3.0	200	35	.02	1	07/16/1975	--	FR FC 47
20	6	X	30	R	10/20/1977	5.0	145	30	.04	2	10/20/1977	--	FR FC 48
22	6	X	30	R	05/20/1975	10.0	145	30	.09	1	05/20/1975	--	FR FC 49
39	6	X	30	R	11/24/1978	20.0	50	30	1.00	1	11/24/1978	--	FR FC 50
20	6	X	30	R	09/19/1977	2.0	315	30	.01	3	09/19/1977	--	FR FC 51
44	6	X	15	R	01/26/1965	35.0	98	15	.42	1	01/26/1965	--	FR FC 52
20	6	X	22	R	12/19/1978	7.0	525	22	.01	1	12/19/1978	--	FR FC 53
63	6	X	15	R	05/14/1973	25.0	73	15	.43	1	05/14/1973	O	FR FC 54
57	6	X	10	R	06/09/1970	20.0	--	10	--	2	06/09/1970	--	FR FC 55
235	8	X	17.94	S	12/26/1946	95.0	180	21	.60	108	03/18/1947	O	FR FD 1
22	6	X	--	--	--	--	--	--	--	--	--	--	FR FD 2
17	6	X	17.38	S	12/26/1946	--	--	--	--	--	--	O	FR FD 3
20	8	X	--	--	--	100.0	--	--	--	--	01/01/1938	Q	FR FD 4

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR FD 5	--	TRANS-TECH INC	--	1902	305	F	35	U	377FDCK
FR FD 6	--	TRANS-TECH INC	--	1904	305	F	48	U	377FDCK
FR FD 7	FR-00-1295	TRANS-TECH INC	F N HAGMANN	1948	305	F	1209	U	377FDCK
FR FD 8	--	CLAGGETT DIOCESE CTR	--	1904	315	S	110	U	377ANTM
FR FD 9	--	--	--	1952	320	S	100	U	377FDCK
FR FD 10	FR-01-1410	BAILEY, JENNINGS	W B HILTON	1952	300	F	99	S	377FDCK
FR FD 11	FR-00-7022	FRED CO BD OF EDUC	A R KEYSER	1950	320	S	179	T	231NOXF
FR FD 12	FR-01-6955	FAIRALL, N C	H STOTTLEMYER	1954	320	S	127	H	231NOXF
FR FD 13	FR-02-0054	TUSCARORA GUN CLUB	W B HILTON	1955	300	S	115	R	231NOXF
FR FD 14	--	WELLS, FRANCIS	--	--	285	F	44	H	377FDCK
FR FD 15	FR-01-7426	WELLS, FRANCIS	W B HILTON	1955	285	F	164	U	377FDCK
FR FD 16	FR-01-9971	WELLS, FRANCIS	W B HILTON	1955	270	F	49	H	377FDCK
FR FD 17	FR-01-1495	AUSHERMAN, CLARENCE	JACK HARLEY	1952	330	F	96	H	377FDCK
FR FD 18	FR-00-9710	DELAUDER, HOWARD	A R KEYSER	1952	340	H	95	H	231NOXF
FR FD 19	FR-00-9713	DAVIS, CARL	A R KEYSER	1952	325	H	79	H	231NOXF
FR FD 20	FR-00-9919	BROWN, VERA	A R KEYSER	1952	315	S	62	H	231NOXF
FR FD 21	FR-01-0327	BAKER, JOHN	A R KEYSER	1952	350	H	86	H	231NOXF
FR FD 22	FR-01-1583	WALTERS, LAWRENCE	A R KEYSER	1953	345	H	135	H	231NOXF
FR FD 23	FR-00-6143	EARHEART, A B	JOHN SHAFF	1950	350	S	100	H	231NOXF
FR FD 24	FR-00-9711	WHITE, RICHARD	A R KEYSER	1952	345	S	127	H	231NOXF
FR FD 25	FR-00-9707	LAUTHON, W H	A R KEYSER	1952	305	F	165	H	231NOXF
FR FD 26	FR-01-9551	JENKINS, ROBERT	JOHN SHAFF	1955	290	F	52	H	377FDCK
FR FD 27	FR-02-1424	THOMAS, JOHN	ED BROWN	1956	330	F	184	H	377FDCK
FR FD 28	FR-01-7481	RENN, W H	J HARKLUND	1956	290	F	76	H	377FDCK
FR FD 29	FR-01-7213	RENN, W H	J HARKLUND	1954	295	F	93	H	377FDCK
FR FD 30	FR-02-0278	LOWE, GILBERT	A L SMITH	1955	305	F	96	H	377FDCK
FR FD 31	FR-00-3512	SMITH, EARL	JOHN SHAFF	1948	315	F	54	U	377FDCK
FR FD 32	FR-02-0719	GIBSON, TONEY	A L SMITH	1955	325	S	28	H	377FDCK
FR FD 33	FR-02-0322	KANODE, HARRY	JACK HARLEY	1955	310	F	68	H	377FDCK
FR FD 34	FR-00-3497	KANODE, HARRY	ED BROWN	1948	290	F	70	H	377FDCK
FR FD 35	FR-02-1012	HOFFMAN, GEORGE	A L SMITH	1955	325	F	34	H	377FDCK
FR FD 36	FR-01-1897	LEAKS, JOSEPH	JACK HARLEY	1953	305	F	49	H	377FDCK
FR FD 37	FR-00-4975	GRIMES, W B	A R KEYSER	1950	300	F	86	H	377FDCK
FR FD 38	FR-00-7236	WILT, CHARLES	JOHN SHAFF	1951	275	F	38	H	377FDCK
FR FD 39	FR-02-2012	THOMAS, CONNER M	A R KEYSER	1956	380	H	150	H	300IJMV
FR FD 40	--	THOMAS, CONNER M	--	--	360	S	64	U	300IJMV
FR FD 41	--	CHESSIE SYSTEM	--	--	300	F	20	C	377FDCK
FR FD 42	FR-01-9772	STRAILMAN, JOHN	C A CROMWELL	1955	300	F	92	H	377FDCK
FR FD 43	--	ST JOSEPHS CHURCH	--	1920	340	F	65	H	377FDCK
FR FD 44	--	PROCTOR, G C	--	--	285	F	37	H	367GROV
FR FD 45	--	HARRIS, W H	--	--	285	F	58	H	377FDCK
FR FD 46	--	QUILLIAN, RAYMOND	--	1939	305	F	111	H	377FDCK
FR FD 47	--	QUILLIAN, RAYMOND	--	1945	290	S	116	H	377FDCK
FR FD 48	--	CLAGGETT DIOCESE CTR	--	--	325	S	120	U	377ANTM
FR FD 49	--	RENN, WILLIAM	--	--	310	F	14	H	377FDCK
FR FD 50	FR-69-0185	EASTALCO ALUMINUM CO	A R KEYSER	1968	350	U	250	N	231NOXF
FR FD 51	FR-69-0196	EASTALCO ALUMINUM CO	A R KEYSER	1968	340	F	275	U	231NOXF
FR FD 52	--	HINES, JOHN H	--	--	300	S	70	S	377FDCK
FR FD 53	--	HINES, JOHN H	--	--	300	H	--	H	377FDCK
FR FD 54	--	--	--	--	300	H	200	S	377FDCK
FR FD 56	FR-66-0024	LEE, C E	C A CROMWELL	1965	290	F	65	H	377FDCK
FR FD 57	FR-68-0441	ST JOSEPHS CHURCH	A R KEYSER	1968	365	H	260	H	377FDCK
FR FD 58	--	PREVOST, MALLET	--	--	370	U	--	S	377FDCK
FR FD 59	--	PREVOST, MALLET	--	--	370	H	--	H	377FDCK
FR FD 60	--	PREVOST, MALLET	L F EASTERDAY	--	370	H	170	H	377FDCK
FR FD 61	FR-67-0283	PREVOST, MALLET	W B HILTON	1966	370	F	145	H	377FDCK
FR FD 62	FR-67-0062	MOGG, GEORGE P	A R KEYSER	1966	260	V	65	H	377FDCK
FR FD 63	FR-66-0590	STIGLER, A E	A R KEYSER	1966	310	F	100	S,H	377FDCK
FR FD 64	FR-66-0378	YINGLING, EDITH	A R KEYSER	1965	310	F	205	H	377FDCK
FR FD 65	FR-66-0116	SPAHR, JOHN	C A CROMWELL	1965	315	F	165	H	377FDCK
FR FD 66	FR-66-0824	SPAHR, JOHN	ROBERT CLINE	1966	320	F	375	H	377FDCK
FR FD 67	FR-69-0317	WEEDON, OSCAR	ROBERT CLINE	1969	280	F	145	H	377FDCK
FR FD 68	FR-69-0133	BISER, JOSEPH	ROBERT CLINE	1968	350	S	68	H	231NOXF
FR FD 69	FR-05-4747	CARROLL MANOR ELEM SCH	YORK DRILLING	1963	320	F	348	T	377FDCK
FR FD 70	FR-70-0070	SNOOTS, ALBERT	A R KEYSER	1969	275	F	100	H	377FDCK
FR FD 71	FR-70-0022	MAY, ROBERT	ROBERT CLINE	1969	275	F	75	H	377FDCK
FR FD 72	FR-69-0050	PROCTOR, INA E	C A CROMWELL	1968	310	F	165	H	377FDCK
FR FD 73	FR-66-0447	LAWRENCE, FRANK	J HARRIS	1966	300	F	125	H	377FDCK
FR FD 74	FR-66-0006	CASTLE, RUSSELL	A R KEYSER	1965	310	F	285	H	377FDCK
FR FD 83	FR-72-0338	TUSCARORA GUN CLUB	ROBERT CLINE	1972	300	H	170	H	231NOXF
FR FD 84	FR-70-0451	DELAUTER, WILLIAM A	C A CROMWELL	1970	330	H	165	H	231NOXF
FR FD 85	FR-73-8338	THREE SPRGS FISHERIES	KEYSER-GARVER	1981	240	S	405	U	377FDCK
FR FD 86	FR-73-7125	SUPREME CONCRETE	ROBERT CLINE	1979	370	F	525	N	231NOXF
FR FD 87	FR-73-7534	SUPREME CONCRETE	ROBERT CLINE	1980	370	F	280	N	231NOXF
FR FD 88	FR-03-3888	WRIGHT'S CARRY-OUT	A R KEYSER	1959	240	F	225	C	377FDCK
FR FD 89	FR-05-0941	CLAGGETT DIOCESE CTR	ROBERT CLINE	1963	295	S	75	T	377FDCK
FR FD 90	FR-73-5666	CLAGGETT DIOCESE CTR	C A CROMWELL	1977	295	S	75	T	377FDCK
FR FD 91	FR-73-8136	CARROLL MANOR FIRE CO	KEYSER-GARVER	1981	315	F	225	F	377FDCK
FR FE 1	FR-01-3375	HENDRICKSON, G O	L F EASTERDAY	1953	480	H	80	C	300URBN
FR FE 2	FR-01-7206	WEBB, CECIL A	L F EASTERDAY	1954	450	H	76	H	300URBN

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
20	6	X	17.86	S	12/06/1954	--	--	--	--	--	--	--	FR FD 5
20	6	X	--	--	--	--	--	--	--	--	--	--	FR FD 6
220	12	X	21.57	S	12/06/1954	80.0	--	24	--	--	05/22/1947	--	FR FD 7
--	6	--	--	--	--	5.0	--	--	--	--	01/01/1904	--	FR FD 8
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FD 9
48	6	X	16	R	12/29/1952	9.0	68	16	0.17	2	12/29/1952	--	FR FD 10
8	6	X	19	R	11/05/1950	10.0	79	19	.17	2	11/05/1950	--	FR FD 11
17	6	X	42	R	11/18/1954	7.0	120	42	.09	1	11/18/1954	--	FR FD 12
38	6	X	56	R	08/01/1955	8.0	90	56	.24	1	08/01/1955	--	FR FD 13
--	--	--	38.52	S	03/21/1956	--	--	--	--	--	--	--	FR FD 14
43	6	X	33	R	01/21/1955	2.0	120	33	.02	1	01/21/1955	--	FR FD 15
18	6	X	18	R	08/01/1955	24.0	29	18	2.18	1	08/01/1955	Q	FR FD 16
23	6	X	34	R	12/19/1952	19.0	--	34	--	--	12/19/1952	--	FR FD 17
12	6	X	25	R	06/16/1952	2.0	25	25	--	.5	06/16/1952	--	FR FD 18
22	6	X	30	R	05/30/1952	3.0	50	30	.15	1	05/30/1952	--	FR FD 19
22	6	X	35	R	04/12/1952	10.0	40	35	2.00	1	04/12/1952	--	FR FD 20
6	6	X	40	R	05/27/1952	5.0	60	40	.25	1	05/27/1952	--	FR FD 21
22	6	X	25	R	01/10/1953	8.0	100	25	.11	1	01/10/1953	--	FR FD 22
--	--	X	30	R	06/28/1950	10.0	--	30	--	6	06/28/1950	--	FR FD 23
30	6	X	10	R	03/27/1952	2.0	90	10	.03	.5	03/27/1952	--	FR FD 24
23	6	X	30	R	09/27/1952	12.0	70	30	.30	2	09/27/1952	--	FR FD 25
22	6	X	12	R	06/10/1955	7.0	12	12	--	3	06/10/1955	--	FR FD 26
26	6	X	32	R	02/16/1956	4.0	--	32	--	1	02/16/1956	--	FR FD 27
25	6	X	--	--	--	--	--	--	--	--	--	--	FR FD 28
42	6	X	26	R	12/08/1954	12.0	50	26	.50	.5	12/08/1954	--	FR FD 29
23	6	X	60	R	07/16/1955	10.0	70	60	1.00	1	07/16/1955	--	FR FD 30
54	6	O	23	R	12/20/1948	4.0	--	23	--	4	12/20/1948	--	FR FD 31
24	6	X	8	R	09/06/1955	10.0	10	8	6.67	.3	09/06/1955	--	FR FD 32
9	6	X	6	R	08/19/1955	15.0	12	6	2.50	--	08/19/1955	--	FR FD 33
18	6	X	30	R	12/17/1948	6.0	--	30	--	.5	12/17/1948	--	FR FD 34
16	6	X	10	R	11/03/1955	6.0	28	10	.33	.3	11/03/1955	--	FR FD 35
15	6	X	20.00	S	08/16/1956	--	--	--	--	--	--	--	FR FD 36
23	6	X	25	R	02/20/1950	6.0	35	25	.60	1	02/20/1950	--	FR FD 37
--	--	X	10	R	01/16/1951	10.0	--	10	--	2	01/16/1951	--	FR FD 38
42	6	X	35	R	01/23/1956	8.0	150	35	.07	1	01/23/1956	--	FR FD 39
64	48	W	59.82	S	03/30/1956	2.0	--	--	--	.5	01/01/1954	--	FR FD 40
20	48	W	12.53	S	03/30/1956	--	--	--	--	--	--	--	FR FD 41
7	6	X	20	R	07/05/1955	3.0	82	20	.05	.5	07/05/1955	--	FR FD 42
--	--	--	37.02	S	08/31/1956	--	--	--	--	--	--	--	FR FD 43
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FD 44
--	--	--	--	--	--	--	--	--	--	--	--	--	FR FD 45
36	6	X	20	R	11/06/1956	--	--	--	--	--	--	--	FR FD 46
--	6	--	23.66	S	11/06/1956	--	--	--	--	--	--	--	FR FD 47
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FD 48
--	--	--	12.05	S	12/06/1954	--	--	--	--	--	--	--	FR FD 49
75	8	X	32	R	11/04/1968	150.0	222	32	.79	24	11/04/1968	G,A	FR FD 50
63	6	X	15.08	S	12/03/1968	45.0	--	17	--	24	10/26/1968	G	FR FD 51
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FD 52
--	6	X	--	--	--	--	--	--	--	--	--	Q	FR FD 53
--	6	X	--	--	--	--	--	--	--	--	--	--	FR FD 54
34	6	X	28	R	07/13/1965	12.0	--	28	--	2	07/13/1965	--	FR FD 56
57	6	X	40	R	08/22/1968	4.0	--	40	--	--	08/22/1968	--	FR FD 57
--	6	X	--	--	--	--	--	--	--	--	--	--	FR FD 58
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FD 59
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FD 60
36	6	X	37	R	12/06/1966	1.5	138	37	.02	2	12/06/1966	--	FR FD 61
43	6	X	15	R	08/05/1966	100.0	--	15	--	1	08/05/1966	--	FR FD 62
85	6	X	30	R	03/07/1966	25.0	--	30	--	1	03/07/1966	--	FR FD 63
23	6	X	35	R	12/15/1965	3.0	--	35	--	1	12/15/1965	--	FR FD 64
16	6	X	40	R	08/28/1965	3.5	--	40	--	3	08/28/1965	--	FR FD 65
48	6	X	40	R	07/02/1966	1.0	375	40	.0	1	07/02/1966	--	FR FD 66
59	6	X	40	R	02/12/1969	5.0	145	40	.05	1	02/12/1969	--	FR FD 67
48	6	X	40	R	09/26/1968	100.0	68	40	3.57	1	09/26/1968	--	FR FD 68
21	6	X	--	--	--	25.0	--	--	--	8	12/03/1963	--	FR FD 69
25	6	X	23	R	10/15/1969	7.0	--	23	--	1	10/15/1969	--	FR FD 70
32	5	X	25	R	07/29/1969	10.0	75	25	.20	1	07/29/1969	--	FR FD 71
19	6	X	--	--	--	7.0	--	--	--	2	08/07/1968	--	FR FD 72
25	6	X	30	R	01/06/1966	4.0	122	30	.04	1	01/06/1966	--	FR FD 73
22	6	X	50	R	07/20/1965	2.0	--	50	--	1	07/20/1965	--	FR FD 74
42	6	X	42	R	01/13/1972	20.0	170	42	.16	1	01/13/1972	O,Q	FR FD 83
19	6	X	55	R	06/15/1970	10.0	150	55	.11	1	06/15/1970	--	FR FD 84
40	8	X	20	R	05/05/1981	134.0	179	20	.84	12	05/05/1981	O	FR FD 85
41	6	X	40	R	08/14/1979	30.0	525	40	.06	1	08/14/1979	--	FR FD 86
32	8	X	40	R	03/11/1980	40.0	280	40	.17	1	03/11/1980	--	FR FD 87
29	6	X	20	R	03/20/1959	5.0	60	20	.13	2	03/20/1959	--	FR FD 88
62	6	X	30	R	04/01/1963	85.0	75	30	1.89	10	04/01/1963	--	FR FD 89
34	8	X	30	R	10/16/1977	100.0	70	30	2.50	3	10/16/1977	--	FR FD 90
60	6	X	40	R	01/20/1981	20.0	200	40	.13	4	01/20/1981	O,Q	FR FD 91
--	--	--	32	R	09/26/1953	6.0	80	32	.13	--	09/26/1953	Q	FR FE 1
8	6	X	30	R	12/01/1954	8.0	55	30	.32	--	12/01/1954	--	FR FE 2

Table 1.—Records of selected wells in Frederick County, Md.—continued

WELL NUMBER	STATE PERMIT NUMBER	OWNER	DRILLER	YEAR COMP-LETED	ALTI-TUDE (FT)	TOPO SET-TING	DEPTH OF WELL (FT)	USE OF WATER	GEOLOGIC UNIT
FR FE 3	FR-00-6679	HARMON, CHARLES R	A R KEYSER	1950	500	S	86	H	300URBN
FR FE 4	--	HARMON, CHARLES R	--	1941	500	S	85	S	300URBN
FR FE 5	--	DENNY, GEORGE P	JARBOE GROVE	--	470	H	60	H,S	300URBN
FR FE 6	--	URBANA ZION CHURCH	--	--	445	V	29	H	300URBN
FR FE 7	--	STRONGHOLD INC	W B HILTON	1929	560	S	59	H	300SGFM
FR FE 8	FR-00-8657	POLLACK, A D	DEWEY BROWN	1951	430	H	59	H	300URBN
FR FE 9	--	HOPE HILL M E CHURCH	--	--	380	S	96	U	300IJMV
FR FE 10	FR-01-4839	FLINT HILL CHURCH	L F EASTERDAY	1954	460	H	100	T	300URBN
FR FE 11	FR-00-9216	STRONGHOLD INC	W B HILTON	1952	490	S	88	H	300URBN
FR FE 12	--	MYERS, R F	--	--	380	H	65	S	300URBN
FR FE 14	--	DAVIS, JOHN W	W B HILTON	1910	440	H	75	H,S	300URBN
FR FE 15	--	DAVIS, JOHN W	--	--	440	S	75	U	300URBN
FR FE 16	FR-00-4471	DAVIS, JOHN W	W B HILTON	1949	430	F	102	H,S	300URBN
FR FE 17	--	POHLMANN	--	--	450	H	54	U	300URBN
FR FE 18	--	BABCOCK, WILLIAM T	--	1946	460	F	62	H	300URBN
FR FE 19	FR-02-0824	SALE, CARLYLE	W B HILTON	1955	450	H	146	H	300SMCK
FR FE 20	FR-01-9734	KENDALL, FRANK	W B HILTON	1955	390	H	128	H	300URBN
FR FE 21	--	KENDALL, FRANK	--	--	390	H	46	U	300URBN
FR FE 22	--	COSGROVE	--	--	440	H	127	S,H	300URBN
FR FE 23	FR-01-1708	WEBB, CLAUDE A	A R KEYSER	1953	420	S	58	H	300URBN
FR FE 24	FR-72-0275	COLUMBIA-COMUS INC	A R KEYSER	1971	450	V	443	U	300URBN
FR FE 25	FR-73-1214	MILLS, BASIL	KEYSER-GARVER	1973	470	H	200	C	300GLRM
FR FE 26	FR-72-0411	HUMBLE OIL CO	ROBERT CLINE	1972	420	S	82	U	300URBN
FR FE 27	FR-73-4954	EXXON OIL CO	L F EASTERDAY	1977	445	F	125	C	300URBN
FR FE 28	FR-73-3978	URBANA FIRE CO	L F EASTERDAY	1977	460	F	405	F	300URBN
FR FE 29	FR-03-6146	FR CO BD OF ED	KEYSER-GARVER	1959	445	F	250	T	300URBN
FR FE 30	FR-73-3308	FR CO BD OF ED	KEYSER-GARVER	1976	445	F	250	T	300URBN
FR FE 31	FR-73-8546	GEORGIA-CONN INC	ROBERT CLINE	1981	480	H	400	C	300URBN
FR FE 32	FR-69-0444	PETER PAN INN	ROBERT CLINE	1969	450	F	400	C	300URBN
FR FE 33	FR-69-0464	BAUMGARDNER, RICHARD	ROBERT CLINE	1969	450	F	370	C	300URBN
FR FE 34	FR-73-1210	BAUMGARDNER, RICHARD	ROBERT CLINE	1973	450	F	320	C	300URBN
FR FE 35	FR-73-1930	PETER PAN INN	ROBERT CLINE	1974	450	F	300	C	300URBN
FR FE 36	FR-73-5167	PETER PAN INN	ROBERT CLINE	1977	450	F	500	C	300URBN
FR FE 37	FR-73-5167	PETER PAN INN	ROBERT CLINE	1977	450	F	300	U	300URBN
FR FE 38	FR-73-5167	PETER PAN INN	ROBERT CLINE	1977	450	F	400	U	300URBN
FR FF 1	--	PAGE, ARNO G	--	--	440	S	41	H	300URBN
FR FF 3	FR-01-8508	BEALL, BEARY	HARRY GREEN	1955	450	H	86	H	300SMCK
FR FF 4	FR-01-3338	FENWICK, CHARLES	W B HILTON	1953	390	S	58	H	300SMCK
FR FF 5	--	MERSON, BLAKE	--	--	390	S	41	U	300SMCK
FR FF 6	FR-02-0830	MERSON, BLAKE	HARRY GREEN	1955	390	S	90	H	300SMCK
FR FF 7	--	ASKINS, W C	--	--	460	S	109	H	300URBN
FR FF 8	--	DAY, JAMES M	HARRY GREEN	1952	640	H	100	H	300IJMV
FR FF 9	FR-73-5909	DORSEY, VERNON	L F EASTERDAY	1978	600	S	220	U	300IJMV
FR FF 10	FR-73-2667	RIDGEWAY, BERNARD	KEYSER-GARVER	1975	400	S	282	U	300SMCK
FR FF 11	FR-73-8192	RIDGEWAY, BERNARD	RALPH MAYNE	1981	400	S	--	C,H	300SMCK
FR FF 12	FR-71-0568	BURDETTE BROS	L F EASTERDAY	1971	470	S	120	C	300SMCK
FR FF 13	FR-73-3238	SCHULTZ, ELIZABETH	ROBERT CLINE	1976	420	S	145	C	300SMCK
FR FF 14	FR-71-0061	PLEASANT GROVE CHURCH	ROBERT CLINE	1970	540	S	120	T	300URBN
FR FG 1	FR-73-6036	KEMPTON ELEM SCHOOL	ROBERT CLINE	1978	670	S	200	T	300MRBG
FR GD 1	FR-00-8037	HENDERSON, E A	W B HILTON	1951	290	S	71	H	377FDCK
FR GD 2	FR-00-3829	HARRIS, J P	H STOTTLEMYER	1949	340	S	80	S	231NOXF
FR GD 3	FR-00-3411	HARRIS, J P	H STOTTLEMYER	1949	340	S	80	S	231NOXF
FR GD 4	--	C & O CANAL NATL PARK	HOFFMAN WELL	1969	220	V	50	U	110ALVM
FR GD 5	--	C & O CANAL NATL PARK	HOFFMAN WELL	1969	220	V	305	H	377FDCK
FR GE 1	FR-00-4586	JOHNSON, CHARLES H	H STOTTLEMYER	1952	460	S	70	H	300SGFM

Table 1.—Records of selected wells in Frederick County, Md.—continued

DEPTH (FT)	CASING DIAMETER (IN)	FINISH	WATER LEVEL (FT)	SOURCE	DATE MEASURED	YIELD (GPM)	PUMPING LEVEL (FT)	STATIC LEVEL (FT)	SPECIFIC CAPACITY (GPM/FT)	HOURS PUMPED	DATE OF TEST	OTHER DATA AVAILABLE	WELL NUMBER
11	6	X	35	R	09/18/1950	4.0	52	35	0.24	1	09/18/1950	--	FR FE 3
10	6	X	--	--	--	10.0	--	--	--	12	01/01/1941	--	FR FE 4
--	6	--	38.33	S	08/30/1956	10.0	--	--	--	--	--	--	FR FE 5
--	6	--	20.66	S	08/30/1956	--	--	--	--	--	--	--	FR FE 6
23	6	X	26.06	S	09/17/1956	24.0	--	--	--	--	04/03/1929	--	FR FE 7
25	6	X	40	R	10/23/1951	6.0	--	40	--	1	10/23/1951	--	FR FE 8
--	6	--	51.70	S	02/21/1956	--	--	--	--	--	--	--	FR FE 9
14	6	X	70	R	04/21/1954	8.0	92	70	.36	--	04/21/1954	--	FR FE 10
42	6	X	22.81	S	03/30/1956	20.0	45	20	.80	1	01/03/1952	--	FR FE 11
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FE 12
30	6	X	35	R	01/01/1931	5.0	--	--	--	--	--	Q	FR FE 14
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FE 15
12	6	X	16	R	08/16/1949	5.0	30	16	.36	1	08/16/1949	--	FR FE 16
--	6	--	28.35	S	04/11/1956	--	--	--	--	--	--	--	FR FE 17
--	6	--	30	R	04/30/1947	--	--	--	--	--	--	Q	FR FE 18
40	6	X	76	R	09/28/1955	3.5	--	76	--	1	09/28/1955	--	FR FE 19
22	6	X	48	R	07/03/1955	2.5	--	48	--	1	07/03/1955	Q	FR FE 20
46	36	W	35.96	S	04/11/1956	--	--	--	--	--	--	--	FR FE 21
--	6	--	--	--	--	--	--	--	--	--	--	Q	FR FE 22
12	6	X	20	R	02/13/1953	4.0	50	20	.13	.5	02/13/1953	--	FR FE 23
94	6	X	10	R	11/22/1971	50.0	--	10	--	1	11/22/1971	--	FR FE 24
48	6	X	60	R	09/24/1973	8.0	200	60	.06	1	09/24/1973	--	FR FE 25
60	6	X	27	R	04/01/1972	100.0	82	27	1.82	1	04/01/1972	O	FR FE 26
19	6	X	30	R	10/06/1977	40.0	125	30	.42	2	10/06/1977	--	FR FE 27
57	6	X	40	R	01/26/1977	30.0	405	40	.08	3	01/26/1977	--	FR FE 28
64	6	X	35	R	10/22/1959	30.0	35	35	--	24	10/22/1959	--	FR FE 29
77	6	X	19	R	02/10/1976	30.0	62	19	.70	24	02/10/1976	--	FR FE 30
70	6	X	47	R	07/24/1981	12.0	400	47	.03	2	07/24/1981	--	FR FE 31
41	6	X	40	R	05/14/1969	2.0	400	40	.01	1	05/14/1969	--	FR FE 32
18	6	X	40	R	05/16/1969	20.0	370	40	.06	2	05/16/1969	--	FR FE 33
22	6	X	60	R	09/06/1973	12.0	320	60	.05	1	09/06/1973	--	FR FE 34
23	6	X	40	R	05/30/1974	30.0	300	40	.12	1	05/30/1974	--	FR FE 35
42	6	X	72	R	09/23/1977	11.0	500	72	.03	1	09/23/1977	--	FR FE 36
--	--	X	--	--	--	3.0	--	--	--	--	09/23/1977	--	FR FE 37
--	--	X	--	--	--	3.0	--	--	--	--	09/23/1977	--	FR FE 38
4	6	X	17.18	S	04/11/1956	--	--	--	--	--	--	Q	FR FF 1
18	6	X	10	R	03/20/1955	5.0	20	10	.50	1	03/20/1955	Q	FR FF 3
19	6	X	16	R	09/17/1953	5.0	32	16	.31	1	09/17/1953	Q	FR FF 4
--	6	--	9.25	S	04/05/1956	--	--	--	--	--	--	--	FR FF 5
20	6	X	16	R	09/20/1955	6.0	80	16	.09	2	09/20/1955	--	FR FF 6
--	6	--	--	--	--	--	--	--	--	--	--	--	FR FF 7
--	6	X	--	--	--	--	--	--	--	--	--	--	FR FF 8
19	6	X	40	R	08/03/1978	2.0	160	40	.02	2	08/03/1978	--	FR FF 9
40	6	X	32	R	05/27/1975	1.0	42	32	.10	2	05/27/1975	--	FR FF 10
--	--	X	--	--	--	--	--	--	--	--	--	--	FR FF 11
40	6	X	30	R	06/08/1971	20.0	120	30	.22	1	06/08/1971	--	FR FF 12
64	6	X	14	R	01/30/1976	20.0	145	14	.15	1	01/30/1976	O,Q	FR FF 13
39	6	X	30	R	08/12/1970	15.0	120	30	.17	1	08/12/1970	--	FR FF 14
60	6	X	39	R	06/14/1978	25.0	200	39	.16	1	06/14/1978	--	FR FG 1
30	6	X	39	R	06/12/1951	16.0	52	39	1.23	1	06/12/1951	--	FR GD 1
9	6	X	45	R	06/04/1949	5.0	75	45	.17	1	06/04/1949	--	FR GD 2
9	6	X	45	R	06/04/1949	5.0	75	45	.17	1	06/04/1949	--	FR GD 3
--	--	--	--	--	--	--	--	--	--	--	--	--	FR GD 4
49	6	X	20	R	04/01/1969	17.0	--	20	--	2	04/01/1969	G	FR GD 5
25	6	X	10	R	10/20/1949	30.0	--	10	--	1	10/20/1949	--	FR GE 1

Table 2.—Records of selected springs in Frederick County, Md.—Explanation of codes

USE OF WATER

C	Commercial
H	Domestic
I	Irrigation
P	Public supply
Q	Aquaculture
R	Recreation
S	Stock
T	Institution
U	Unused
Z	Other

TOPOGRAPHIC SETTING

C	Stream channel
D	Depression
F	Flat
H	Hilltop
S	Hillside
V	Valley flat
W	Upland draw

IMPROVEMENTS

B	Boxed basin
C	Concrete basin
G	Gallery
H	Springhouse
L	Lined
N	None
R	Pipe
T	Trough
Z	Other

REMARKS

A	Additional data available in Otton and Hilleary (1985)
Q	Water-quality data included in tables 7 and 8

GEOLOGIC UNIT CODE

Code	Geologic Unit
110MNWS	Mountain Wash
110QRNR	Quaternary System
231GBRG	Gettysburg Shale
231NOXF	New Oxford Formation
231NOXFB	New Oxford Formation Basal Limestone Conglomerate
300IJMV	Ijamsville Formation
300LBRN	Libertytown Metarhyolite
300MRBG	Marburg Formation
300SMCK	Sams Creek Metabasalt
300URBN	Urbana Formation
367GROV	Grove Limestone
377ANTM	Antietam Formation
377FDCK	Frederick Limestone
337HRPR	Harpers Formation
377LUDN	Loudoun Formation
377WVRN	Weverton Formation
400CTCN	Catoctin Metabasalt
400GBGG	Granodiorite and Biotite Granite Gneiss
400MTRL	Metarhyolite and associated Pyroclastic Sediments
400PCMB	Precambrian Erathem

Table 2.—Records of selected springs in Frederick County, Md.—continued

LOCAL NUMBER	OWNER	USE OF WATER	ALTI-TUDE	TOPO SETTING	AQUIFER	IMPROVE-MENTS	DISCHARGE (GALLONS PER MINUTE)	DATE	REMARKS
FR AD 1	FRED CO ROADS COMM	Z	1140	S	400MTRL	B	1	08/12/1954	
							13	05/31/1956	
FR AD 11	VICTOR CULLEN SCHOOL	T	1350	S	400CTCN	Z	60	06/12/1956	
FR AD 36	ROWE	U	995	C	400MTRL	H	--	--	Q, BLUE METARHYOLITE UNIT
FR AD 44	CATOCTIN MOUNTAIN PARK	U	1420	S	400MTRL	B	--	--	Q
FR AE 2	GRABLE, C H	H	515	S	110MNWS	Z	--	--	
FR AE 15	DERLINGER, R B	P	780	S	400CTCN	G	15	05/31/1956	
FR AE 18	LATE, HOWARD	U	970	S	377HRPR	N	3	06/13/1956	
FR AE 19	MESNER		670	V	377LUDN	Z	10	06/13/1956	
FR AE 25	RIAL	U	505	S	377HRPR	--	5	06/15/1956	
FR AE 30	MT ST MARYS COLLEGE	T	760	S	377WVRN	G	27	09/21/1956	
FR AE 36	YOUNG, JOSEPH	H	710	S	377LUDN	G	4	11/14/1956	
FR AE 39	CITY OF EMMITSBURG	U	880	S	400CTCN	H	4	12/12/1980	A
FR BC 74	--	S	1120	S	400CTCN	H	--	--	
FR BC 79	--	H	1200	S	400MTRL	H	--	--	
FR BD 3	CATOCTIN MOUNTAIN PARK	T	1387	S	400MTRL	C	10	11/01/1953	
FR BD 4	do.	T	1400	S	400MTRL	C	3	11/03/1953	
FR BD 10	REED, WADE	H	690	S	110QRNR	C	4	07/17/1956	Q, COLLUVIAL FAN DEPOSITS
FR BD 26	MD STATE HIGHWAY ADM	Z	950	S	400CTCN	C	1	11/09/1956	Q, PUBLIC ROADSIDE SPRING
FR BD 39	CATOCTIN MOUNTAIN PARK	U	1370	V	400MTRL	C	1	06/29/1965	
FR BD 54	TOWN OF THURMONT	P	740	S	377WVRN	B	17	11/13/1980	A
FR BD 72	CATOCTIN MOUNTAIN PARK	U	1400	S	400MTRL	R	--	--	UNIFORMLY APHANITIC METARHYOLITE
FR BD 73	do.	U	1445	S	400MTRL	L	--	--	
FR BD 106	do.	U	1460	S	400MTRL	C	--	--	Q
FR BD 107	do.	H	1480	S	400MTRL	C	--	--	Q
FR BD 108	do.	U	1410	S	400MTRL	R	--	--	Q
FR BD 110	do.	U	1460	S	400MTRL	C	--	--	Q
FR BE 4	TREPENING	T	420	V	231GBRG	--	--	--	
FR BE 5	do.	T	420	V	231GBRG	--	--	--	
FR BE 60	MORAVIAN CHURCH	U	440	S	231GBRG	T	20	04/12/1973	
FR BE 117	LAWYER, STRAFFORD	H,S	445	S	231GBRG	H	--	--	
FR CB 4	ECHO LAKE CAMP	T	915	V	400CTCN	H	15	04/25/1956	
FR CB 7	TOWN OF MYERSVILLE	P	1160	S	400MTRL	C	22	05/11/1956	A, Q, SERIES OF 7 SPRINGS
FR CB 10	--	U	1050	S	400MTRL	B	--	--	
FR CC 6	GROSSNICKLE, C F	H,S	790	S	400CTCN	C	6	04/26/1956	Q
FR CC 9	LEWIS, LAWRENCE	H	890	S	400MTRL	C	3	00/00/1956	
FR CD 16	CATOCTIN CHURCH	U	470	F	110MNWS	C	--	--	
FR CD 38	MARYLAND FISHERIES ADM	T	820	S	377WVRN	H	20	11/13/1980	A, Q
FR CE 2	WISE	H,S	340	V	231NOXF	C	3	09/07/1951	
FR CE 19	GLADE HAVEN FARM	S	330	W	377FDCK	H	25	10/01/1969	
FR CE 24	SMITH, J A	S	310	V	367GROV	H	30	06/04/1970	
FR CE 25	do.	S	310	V	367GROV	--	25	06/04/1970	
FR CE 26	STUP, MARION	U	280	V	377FDCK	N	10	06/25/1970	
FR CE 27	FRITZ, DONALD	U	295	V	367GROV	N	10	SPRING 1970	
							0	07/07/1970	
FR CE 28	BAUCHER, E	U	310	V	367GROV	N	20	07/07/1970	
FR CE 29	PATTERSON, JEFFERSON	U	310	V	367GROV	--	2	07/07/1970	
FR CF 5	STEVENS	H	420	S	377ANTM	H	--	--	
FR CF 6	MAIN, PAUL H	H	400	V	377ANTM	L	--	--	
FR CF 31	FILLERS	U	355	S	367GROV	H	200	10/13/1969	
FR CF 34	GONNER, ALBERT	U	550	S	300IJMV	--	10	10/26/1956	
FR CF 38	GLADE VALLEY FARMS	S	350	V	367GROV	N	90	10/13/1969	
FR DB 3	HINDS, R H	U	600	S	400CTCN	C	15	04/01/1955	Q
FR DC 21	THAYER	H	480	S	400GBGG	C	4	10/20/1955	Q
FR DC 22	RYDZEK, FRANKLIN	H	620	S	400CTCN	B	3	10/21/1955	
FR DC 24	HOLTER, E F	H	570	S	400CTCN	--	2	10/21/1955	HAS JET PUMP
FR DC 29	WILLIS, WILLIAM	H	685	S	400CTCN	L	5	08/15/1956	Q
FR DC 32	TOWN OF MIDDLETOWN	P	1060	S	400CTCN	R	--	--	
FR DC 33	do.	P	870	S	400CTCN	R	--	--	
FR DC 34	do.	P	830	S	400CTCN	R	--	--	
FR DC 35	do.	P	1150	S	400CTCN	R	--	--	
FR DC 36	do.	P	900	S	400CTCN	R	--	--	Q
FR DD 11	BRADDOCK WATER CO	P	740	V	377LUDN	C	--	--	
FR DD 12	do.	P	960	V	400CTCN	C	35	11/00/1962	
FR DD 38	WILEY, JOHN	H	350	V	231NOXF	L	8	06/11/1956	
FR DD 39	do.	S	340	V	231NOXF	L	8	06/11/1956	
FR DD 75	MD STATE HIGHWAY ADM	Z	780	S	377WVRN	R	1	11/20/1980	A, USED BY PASSERS-BY
FR DD 78	GAMBRILL STATE PARK	R	1400	S	377WVRN	H	5	05/26/1980	A
FR DD 80	BRADDOCK WATER CO	P	725	S	377LUDN	R	--	--	
FR DD 87	LONG, ROLAND	H	440	S	377HRPR	--	100	05/13/1970	
FR DD 178	MONTVIEW PROPERTY	U	315	V	377FDCK	H	270	04/21/1981	A
FR DE 2	U S ARMY	I	340	V	377FDCK	H	40	--	Q

Table 2.—Records of selected springs in Frederick County, Md.—continued

LOCAL NUMBER	OWNER	USE OF WATER	ALTI-TUDE	TOPO SETTING	AQUIFER	IMPROVE-MENTS	DISCHARGE (GALLONS PER MINUTE)	DATE	REMARKS
FR DE 42	DENIKE, THOMAS	Q	285	V	367GROV	C	1020	10/31/1980	A, SUPPLIES FISH PONDS
FR DE 67	MOORE, CASPER C	S	295	V	377FDCK	--	86	06/08/1970	
FR DE 68	FREDERICK CO DEV CO	S	310	V	377FDCK	N	40	06/24/1970	
FR DE 70	U S ARMY	U	335	V	377FDCK	--	10	06/25/1970	
FR DE 71	do.	U	335	V	377FDCK	--	150	06/25/1970	
FR DE 77	GLADE VALLEY FARMS	S	320	V	377FDCK	N	10	06/30/1970	
FR DE 78	do.	S	295	V	377FDCK	H	20	06/30/1970	
FR DE 79	THOMAS, MRS CLAYBORNE	S	335	V	367GROV	--	10	06/30/1970	
FR DE 81	STULL, MONROE	S	275	V	377FDCK	--	50	03/26/1971	
FR DE 82	SNYDOR, PAUL	U	275	V	377FDCK	N	200	03/26/1971	
FR DF 6	BEARD, PAUL	C	450	S	300IJMV	--	--	--	USED FOR MILK HOUSE
FR DF 11	SUMMERS, E P	H,S	460	W	300IJMV	L	15	12/24/1955	Q
FR DF 21	LEHIGH PORTLAND CEMENT	U	330	S	377FDCK	H	15	10/01/1969	
FR DF 22	C & M REALTY	S	350	D	377FDCK	--	--	--	
FR DF 24	do.	S	385	V	--	N	10	10/20/1969	ON CONTACT BETWEEN 377ANTM & 377FDCK
FR DF 25	EAGLEHEAD COUNTRY CLUB	U	400	S	300LBRN	H	5	04/16/1981	A
FR DG 1	SCHNEIDER, ROY	H,S	590	W	300MRBG	H	--	--	
FR DG 11	BOHN, CLYDE M	H,S	515	W	300IJMV	B	50	08/29/1955	2 SPRINGS WITH SAME NO. 200 FT APART, DISCHARGE MEAS. FROM UPPER SPR ONLY
FR DH 2	CLIFFORD, OSCAR	H	550	W	300IJMV	L	18	08/30/1955	
FR EB 23	MORRISON, J E	H	720	S	400PCMB	G	5	08/27/1956	
FR EB 26	STEPLER, HOWARD	U	520	W	400PCMB	G	2	09/21/1956	
FR EC 2	AHALT, C E	S	385	S	400PCMB	C	2	10/21/1955	Q
FR EC 4	DIEHLE, CHARLES	--	600	S	400CTCN	C	3	10/21/1955	
FR ED 3	HIMES, JOSEPH	S	410	W	231NOXF	C	0	11/09/1954	
FR ED 4	do.	S	405	W	231NOXF	B	0	11/09/1954	
FR ED 42	PRIOR, W A	H,S	285	S	367GROV	G	22	08/30/1956	
FR ED 59	FRED CO BD OF EDUC	U	290	H	377FDCK	C	--	--	
FR ED 64	STONE, GEORGE	S	295	V	377FDCK	N	50	05/26/1970	
FR ED 65	PAGE, JOSEPH	S	310	V	377FDCK	--	15	05/26/1970	
FR ED 66	do.	S	295	V	377FDCK	N	--	--	
FR ED 67	GEISINGER, J D	S	295	V	377FDCK	N	80	05/26/1970	
FR ED 68	do.	S	295	V	377FDCK	--	70	05/26/1970	
FR ED 69	CLEMSON, MARGARET	S	265	V	367GROV	N	5	05/26/1970	
FR ED 70	JONES, ALBERT	S	275	V	377FDCK	H	70	05/27/1970	
FR ED 71	do.	S	275	V	377FDCK	N	30	05/27/1970	
FR ED 82	INTERSTATE HOUSING	U	350	V	231NOXFB	N	402	04/20/1971	
FR ED 83	do.	U	350	V	231NOXFB	--	30	04/20/1971	
FR ED 84	do.	H	350	V	231NOXFB	H	100	04/20/1971	
FR EE 100	CITY OF FREDERICK	U	295	V	377FDCK	H	--	--	ADAMSTOWN MEMBER
FR EF 22	ZIMMERMAN, E E	H,S	460	W	300SMCK	G	30	03/25/1956	
FR EG 5	DERR	H,C	630	S	300MRBG	B	--	--	
FR EG 13	GARDNER, FRANK A	S	625	W	300MRBG	H	100	08/30/1955	
FR FB 10	TOWN OF BRUNSWICK	U	310	V	400PCMB	R	3	04/02/1958	Q, USED FOR OBSERVATION BY USGS 1958-1974
FR FB 12	do.	O	300	V	400PCMB	R	9	01/04/1960	A, Q, USED FOR OBSERVATION BY USGS FROM 1974
FR FC 8	BELL, WILLIAM	S	260	V	400PCMB	C	3	12/15/1955	
FR FC 12	REED, C E	S	490	S	400CTCN	H	3	12/21/1955	
FR FC 13	HALE, L P	H	290	S	400PCMB	C	3	12/21/1955	
FR FC 15	REED, C E	H	550	S	400CTCN	C	12	12/21/1955	Q
FR FC 22	C & O CANAL NATL PARK	U	230	V	231NOXFB	B	350	04/22/1981	A, Q
FR FD 55	THREE SPRING FISHERIES	Q	270	D	377FDCK	C	247	03/19/1969	
FR FD 75	CARROLLTON FARM	S	280	V	377FDCK	H	83	05/27/1970	
FR FD 76	do.	S	280	V	377FDCK	--	5	05/27/1970	
FR FD 77	do.	S	280	V	377FDCK	--	40	05/27/1970	
FR FD 78	do.	S	280	V	377FDCK	--	200	05/27/1970	
FR FD 79	SPRINGDALE GROVE FARM	S	270	V	377FDCK	--	75	05/27/1970	
FR FD 80	LEVICK, ROBERT	S	270	V	377FDCK	--	200	05/27/1970	
FR FD 81	RUSSELL, JOHN	S	290	V	377FDCK	--	30	06/30/1970	
FR FD 82	MILLS, EUGENE	S	280	V	377FDCK	--	15	06/30/1970	
FR FE 13	MYERS, R F	H	380	W	300URBN	G	15	00/00/1952	Q
FR FF 2	PAGE, ARNO G	S	440	S	300URBN	C	--	--	Q

Table 3.—Water levels in observation wells in Frederick County, Md.

(F, FLOWING)

WELL FR AD 37

ALTITUDE OF LAND SURFACE 1020 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 2.87 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 5.16 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 21, 1982	4.21	DEC 21, 1982	4.65	APR 27, 1983	2.87	AUG 22, 1983	5.03
AUG 13	4.64	JAN 25, 1983	4.24	MAY 23	3.18	SEP 27	5.16
OCT 07	4.96	FEB 24	3.53	JUN 20	3.74	NOV 02	4.47
NOV 22	4.79	MAR 24	3.05	JUL 27	4.65		

WELL FR AD 40

ALTITUDE OF LAND SURFACE 1030 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 0.09 FEET BELOW LAND SURFACE DATUM JUN 20, 1983.

LOWEST WATER LEVEL 11.81 FEET BELOW LAND SURFACE DATUM NOV 22, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 11, 1982	8.81	NOV 22, 1982	11.81	MAR 24, 1983	3.63	JUL 27, 1983	10.33
JUL 13	10.26	DEC 21	11.36	APR 27	1.10	AUG 22	10.84
AUG 13	11.20	JAN 25, 1983	10.12	MAY 23	3.82	SEP 27	11.64
OCT 07	11.69	FEB 24	2.90	JUN 20	0.09	NOV 02	9.83

WELL FR AE 50

ALTITUDE OF LAND SURFACE 655 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 1.45 FEET ABOVE LAND SURFACE DATUM JUN 20, 1983.

LOWEST WATER LEVEL 8.81 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 15, 1982	-3.43	NOV 22, 1982	-7.58	MAR 24, 1983	-4.07	JUL 27, 1983	-7.17
JUL 13	-6.78	DEC 21	-6.98	APR 27	-2.91	AUG 22	-8.22
AUG 13	-7.36	JAN 25, 1983	-4.62	MAY 23	-0.55	SEP 27	-8.81
OCT 07	-7.98	FEB 24	-2.28	JUN 20	1.45	NOV 02	-7.03

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR AF 27

ALTITUDE OF LAND SURFACE 385 FEET.

RECORDS AVAILABLE 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.62 FEET ABOVE LAND SURFACE DATUM MAY 23, 1983.

LOWEST WATER LEVEL 3.74 FEET BELOW LAND SURFACE DATUM NOV 22, 1982.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 08, 1982	0.39	DEC 21, 1982	-1.68	JUN 20, 1983	-0.04	DEC 27, 1983	-1.14
JUN 15	0.61	JAN 25, 1983	-1.39	JUL 27	-2.52	FEB 06, 1984	-1.51
JUL 21	-1.66	FEB 23	-0.26	AUG 22	-3.59	MAR 02	-1.30
AUG 24	-2.09	MAR 23	-0.	SEP 27	-3.60	APR 02	-0.74
OCT 04	-3.28	APR 27	0.30	NOV 02	-2.98	MAY 02	-0.53
NOV 22	-3.74	MAY 23	0.62	28	-2.10	JUN 07	-0.90

WELL FR AF 39

ALTITUDE OF LAND SURFACE 425 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 1.49 FEET BELOW LAND SURFACE DATUM MAY 23, 1983.

LOWEST WATER LEVEL 19.36 FEET BELOW LAND SURFACE DATUM NOV 22, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 11, 1982	4.46	NOV 22, 1982	19.36	MAR 23, 1983	2.11	JUL 27, 1983	8.74
JUL 12	5.94	DEC 21	10.34	APR 27	1.78	AUG 22	14.10
AUG 24	14.24	JAN 25, 1983	4.63	MAY 23	1.49	SEP 27	18.48
OCT 04	18.66	FEB 23	2.45	JUN 20	4.24	NOV 02	14.50

WELL FR BD 1

ALTITUDE OF LAND SURFACE 630 FEET.

RECORDS AVAILABLE 1946 - 1977.

HIGHEST WATER LEVEL 7.10 FEET BELOW LAND SURFACE DATUM APR 30, 1964.

LOWEST WATER LEVEL 32.62 FEET BELOW LAND SURFACE DATUM NOV 13, 1952.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1946	13.61	OCT 03, 1947	15.74	MAY 02, 1949	9.88	APR 04, 1950	8.09
DEC 02	14.54	NOV 21	17.95	23	10.22	MAY 04	8.84
18	14.71	DEC 26	17.50	31	12.20	JUN 05	9.82
FEB 07, 1947	11.25	JAN 22, 1948	17.80	JUL 06	12.61	JUL 11	12.38
MAR 08	12.73	FEB 19	11.39	AUG 02	10.35	AUG 10	13.69
15	10.43	MAY 05	8.13	12	11.81	SEP 07	14.32
APR 04	11.41	JUN 09	10.61	SEP 09	13.14	OCT 11	13.02
12	11.70	JUL 12	12.19	OCT 04	12.61	27	12.97
MAY 05	10.96	OCT 07	30.44	NOV 30	13.66	31	12.44
31	9.64	JAN 07, 1949	7.61	DEC 05	13.55	DEC 05	9.07
JUN 06	11.17	FEB 09	8.85	JAN 04, 1950	11.46	JAN 04, 1951	11.22
JUL 11	12.50	21	8.87	FEB 09	10.07	FEB 06	9.96
AUG 13	13.88	MAR 05	9.83	28	10.41	MAR 05	9.11
SEP 06	14.48	APR 05	10.86	MAR 03	10.82	20	8.90

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BD 1

DATE	WATER LEVEL
APR 03, 1951	7.95
MAY 03	9.28
AUG 01	12.42
SEP 04	13.36
OCT 04	16.43
08	16.38
NOV 06	14.52
FEB 06, 1952	7.94
MAR 03	10.85
APR 09	8.43
16	8.78
MAY 13	9.47
JUN 10	13.00
JUL 01	15.14
23	16.35
AUG 04	23.29
SEP 05	18.83
30	17.87
NOV 13	32.62
25	15.57
JAN 05, 1953	13.92
FEB 02	11.40
MAR 10	11.65
APR 15	10.07
21	11.18
MAY 04	11.95
JUL 23	16.85
AUG 05	19.55
SEP 02	30.58
OCT 08	30.87
NOV 03	22.85
DEC 02	18.71
FEB 02, 1954	16.82
03	16.92
MAR 08	14.03
APR 08	13.55
MAY 06	11.37
JUN 10	14.69
28	22.62
JUL 14	18.85
AUG 03	22.64
31	17.53
SEP 29	19.11
OCT 05	19.21
NOV 05	18.45
30	18.28
DEC 29	17.51
JAN 06, 1955	16.69
26	17.21
FEB 15	16.08
28	14.83
APR 04	12.19
05	12.25
MAY 09	12.27
JUN 13	13.90
JUL 11	13.99
AUG 10	15.71
26	12.85
SEP 07	13.51
OCT 07	14.55
10	14.51
12	14.63
NOV 08	14.39
DEC 07	14.65
27	14.98
FEB 01, 1956	14.70
MAR 07	12.12
16	9.97
APR 04	10.74
MAY 01	11.90
07	11.82
17	12.46
JUN 05	13.12
JUL 11	14.52
17	14.70
AUG 02	14.11
06	14.16
SEP 13	15.47
OCT 24	15.99
NOV 01, 1956	15.39
DEC 06	14.63
JAN 08, 1957	13.35
FEB 13	12.55
MAR 13	10.87
APR 29	12.02
MAY 02	12.43
JUL 10	14.36
AUG 13	16.72
SEP 11	17.19
OCT 08	17.54
NOV 07	17.08
21	15.80
JAN 07, 1958	12.50
FEB 04	11.35
MAR 12	11.06
APR 11	9.21
MAY 19	10.17
JUN 18	11.47
JUL 29	13.44
SEP 16	15.19
OCT 29	14.48
DEC 18	15.48
JAN 06, 1959	15.12
FEB 03	14.25
MAR 17	11.41
APR 27	11.32
JUN 01	11.94
08	12.22
JUL 21	13.47
AUG 31	14.15
SEP 01	14.15
OCT 14	15.34
DEC 01	15.68
03	15.73
JAN 04, 1960	14.22
20	13.77
FEB 01	13.84
MAR 09	9.90
APR 04	8.03
18	10.56
JUN 06	11.50
JUL 01	11.74
19	12.61
AUG 01	13.20
SEP 07	14.63
08	14.62
OCT 03	14.85
17	15.42
NOV 01	14.99
DEC 05	15.92
JAN 04, 1961	16.00
09	16.02
FEB 15	15.87
MAR 01	9.90
15	10.89
MAY 03	9.22
JUN 05	11.58
07	11.68
JUL 05	13.43
12	13.68
AUG 02	14.42
15	15.02
SEP 05	15.49
20	16.31
OCT 05	16.69
25	17.40
30	17.46
DEC 05	16.60
07	16.66
JAN 04, 1962	15.49
17	12.93
FEB 07	12.89
21	13.27
MAR 05	9.82
21	9.56
APR 02	9.99
MAY 01	10.27
03	10.15
JUN 06, 1962	12.34
11	12.45
JUL 05	13.39
18	13.73
AUG 01	14.64
28	16.15
SEP 04	16.32
OCT 04	16.44
09	16.70
NOV 08	17.27
19	16.35
DEC 03	16.69
JAN 07, 1963	16.77
08	16.75
FEB 27	14.33
MAR 08	10.40
APR 01	11.26
10	11.80
MAY 08	12.19
23	12.64
JUN 06	11.97
JUL 01	13.02
10	13.52
31	14.47
AUG 22	15.47
SEP 04	16.27
OCT 01	17.16
NOV 06	17.77
DEC 17	15.02
19	15.05
JAN 21, 1964	12.69
FEB 26	11.53
MAR 06	8.75
APR 02	11.06
16	9.32
30	7.10
MAY 20	11.51
JUN 02	12.56
JUL 01	14.00
09	14.25
AUG 05	14.22
SEP 02	15.95
OCT 02	16.64
NOV 03	17.22
10	17.40
DEC 07	16.25
JAN 05, 1965	15.30
07	15.28
FEB 01	13.32
MAR 10	8.99
APR 15	11.07
MAY 03	10.56
JUN 04	12.40
29	13.51
AUG 02	15.14
SEP 03	16.29
30	16.71
NOV 03	16.39
DEC 06	16.37
JAN 03, 1966	16.55
FEB 02	16.71
MAR 03	10.40
31	14.27
MAY 02	9.34
25	12.04
JUN 09	12.62
24	13.44
JUL 05	14.20
20	22.32
OCT 11	23.10
DEC 13	16.05
JAN 25, 1967	15.35
MAR 13	14.90
APR 18	13.48
JUN 27	15.28
AUG 29	16.91
SEP 28	18.14
OCT 25	16.77
NOV 21, 1967	16.31
DEC 21	14.24
FEB 27, 1968	14.82
MAR 25	12.52
APR 24	14.25
MAY 23	16.23
JUN 26	14.66
JUL 18	16.05
23	16.34
AUG 29	18.45
NOV 19	21.35
DEC 19	20.10
JAN 08, 1969	20.05
16	24.70
FEB 06	21.20
20	19.20
MAR 11	19.12
24	19.13
APR 22	17.38
MAY 21	17.82
JUN 23	18.35
JUL 23	20.40
AUG 21	19.10
NOV 20	19.43
DEC 16	16.80
JAN 13, 1970	16.98
FEB 20	14.23
MAR 24	13.60
APR 22	12.72
MAY 21	15.20
JUN 23	16.31
JUL 22	15.42
AUG 24	16.98
SEP 23	18.81
OCT 20	18.85
NOV 23	15.32
DEC 21	14.92
JAN 21, 1971	14.49
FEB 22	11.76
MAR 24	13.63
APR 21	14.45
MAY 25	14.30
JUN 25	15.83
SEP 08	17.98
OCT 21	17.50
DEC 09	12.86
JAN 03, 1972	14.33
FEB 15	11.52
MAR 01	10.95
APR 06	12.98
MAY 17	13.10
JUL 19	13.44
SEP 28	18.05
NOV 06	18.70
DEC 13	13.90
JAN 03, 1973	14.25
24	13.30
MAR 02	14.05
APR 12	10.80
MAY 24	15.02
JUL 06	14.75
AUG 15	16.37
OCT 03	16.45
NOV 16	17.92
DEC 26	13.84
JAN 30, 1974	13.38
MAR 06	14.60
APR 17	10.89
MAY 29	13.53
JUL 12	14.96
AUG 13	16.14
SEP 18	17.50
OCT 31	16.75
DEC 09	15.95
JAN 02, 1975	14.81
16	13.04
FEB 27	9.98
APR 10	11.73
MAY 16	11.16

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BD 1

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 25, 1975	12.72	JAN 15, 1976	11.85	AUG 13, 1976	14.56	MAY 04, 1977	12.14
AUG 06	14.40	MAR 02	12.23	OCT 06	13.12	JUN 15	13.55
SEP 15	14.70	APR 01	9.38	NOV 17	12.63	JUL 21	14.66
29	11.76	27	12.20	JAN 04, 1977	12.82		
DEC 08	12.63	MAY 17	12.83	FEB 15	12.70		
29	11.82	JUN 23	13.78	MAR 29	10.22		

WELL FR BD 7

ALTITUDE OF LAND SURFACE 1150 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 0.50 FEET BELOW LAND SURFACE DATUM JUN 20, 1983.

LOWEST WATER LEVEL 3.19 FEET BELOW LAND SURFACE DATUM NOV 02, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 1982	F	NOV 22, 1982	1.92	MAR 24, 1983	F	JUL 27, 1983	1.32
JUL 09	1.24	DEC 21	2.67	APR 27	F	AUG 22	2.51
AUG 25	1.31	JAN 25, 1983	1.08	MAY 23	F	SEP 27	2.12
OCT 07	1.44	FEB 24	0.86	JUN 20	0.50	NOV 02	3.19

WELL FR BD 44

ALTITUDE OF LAND SURFACE 1580 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 13.79 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 31.82 FEET BELOW LAND SURFACE DATUM NOV 22, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 1982	17.97	NOV 22, 1982	31.82	MAR 24, 1983	14.35	JUL 27, 1983	26.65
JUL 09	23.46	DEC 21	31.45	APR 27	13.79	AUG 22	29.22
AUG 25	29.04	JAN 25, 1983	29.94	MAY 23	19.22	SEP 27	31.08
OCT 07	30.85	FEB 24	25.30	JUN 20	22.13	NOV 02	31.23

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BD 96

ALTITUDE OF LAND SURFACE 1150 FEET.

RECORDS AVAILABLE 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 8.80 FEET BELOW LAND SURFACE DATUM APR 10, 1983.

LOWEST WATER LEVEL 45.23 FEET BELOW LAND SURFACE DATUM OCT 12, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 05, 1982	13.70	JUL 15, 1982	26.10	OCT 09, 1982	38.90	DEC 18, 1982	31.72
06	13.43	16	26.30	10	39.08	19	31.68
07	12.85	17	26.60	11	39.13	20	31.85
08	13.30	18	26.93	12	39.20	21	32.15
09	14.10	19	27.10	13	39.25	22	32.30
10	14.55	20	27.15	14	39.00	23	32.30
11	14.15	21	27.50	15	38.90	24	32.20
12	14.50	22	27.83	16	39.20	25	32.10
13	15.25	23	28.10	17	39.40	26	31.95
14	16.10	24	28.45	18	39.50	27	31.93
15	16.95	25	28.75	19	39.60	28	31.70
16	17.55	26	29.10	20	39.68	29	31.38
17	17.92	27	29.25	21	39.75	30	31.46
18	17.55	28	28.10	22	39.80	31	31.46
19	17.35	29	28.10	23	39.87	JAN 01, 1983	31.38
20	17.70	30	28.32	24	39.95	02	31.32
21	18.28	31	28.38	25	40.00	03	31.40
22	18.80	AUG 01	28.85	26	39.85	04	31.50
23	19.17	02	29.10	27	39.60	05	31.50
24	19.52	03	29.40	28	39.75	06	31.29
25	19.87	04	29.60	29	39.87	07	31.20
26	19.95	05	29.68	30	39.98	08	31.37
27	17.20	06	29.98	31	40.03	09	31.40
28	14.40	07	30.15	NOV 01	40.10	10	31.40
29	13.60	08	30.20	02	40.15	11	28.70
30	14.20	25	34.00	03	40.20	12	26.40
MAY 01	15.10	26	34.38	04	40.20	13	26.12
02	16.05	27	34.57	05	39.30	14	26.20
03	17.05	28	34.75	06	38.40	15	26.25
04	18.00	29	35.10	07	38.70	16	26.43
05	18.80	30	35.40	08	38.90	17	26.60
06	19.40	31	35.55	09	39.07	18	26.85
07	19.80	SEP 01	35.75	10	39.19	19	27.05
08	20.10	02	35.75	11	39.21	20	27.15
09	20.60	03	36.02	12	39.21	21	27.15
10	21.00	04	36.40	13	38.60	22	27.15
11	21.40	05	36.72	14	37.70	23	27.03
12	21.70	06	37.00	15	38.00	24	26.10
13	22.00	07	37.23	16	38.00	25	25.40
14	22.30	08	37.33	17	38.40	26	24.97
15	22.55	09	37.32	18	38.55	27	24.60
16	22.77	10	37.20	19	38.65	28	24.40
17	23.00	11	37.47	20	38.65	29	24.25
18	23.02	12	37.80	21	38.65	30	24.13
19	23.10	13	38.10	22	38.67	31	23.98
20	23.35	14	38.32	23	38.63	FEB 01	23.98
21	23.63	15	38.38	24	38.73	02	23.90
22	23.80	16	38.40	25	38.85	03	17.75
23	23.90	17	38.65	26	38.95	04	14.17
24	23.85	18	38.93	27	39.05	05	14.48
25	23.90	19	38.10	28	39.10	06	14.72
26	24.10	20	39.18	29	38.15	07	15.45
27	24.30	21	39.10	30	34.45	08	16.45
28	24.32	22	38.90	DEC 01	34.40	09	17.20
29	24.03	23	38.50	02	34.12	10	17.90
30	24.92	24	38.58	03	34.16	11	18.50
31	23.80	25	38.75	04	34.20	12	19.20
JUN 01	23.78	26	38.83	05	34.25	13	19.50
02	23.95	27	38.80	06	34.50	14	19.85
03	24.18	28	36.95	07	34.85	15	20.27
04	24.00	29	36.38	08	34.92	16	20.45
05	23.33	30	37.58	09	35.08	17	20.55
06	17.00	OCT 01	37.73	10	35.12	18	20.60
07	14.17	02	38.00	11	35.15	19	20.60
JUL 09	24.93	03	38.20	12	35.30	20	20.60
10	25.18	04	38.35	13	35.50	21	20.40
11	25.27	05	38.50	14	35.62	22	19.05
12	25.48	06	38.60	15	35.64	23	14.65
13	25.73	07	38.60	16	35.40	24	12.70
14	25.90	08	38.75	17	32.00	25	12.73

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BD 96

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 26, 1983	13.45	MAY 16, 1983	21.90	AUG 03, 1983	33.38	OCT 21, 1983	38.60
27	14.10	17	18.90	04	33.30	22	38.50
28	14.70	18	16.60	05	33.30	23	38.25
MAR 01	14.88	19	16.18	06	33.00	24	32.25
02	15.25	20	15.05	07	33.40	25	29.40
03	16.40	21	14.18	08	33.80	26	28.68
04	17.30	22	13.40	09	34.22	27	28.42
05	18.05	23	12.10	10	34.60	28	28.78
06	18.28	24	13.00	11	34.70	29	29.40
07	17.80	25	14.00	12	34.50	30	29.63
08	16.60	26	14.72	13	34.70	31	29.72
09	11.85	27	15.55	14	34.95	NOV 01	29.75
10	11.15	28	16.50	15	35.30	02	29.70
11	11.60	29	17.20	16	35.60	03	29.50
12	12.40	30	18.00	17	35.90	04	29.35
13	13.30	31	18.80	18	36.10	05	29.32
14	14.35	JUN 01	19.60	19	36.33	06	29.40
15	15.50	02	20.25	20	36.68	07	29.60
16	16.50	03	20.65	21	37.00	08	29.75
17	17.25	04	20.80	22	37.35	09	29.75
18	17.30	05	19.30	23	37.67	10	29.73
19	9.15	06	18.35	24	37.78	11	27.30
20	9.70	07	18.97	25	38.00	12	23.87
21	9.88	08	19.70	26	38.27	13	23.40
22	10.90	09	20.30	27	38.50	14	23.42
23	11.90	10	20.80	28	38.63	15	23.40
24	12.75	11	21.25	29	38.80	16	22.28
25	14.20	12	21.63	30	38.98	17	21.48
26	15.30	13	22.00	31	39.13	18	21.10
27	15.60	14	22.35	SEP 01	39.12	19	20.88
28	12.90	15	22.67	02	39.05	20	20.72
29	12.97	16	23.00	03	39.25	21	19.40
30	13.70	17	23.30	04	39.45	22	17.95
31	14.60	18	23.25	05	39.63	23	17.50
APR 01	15.60	19	22.30	06	39.80	24	17.45
02	16.10	20	22.46	07	40.00	25	17.15
03	10.95	21	21.25	08	40.18	26	14.30
04	11.20	22	21.10	09	40.35	27	14.20
05	12.05	23	21.45	10	40.50	28	14.28
06	12.85	24	21.82	11	40.65	29	12.95
07	13.70	25	22.32	12	40.83	30	13.30
08	13.72	26	22.78	13	40.95	DEC 01	14.10
09	12.38	27	23.20	14	40.95	02	14.90
10	8.80	28	23.52	15	40.97	03	15.80
11	9.75	29	23.73	16	41.05	04	15.80
12	10.80	30	24.02	17	41.10	05	13.60
13	11.90	JUL 01	24.30	18	41.37	06	13.55
14	12.80	02	24.65	19	41.60	07	12.68
15	12.90	03	24.93	20	41.80	08	13.40
16	10.20	04	25.20	21	41.97	20	17.45
17	11.10	05	25.30	22	41.97	21	18.30
18	12.10	06	25.55	23	41.92	22	18.32
19	13.20	07	25.83	24	42.02	23	15.45
20	14.60	08	26.05	25	42.13	24	15.20
21	15.60	09	26.27	26	42.22	25	16.10
22	16.50	10	26.55	27	42.30	26	17.05
23	17.05	11	26.84	28	42.70	27	17.80
24	16.60	12	27.20	29	43.10	28	18.12
25	12.80	13	27.50	30	43.30	29	17.20
26	9.00	14	27.82	OCT 01	43.30	30	17.43
27	11.70	15	28.10	02	42.40	31	18.00
28	12.65	16	28.47	03	42.50	JAN 01, 1984	18.50
29	13.95	17	28.80	04	43.00	02	18.90
30	15.10	18	29.20	05	43.40	03	19.25
MAY 01	16.00	19	29.48	06	43.60	04	19.54
02	16.90	20	29.65	07	44.00	05	19.80
03	17.68	21	29.58	08	44.32	06	20.15
04	18.50	22	29.90	09	44.70	07	20.47
05	19.20	23	30.12	10	45.00	08	20.82
06	19.83	24	30.45	11	45.22	09	21.02
07	20.28	25	30.78	12	45.23	10	21.08
08	20.55	26	31.15	13	41.90	11	21.40
09	20.95	27	31.53	14	38.55	12	21.60
10	21.28	28	31.90	15	37.40	13	21.68
11	21.55	29	32.25	16	37.90	14	21.80
12	21.78	30	32.70	17	38.20	15	21.90
13	21.98	31	33.00	18	38.40	16	21.97
14	22.13	AUG 01	33.22	19	38.55	17	22.18
15	22.13	02	33.20	20	38.70	18	22.18

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BD 96

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 19, 1984	22.35	JAN 29, 1984	20.90	FEB 08, 1984	18.34	FEB 18, 1984	10.90
20	22.52	30	20.10	09	18.60	19	11.65
21	22.70	31	19.08	10	18.80	20	12.55
22	22.80	FEB 01	18.58	11	18.68	21	12.79
23	22.85	02	18.73	12	17.10	MAR 02	12.27
24	22.83	03	18.80	13	16.10	APR 02	10.17
25	22.50	04	18.65	14	12.00	MAY 02	19.57
26	22.28	05	18.30	15	8.93	JUN 06	20.10
27	22.05	06	17.80	16	9.54		
28	21.60	07	17.95	17	10.20		

WELL FR BD 101

ALTITUDE OF LAND SURFACE 630 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 1.28 FEET BELOW LAND SURFACE DATUM MAY 23, 1983.

LOWEST WATER LEVEL 25.87 FEET BELOW LAND SURFACE DATUM JAN 25, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 08, 1982	11.21	NOV 22, 1982	25.06	APR 28, 1983	1.37	SEP 26, 1983	22.92
JUN 15	2.46	DEC 21	25.70	MAY 23	1.28	NOV 03	24.60
JUL 19	12.55	JAN 25, 1983	25.87	JUN 23	8.19		
AUG 13	15.35	FEB 23	23.93	JUL 27	15.04		
OCT 05	21.90	MAR 23	16.32	AUG 24	18.87		

WELL FR BE 65

ALTITUDE OF LAND SURFACE 518 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 44.55 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 64.39 FEET BELOW LAND SURFACE DATUM DEC 21, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 16, 1982	57.04	DEC 21, 1982	64.39	APR 27, 1983	44.55	AUG 22, 1983	55.02
AUG 13	61.36	JAN 25, 1983	63.97	MAY 23	48.09	SEP 27	59.52
OCT 04	61.47	FEB 23	61.14	JUN 21	48.74	NOV 02	59.66
NOV 22	64.03	MAR 23	58.56	JUL 27	50.93		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR BE 73

ALTITUDE OF LAND SURFACE 468 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 1.78 FEET BELOW LAND SURFACE DATUM APR 20, 1982.

LOWEST WATER LEVEL 27.18 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 1982	1.78	NOV 22, 1982	21.62	APR 27, 1983	16.10	SEP 27, 1983	27.18
JUN 08	3.02	DEC 21	22.01	MAY 23	2.19	NOV 02	18.32
JUL 13	3.94	JAN 25, 1983	18.40	JUN 21	2.97	21	9.69
AUG 13	13.80	FEB 23	3.36	JUL 27	8.70	28	5.44
OCT 04	19.94	MAR 23	1.83	AUG 23	18.91		

WELL FR CB 19

ALTITUDE OF LAND SURFACE 820 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 90.80 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 125.18 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 28, 1982	100.80	DEC 21, 1982	107.21	APR 26, 1983	90.80	AUG 24, 1983	98.11
AUG 25	103.45	JAN 27, 1983	107.35	MAY 21	93.93	SEP 27	125.18
OCT 07	107.47	FEB 24	103.16	JUN 20	94.53	NOV 02	107.96
NOV 23	111.29	MAR 24	97.40	JUL 26	99.17		

WELL FR CC 33

ALTITUDE OF LAND SURFACE 940 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 14.66 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 21.03 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16, 1982	15.78	NOV 23, 1982	18.15	APR 26, 1983	14.66	SEP 27, 1983	21.03
JUN 17	15.24	DEC 21	16.28	MAY 24	15.02	NOV 02	19.38
JUL 13	17.93	JAN 27, 1983	16.37	JUN 21	16.28		
AUG 25	18.50	FEB 24	15.25	JUL 26	19.00		
OCT 07	19.32	MAR 24	15.38	AUG 24	20.10		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CD 46

ALTITUDE OF LAND SURFACE 400 FEET.

RECORDS AVAILABLE 1982 - 1984.

HIGHEST WATER LEVEL 7.76 FEET BELOW LAND SURFACE DATUM MAR 18, 1983.

LOWEST WATER LEVEL 9.95 FEET BELOW LAND SURFACE DATUM SEP 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 19, 1982	9.26	MAY 28, 1982	8.98	SEP 01, 1982	9.83	NOV 10, 1982	9.27
MAR 17	8.40	29	8.80	02	9.80	11	9.30
19	8.47	30	8.88	03	9.80	12	9.03
20	8.44	31	8.93	04	9.85	13	8.98
21	8.46	JUN 01	9.00	05	9.87	14	9.07
22	8.51	02	9.05	06	9.89	15	9.12
23	8.58	03	9.14	07	9.92	16	9.15
24	8.63	04	8.85	08	9.87	17	9.06
25	8.63	05	8.52	09	9.85	18	9.30
26	8.63	06	8.60	10	9.84	19	9.34
27	8.67	07	8.73	11	9.89	20	9.33
28	8.78	08	8.94	12	9.94	21	9.32
29	8.78	09	8.92	13	9.95	22	9.28
30	8.78	10	8.65	14	9.81	23	9.28
31	8.57	11	8.65	15	9.82	24	9.29
APR 01	8.58	12	8.55	16	9.82	25	9.35
02	8.72	13	8.13	17	9.93	26	9.35
03	8.25	14	8.15	18	9.93	27	9.36
04	8.35	15	8.35	19	9.94	28	8.70
05	8.45	16	8.35	20	9.85	29	8.64
06	8.22	17	8.33	21	9.82	30	8.89
07	8.42	18	8.50	22	9.75	DEC 01	8.85
08	8.50	19	8.64	23	9.76	02	8.89
09	8.40	20	8.79	24	9.75	03	8.94
10	8.42	JUL 04	8.86	25	9.75	04	8.95
11	8.43	05	9.17	26	9.40	05	8.98
12	8.51	06	9.23	27	9.28	06	9.00
13	8.55	07	9.30	28	9.49	07	9.06
14	8.60	08	9.36	29	9.53	08	9.09
15	8.66	09	9.40	30	9.57	09	9.11
16	8.72	10	9.42	OCT 01	9.56	10	9.15
17	8.42	11	9.40	02	9.60	11	9.15
20	8.71	12	9.40	03	9.61	12	9.17
21	8.76	13	9.46	04	9.60	13	9.17
22	8.82	14	9.53	05	9.60	14	9.24
23	8.85	15	9.51	06	9.56	15	9.18
24	8.90	16	9.55	07	9.60	16	8.66
25	8.95	17	9.66	08	9.57	17	8.80
26	8.54	18	9.66	09	9.58	18	8.87
27	8.50	19	9.66	10	9.59	19	8.97
28	8.55	20	9.66	11	9.58	20	8.98
29	8.65	21	9.66	12	9.56	21	8.98
30	8.70	22	9.66	13	9.41	22	9.00
MAY 01	8.79	23	9.66	14	9.41	23	9.07
02	8.86	24	9.66	15	9.47	24	9.07
03	8.94	25	9.69	16	9.51	25	9.10
04	9.00	26	9.72	17	9.54	26	9.05
05	9.06	27	9.75	18	9.56	27	9.00
06	9.13	28	9.66	19	9.51	28	9.00
07	9.17	29	9.53	20	9.52	29	9.00
08	9.09	30	9.46	21	9.49	30	9.08
09	9.10	31	9.46	22	9.48	31	9.12
10	9.22	AUG 01	9.50	23	9.60	JAN 01, 1983	9.12
11	9.30	02	9.54	24	9.60	02	9.14
12	9.33	03	9.52	25	9.34	03	9.15
13	9.35	04	9.58	26	9.40	04	9.19
14	9.42	05	9.50	27	9.45	05	9.16
15	9.44	06	9.54	28	9.50	06	9.15
16	9.49	07	9.55	29	9.50	07	9.18
17	9.46	08	9.55	30	9.50	08	9.20
18	9.31	09	9.53	31	9.50	09	9.24
19	9.25	10	9.58	NOV 01	9.49	10	8.62
20	9.18	24	9.74	02	9.48	11	8.62
21	9.29	25	9.75	03	9.43	12	8.85
22	9.28	26	9.84	04	8.89	13	8.92
23	9.17	27	9.84	05	8.97	14	9.00
24	9.14	28	9.82	06	9.12	15	8.95
25	9.14	29	9.88	07	9.18	16	8.96
26	9.18	30	9.88	08	9.20	17	9.05
27	9.23	31	9.86	09	9.22	18	9.12

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CD 46

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 19, 1983	9.18	MAY 02, 1983	8.84	AUG 04, 1983	9.81	OCT 31, 1983	9.05
20	9.25	03	8.75	05	8.70	NOV 01	9.08
21	9.32	04	8.75	06	8.88	02	9.10
22	9.35	05	8.82	07	9.17	03	9.06
23	9.02	06	8.92	24	9.67	04	9.08
24	8.94	07	8.97	25	9.63	05	9.12
25	9.01	08	8.86	26	9.64	06	9.13
26	9.02	09	8.91	27	9.68	07	9.15
27	9.05	10	9.00	28	9.68	08	9.20
28	9.06	11	9.08	29	9.65	09	9.22
29	9.08	12	9.15	30	9.68	10	8.60
30	8.95	13	9.18	31	9.67	11	8.63
31	8.96	14	9.15	SEP 01	9.64	12	8.70
FEB 01	9.04	15	8.79	02	9.70	13	8.80
02	8.50	16	8.44	03	9.70	14	8.86
03	8.40	17	8.55	04	9.74	15	8.74
04	8.62	18	8.70	05	9.72	16	8.74
05	8.72	19	8.42	06	9.74	17	8.80
06	8.84	20	8.45	07	9.77	18	8.88
07	8.78	21	8.45	08	9.81	19	8.94
08	8.79	22	8.40	09	9.81	20	8.50
09	8.86	23	8.45	10	9.81	21	8.50
10	8.90	24	8.55	11	9.86	22	8.71
11	8.97	25	8.70	12	9.86	23	8.78
12	8.90	26	8.74	13	9.75	24	8.40
13	8.95	27	8.52	14	9.75	25	8.31
14	8.98	28	8.68	15	9.54	26	8.55
15	8.93	29	8.60	16	9.79	27	8.67
16	8.87	30	8.60	17	9.78	28	8.39
17	8.84	31	8.75	18	9.79	29	8.42
18	8.77	JUN 01	8.80	19	9.84	30	8.59
19	8.77	02	8.90	20	9.85	DEC 01	8.65
20	8.77	03	8.90	21	9.62	02	8.73
21	8.72	04	8.72	22	9.62	03	8.65
22	8.64	05	8.72	23	9.70	04	8.35
23	8.60	06	8.87	24	9.73	05	8.52
24	8.60	07	8.96	25	9.70	06	8.30
25	8.63	08	9.05	26	9.71	07	8.40
26	8.63	09	9.17	27	9.70	08	8.53
27	8.70	10	9.19	28	9.73	09	8.60
28	8.74	11	9.25	29	9.73	10	8.64
MAR 01	8.64	12	9.30	30	9.61	11	8.68
02	8.64	24	8.86	OCT 01	9.60	12	8.23
03	8.74	25	8.93	02	9.60	13	8.22
04	8.78	26	9.05	03	9.61	14	8.23
05	8.80	27	9.13	04	9.61	15	8.27
06	8.55	28	8.80	05	9.58	16	8.40
07	8.50	29	8.72	06	9.59	17	8.47
08	8.36	30	8.80	07	9.64	18	8.53
09	8.40	JUL 01	8.93	08	9.63	19	8.58
10	8.42	02	8.92	09	9.63	20	8.73
11	8.50	03	9.15	10	9.65	21	8.77
12	8.56	04	9.23	11	9.58	22	8.30
13	8.64	05	9.25	12	9.27	23	8.38
14	8.70	06	9.25	13	9.16	24	8.52
15	8.73	07	9.36	14	9.16	25	8.65
16	8.80	08	9.41	15	9.28	26	8.80
17	8.83	09	9.44	16	9.40	27	8.90
18	7.76	10	9.46	17	9.36	28	8.71
19	7.95	11	9.50	18	9.38	29	8.73
20	8.26	12	9.01	19	9.41	30	8.75
21	8.29	13	9.01	20	9.30	31	8.85
22	8.40	14	9.40	21	9.30	JAN 01, 1984	8.98
23	8.50	26	9.76	22	9.34	02	8.99
24	8.60	27	9.70	23	8.97	03	8.97
APR 25	8.16	28	9.73	24	8.77	04	8.94
26	8.26	29	9.77	25	8.77	05	8.90
27	8.36	30	9.77	26	8.78	06	8.86
28	8.45	31	9.75	27	8.87	07	8.86
29	8.57	AUG 01	9.78	28	8.94	23	9.16
30	8.90	02	9.78	29	8.98	FEB 21	8.67
MAY 01	8.92	03	9.80	30	9.03		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CD 74

ALTITUDE OF LAND SURFACE 530 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 6.16 FEET BELOW LAND SURFACE DATUM MAR 23, 1983.

LOWEST WATER LEVEL 11.16 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 13, 1982	10.45	JAN 25, 1983	8.57	MAY 23, 1983	6.67	NOV 01, 1983	8.63
OCT 07	10.79	FEB 23	6.17	JUN 22	6.37		
NOV 22	10.03	MAR 23	6.16	JUL 27	10.17		
DEC 22	8.73	APR 27	6.29	SEP 27	11.16		

WELL FR CD 88

ALTITUDE OF LAND SURFACE 410 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 15.29 FEET BELOW LAND SURFACE DATUM FEB 23, 1983.

LOWEST WATER LEVEL 17.20 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 22, 1982	16.14	FEB 23, 1983	15.29	MAY 23, 1983	15.62	AUG 24, 1983	17.03
JAN 12, 1983	15.92	MAR 23	15.51	JUN 22	15.34	SEP 27	17.20
25	16.07	APR 27	15.40	JUL 27	16.82	NOV 01	16.36

WELL FR CF 46

ALTITUDE OF LAND SURFACE 418 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 8.17 FEET BELOW LAND SURFACE DATUM APR 28, 1983.

LOWEST WATER LEVEL 18.82 FEET BELOW LAND SURFACE DATUM OCT 07, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 1982	14.40	NOV 23, 1982	17.42	APR 28, 1983	8.17	SEP 27, 1983	17.46
JUN 08	15.34	DEC 20	16.84	MAY 23	11.66	NOV 02	16.90
JUL 13	15.10	JAN 25, 1983	16.32	JUN 21	14.95		
AUG 13	16.59	FEB 23	14.31	JUL 26	15.92		
OCT 07	18.82	MAR 23	8.46	AUG 23	16.89		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CF 48

ALTITUDE OF LAND SURFACE 338 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 10.08 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 14.28 FEET BELOW LAND SURFACE DATUM NOV 03, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 22, 1982	10.53	DEC 20, 1982	12.91	APR 27, 1983	10.08	AUG 23, 1983	13.34
AUG 13	10.56	JAN 25, 1983	13.36	MAY 23	10.44	SEP 28	14.26
OCT 04	10.74	FEB 23	11.09	JUN 20	10.76	NOV 03	14.28
NOV 23	13.41	MAR 23	10.25	JUL 27	12.85		

WELL FR CF 50

ALTITUDE OF LAND SURFACE 423 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 38.73 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 42.78 FEET BELOW LAND SURFACE DATUM SEP 28, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 1982	40.86	NOV 24, 1982	42.38	APR 27, 1983	38.73	SEP 28, 1983	42.78
JUN 08	41.02	DEC 20	41.92	MAY 23	40.04	NOV 03	42.04
JUL 13	41.56	JAN 25, 1983	41.74	JUN 20	41.38		
AUG 13	41.49	FEB 23	40.58	JUL 27	41.88		
OCT 04	41.10	MAR 23	39.91	AUG 23	42.64		

WELL FR CF 52

ALTITUDE OF LAND SURFACE 490 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 10.39 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 29.41 FEET BELOW LAND SURFACE DATUM NOV 24, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 21, 1982	16.45	DEC 20, 1982	18.47	APR 27, 1983	10.39	AUG 23, 1983	19.64
AUG 13	16.98	JAN 25, 1983	18.33	MAY 23	12.28	SEP 27	21.17
OCT 04	25.46	FEB 23	13.77	JUN 20	15.17	NOV 02	18.90
NOV 24	29.41	MAR 24	11.59	JUL 27	17.26		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CG 1

ALTITUDE OF LAND SURFACE 600 FEET.

RECORDS AVAILABLE 1946 TO CURRENT YEAR.

HIGHEST WATER LEVEL 28.63 FEET BELOW LAND SURFACE DATUM SEP 29, 1975.

LOWEST WATER LEVEL 42.02 FEET BELOW LAND SURFACE DATUM OCT 05, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 01, 1946	37.20	OCT 27, 1947	39.19	MAR 07, 1949	34.93	NOV 23, 1954	40.19
08	37.48	NOV 03	39.30	14	35.57	DEC 29	39.29
15	37.80	12	37.50	21	36.10	FEB 09, 1955	38.97
22	37.98	17	38.13	28	36.40	APR 05	35.97
29	38.20	24	38.50	APR 04	36.70	MAY 11	38.10
AUG 05	38.32	DEC 01	38.25	11	36.75	JUN 07	38.60
12	38.30	08	38.30	18	36.23	JUL 14	38.61
19	38.45	15	38.44	25	36.34	AUG 01	39.68
26	38.49	22	38.53	MAY 02	36.60	SEP 13	36.44
SEP 03	38.50	29	38.50	09	36.70	OCT 07	38.71
09	38.67	JAN 05, 1948	35.57	16	36.78	12	37.81
16	38.80	12	36.47	23	36.90	NOV 01	36.83
23	38.88	19	37.04	30	37.25	DEC 01	37.96
30	38.88	26	37.47	JUN 13	37.73	JAN 04, 1956	38.80
OCT 07	39.05	FEB 02	37.75	20	37.87	FEB 01	38.52
14	39.02	09	37.96	27	38.04	MAR 01	36.44
21	39.15	16	36.70	JUL 04	38.23	APR 02	35.27
28	38.95	23	36.20	11	38.40	MAY 01	36.65
NOV 04	39.08	MAR 01	36.05	18	35.25	JUN 04	38.17
12	39.22	08	34.39	25	35.42	27	38.72
18	39.22	15	34.98	AUG 01	36.15	JUL 09	38.71
25	39.28	22	35.48	08	36.80	AUG 06	39.79
DEC 02	39.38	29	35.26	15	37.20	SEP 10	38.94
09	39.42	APR 05	35.32	22	37.47	OCT 01	39.14
16	39.46	19	34.50	29	37.73	NOV 05	38.52
23	39.30	26	35.08	SEP 05	38.00	DEC 03	39.06
30	39.23	MAY 03	35.60	12	38.24	JAN 02, 1957	36.50
JAN 06, 1947	38.74	10	34.45	17	38.35	FEB 11	34.76
13	38.84	17	35.00	26	38.56	MAR 13	35.65
20	38.50	24	35.70	OCT 10	38.75	APR 01	36.94
27	37.52	31	36.10	17	38.90	MAY 02	36.75
FEB 03	36.52	JUN 07	36.60	24	38.98	JUN 03	38.34
12	37.20	14	37.00	JAN 20, 1950	39.24	JUL 08	39.18
17	37.38	28	36.30	MAR 03	38.10	30	39.50
24	37.69	JUL 05	37.56	APR 24	37.55	SEP 13	40.24
MAR 04	37.95	12	37.88	JUL 21	38.78	OCT 02	40.54
11	37.30	19	37.75	SEP 25	37.36	NOV 07	40.41
17	35.14	AUG 02	37.96	OCT 27	38.52	DEC 02	40.51
24	36.10	09	38.15	NOV 28	38.57	JAN 02, 1958	38.04
31	36.70	16	38.30	DEC 27	37.00	FEB 05	38.01
APR 07	37.09	23	38.23	FEB 05, 1951	36.87	MAR 03	35.82
15	37.49	30	38.40	MAR 20	36.02	APR 01	32.00
21	37.67	SEP 06	38.60	MAY 29	38.65	MAY 06	35.13
28	37.90	13	38.65	AUG 09	39.11	JUN 02	36.54
MAY 05	37.90	20	38.75	OCT 04	39.68	JUL 01	38.17
12	38.13	27	38.87	NOV 06	39.81	AUG 04	38.74
19	38.35	OCT 04	39.00	DEC 10	39.00	SEP 02	39.38
26	37.20	11	38.88	JAN 04, 1952	35.08	OCT 02	39.57
JUN 02	37.56	18	38.90	FEB 06	33.92	NOV 04	39.80
09	37.10	25	39.03	MAR 17	35.00	DEC 05	39.94
16	37.50	NOV 01	39.17	APR 15	33.94	JAN 06, 1959	40.15
23	37.85	08	39.04	MAY 13	33.47	FEB 02	40.22
30	38.00	15	39.09	JUN 12	35.86	MAR 02	39.49
JUL 14	36.60	22	38.88	JUL 01	37.35	30	39.20
21	35.18	29	38.40	AUG 12	39.13	MAY 07	38.80
28	36.20	DEC 06	37.05	SEP 03	38.90	JUN 01	38.89
AUG 04	36.70	13	37.47	OCT 07	39.56	JUL 02	38.79
11	37.25	20	35.67	DEC 30	37.79	AUG 03	39.42
18	37.58	27	36.35	JAN 27, 1953	34.55	31	39.26
25	37.30	JAN 03, 1949	33.06	FEB 17	36.08	OCT 02	39.50
SEP 01	38.05	10	32.40	MAR 20	35.08	NOV 02	39.75
08	38.23	17	34.10	APR 21	36.09	DEC 03	39.63
15	38.40	24	34.92	MAY 19	33.43	JAN 04, 1960	37.64
22	38.56	31	33.05	JUL 23	38.30	FEB 01	37.74
29	38.72	FEB 07	33.47	SEP 15	41.22	MAR 14	36.88
OCT 06	38.85	14	33.95	FEB 02, 1954	38.69	APR 04	33.44
13	39.02	21	34.05	JUN 28	38.82	MAY 02	36.51
20	39.07	28	34.34	OCT 14	40.95	JUN 02	37.62

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CG 1

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 01, 1960	38.37	JUN 29, 1965	38.78	SEP 23, 1971	37.93	FEB 27, 1978	37.23
AUG 01	39.17	AUG 02	39.24	OCT 21	37.98	MAR 31	33.87
SEP 07	39.25	SEP 03	39.76	DEC 09	35.84	MAY 02	37.13
OCT 03	39.34	30	40.07	JAN 03, 1972	36.52	JUN 14	37.13
NOV 01	39.77	NOV 03	40.40	MAR 02	30.62	JUL 31	37.88
DEC 05	40.22	DEC 06	40.73	APR 14	34.61	SEP 14	38.85
JAN 04, 1961	40.16	JAN 03, 1966	41.05	MAY 18	35.99	OCT 25	39.30
FEB 02	39.80	FEB 02	41.06	JUN 27	29.30	MAR 06, 1979	32.63
MAR 01	31.95	MAR 03	34.99	SEP 05	38.24	APR 25	36.37
APR 04	34.82	31	38.01	OCT 06	39.09	JUN 05	35.94
MAY 03	35.39	MAY 02	36.59	NOV 06	39.60	JUL 17	37.93
JUN 05	37.59	JUN 10	38.27	DEC 19	34.18	AUG 20	38.62
JUL 05	38.29	JUL 25	39.33	JAN 02, 1973	34.02	OCT 04	32.15
AUG 02	39.26	SEP 07	39.93	29	33.82	NOV 14	36.12
SEP 05	39.59	OCT 11	38.51	MAR 10	35.36	DEC 20	37.95
OCT 05	39.93	13	38.37	APR 11	31.85	JAN 02, 1980	37.94
30	40.15	DEC 12	38.21	MAY 31	34.40	22	37.23
DEC 07	40.95	JAN 26, 1967	37.95	JUL 05	36.00	MAR 07	38.34
JAN 04, 1962	40.48	MAR 14	34.85	AUG 20	38.37	APR 15	36.31
FEB 07	37.89	APR 19	38.85	OCT 03	38.82	JUN 03	37.45
MAR 05	36.30	JUN 28	38.88	NOV 16	41.22	AUG 19	36.60
APR 02	35.57	AUG 31	39.03	DEC 26	37.21	OCT 06	38.79
MAY 01	35.80	SEP 01	39.03	JAN 29, 1974	34.35	NOV 13	40.61
JUN 06	38.13	OCT 11	40.27	MAR 05	37.09	DEC 15	40.06
JUL 05	38.83	NOV 27	39.74	APR 16	35.71	JAN 05, 1981	40.96
AUG 01	39.50	JAN 10, 1968	39.23	MAY 29	37.13	29	40.77
SEP 05	39.92	FEB 21	38.02	JUL 11	38.07	MAR 03	38.65
OCT 09	40.66	29	38.31	AUG 15	38.82	APR 14	36.09
NOV 08	41.03	APR 24	37.59	SEP 18	36.99	JUN 02	38.49
DEC 03	41.49	JUN 01	34.96	OCT 31	38.59	JUL 07	37.59
JAN 07, 1963	40.77	JUL 23	38.47	DEC 09	37.63	AUG 18	38.97
FEB 15	39.44	SEP 10	38.97	JAN 02, 1975	37.27	OCT 05	40.16
MAR 08	36.76	NOV 13	39.25	FEB 28	35.05	NOV 16	40.71
APR 01	37.09	DEC 19	38.42	APR 11	35.51	DEC 17	40.89
MAY 08	38.70	30	38.30	MAY 15	35.33	JAN 26, 1982	40.45
JUN 06	38.82	JAN 31, 1969	39.08	JUN 19	34.10	MAR 02	36.96
JUL 01	39.46	MAR 14	37.96	JUL 31	35.98	APR 13	37.03
31	39.87	APR 25	37.95	SEP 15	37.88	MAY 18	37.85
SEP 04	40.98	JUN 06	38.55	29	28.63	JUL 07	36.99
OCT 01	40.80	JUL 17	39.00	OCT 30	34.40	AUG 26	38.92
NOV 06	40.07	AUG 21	38.76	DEC 10	36.67	OCT 05	42.02
DEC 17	40.69	SEP 24	37.68	29	36.92	NOV 05	39.70
JAN 21, 1964	38.58	NOV 05	38.95	MAR 01, 1976	37.33	DEC 06	39.67
FEB 18	38.26	DEC 16	38.54	APR 05	35.60	JAN 04, 1983	39.88
MAR 06	34.11	JAN 05, 1970	37.73	MAY 12	37.46	FEB 02	39.43
APR 16	36.08	28	38.36	JUN 24	38.43	MAR 04	36.65
30	35.24	MAR 11	36.25	AUG 17	38.99	APR 06	35.08
JUN 02	37.09	APR 22	36.38	OCT 14	35.20	MAY 06	33.96
JUL 01	38.40	JUN 03	37.15	NOV 19	36.35	JUN 01	35.99
AUG 05	39.02	JUL 15	36.85	JAN 06, 1977	38.13	JUL 07	34.03
31	39.60	AUG 26	37.34	FEB 14	38.40	AUG 01	37.56
OCT 02	40.90	OCT 07	37.69	MAR 30	35.53	SEP 01	38.52
NOV 10	40.36	NOV 20	36.89	MAY 10	36.84	OCT 06	39.30
DEC 07	40.37	DEC 16	39.50	JUN 14	38.29	DEC 09	36.88
JAN 05, 1965	40.27	JAN 26, 1971	37.43	JUL 20	39.05	27	35.21
FEB 01	38.60	MAR 11	34.21	AUG 24	39.98	FEB 06, 1984	37.41
MAR 10	35.50	APR 12	36.79	OCT 13	40.18	MAR 02	33.27
APR 15	36.72	MAY 24	36.46	NOV 17	40.20	APR 02	30.57
MAY 03	37.39	JUN 25	37.69	JAN 03, 1978	36.37	MAY 02	34.36
JUN 22	38.60	SEP 08	38.82	20	34.91	JUN 06	36.01

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR CG 5

ALTITUDE OF LAND SURFACE 410 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 24.20 FEET BELOW LAND SURFACE DATUM MAR 23, 1983.

LOWEST WATER LEVEL 28.92 FEET BELOW LAND SURFACE DATUM NOV 01, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 26, 1982	27.62	DEC 21, 1982	27.05	APR 27, 1983	25.54	AUG 23, 1983	27.88
SEP 01	27.77	JAN 25, 1983	26.14	MAY 24	24.54	SEP 28	28.29
OCT 04	27.78	FEB 23	24.93	JUN 20	24.84	NOV 01	28.92
NOV 24	28.83	MAR 23	24.20	JUL 27	26.99		

WELL FR CG 29

ALTITUDE OF LAND SURFACE 540 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 20.18 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 34.36 FEET BELOW LAND SURFACE DATUM JUL 21, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 21, 1982	34.36	DEC 21, 1982	27.00	APR 27, 1983	20.18	AUG 23, 1983	32.78
AUG 25	25.32	JAN 25, 1983	25.86	MAY 24	22.35	SEP 28	25.72
OCT 04	28.18	FEB 23	24.54	JUN 20	23.14	NOV 01	26.38
NOV 24	27.14	MAR 23	23.92	JUL 27	23.69		

WELL FR DC 41

ALTITUDE OF LAND SURFACE 610 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 42.63 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 53.18 FEET BELOW LAND SURFACE DATUM JUL 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 1982	44.58	NOV 23, 1982	48.03	APR 27, 1983	42.63	SEP 27, 1983	48.68
JUN 17	44.94	DEC 21	46.75	MAY 24	45.89	NOV 02	47.15
JUL 13	46.38	JAN 27, 1983	47.45	JUN 21	48.12		
AUG 25	47.71	FEB 24	42.83	JUL 26	53.18		
OCT 07	48.13	MAR 24	43.95	AUG 24	48.69		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR DC 43

ALTITUDE OF LAND SURFACE 570 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 0.98 FEET ABOVE LAND SURFACE DATUM JUL 13, 1982; DEC 21, 1982.

LOWEST WATER LEVEL 1.61 FEET BELOW LAND SURFACE DATUM JUL 26, 1983.

WATER LEVELS IN FEET ABOVE OR BELOW(-) LAND SURFACE DATUM.

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
APR 22, 1982		F	NOV 23, 1982	0.31		APR 27, 1983		F	SEP 27, 1983	-0.56
JUN 17		F	DEC 21	0.98		MAY 24		F	NOV 02	0.65
JUL 13	0.98		JAN 27, 1983		F	JUN 21		F		
AUG 25	-0.13		FEB 24		F	JUL 26	-1.61			
OCT 07	0.51		MAR 24		F	AUG 24	-1.15			

WELL FR DC 54

ALTITUDE OF LAND SURFACE 660 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 4.52 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 149.24 FEET BELOW LAND SURFACE DATUM JUN 21, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 26, 1982	13.98	NOV 23, 1982	9.65	MAR 24, 1983	5.64	JUL 26, 1983	9.23
JUL 12	16.23	DEC 21	8.83	APR 27	4.52	AUG 24	9.45
AUG 25	7.56	JAN 26, 1983	9.59	MAY 24	5.64	SEP 26	15.40
OCT 07	11.36	FEB 24	5.94	JUN 21	149.24	NOV 02	12.36

WELL FR DC 65

ALTITUDE OF LAND SURFACE 460 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 11.45 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 16.60 FEET BELOW LAND SURFACE DATUM AUG 24, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 28, 1982	13.04	DEC 21, 1982	14.82	APR 27, 1983	11.45	AUG 24, 1983	16.60
AUG 25	15.52	JAN 27, 1983	15.18	MAY 24	13.11	SEP 27	16.28
OCT 07	16.01	FEB 24	12.51	JUN 21	13.24	NOV 02	15.36
NOV 23	15.64	MAR 24	14.24	JUL 26	15.21		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR DD 146

ALTITUDE OF LAND SURFACE 420 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 9.11 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 26.09 FEET BELOW LAND SURFACE DATUM OCT 05, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1982	26.09	FEB 23, 1983	10.52	JUN 22, 1983	11.46	NOV 01, 1983	22.53
NOV 22	23.77	MAR 23	9.90	JUL 27	16.51		
DEC 22	21.31	APR 27	9.11	AUG 24	20.73		
JAN 25, 1983	18.32	MAY 23	11.77	SEP 27	23.49		

WELL FR DD 208

ALTITUDE OF LAND SURFACE 380 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 7.39 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 14.07 FEET BELOW LAND SURFACE DATUM SEP 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 19, 1982	12.11	NOV 22, 1982	13.27	APR 26, 1983	7.39	SEP 26, 1983	14.07
JUN 16	8.42	DEC 20	12.26	MAY 24	8.75	NOV 01	12.68
JUL 12	8.46	JAN 26, 1983	12.78	JUN 23	10.08		
AUG 24	12.63	FEB 23	10.88	JUL 26	12.85		
OCT 05	13.31	MAR 24	8.80	AUG 23	13.91		

WELL FR DE 104

ALTITUDE OF LAND SURFACE 290 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 7.39 FEET BELOW LAND SURFACE DATUM APR 27, 1983.

LOWEST WATER LEVEL 18.59 FEET BELOW LAND SURFACE DATUM NOV 23, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 06, 1982	12.69	NOV 23, 1982	18.59	APR 27, 1983	7.39	SEP 28, 1983	14.44
JUN 15	9.98	DEC 20	18.59	MAY 23	9.82	NOV 01	14.78
JUL 13	13.35	JAN 28, 1983	18.51	JUN 20	8.45		
AUG 13	14.68	FEB 23	17.40	JUL 27	11.23		
OCT 07	17.03	MAR 23	10.89	AUG 23	12.57		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR DF 20

ALTITUDE OF LAND SURFACE 330 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 17.02 FEET BELOW LAND SURFACE DATUM JUN 20, 1983.

LOWEST WATER LEVEL 26.13 FEET BELOW LAND SURFACE DATUM NOV 01, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 03, 1982	21.23	JAN 28, 1983	18.78	MAY 24, 1983	18.33	SEP 28, 1983	24.03
OCT 08	25.89	FEB 23	20.12	JUN 20	17.02	NOV 01	26.13
NOV 24	19.05	MAR 23	17.77	JUL 27	19.00		
DEC 20	18.86	APR 27	17.08	AUG 23	20.19		

WELL FR DF 35

ALTITUDE OF LAND SURFACE 570 FEET.

RECORDS AVAILABLE 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 44.20 FEET BELOW LAND SURFACE DATUM APR 02, 1984.

LOWEST WATER LEVEL 59.98 FEET BELOW LAND SURFACE DATUM FEB 01, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 06, 1982	57.13	JAN 26, 1983	59.78	JUL 26, 1983	54.31	FEB 01, 1984	59.98
JUL 12	55.19	FEB 24	58.78	AUG 23	55.85	MAR 02	56.53
AUG 26	57.18	MAR 23	56.11	SEP 28	57.32	APR 02	44.20
OCT 07	58.09	APR 28	47.29	NOV 03	57.91	MAY 02	46.94
NOV 23	58.91	MAY 24	49.35	28	57.33	JUN 06	49.50
DEC 20	59.05	JUN 22	51.66	DEC 27	57.36		

WELL FR EB 33

ALTITUDE OF LAND SURFACE 530 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 9.38 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 27.81 FEET BELOW LAND SURFACE DATUM NOV 02, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 02, 1982	23.98	JAN 27, 1983	26.66	MAY 24, 1983	15.01	SEP 26, 1983	27.09
OCT 07	24.79	FEB 24	14.38	JUN 21	19.04	NOV 02	27.81
NOV 23	27.01	MAR 24	15.56	JUL 26	22.26		
DEC 21	27.15	APR 26	9.38	AUG 24	23.83		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR EB 34

ALTITUDE OF LAND SURFACE 530 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 17.49 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 27.03 FEET BELOW LAND SURFACE DATUM AUG 27, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 27, 1982	27.03	JAN 27, 1983	24.88	MAY 24, 1983	17.77	SEP 26, 1983	24.05
OCT 05	26.09	FEB 24	22.58	JUN 21	23.64	NOV 01	24.06
NOV 23	26.49	MAR 24	21.56	JUL 26	21.48		
DEC 21	25.16	APR 26	17.49	AUG 24	23.33		

WELL FR EC 24

ALTITUDE OF LAND SURFACE 460 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 6.17 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 10.53 FEET BELOW LAND SURFACE DATUM SEP 28, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18, 1982	10.04	NOV 23, 1982	10.41	MAR 24, 1983	8.02	JUL 26, 1983	10.07
JUL 29	9.91	DEC 21	9.06	APR 26	6.17	AUG 24	10.35
AUG 26	10.27	JAN 28, 1983	9.96	MAY 25	7.47	SEP 28	10.53
OCT 22	10.51	MAR 11	7.60	JUN 21	10.35	NOV 01	10.23

WELL FR EC 28

ALTITUDE OF LAND SURFACE 580 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 21.75 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 30.72 FEET BELOW LAND SURFACE DATUM NOV 23, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 18, 1982	27.87	NOV 23, 1982	30.72	MAR 24, 1983	25.48	JUL 26, 1983	25.32
JUL 12	26.84	DEC 21	29.17	APR 26	21.75	AUG 24	26.63
AUG 25	28.15	JAN 27, 1983	29.65	MAY 25	22.82	SEP 27	27.42
OCT 07	28.99	FEB 25	26.48	JUN 21	23.26	NOV 01	27.44

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR ED 89

ALTITUDE OF LAND SURFACE 420 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 33.34 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 54.12 FEET BELOW LAND SURFACE DATUM AUG 30, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 30, 1982	54.12	JAN 27, 1983	44.03	MAY 24, 1983	34.43	SEP 27, 1983	48.53
OCT 05	50.54	FEB 24	39.03	JUN 21	39.70	NOV 01	46.17
NOV 23	46.77	MAR 23	35.34	JUL 26	42.63		
DEC 20	42.22	APR 26	33.34	AUG 23	46.11		

WELL FR ED 115

ALTITUDE OF LAND SURFACE 300 FEET.

RECORDS AVAILABLE 1982 - 1984.

HIGHEST WATER LEVEL 5.37 FEET BELOW LAND SURFACE DATUM APR 25, 1983.

LOWEST WATER LEVEL 21.72 FEET BELOW LAND SURFACE DATUM NOV 03, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 07, 1982	14.20	JUN 07, 1982	15.31	JUL 17, 1982	13.42	OCT 04, 1982	19.89
12	14.31	08	15.26	18	13.52	05	19.95
30	14.77	09	15.19	19	13.62	06	20.02
MAY 01	14.78	10	15.10	20	13.71	07	20.08
02	14.80	11	15.00	21	13.85	08	20.13
03	14.82	12	14.97	22	13.98	09	20.20
04	14.86	13	12.45	23	14.10	10	20.28
05	14.92	14	12.10	24	14.20	11	20.35
06	15.00	15	11.82	25	14.30	12	20.42
07	15.07	16	11.40	26	14.40	13	20.48
08	15.13	17	11.08	27	14.50	14	20.50
09	15.20	18	10.93	28	14.40	15	20.58
10	15.28	19	10.83	29	14.42	16	20.63
11	15.46	20	10.86	30	14.53	17	20.70
12	15.48	21	10.90	31	14.58	18	20.80
13	15.53	22	10.92	AUG 01	14.64	19	20.83
14	15.60	23	11.01	02	14.75	20	20.90
15	15.69	24	11.10	03	14.80	21	20.98
16	15.75	25	11.15	04	14.90	22	21.03
17	15.81	26	11.24	05	15.00	23	21.10
18	15.90	27	11.32	06	15.10	24	21.18
19	15.98	28	11.41	24	16.50	25	21.20
20	16.02	29	11.50	25	16.52	26	21.20
21	16.09	30	11.63	26	16.60	27	21.24
22	16.18	JUL 01	11.65	27	16.68	28	21.33
23	16.21	02	11.79	28	16.78	29	21.41
24	16.29	03	11.82	29	16.88	30	21.50
25	16.32	04	11.85	30	16.94	31	21.57
26	16.40	05	12.11	31	17.02	NOV 01	21.62
27	16.50	06	12.20	SEP 23	19.32	02	21.68
28	16.58	07	12.23	24	19.37	03	21.72
29	16.57	08	12.32	25	19.45	04	21.60
30	16.63	09	12.45	26	19.53	05	21.10
31	16.70	10	12.60	27	19.50	06	20.98
JUN 01	16.72	11	12.70	28	19.50	07	20.92
02	16.77	12	12.80	29	19.58	08	20.90
03	16.80	13	12.98	30	19.63	09	20.90
04	16.82	14	13.10	OCT 01	19.70	10	20.91
05	16.20	15	13.20	02	19.78	11	20.93
06	15.48	16	13.30	03	19.81	12	20.95

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR ED 115

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13, 1982	20.93	JAN 31, 1983	20.90	MAY 05, 1983	7.05	JUL 23, 1983	14.25
14	20.93	FEB 01	20.91	06	7.27	24	14.35
15	20.93	02	20.89	07	7.40	25	14.50
16	20.98	03	20.71	08	7.50	26	14.62
17	20.99	04	20.68	09	7.68	27	14.80
18	21.00	05	20.65	10	7.82	28	14.90
19	21.04	06	20.60	11	7.98	29	15.02
20	21.09	07	20.55	12	8.10	30	15.13
21	21.11	08	20.51	13	8.25	31	15.23
22	21.15	09	20.49	14	8.35	AUG 01	15.33
23	21.27	10	20.44	15	8.50	02	15.45
24	21.30	11	20.40	16	8.25	03	15.55
25	21.38	12	20.40	17	8.20	04	15.65
26	21.46	13	20.39	18	8.25	05	15.75
27	21.55	14	20.35	19	8.32	06	15.80
28	21.60	15	20.35	20	8.30	07	15.88
29	21.10	16	20.31	21	8.30	08	15.98
30	20.92	17	20.28	22	7.68	09	16.10
DEC 01	20.80	18	20.20	23	7.55	10	16.20
02	20.73	19	20.08	24	7.65	11	16.30
03	20.68	20	19.92	25	7.80	12	16.38
04	20.63	21	19.73	26	7.68	13	16.50
05	20.60	22	19.30	27	7.72	14	16.60
06	20.60	23	18.70	28	7.90	15	16.70
07	20.60	24	18.18	29	7.98	16	16.80
08	20.60	25	17.70	30	8.00	17	16.90
09	20.60	26	17.32	31	8.17	18	16.98
10	20.60	27	17.05	JUN 01	8.35	19	17.09
11	20.60	28	16.78	02	8.53	20	17.19
12	20.60	MAR 01	16.55	03	8.70	21	17.32
13	20.64	02	16.40	04	8.78	22	17.43
14	20.68	03	16.30	05	8.97	23	17.54
15	20.70	04	16.20	06	9.10	24	17.70
16	20.65	05	16.18	07	9.20	25	17.80
17	20.55	06	16.07	08	9.35	26	17.90
18	20.53	07	16.00	09	9.60	27	17.99
19	20.51	08	15.40	10	9.78	28	18.10
20	20.50	09	15.05	11	9.95	29	16.90
21	20.50	10	14.80	12	10.10	30	16.55
22	20.52	11	14.60	13	10.25	31	16.38
23	20.48	12	14.50	14	10.40	SEP 01	16.33
24	20.49	13	14.42	15	10.55	02	16.33
25	20.49	14	14.35	16	10.80	03	16.34
26	20.49	15	14.31	17	10.90	04	16.42
27	20.50	16	14.31	18	10.80	05	16.53
28	20.50	17	14.29	19	10.83	06	16.64
29	20.51	18	14.00	20	10.50	07	16.75
30	20.58	19	13.40	21	10.20	08	16.87
31	20.60	20	13.20	22	10.20	09	17.00
JAN 01, 1983	20.63	21	12.90	23	10.22	10	17.11
02	20.68	22	12.80	24	10.26	11	17.22
03	20.71	23	12.73	25	10.40	12	17.35
04	20.78	24	12.70	26	10.56	13	17.49
05	20.82	25	12.62	27	10.70	14	17.60
06	20.85	26	12.62	28	10.80	15	17.70
07	20.90	27	12.32	29	11.00	16	17.81
08	20.95	28	12.24	30	11.15	17	17.93
09	21.00	29	12.23	JUL 01	11.28	18	18.07
10	21.04	30	12.20	02	11.40	19	18.20
11	20.90	31	12.14	03	11.58	20	18.30
12	20.88	APR 01	12.14	04	11.70	21	18.42
13	20.88	02	12.10	05	11.82	22	18.48
14	20.85	03	11.62	06	12.00	23	18.60
15	20.81	04	11.60	07	12.18	24	18.70
16	20.80	05	11.50	08	12.30	25	18.80
17	20.80	06	11.47	09	12.42	26	18.90
18	20.80	07	11.40	10	12.50	27	19.00
19	20.80	08	11.10	11	12.63	28	19.10
20	20.80	09	10.70	12	12.78	29	19.20
21	20.80	25	5.37	13	12.88	30	19.30
22	20.80	26	5.50	14	13.10	OCT 01	19.33
23	20.80	27	5.79	15	13.22	02	19.42
24	20.81	28	5.95	16	13.35	03	19.52
25	20.81	29	6.10	17	13.50	04	19.60
26	20.81	30	6.30	18	13.63	05	19.70
27	20.81	MAY 01	6.48	19	13.78	06	19.80
28	20.85	02	6.61	20	13.90	07	19.90
29	20.87	03	6.71	21	14.03	08	19.98
30	20.89	04	6.82	22	14.07	09	20.05

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR ED 115

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 1983	20.13	NOV 04, 1983	18.40	NOV 29, 1983	16.25	DEC 24, 1983	9.88
11	20.22	05	18.45	30	16.10	JAN 23, 1984	12.83
12	20.30	06	18.52	DEC 01	16.04	24	12.85
13	20.34	07	18.60	02	15.95	25	12.90
14	20.37	08	18.68	03	15.93	26	12.82
15	20.35	09	18.74	04	15.52	27	12.50
16	20.37	10	18.73	05	15.33	28	12.22
17	20.40	11	18.33	06	14.90	29	12.13
18	20.45	12	18.20	07	14.77	30	12.10
19	20.50	13	18.13	08	14.65	31	12.10
20	20.58	14	18.12	09	14.57	FEB 01	12.28
21	20.60	15	18.06	10	14.54	02	12.40
22	20.64	16	18.03	11	14.45	03	12.40
23	19.85	17	18.05	12	14.20	04	12.20
24	19.10	18	18.10	13	11.30	05	12.02
25	18.70	19	18.15	14	10.92	06	11.97
26	18.50	20	18.10	15	10.72	07	11.98
27	18.40	21	17.95	16	10.63	08	12.10
28	18.32	22	17.88	17	10.60	09	12.18
29	18.32	23	17.82	18	10.50	10	12.30
30	18.34	24	17.77	19	10.48	11	12.23
31	18.34	25	17.20	20	10.55	12	12.12
NOV 01	18.33	26	16.95	21	10.55	13	12.02
02	18.36	27	16.78	22	10.10	22	8.19
03	18.38	28	16.50	23	9.90		

WELL FR EE 104

ALTITUDE OF LAND SURFACE 310 FEET.

RECORDS AVAILABLE 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.50 FEET BELOW LAND SURFACE DATUM APR 02, 1984.

LOWEST WATER LEVEL 69.65 FEET BELOW LAND SURFACE DATUM JAN 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 20, 1982	62.04	JAN 26, 1983	69.65	JUL 26, 1983	53.64	FEB 01, 1984	55.09
JUL 12	56.50	FEB 25	62.79	AUG 23	58.39	MAR 02	47.09
AUG 24	62.21	MAR 23	55.12	SEP 26	61.12	APR 02	40.50
OCT 08	67.03	APR 26	41.55	NOV 01	59.32	MAY 02	43.07
NOV 22	69.04	MAY 24	43.76	28	56.08	JUN 06	43.44
DEC 20	67.93	JUN 22	46.08	DEC 27	50.78		

WELL FR EE 124

ALTITUDE OF LAND SURFACE 265 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 25.11 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 38.88 FEET BELOW LAND SURFACE DATUM DEC 20, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR EE 124

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 07, 1982	32.91	NOV 24, 1982	38.73	APR 26, 1983	25.11	SEP 26, 1983	38.45
MAY 20	35.60	DEC 20	38.88	MAY 24	25.51	NOV 01	38.51
JUL 12	32.91	JAN 28, 1983	38.00	JUN 22	29.20		
AUG 26	37.44	FEB 25	35.48	JUL 26	34.02		
OCT 08	38.39	MAR 23	32.57	AUG 23	37.46		

WELL FR EE 126

ALTITUDE OF LAND SURFACE 260 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 26.25 FEET BELOW LAND SURFACE DATUM APR 28, 1983.

LOWEST WATER LEVEL 36.22 FEET BELOW LAND SURFACE DATUM JAN 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 14, 1982	31.58	DEC 20, 1982	35.84	APR 28, 1983	26.25	AUG 23, 1983	32.27
AUG 26	33.17	JAN 26, 1983	36.22	MAY 24	26.99	SEP 28	33.96
OCT 07	34.47	FEB 24	35.16	JUN 22	28.90	NOV 03	34.26
NOV 24	36.05	MAR 23	32.45	JUL 26	30.83		

WELL FR EF 1

ALTITUDE OF LAND SURFACE 550 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 19.01 FEET BELOW LAND SURFACE DATUM APR 28, 1983.

LOWEST WATER LEVEL 20.71 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 15, 1982	20.16	NOV 23, 1982	20.62	MAR 23, 1983	19.17	JUL 25, 1983	20.16
28	20.06	DEC 20	20.26	APR 28	19.01	AUG 23	20.38
AUG 26	20.32	JAN 26, 1983	20.22	MAY 24	19.05	SEP 27	20.71
OCT 07	20.42	FEB 24	19.41	JUN 22	19.04	NOV 03	20.41

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR EF 26

ALTITUDE OF LAND SURFACE 270 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 21.02 FEET BELOW LAND SURFACE DATUM JUN 22, 1983.

LOWEST WATER LEVEL 23.79 FEET BELOW LAND SURFACE DATUM AUG 23, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 07, 1982	21.84	NOV 23, 1982	23.22	MAR 23, 1983	21.27	JUL 26, 1983	23.53
JUL 12	22.78	DEC 20	22.62	APR 28	21.09	AUG 23	23.79
AUG 26	23.69	JAN 26, 1983	22.78	MAY 24	21.09	SEP 28	23.69
OCT 07	23.60	FEB 24	21.71	JUN 22	21.02	NOV 03	22.44

WELL FR EF 40

ALTITUDE OF LAND SURFACE 565 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 31.75 FEET BELOW LAND SURFACE DATUM MAY 24, 1983.

LOWEST WATER LEVEL 40.38 FEET BELOW LAND SURFACE DATUM JAN 24, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 28, 1982	37.56	DEC 20, 1982	39.86	APR 28, 1983	32.45	AUG 23, 1983	34.81
AUG 25	37.84	JAN 24, 1983	40.38	MAY 24	31.75	SEP 26	35.78
OCT 07	38.98	FEB 25	38.87	JUN 22	33.19	NOV 03	36.59
NOV 23	39.74	MAR 23	36.64	JUL 25	33.69		

WELL FR EF 49

ALTITUDE OF LAND SURFACE 610 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 28.11 FEET BELOW LAND SURFACE DATUM MAY 15, 1983.

LOWEST WATER LEVEL 55.56 FEET BELOW LAND SURFACE DATUM JAN 24, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 23, 1982	52.74	JAN 04, 1983	52.62	JAN 16, 1983	52.74	JAN 28, 1983	55.40
24	52.78	05	52.70	17	52.76	29	54.90
25	52.74	06	52.78	18	52.83	30	53.45
26	52.69	07	52.82	19	52.88	31	53.14
27	52.68	08	52.88	20	52.97	FEB 01	53.21
28	52.68	09	52.88	21	52.99	02	52.68
29	52.74	10	52.87	22	53.03	03	51.83
30	52.50	11	52.86	23	53.04	04	51.83
31	52.42	12	52.82	24	55.56	05	52.00
JAN 01, 1983	52.42	13	52.82	25	55.54	06	52.22
02	52.44	14	52.79	26	55.40	07	52.33
03	52.50	15	52.76	27	54.95	08	52.38

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR EF 49

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 09, 1983	52.42	APR 07, 1983	40.61	AUG 25, 1983	47.34	OCT 21, 1983	51.10
10	52.44	08	40.65	26	47.43	22	51.08
11	52.40	09	40.60	27	47.47	23	50.35
12	52.49	25	33.60	28	47.51	24	49.95
13	52.69	26	33.59	29	47.58	25	49.86
14	52.62	27	33.54	30	47.70	26	49.86
15	52.61	28	33.31	31	47.78	27	49.95
16	52.48	29	32.66	SEP 01	47.88	28	50.12
17	52.11	30	32.23	02	48.03	29	50.17
18	51.45	MAY 01	32.09	03	48.10	30	50.53
19	50.81	02	31.58	04	48.20	31	50.67
20	50.53	03	31.42	05	48.27	NOV 01	50.76
21	50.05	04	30.87	06	48.35	02	50.93
22	49.30	05	30.44	07	48.44	03	50.98
23	48.20	06	29.64	08	48.57	04	51.04
24	47.75	07	29.50	09	48.63	05	51.12
25	46.64	08	29.33	10	48.64	06	51.14
26	47.71	09	29.08	11	48.70	07	51.24
27	47.85	10	29.07	12	48.80	08	51.37
28	47.83	11	28.56	13	48.95	09	51.47
MAR 01	47.52	12	28.49	14	48.97	10	51.20
02	46.94	13	28.33	15	49.03	11	50.45
03	46.84	14	28.19	16	49.10	12	50.43
04	46.78	15	28.11	17	49.09	13	50.56
05	46.72	25	34.21	18	49.20	14	50.74
06	46.72	26	34.23	19	49.34	15	50.88
07	46.69	27	34.44	20	49.47	16	50.74
08	44.60	28	34.77	21	49.43	17	50.74
09	43.30	29	35.06	22	49.45	18	50.87
10	42.50	30	35.25	23	49.53	19	50.94
11	42.05	31	35.54	24	49.68	20	51.03
12	41.96	JUN 01	35.88	25	49.80	21	50.86
13	41.96	02	36.27	26	49.87	22	50.84
14	42.05	03	36.62	27	49.94	23	50.83
15	42.13	04	36.78	28	50.03	24	50.66
16	42.33	05	37.06	29	50.09	25	49.50
17	42.56	06	37.37	30	50.09	26	49.37
18	42.30	07	37.56	OCT 01	50.04	27	49.36
19	41.44	08	37.78	02	50.05	28	48.85
20	41.38	09	38.10	03	50.15	29	48.20
21	40.80	10	38.41	04	50.23	30	48.08
22	40.61	11	38.64	05	50.29	DEC 01	48.05
23	40.59	12	38.83	06	50.34	02	48.05
24	40.59	13	39.00	07	50.46	03	48.05
25	40.54	14	39.20	08	50.55	04	47.52
26	40.77	15	39.35	09	50.61	05	47.36
27	40.72	16	39.58	10	50.76	06	46.87
28	40.46	17	39.75	11	50.88	07	46.76
29	40.46	18	39.94	12	50.71	08	46.74
30	40.64	19	40.10	13	50.64	09	46.82
31	40.65	20	40.23	14	50.70	10	46.85
APR 01	40.65	21	40.40	15	50.78	11	46.96
02	40.79	22	40.75	16	50.88	12	46.81
03	40.50	23	40.87	17	51.00	13	45.97
04	40.50	24	41.03	18	51.10		
05	40.66	JUL 25	44.71	19	51.23		
06	40.61	AUG 24	47.32	20	51.18		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR EG 33

ALTITUDE OF LAND SURFACE 840 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 26.50 FEET BELOW LAND SURFACE DATUM APR 28, 1983.

LOWEST WATER LEVEL 41.77 FEET BELOW LAND SURFACE DATUM OCT 04, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 20, 1982	35.57	DEC 20, 1982	37.31	APR 28, 1983	26.50	AUG 23, 1983	37.82
AUG 25	37.83	JAN 26, 1983	36.94	MAY 24	26.68	SEP 28	38.64
OCT 04	41.77	FEB 25	30.67	JUN 22	31.78	NOV 03	38.43
NOV 23	39.68	MAR 23	26.75	JUL 25	36.20		

WELL FR EH 11

ALTITUDE OF LAND SURFACE 650 FEET.

RECORDS AVAILABLE 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 8.35 FEET BELOW LAND SURFACE DATUM MAR 23, 1983.

LOWEST WATER LEVEL 13.73 FEET BELOW LAND SURFACE DATUM DEC 03, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1981	13.37	OCT 04, 1982	13.12	MAY 24, 1983	8.84	DEC 27, 1983	10.62
DEC 03	13.73	NOV 23	13.72	JUN 22	10.24	FEB 01, 1984	11.00
JAN 06, 1982	12.43	DEC 20	13.21	JUL 25	11.53	MAR 02	9.84
FEB 02	12.27	JAN 26, 1983	13.33	AUG 23	12.06	APR 02	8.74
APR 08	11.69	FEB 24	11.73	SEP 28	12.75	MAY 02	9.65
JUL 06	11.02	MAR 23	8.35	NOV 03	12.95	JUN 06	10.22
AUG 25	12.40	APR 28	9.24	28	11.28		

WELL FR FB 11

ALTITUDE OF LAND SURFACE 340 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 6.94 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 10.76 FEET BELOW LAND SURFACE DATUM SEP 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 26, 1982	10.10	JAN 27, 1983	9.47	MAY 24, 1983	7.89	SEP 26, 1983	10.76
OCT 05	10.17	FEB 24	7.46	JUN 21	8.41	NOV 01	9.91
NOV 23	10.30	MAR 24	7.91	JUL 26	9.82		
DEC 21	9.27	APR 26	6.94	AUG 24	10.54		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR FB 16

ALTITUDE OF LAND SURFACE 230 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 2.40 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 10.25 FEET BELOW LAND SURFACE DATUM JUL 26, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 14, 1982	9.43	JAN 27, 1983	7.94	MAY 24, 1983	5.31	SEP 26, 1983	9.93
OCT 05	8.93	FEB 24	5.31	JUN 21	7.75	NOV 01	8.75
NOV 23	8.59	MAR 24	5.14	JUL 26	10.25		
DEC 21	7.82	APR 26	2.40	AUG 24	9.96		

WELL FR FC 54

ALTITUDE OF LAND SURFACE 230 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 7.59 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 15.16 FEET BELOW LAND SURFACE DATUM SEP 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 14, 1982	15.10	JAN 27, 1983	13.89	MAY 24, 1983	9.64	SEP 27, 1983	15.16
OCT 05	14.88	FEB 24	11.42	JUN 21	12.01	NOV 01	13.82
NOV 23	14.67	MAR 24	10.62	JUL 26	13.58		
DEC 20	13.02	APR 26	7.59	AUG 24	14.40		

WELL FR FD 83

ALTITUDE OF LAND SURFACE 300 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 61.98 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 69.51 FEET BELOW LAND SURFACE DATUM AUG 24, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 27, 1982	67.05	JAN 27, 1983	66.43	MAY 24, 1983	62.94	SEP 27, 1983	67.39
OCT 05	67.35	FEB 24	64.97	JUN 21	65.49	NOV 01	67.19
NOV 23	67.22	MAR 24	64.62	JUL 26	66.79		
DEC 20	66.71	APR 26	61.98	AUG 24	69.51		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR FD 85

ALTITUDE OF LAND SURFACE 240 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 10.56 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 16.08 FEET BELOW LAND SURFACE DATUM SEP 17, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 17, 1982	16.08	JAN 28, 1983	13.38	MAY 24, 1983	10.58	SEP 27, 1983	15.44
OCT 06	15.95	FEB 24	11.08	JUN 21	11.96	NOV 01	14.04
NOV 23	15.40	MAR 24	11.67	JUL 26	13.89		
DEC 20	13.63	APR 26	10.56	AUG 23	14.38		

WELL FR FD 91

ALTITUDE OF LAND SURFACE 315 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 13.27 FEET BELOW LAND SURFACE DATUM APR 26, 1983.

LOWEST WATER LEVEL 30.51 FEET BELOW LAND SURFACE DATUM DEC 20, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 03, 1982	25.72	JAN 27, 1983	27.99	MAY 24, 1983	13.66	SEP 27, 1983	26.72
OCT 06	28.30	FEB 24	23.57	JUN 20	17.41	NOV 01	26.84
NOV 23	29.21	MAR 23	16.45	JUL 26	27.23		
DEC 20	30.51	APR 26	13.27	AUG 23	27.23		

WELL FR FE 26

ALTITUDE OF LAND SURFACE 420 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 25.90 FEET BELOW LAND SURFACE DATUM MAY 24, 1983.

LOWEST WATER LEVEL 30.09 FEET BELOW LAND SURFACE DATUM NOV 23, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 31, 1982	28.93	JAN 24, 1983	29.98	MAY 24, 1983	25.90	SEP 26, 1983	29.44
OCT 07	29.50	FEB 25	29.04	JUN 22	26.82	NOV 03	29.40
NOV 23	30.09	MAR 23	28.23	JUL 26	28.07		
DEC 20	29.95	APR 28	26.15	AUG 23	28.68		

Table 3.—Water levels in observation wells in Frederick County, Md.—continued

WELL FR FF 13

ALTITUDE OF LAND SURFACE 420 FEET.

RECORDS AVAILABLE 1982 - 1983.

HIGHEST WATER LEVEL 15.65 FEET BELOW LAND SURFACE DATUM MAY 24, 1983.

LOWEST WATER LEVEL 23.16 FEET BELOW LAND SURFACE DATUM AUG 23, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 14, 1982	22.87	DEC 20, 1982	20.48	APR 28, 1983	15.83	AUG 23, 1983	23.16
AUG 25	20.07	JAN 24, 1983	20.73	MAY 24	15.65	SEP 26	19.91
OCT 07	20.37	FEB 25	19.12	JUN 22	17.75	NOV 03	19.63
NOV 23	20.79	MAR 23	18.19	JUL 26	18.95		

Table 4.— Ground-water appropriations in Frederick County, Md., greater than 10,000 gallons per day (average)

[Yearly totals are from all sources unless indicated otherwise.]

Name of appropriator	Ground-water appropriation permit number	Quantity (gal/d)	State permit number	USGS Inventory number	Aquifer	1982-83 reported pumpage (gal) Daily total	Yearly total
Lake Spring Water Company	FR 54 GAP 007	22,000	FR-01-8451	FR-DD 44	Harpers Formation	11,751	4,289,000
U.S. Department of the Interior, National Park Service, Catoctin Mountain Park	FR 55 GAP 002	22,000	FR-66-0492	FR-BD 40	Catoctin Metabasalt	8,458	[1] 3,087,300
			FR-66-0489	FR-BD 41	do.		
			Spring	FR-BD 107	Metarhyolite and associated pyroclastic sediments	279	102,010
			--	--	do.	127	46,200
			FR-03-2795	FR-BD 34	Loudoun Formation	21	7,600
			FR-66-0490	FR-BD 43	Metarhyolite and associated pyroclastic sediments	3,704	1,352,000
			FR-66-0491	FR-BD 44	Catoctin Metabasalt	0	0
			FR-02-5350	FR-BD 8	do.	4,398	1,605,400
			FR-02-1967	FR-BD 7	do.	0	0
			FR-71-0428	FR-BD 49	Weverton Formation	80	29,100
Smith Bakeries, Incorporated	FR 55 GAP 005	30,000	FR-02-0905	FR-CF 53	New Oxford Formation	464	169,300
M. A. Bioproducts	FR 61 GAP 010	20,000	FR-04-4852	FR-DE 51	Grove Limestone	10,915	3,983,900
			FR-73-0377	FR-DE 103	do.	0	0
Braddock Water Company, Incorporated	FR 62 GAP 012	70,000	FR-01-5755	FR-DD 13	Harpers Formation	151,307	55,227,000
			FR-69-0438	FR-DD 176	Catoctin Metabasalt		
			FR-04-9969	FR-DD 79	Antietam Formation		
			--	FR-DD 10	do.		
Fountaindale Services, Incorporated	FR 66 GAP 012	170,000	FR-73-0070	FR-DC 57	Catoctin Metabasalt	18,162	6,629,000
			FR-73-2824	FR-DC 59	do.	21,030	7,676,000
			FR-73-2825	FR-DC 58	do.	20,178	7,365,000
			FR-66-0605	FR-DC 55	do.	16,485	6,017,000
			FR-69-0207	FR-DC 56	do.	0	0
			FR-73-3729	FR-DC 60	do.	25,915	9,459,000
			FR-73-7558	FR-DC 61	do.	0	0
			FR-73-8045	FR-DC 62	do.	0	0
Maryland Department of Transportation, State Highway Administration	FR 66 GAP 013	20,000	FR-67-0047	FR-CB 11	Metarhyolite and associated pyroclastic sediments	20,644	7,535,000
			do.	FR-CB 12	do.		
			do.	FR-CB 13	do.		
			do.	FR-CB 14	do.		
			FR-73-6655	FR-CB 15	do.		
Frederick County Engineering Department, Division of Public Works	FR 68 GAP 001	55,000	FR-69-0376	FR-FC 26	Tomstown Dolomite	35,854	13,086,650
			FR-69-0377	FR-FC 27	New Oxford Formation Basal Conglomerate		
			FR-72-0029	FR-FC 31	Tomstown Dolomite		
Genstar Stone Products	FR 68 GAP 011	30,000	FR-67-0530	FR-EE 45	Grove Limestone	8,464	3,089,280
			do.	FR-EE 48	do.		
			FR-72-0101	--	do.		
			FR-65-0339	FR-EE 62	do.		
			FR-65-0459	FR-EE 64	do.		
Eastalco Joint Venture	FR 69 GAP 008	100,000	FR-69-0185	FR-FD 50	New Oxford Formation	52,057	19,000,979
			FR-69-0196	FR-FD 51	do.		
Thurmont, Town of	FR 69 GAP 021	200,000	FR-72-0327	FR-BE 39	Gettysburg Shale	72,373	[2] 26,416,000
			FR-69-0518	FR-BE 38	do.	15,481	[3] 5,650,500
			FR-73-8674	FR-BE 74	do.	0	0
			FR-73-8626	FR-BE 72	do.	3,677	[4] 1,342,100
			--	FR-BD 2	Harpers Formation	0	0
			--	--	Gettysburg Shale	6,127	[5] 2,236,300
Phoenix Property Utility Department	FR 69 GAP 023	42,000	FR-73-0851	FR-EF 42	Ijamsville Formation	15,866	5,791,000
			FR-73-0852	FR-EF 26	Libertytown Metarhyolite		
			FR-73-0852	FR-EF 27	Urbana Formation		
			FR-73-0582	FR-DF 35	Libertytown Metarhyolite		
			FR-72-0433	FR-DF 33	Ijamsville Formation		
			FR-71-0396	FR-EF 28	Libertytown Metarhyolite		
Dan-Dee, Incorporated	FR 69 GAP 026	10,000	FR-69-0546	FR-DD 206	Loudoun Formation	4,554	1,662,030
			FR-01-1300	FR-DD 68	Catoctin Metabasalt		
Conco, Incorporated	FR 70 GAP 010	12,000	FR-68-0069	--	Harpers Formation	12,000	[5] [6] 4,380,000
			FR-68-0070	FR-EC 35	do.		
Rotorex Company	FR 72 GAP 016	125,000	FR-72-0396	FR-DE 98	Frederick Limestone	64,945	23,704,800
			do.	FR-DE 99	do.		
			do.	FR-DE 100	do.		
			do.	FR-DE 101	do.		

Table 4.— Ground-water appropriations in Frederick County, Md., greater than 10,000 gallons per day (average) —continued

Name of appropriator	Ground-water appropriation permit number	Quality (gal/d)	State permit number	USGS Inventory number	Aquifer	1982-83 reported pumpage (gal) Daily total	Yearly total
Middletown, Town of	FR 74 GAP 025	300,000	FR-73-1943	FR-DC 52	Catoctin Metabasalt	153,047	55,862,000
			FR-73-1944	FR-DC 51	do.		
			FR-04-8794	FR-DC 37	do.		
			FR-73-1706	FR-DC 53	do.		
			FR-65-0491	FR-DC 38	do.		
			do.	FR-DC 39	do.		
			FR-73-1602	FR-DC 54	do.		
			FR-01-8163	FR-DC 16	do.		
Emmitsburg, Town of	FR 75 GAP 011	15,000	FR-73-3572	--	Catoctin Metabasalt	107,109	19,708,000
			FR-65-0432	FR-AE 37	do.		
			FR-69-0288	FR-AE 38	do.		
			--	FR-AE 33	do.		
			FR-73-3025	FR-AE 53	do.		
Mount St. Mary's College	FR 75 GAP 013	70,000	FR-73-2668	FR-AE 58	Gettysburg Shale	88,375	32,257,000
			FR-73-3688	FR-AE 57	do.		
Mt. Airy, Town of	FR 76 GAP 007	500,000	FR-73-2380	FR-EH 10	Marburg Formation	241,336	88,087,800
			--	FR-EH 1	do.		
			--	FR-EH 2	do.		
			--	FR-EH 15			
Frederick County Division of Public Works	FR 77 GAP 008	500,000	FR-73-4555	FR-EE 124	Grove Limestone	267,205	97,530,000
			FR-73-3847	FR-EE 90	do.		
			FR-73-1028	FR-EE 89	do.		
			FR-73-4999	FR-EE 102	do.		
			FR-73-4554	FR-EE 123	do.		
			FR-72-0304	FR-ED 112	do.		
			do.	FR-ED 111	do.		
			do.	FR-ED 110	do.		
Frederick County Board of Education	FR 78 GAP 010	10,000	FR-73-6036	FR-FG 1	Marburg Formation	232	[7]84,500
Walkersville, Town of	FR 78 GAP 017	530,000	FR-72-0037	FR-DE 83	Grove Limestone	334,759	122,190,000
			FR-65-0017	FR-DE 47	do.	0	0
			FR-66-0555	FR-DE 48	do.	0	0
Woodsboro, Town of	FR 79 GAP 010	46,000	FR-03-4608	FR-CF 47	Frederick Limestone	77,899	28,433,000
			FR-01-0039	FR-CF 1	Grove Limestone		
			FR-81-0518	--	Frederick Limestone		
United Concrete Products	FR 79 GAP 014	12,000	FR-73-7125	FR-FD 86	New Oxford Formation	3,773	[8]1,377,200
			FR-73-7534	FR-FD 87	do.		
Tresselt, E. F.	FR 80 GAP 005	309,000	FR-73-5051	FR-CD 41	Gettysburg Shale	372,221	135,860,000
			FR-73-5052	FR-CD 42	do.		
			--	FR-CD 40	do.		
			FR-73-7861	FR-CD 43	do.		
			FR-73-7935	FR-CD 45	do.		
			FR-73-7937	FR-CD 44	do.		
Three Springs Fisheries, Inc.	FR 80 GAP 009	80,000	FR-73-8338	FR-FD 85	Frederick Limestone	0	0

[1] FR-BD 40 and FR-BD 41 reported as one water source.
[2] Reported pumpage for July through November only.
[3] Reported pumpage for December only.
[4] Reported pumpage for November only.
[5] Reported pumpage for September through December only.
[6] Yearly total estimated at 200 gallons per day (gal/d) per trailer.
[7] Reported pumpage for October through December only. School newly opened September, 1982.
[8] Reported pumpage for 1981 as company was out of business in 1982. Started business again in 1983.

Table 5.— Surface-water appropriations in Frederick County, Md., greater than 10,000 gallons per day—(average)

Name of appropriator	Surface-water appropriation permit number	Quantity (gal/d)	Basin	Source	1982-83 reported pumpage (gal) Daily average	Yearly total
S.W. Barrick & Sons	01-SAP-001	25,000	Israel Creek	Quarry (Grove Limestone)	24,421	8,913,600
Walkersville, Town of	09-SAP-012	175,000	Glade Creek	Reservoir Spring (Ijamsville Formation)	81,485	29,742,100
Frederick, City of	24-SAP-001	1,900,000	Fishing Creek	Reservoir	1,766,397	644,735,000
Lehigh Portland Cement Company	29-SAP-006	500,000	Sams Creek	Direct	405,173	[1] 147,890,000
Frederick, City of	30-SAP-001	800,000	Tuscarora Creek	Weir	300,342	109,630,000
Do.	40-SAP-001	1,600,000	Linganore Creek	Direct	929,707	339,343,000
Fort Detrick	43-SAP-001	-	Monocacy River	Direct	1,769,819	645,984,000
Coplay Cement Company	56-SAP-005	690,000	Monocacy River	Direct Quarry 2 (Grove Limestone) Quarry 3 (Grove Limestone) Well FR 02-5622 (Grove Limestone) Well FR 02-6835 (Grove Limestone) Well FR 02-6836 (Grove Limestone)	409,449	149,450,000
Frederick, City of	61-SAP-001	4,000,000	Monocacy River	Direct	1,038,458	379,037,000
Myersville, Town of	64-SAP-003	3,000	Little Catoctin Creek	Weir	65,066	22,749,200
Frederick County Water & Sewer Department	68-SAP-005	8,000,000	Potomac River	Direct	1,090,282	397,953,000
Genstar Stone Products Company	70-SAP-017	169,000	Monocacy River	Quarry (Grove Limestone)	[2] 86,305	31,501,170
Phoenix Property, Incorporated	70-SAP-026	100,000	Linganore Creek	Direct Well FR 73-8478 (Ijamsville Formation)	39,477	14,409,000
Thurmont, Town of	74-SAP-013	300,000	High Run	Weir	311,711	113,770,000
Maryland Environmental Service -Victor Cullen Center	76-SAP-013	50,000	Friends Creek	Spring (Catoctin Metabasalt)[3]	30,647	11,186,200
Emmitsburg, Town of	76-SAP-014	250,000	Turkey Creek	Reservoir	257,879	100,700,000
Brunswick, Town of	79-SAP-013[4]	1,000,000	Potomac River	Direct	190,677	69,597,000

[1] Four months missing due to meter malfunction.
[2] Reported pumpage for January through May and July only. Nonpumping during other periods.
[3] USGS identification number FR AD 11.
[4] Brunswick also appropriates water from springs in Washington County (WA EJ 4 & 5), and springs in Virginia.

TABLE 6.—DRAINAGE-BASIN CHARACTERISTICS

Table 6.—Drainage-basin characteristics

Station No.	Name	Period of record	Type of record [1]	Artificial influence on flow [2]	Drainage area (mi^2)
01636850	Little Catoctin Creek near Brunswick, Md.	1977-80	L	N	8.64
01636975	Middle Creek at Ellerton, Md.	1977-80	L	N	22.7
01637000	Little Catoctin Creek at Harmony, Md.	1947-58	C	N	8.83
		1958-65	K		
		1964-68	Q		
		1965-69	C		
01637500	Catoctin Creek near Middletown, Md.	1947-present	C	S	66.9
		1982-83	Q		
01637600	Hollow Road Creek near Middletown, Md.	1965-74	K	N	2.3
01638000	Catoctin Creek near Jefferson, Md.	1928-31	C	S	111
01638050	Catoctin Creek at Olive, Md.	1981-83	F	S	112
01638500	Potomac River at Point of Rocks, Md.	1895-present	C	D	9,651
		1960-present	Q		
01638520	Potomac River tributary at Point of Rocks, Md.	1981-83	F	N	3.04
01638600	Tuscarora Creek at Tuscarora, Md.	1975-79	L	N	20.3
01639000	Monocacy River at Bridgeport, Md.	1942-present	C	M	173
		1948-83	Q		
01639325	Friends Creek near Emmitsburg, Md.	1977-80	L	N	12.2
01639390	Toms Creek near Keysville, Md.	1981-83	F	S	88.1
01640160	Beaver Dam Creek near Union Bridge, Md.	1977-80	L	N	7.04
01640200	Little Pipe Creek at Keymar, Md.	1981-83	F	N	80.0
01640500	Owens Creek at Lantz, Md.	1931-present	C	N (pre-1959)	5.93
		1963-83	Q		
01640600	Owens Creek near Thurmont, Md.	1974-79	L	N	14.4
01640650	Little Owens Creek near Thurmont, Md.	1974-79	L	N	6.16
01640700	Owens Creek tributary near Rocky Ridge, Md.	1967-76	K	N	1.2
01640720	Beaver Branch at Rocky Ridge, Md.	1977-80	L	N	6.53
01640750	Owens Creek near Rocky Ridge, Md.	1981-83	F	N	38.8
01641000	Hunting Creek at Jimtown, Md.	1949-present	C	M	18.4
		1961-83	Q		
01641500	Fishing Creek near Lewistown, Md.	1947-present	C	N	7.29
		1982-83	Q		
01641600	Fishing Creek near Utica, Md.	1981-83	F	M	17.9
01641810	Monocacy River near Walkersville, Md.	1974-79	Q	M	637
		1982-83	Q		
01641900	Tuscarora Creek near Frederick, Md.	1974-79	L	M	16.5
		1982-83	F		
01642000	Monocacy River near Frederick, Md.	1889-1930	C	N	665
01642050	Israel Creek near Walkersville, Md.	1964-66	L	N	28.4
		1975-79	L		
		1982-83	F		
01642400	Dollyhyde Creek at Libertytown, Md.	1967-76	K	N	2.7
01642430	Linganore Creek near New London, Md.	1980-present	L	N	45.2
01642450	Bens Branch near New Market, Md.	1975-80	L	N	11.8
01642500	Linganore Creek near Frederick, Md.	1934-82	C	M	82.3
		1981-83	F		
01643000	Monocacy River at Jug Bridge near Frederick, Md.	1929-present	C	N	817
01643020	Monocacy River at Reichs Ford Bridge near Frederick, Md.	1960-present	Q [3]	-	-
01643100	Bush Creek at Ijamsville, Md.	1964-66	L	N	21.5
01643110	Bush Creek at Reels Mill, Md.	1981-83	F	N	29.7
01643125	Ballenger Creek near Lime Kiln, Md.	1977-80	L	N	20.2
		1982-83	F		
01643500	Bennett Creek at Park Mills, Md.	1948-present	C	N	62.8
		1968-72	Q		
		1975-76	Q		
		1982-83	F		
01643580	Monocacy River near Dickerson, Md.	1975-77	Q	M	968
		1975-83	Q		

[1] L = low flow; Q = water quality; C = continuous; K = peak flow; F = water quality and partial flow.

[2] N = negligible; S = slight; M = some; D = considerable.

[3] Water-quality data are used in conjunction with flow data from Jug Bridge gaging station located 1.2 mi upstream.

Table 6.—Drainage-basin characteristics—continued

Main channel length (mi)	Altitude (ft) At 10% stream length	Altitude (ft) At 85% stream length	Mean basin altitude (ft)	Slope of main channel (ft/mi)	Slope of main channel (percent)	Area of lakes and ponds (percent)	Forested area (percent)	Discharge of record Maximum (ft³/s)	Discharge of record Minimum (ft³/s)	Minimum annual discharge (in/yr)	Station No.
6.7	325	510	523	36.8	0.70	0.158	12	-	-	-	01636850
4.34	675	1,210	1,303	164.4	3.11	.074	63.1	-	-	-	01636975
5.10	555	1,445	1,010	232.7	4.41	.006	48	-	-	-	01637000
23.9	410	1,250	1,110	46.9	.89	.163	46	12,000	0.00	15.35	01637500
2.80	535	1,020	826	231.0	4.37	.13	26	-	-	-	01637600
33.4	325	635	902	12.4	.23	.090	43	-	-	-	01638000
35.8	285	1,005	851	26.8	.51	.090	30	-	-	-	01638050
271	290	1,150	1,356	4.2	.080	.044	59	480,000	530	13.16	01638500
3.12	235	515	379	119.7	2.27	.089	29	-	-	-	01638520
12.7	220	415	-	20.5	.39	.111	19.4	-	-	-	01638600
31.5	350	810	597	19.5	.37	.26	24.0	21,300	.00	15.78	01639000
8.01	630	1,300	1,196	111.5	2.11	.05	62	-	-	-	01639325
20.8	345	1,010	826	42.6	.81	.20	49	-	-	-	01639390
5.49	390	505	535	27.9	.53	.106	11.5	-	-	-	01640160
22.3	350	560	559	12.6	.24	.091	12.9	-	-	-	01640200
4.10	1,010	1,620	1,455	198.4	3.76	.00	71	3,270	.00	21.32	01640500
9.51	540	1,410	1,287	122.0	2.31	.050	72.6	-	-	-	01640600
4.82	475	940	1,005	128.6	2.44	.374	70.8	-	-	-	01640650
1.80	370	430	411	44.4	.84	.26	8	-	-	-	01640700
7.30	330	770	546	80.4	1.52	.235	26	-	-	-	01640720
16.9	315	1,165	860	67.1	1.27	.097	52	-	-	-	01640750
8.8	385	1,280	1,100	135.6	2.57	.336	77	2,670	.4	19.56	01641000
4.2	850	1,655	1,450	255.6	4.84	.20	100	2,200	.6	21.61	01641500
12.9	310	1,470	933	119.9	2.27	.657	61	-	-	-	01641600
58.4	270	565	669	6.74	.13	.14	31.6	-	-	-	01641810
5.82	285	450	741	37.8	.72	.12	44.8	-	-	-	01641900
57.9	270	565	731	6.79	.13	.144	36	26,600	15	-	01642000
11.9	290	480	483	21.3	.40	.085	16.4	-	-	-	01642050
2.70	450	530	551	39.5	.75	.20	4	-	-	-	01642400
13.2	350	640	606	29.3	.55	.104	20.7	-	-	-	01642430
8.13	345	610	542	43.5	.82	.116	25.2	-	-	-	01642450
20.1	290	590	576	19.9	.38	.36	20	20,100	1.4	14.42	01642500
64.7	250	535	621	5.87	.11	.155	33	81,600	19	15.34	01643000
-	-	-	-	-	-	-	-	-	-	-	01643020
10.5	355	615	584	33.0	.63	.109	19.4	-	-	-	01643100
14.3	290	570	537	26.1	.49	.097	24.5	-	-	-	01643110
10.6	250	490	419	30.2	.57	.099	13	-	-	-	01643125
15.6	265	545	521	23.9	.45	.087	26	32,200	.30	15.16	01643500
83.5	240	540	613	4.79	.09	.148	30.5	-	-	-	01643580

Table 7.—Quality of ground water in Frederick County, Md.

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH FIELD	PH LAB	TEMPER-ATURE, AIR (DEG C)
FR AD 1	83-04-12	400MTRL	--	--	--	60	5.8	--	12.0
	83-06-06	400MTRL	--	--	--	68	5.8	6.0	24.0
	83-07-12	400MTRL	--	--	--	65	5.6	6.3	22.0
FR AD 2	55-04-04	400CTCN	36	15	10	271	6.5	--	--
FR AD 12	82-06-11	400CTCN	200	60	10	248	7.3	6.9	--
	83-04-07	400CTCN	200	15	50	260	6.9	6.9	11.0
FR AD 36	82-06-08	400MTRL	--	--	1.5	151	6.6	6.6	--
	83-06-16	400MTRL	--	--	1.5	135	6.4	6.3	28.5
FR AD 44	83-04-19	400MTRL	--	--	--	62	6.2	6.2	3.0
	83-06-07	400MTRL	--	--	--	62	5.8	6.4	19.0
FR AE 50	82-06-11	400CTCN	85	15	5.0	95	5.9	6.0	--
	83-04-07	400CTCN	85	15	3.0	79	5.8	5.8	13.0
FR AE 52	82-06-11	400CTCN	335	240	10	79	6.5	6.5	--
	83-04-07	400CTCN	335	15	4.5	83	6.6	6.8	13.0
FR AE 53	82-06-15	400CTCN	400	15	70	116	7.3	7.2	--
	83-04-07	400CTCN	400	55	21	121	7.6	7.3	12.0
FR AF 4	55-04-04	231GBRG	66	15	40	567	8.0	--	--
	55-12-21	231GBRG	66	--	--	538	7.7	--	--
FR AF 23	72-04-14	231GBRG	202	--	--	359	8.0	--	--
FR AF 38	82-06-15	231DIBS	100	15	4.0	293	7.0	7.0	--
	83-04-08	231DIBS	100	15	12	284	6.8	7.0	15.5
FR AG 2	82-06-16	231GBRG	135	15	5.0	432	7.8	7.7	--
FR BC 2	55-04-04	400MTRL	60	15	20	86	6.7	--	--
	70-05-14	400MTRL	60	--	--	95	5.8	--	--
FR BC 4	70-05-14	400MTRL	47	--	--	125	5.7	--	--
FR BC 6	70-05-14	400MTRL	95	--	--	155	6.0	--	--
FR BD 3	52-07-30	400MTRL	--	--	--	58	6.2	--	--
	83-04-11	400MTRL	--	--	--	90	6.3	--	9.0
	83-06-01	400MTRL	--	--	--	80	6.3	6.2	17.0
FR BD 4	83-04-11	400MTRL	--	--	--	59	6.0	--	9.0
	83-06-01	400MTRL	--	--	--	55	6.1	6.0	17.0
	83-07-28	400MTRL	--	--	--	59	5.8	6.4	23.0
	84-03-08	400MTRL	--	--	--	57	5.9	5.9	-5.0
	84-05-10	400MTRL	--	4	1.0	60	6.0	5.9	16.5
	84-08-09	400MTRL	--	--	.20	66	6.0	6.1	28.0
FR BD 6	55-06-06	400MTRL	230	--	25	73	6.7	--	--
	83-04-26	400MTRL	230	--	--	150	5.8	6.0	22.0
	83-06-06	400MTRL	230	--	--	245	5.8	6.1	24.0
FR BD 7	83-04-25	400CTCN	180	--	--	46	6.1	6.4	5.0
	83-06-02	400CTCN	180	--	--	51	6.4	6.6	17.0
FR BD 8	83-04-25	400CTCN	127	--	--	47	6.1	6.4	3.0
	83-06-02	400CTCN	127	--	--	59	6.4	6.3	17.0
	83-07-25	400CTCN	127	--	--	46	5.6	6.2	22.0
	83-11-04	400CTCN	127	10	--	46	6.4	5.8	3.0
	84-03-07	400CTCN	127	20	6.0	75	6.4	6.1	-1.0
	84-05-09	400CTCN	127	15	6.0	45	6.2	6.0	12.0
	84-08-08	400CTCN	127	180	25	52	5.8	6.2	25.0
	84-08-23	400CTCN	127	20	--	--	--	--	--
FR BD 9	56-05-11	377WVRN	30	--	--	63	5.9	--	--
FR BD 34	83-06-02	400CTCN	230	15	--	163	6.9	6.9	14.0
	83-07-13	400CTCN	230	20	--	168	6.6	7.1	26.0
FR BD 35	83-05-03	400MTRL	250	15	--	200	5.5	5.9	18.0
	83-06-13	400MTRL	250	15	--	206	5.4	5.9	25.5
	83-07-19	400MTRL	250	15	--	230	5.6	6.0	--
	83-10-31	400MTRL	250	30	--	221	5.9	5.8	17.0
	83-11-01	400MTRL	250	30	--	220	6.2	5.9	15.0
	84-03-06	400MTRL	250	45	--	201	5.8	5.4	.0
	84-03-08	400MTRL	250	--	--	194	5.7	--	.0
	84-03-20	400MTRL	250	15	--	195	6.0	5.8	5.0
	84-03-30	400MTRL	250	15	--	158	5.9	5.3	.0
	84-04-10	400MTRL	250	15	--	243	5.9	5.8	5.0
	84-04-17	400MTRL	250	20	--	245	5.7	5.4	15.0
	84-04-24	400MTRL	250	10	--	375	6.4	6.6	6.0
	84-05-10	400MTRL	250	10	--	202	5.5	5.2	10.0
	84-08-07	400MTRL	250	45	49	285	5.7	5.8	27.0
FR BD 36	83-05-03	400MTRL	250	--	--	205	6.0	--	18.0
	83-06-13	400MTRL	250	15	--	205	6.2	7.9	25.5
	83-07-19	400MTRL	250	20	--	200	5.9	6.3	--
	83-10-31	400MTRL	250	30	--	189	6.3	6.0	17.0
	83-11-01	400MTRL	250	30	--	176	6.3	6.2	14.0
	84-03-06	400MTRL	250	20	--	445	7.9	7.1	.0
	84-03-08	400MTRL	250	20	--	255	6.5	6.3	-4.0
	84-03-20	400MTRL	250	15	--	226	6.5	6.2	5.0
	84-03-30	400MTRL	250	15	--	172	6.7	6.0	.0
	84-04-10	400MTRL	250	15	--	285	6.7	6.7	5.0
	84-04-17	400MTRL	250	240	--	260	6.4	6.2	15.0
	84-04-24	400MTRL	250	15	--	450	7.1	7.2	6.0
	84-05-10	400MTRL	250	10	--	203	6.3	6.1	10.0
	84-08-07	400MTRL	250	45	25	280	6.4	6.5	27.0
FR BD 38	83-05-03	400MTRL	450	--	--	124	6.1	--	18.0

Table 7.—Quality of ground water in Frederick County, Md.—continued

TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SITE NUMBER
10.0	--	<1	<1	--	--	--	--	--	FR AD 1
13.0	--	<1	85	20	5	4.7	1.9	3.3	
9.5	--	K2	K4	20	3	4.9	1.9	3.9	
--	12	--	--	110	58	24	12	7.7	FR AD 2
12.0	--	--	--	98	40	16	14	6.0	FR AD 12
11.5	--	--	--	110	54	18	16	6.2	
11.0	--	--	--	58	11	14	5.6	5.1	FR AD 36
11.0	--	--	--	63	8	14	6.7	6.3	
6.0	--	<1	47	20	9	4.2	2.3	1.8	FR AD 44
12.0	--	<1	K6	25	10	5.2	2.8	2.6	
12.0	--	--	--	42	15	7.8	5.4	2.7	FR AE 50
10.5	--	--	--	33	18	6.1	4.2	2.1	
13.0	--	--	--	33	3	6.8	3.8	2.3	FR AE 52
10.5	--	--	--	36	4	6.2	5.0	3.1	
12.0	--	--	--	59	0	12	7.1	5.7	FR AE 53
11.0	--	--	--	58	0	12	6.9	5.9	
--	10	--	--	280	120	70	25	8.8	FR AF 4
--	3	--	--	250	88	73	--	--	
12.0	0	--	--	180	0	50	14	12	FR AF 23
11.5	--	--	--	140	28	27	17	4.4	FR AF 38
11.0	--	--	--	140	24	27	17	4.5	
13.0	--	--	--	200	60	63	9.2	13	FR AG 2
--	15	--	--	20	0	7.2	.50	3.1	FR BC 2
15.0	--	--	--	--	--	--	--	--	
17.0	--	--	--	--	--	--	--	--	FR BC 4
17.0	--	--	--	--	--	--	--	--	FR BC 6
--	3	--	--	19	0	4.6	1.8	3.7	FR BD 3
7.0	--	<1	K1	--	--	--	--	--	
9.0	--	K1	K8	30	6	7.1	2.9	3.9	
8.0	--	K1	<1	--	--	--	--	--	FR BD 4
9.0	--	<1	K14	18	0	4.2	1.8	2.4	
9.0	--	K1	22	19	9	4.6	1.9	2.5	
7.0	--	<1	<1	19	9	4.6	1.9	2.1	
10.0	--	<1	<1	19	8	4.5	1.9	2.1	
12.0	--	K2	46	22	9	5.2	2.1	2.4	
--	7	--	--	31	0	8.0	2.7	1.7	FR BD 6
9.0	--	<1	K15	68	50	14	8.2	13	
9.0	--	<1	K140	66	47	13	8.2	16	
11.0	--	<1	K3	18	0	3.1	2.6	1.7	FR BD 7
11.0	--	<1	K4	23	0	4.7	2.8	1.7	
9.0	--	<1	23	19	0	3.2	2.6	1.7	FR BD 8
10.0	--	<1	<1	25	0	4.0	3.6	2.1	
11.0	--	<1	36	18	0	3.1	2.5	2.0	
8.0	--	<1	<1	26	1	4.4	3.6	2.5	
9.0	--	<1	<1	30	0	5.1	4.3	2.4	
10.0	--	<1	<1	18	0	3.1	2.6	1.5	
13.5	--	<1	<1	20	0	3.3	2.8	1.6	
--	--	--	--	--	--	--	--	--	
--	2	--	--	19	17	--	--	--	FR BD 9
11.0	--	<1	K1	69	15	11	10	6.0	FR BD 34
12.5	--	<1	<1	68	4	11	10	6.1	
15.0	--	<1	<1	49	27	12	4.8	10	FR BD 35
13.0	--	<1	<1	60	33	15	5.6	12	
--	--	<1	<1	55	16	11	6.6	11	
8.0	--	<1	<1	74	38	20	5.9	10	
15.0	--	<1	<1	85	34	24	6.0	8.9	
10.0	--	<1	<1	62	26	15	5.9	12	
10.0	--	--	--	--	--	--	--	--	
13.0	--	<1	<1	64	28	17	5.2	10	
10.0	--	<1	<1	60	37	14	6.1	12	
10.0	--	<1	<1	58	18	13	6.2	22	
13.0	--	<1	>200	62	39	14	6.5	15	
17.0	--	<1	<1	60	0	15	5.4	53	
11.0	--	<1	<1	64	45	15	6.5	13	
13.5	--	<1	<1	75	55	18	7.3	12	
13.0	--	<1	>200	--	--	--	--	--	FR BD 36
13.0	--	<1	<1	77	14	25	3.2	8.5	
--	--	<1	<1	86	28	29	3.0	8.9	
8.0	--	<1	<1	69	18	22	3.3	8.8	
15.0	--	<1	<1	71	17	24	2.8	6.6	
10.0	--	<1	<1	98	0	32	4.4	65	
10.0	--	<1	<1	110	25	36	4.4	9.5	
12.5	--	<1	<1	94	26	31	4.1	7.5	
10.0	--	<1	<1	93	22	31	3.8	7.0	
10.0	--	<1	<1	120	20	43	4.0	7.5	
13.0	--	<1	<1	99	25	33	4.0	7.3	
17.0	--	--	--	78	0	24	4.3	70	
11.0	--	<1	<1	93	26	31	3.9	7.1	
13.0	--	<1	<1	95	28	31	4.2	8.3	
13.0	--	<1	K95	--	--	--	--	--	FR BD 38

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FR AD 1	83-04-12	--	--	--	--	--	40	--	--	--
	83-06-06	0.82	--	--	--	14	45	6.6	2.7	--
	83-07-12	.94	--	--	--	16	84	7.3	1.7	--
FR AD 2	55-04-04	.70	62	--	51	--	31	51	12	<0.05
FR AD 12	82-06-11	.20	--	--	--	58	5.6	23	24	<.10
	83-04-07	.30	--	--	65	57	14	20	32	<.10
FR AD 36	82-06-08	.90	--	--	--	47	23	12	9.0	<.10
	83-06-16	1.0	--	--	55	44	42	10	11	.10
FR AD 44	83-04-19	.40	--	--	--	11	14	6.5	1.9	--
	83-06-07	.65	--	--	--	16	45	5.3	2.2	--
FR AE 50	82-06-11	.10	--	--	--	27	66	23	2.9	<.10
	83-04-07	.20	--	--	15	15	46	21	3.5	<.10
FR AE 52	82-06-11	.10	--	--	--	30	18	14	1.9	<.10
	83-04-07	.20	--	--	37	32	16	9.2	2.5	<.10
FR AE 53	82-06-15	.10	--	--	--	66	6.4	3.0	1.1	<.10
	83-04-07	.20	--	--	75	65	3.2	3.6	1.3	<.10
FR AF 4	55-04-04	1.0	190	--	160	--	3.1	130	5.2	.40
	55-12-21	--	200	--	164	--	6.3	100	9.0	--
FR AF 23	72-04-14	.90	220	--	185	--	3.6	9.6	3.5	.10
FR AF 38	82-06-15	.40	--	--	--	110	21	31	4.3	<.10
	83-04-08	.50	--	--	141	114	35	28	5.8	<.10
FR AG 2	82-06-16	.20	--	--	--	136	4.2	24	20	.10
FR BC 2	55-04-04	1.4	29	--	24	--	9.2	4.2	1.8	<.05
	70-05-14	--	--	--	--	--	--	--	--	--
FR BC 4	70-05-14	--	--	--	--	--	--	--	--	--
FR BC 6	70-05-14	--	--	--	--	--	--	--	--	--
FR BD 3	52-07-30	.70	24	--	20	--	24	2.0	2.9	<.05
	83-04-11	--	--	--	--	--	23	--	--	--
	83-06-01	.84	--	--	--	24	23	6.1	2.1	--
FR BD 4	83-04-11	--	--	--	--	--	21	--	--	--
	83-06-01	.47	--	--	--	10	35	4.4	3.5	--
	83-07-28	.53	--	--	--	11	33	1.8	4.6	--
	84-03-08	.40	--	--	--	11	24	5.7	6.6	<.10
	84-05-10	.40	--	--	--	5.0	21	5.3	5.0	<.10
	84-08-09	.40	--	--	--	11	24	9.4	7.0	<.10
FR BD 6	55-06-06	1.7	40	--	33	--	13	.0	.60	<.05
	83-04-26	1.0	--	--	--	18	58	5.9	32	--
	83-06-06	.84	--	--	--	19	60	6.0	20	--
FR BD 7	83-04-25	.42	--	--	--	21	34	.1	1.5	--
	83-06-02	.39	--	--	--	26	20	.1	1.3	--
FR BD 8	83-04-25	.30	--	--	--	18	33	.4	3.6	--
	83-06-02	.36	--	--	--	27	21	1.9	2.3	--
	83-07-25	.45	--	--	--	18	92	.2	2.4	--
	83-11-04	.30	--	--	--	27	19	1.8	4.3	<.10
	84-03-07	.30	--	--	--	31	24	3.5	2.6	<.10
	84-05-09	.30	--	--	--	20	24	.8	2.2	<.10
	84-08-08	.30	--	--	--	22	64	.7	2.5	<.10
	84-08-23	--	--	--	--	--	--	--	--	--
FR BD 9	56-05-11	--	3	--	2	--	6.0	14	2.5	--
FR BD 34	83-06-02	.30	--	--	--	55	13	2.4	13	--
	83-07-13	.42	--	--	--	56	32	2.4	16	--
FR BD 35	83-05-03	2.1	--	--	--	20	136	7.1	17	--
	83-06-13	1.6	--	--	--	26	209	6.0	19	--
	83-07-19	1.0	--	--	--	37	188	5.3	16	--
	83-10-31	1.6	--	--	--	36	88	6.2	31	<.10
	83-11-01	1.6	--	--	--	50	62	6.6	26	<.10
	84-03-06	1.8	--	--	--	24	111	6.5	35	<.10
	84-03-08	--	--	--	--	--	--	--	--	--
	84-03-20	1.9	--	--	--	35	70	6.5	29	<.10
	84-03-30	1.9	--	--	--	21	56	5.8	38	<.10
	84-04-10	2.0	--	--	--	38	98	8.6	39	<.10
	84-04-17	2.0	--	--	--	22	89	8.9	41	.10
	84-04-24	1.9	--	--	--	116	92	8.1	37	<.10
	84-05-10	2.0	--	--	--	18	116	5.1	42	<.10
	84-08-07	1.9	--	--	--	21	76	6.9	45	<.10
FR BD 36	83-05-03	--	--	--	--	--	110	--	--	--
	83-06-13	1.4	--	--	--	63	76	4.0	11	--
	83-07-19	1.6	--	--	--	57	142	2.0	14	--
	83-10-31	1.5	--	--	--	51	50	2.5	18	<.10
	83-11-01	1.3	--	--	--	56	53	2.3	13	<.10
	84-03-06	1.6	--	--	--	201	5.1	5.5	24	<.10
	84-03-08	1.5	--	--	--	83	51	5.8	25	<.10
	84-03-20	1.6	--	--	--	69	42	6.5	21	<.10
	84-03-30	1.5	--	--	--	72	28	5.4	19	<.10
	84-04-10	1.4	--	--	--	100	40	6.9	19	<.10
	84-04-17	1.6	--	--	--	74	57	5.8	22	<.10
	84-04-24	1.8	--	--	--	192	31	5.5	28	.10
	84-05-10	1.5	--	--	--	67	66	5.0	21	<.10
	84-08-07	1.6	--	--	--	67	52	4.3	24	<.10
FR BD 38	83-05-03	--	--	--	--	--	57	--	--	--

Table 7.—Quality of ground water in Frederick County, Md.—continued

SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SITE NUMBER
--	--	--	--	--	--	--	--	--	FR AD 1
--	--	--	--	0.56	--	0.10	--	0.126	
--	--	--	0.63	.68	--	.20	--	.068	
23	182	170	2.7	--	--	--	--	--	FR AD 2
19	147	140	--	1.2	--	--	--	.020	FR AD 12
19	155	150	--	1.2	--	.10	0.020	.020	
22	117	97	--	1.3	--	.80	.050	.060	FR AD 36
25	117	110	--	1.5	--	<.10	.050	.060	
--	--	--	--	1.2	--	--	--	.068	FR AD 44
--	--	--	--	1.5	--	.20	--	.113	
17	77	75	--	.26	--	--	--	<.010	FR AE 50
14	64	60	--	.11	--	.10	<.010	<.010	
18	84	65	--	.15	--	--	--	.030	FR AE 52
21	66	67	--	.35	--	<.10	.040	.040	
20	85	89	--	.40	--	--	--	.030	FR AE 53
19	90	88	--	.38	--	<.10	.020	.020	
25	373	360	.36	--	--	--	--	--	FR AF 4
--	--	--	.56	--	--	--	--	--	
20	228	230	1.2	--	--	--	--	--	FR AF 23
44	220	190	--	.61	--	--	--	<.010	FR AF 38
34	180	190	--	<.10	--	--	--	<.010	
20	313	230	--	11	--	.40	.050	.030	FR AG 2
15	65	56	1.9	--	--	--	--	--	FR BC 2
--	--	--	2.2	--	--	--	--	--	
--	--	--	3.6	--	--	--	--	--	FR BC 4
--	--	--	1.8	--	--	--	--	--	FR BC 6
17	47	47	.47	--	--	--	--	--	FR BD 3
--	--	--	--	--	--	--	--	--	
--	--	--	1.1	1.1	--	.20	--	.033	
--	--	--	--	--	--	--	--	--	FR BD 4
--	--	--	--	.76	--	.20	--	--	
--	--	--	--	.53	--	.20	--	.022	
12	45	39	--	.98	--	--	--	.010	
12	41	38	--	.93	--	--	--	<.010	
13	48	47	--	.97	--	--	--	.050	
13	55	50	.68	--	--	--	--	--	FR BD 6
--	--	--	--	1.2	0.155	--	--	.000	
--	--	--	--	1.2	--	--	--	.030	
--	--	--	--	.04	--	--	--	.002	FR BD 7
--	--	--	.04	.05	.029	.20	--	.035	
--	--	--	--	.10	--	--	--	--	FR BD 8
--	--	--	--	.11	.047	<.10	--	.030	
--	--	--	--	.10	--	<.10	--	.058	
13	40	45	--	.15	--	--	--	.230	
13	52	50	--	.24	--	--	--	.020	
11	36	33	--	.11	--	--	--	<.010	
12	33	37	--	.13	--	--	--	.060	
--	--	--	--	--	--	--	--	--	
--	--	--	.45	--	--	--	--	--	FR BD 9
--	--	--	--	.09	--	.20	--	--	FR BD 34
--	--	--	--	.20	--	<.10	--	--	
--	--	--	--	3.6	--	--	--	--	FR BD 35
--	--	--	--	4.3	--	.30	--	.262	
--	--	--	--	4.1	--	<.10	--	.060	
18	172	110	--	3.9	--	--	--	.030	
27	166	130	--	3.7	--	--	--	.010	
14	124	110	--	3.6	--	--	--	<.010	
--	--	--	--	--	--	--	--	--	
17	129	110	--	3.4	--	--	--	<.010	
14	157	110	--	3.8	--	--	--	<.010	
12	144	130	--	3.4	--	--	--	<.010	
12	186	110	--	3.0	--	--	--	<.010	
14	205	210	--	3.4	--	--	--	<.010	
13	191	110	--	3.3	--	--	--	<.010	
15	201	120	--	3.6	--	--	--	<.010	
--	--	--	--	--	--	--	--	--	FR BD 36
--	--	--	--	3.3	--	.20	--	.045	
--	--	--	--	2.5	--	.20	--	--	
17	128	100	--	2.7	--	--	--	.060	
18	125	100	--	2.8	--	--	--	.020	
18	289	280	--	3.0	--	--	--	.010	
18	176	150	--	3.2	--	--	--	<.010	
18	168	130	--	3.3	--	--	--	<.010	
18	167	130	--	3.3	--	--	--	<.010	
20	185	160	--	3.1	--	--	--	<.010	
18	184	140	--	2.9	--	--	--	<.010	
16	286	270	--	3.3	--	--	--	<.010	
19	182	130	--	3.0	--	--	--	<.010	
18	176	130	--	3.1	--	--	--	<.010	
--	--	--	--	--	--	--	--	--	FR BD 38

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH FIELD	PH LAB	TEMPER-ATURE, AIR (DEG C)
FR BD 38	83-06-13	400MTRL	450	15	--	161	6.6	7.3	25.5
	83-07-19	400MTRL	450	15	--	168	6.2	6.7	--
	83-10-31	400MTRL	450	15	--	160	6.2	5.8	17.0
	83-11-01	400MTRL	450	30	--	155	6.8	6.6	14.0
	84-03-06	400MTRL	450	40	--	154	6.6	6.4	.0
	84-05-10	400MTRL	450	10	--	157	6.7	6.5	10.0
	84-08-07	400MTRL	450	45	36	143	6.6	6.7	27.0
FR BD 39	83-05-09	400CTCN	--	--	--	108	5.8	6.3	9.0
	83-06-14	400CTCN	--	--	--	112	5.7	6.6	31.0
	83-07-28	400CTCN	--	--	--	120	6.0	6.2	23.0
	83-11-02	400CTCN	--	--	--	108	6.2	5.6	15.0
	84-03-07	400CTCN	--	--	.50	110	6.1	5.8	5.5
	84-05-09	400CTCN	--	5	--	106	6.3	6.1	9.0
	84-08-08	400CTCN	--	5	.20	113	6.0	6.0	28.0
FR BD 40	66-03-17	400CTCN	180	--	--	56	7.0	--	--
	83-05-02	400CTCN	180	15	--	72	6.0	6.3	16.0
	83-06-13	400CTCN	180	5	--	71	6.1	6.5	24.0
	83-07-18	400CTCN	180	15	--	71	5.8	6.3	25.0
	83-11-03	400CTCN	180	15	8.0	65	6.3	5.8	16.0
	84-03-08	400CTCN	180	15	6.0	61	6.1	5.9	-6.0
	84-05-09	400CTCN	180	15	4.0	67	6.0	5.9	10.0
	84-08-09	400CTCN	180	300	35	70	6.4	6.4	29.0
FR BD 41	66-03-22	400MTRL	160	--	--	74	6.8	--	--
	83-05-02	400MTRL	160	--	--	79	6.2	7.1	16.0
	83-06-13	400MTRL	160	--	--	84	6.3	7.8	24.5
	83-07-18	400MTRL	160	--	--	85	5.9	6.4	25.0
FR BD 43	83-04-27	400CTCN	120	20	--	21	5.3	5.7	18.0
	83-06-07	400CTCN	120	20	--	23	5.1	5.9	18.5
	83-07-25	400CTCN	120	30	--	30	4.8	6.0	22.0
	83-11-03	400CTCN	120	15	18	34	6.1	5.6	15.0
	84-03-08	400CTCN	120	20	45	12	5.7	5.3	-6.0
	84-05-09	400CTCN	120	20	5.0	22	5.5	5.4	9.0
	84-08-09	400CTCN	120	25	45	34	6.1	6.1	27.0
FR BD 44	66-05-16	400CTCN	247	480	--	37	7.0	--	--
	83-04-27	400CTCN	247	--	--	33	5.6	5.9	23.0
	83-06-07	400CTCN	247	--	--	27	5.7	6.0	18.5
FR BD 49	71-04-07	377WVRN	202	--	--	43	5.9	--	--
	81-08-21	377WVRN	202	--	--	21	5.9	6.9	--
	83-04-18	377WVRN	202	15	--	44	6.3	6.1	7.0
	83-06-06	377WVRN	202	45	--	50	5.6	6.4	24.0
	83-07-13	377WVRN	202	--	--	55	5.8	6.5	28.0
	83-11-04	377WVRN	202	15	--	55	6.2	5.8	3.0
	83-11-09	377WVRN	202	--	--	--	6.2	5.8	3.0
	84-03-07	377WVRN	202	30	6.0	50	6.3	5.8	.0
	84-05-09	377WVRN	202	15	10	52	6.2	5.9	15.0
	84-08-08	377WVRN	202	25	12	54	5.9	6.5	25.0
FR BD 72	83-05-10	400MTRL	--	--	--	53	6.2	6.9	9.0
	83-06-07	400MTRL	--	--	--	54	6.0	6.7	21.0
	83-07-12	400MTRL	--	--	--	50	6.0	6.5	19.0
FR BD 73	83-05-10	400MTRL	--	--	--	75	6.2	6.4	9.0
	83-06-07	400MTRL	--	--	--	72	6.1	6.5	21.0
	83-07-12	400MTRL	--	--	--	74	5.9	6.4	24.5
	83-11-04	400MTRL	--	5	.50	75	6.6	6.1	3.0
	84-03-06	400MTRL	--	5	.50	72	5.8	5.9	.0
	84-05-10	400MTRL	--	5	1.0	72	6.0	6.0	16.5
	84-08-08	400MTRL	--	5	.50	86	5.8	6.5	35.0
FR BD 105	82-06-08	400MTRL	85	15	5.0	66	6.8	6.3	--
	83-04-07	400MTRL	85	20	9.0	70	5.9	6.0	9.5
FR BD 106	83-04-11	400MTRL	--	--	--	52	6.0	--	--
	83-06-01	400MTRL	--	--	--	49	5.5	5.8	15.0
	83-07-27	400MTRL	--	--	--	56	5.4	6.2	23.0
FR BD 107	83-04-05	400MTRL	--	--	--	390	5.8	6.4	--
	83-04-05	400MTRL	--	--	--	390	5.8	6.4	--
	83-06-01	400MTRL	--	--	--	260	6.2	6.1	19.0
	83-07-19	400MTRL	--	--	--	163	5.5	6.2	28.5
	83-11-02	400MTRL	--	--	--	171	6.0	5.7	14.0
	84-03-07	400MTRL	--	--	--	385	6.2	5.9	4.0
	84-05-09	400MTRL	--	5	2.0	300	6.3	6.0	9.0
	84-08-08	400MTRL	--	--	.50	180	6.0	6.1	35.0
FR BD 108	83-04-12	400MTRL	--	--	--	175	6.0	--	10.0
	83-06-08	400MTRL	--	--	--	150	6.6	6.7	19.0
	83-08-03	400MTRL	--	--	--	165	5.9	6.6	26.0
	83-11-02	400MTRL	--	--	--	150	6.7	6.2	17.0
	84-03-06	400MTRL	--	5	.50	162	6.0	5.7	.0
	84-05-08	400MTRL	--	5	1.0	145	6.0	5.8	16.0
	84-08-07	400MTRL	--	5	.50	155	5.9	6.2	31.0
FR BD 109	83-06-08	400MTRL	10	--	--	162	5.8	6.5	19.0
	83-08-03	400MTRL	10	--	--	165	5.6	6.2	26.0
FR BD 110	83-04-11	400MTRL	--	--	--	70	6.1	--	9.0
	83-06-01	400MTRL	--	--	--	73	5.7	6.0	15.0

Table 7.—Quality of ground water in Frederick County, Md.—continued

TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SITE NUMBER
13.0	--	<1	<1	64	3	21	3.1	6.0	FR BD 38
--	--	<1	<1	66	6	21	3.1	7.7	
8.0	--	<1	<1	44	6	13	2.9	5.4	
15.0	--	<1	<1	77	6	25	3.6	6.6	
10.0	--	<1	<1	66	10	21	3.3	5.5	
11.0	--	<1	<1	81	19	27	3.2	5.5	
13.5	--	<1	<1	49	4	15	2.9	5.0	
9.0	--	K14	94	38	10	9.3	3.5	4.8	FR BD 39
10.0	--	<1	K1	40	18	9.9	3.7	4.9	
9.0	--	<1	<1	41	18	10	3.7	5.3	
10.5	--	<1	<1	41	14	10	3.8	4.6	
10.0	--	<1	<1	41	17	10	3.9	4.2	
10.0	--	<1	<1	41	17	10	3.9	4.1	
13.5	--	<1	<1	40	16	10	3.7	4.0	
10.0	--	--	--	24	0	6.4	2.0	2.2	FR BD 40
9.5	--	<1	K12	27	0	6.8	2.3	2.7	
10.5	--	<1	<1	26	1	6.7	2.2	2.4	
10.0	--	<1	<1	28	1	7.3	2.4	2.7	
12.0	--	<1	<1	29	0	7.5	2.4	2.7	
9.0	--	<1	<1	28	3	7.2	2.4	2.1	
10.0	--	<1	<1	27	1	7.0	2.4	2.1	
11.0	--	<1	<1	29	0	7.8	2.4	2.1	
10.0	--	--	--	32	0	7.4	3.2	3.2	FR BD 41
9.5	--	<1	K15	31	0	7.2	3.3	3.7	
10.5	--	<1	<1	32	0	7.4	3.4	3.0	
11.0	--	<1	<1	32	0	7.4	3.4	3.9	
8.0	--	<1	>200	4	0	1.0	.45	1.7	FR BD 43
9.5	--	<1	<1	5	0	1.2	.45	2.4	
8.0	--	<1	K8	7	0	1.8	.68	3.1	
10.5	--	<1	<1	11	0	2.7	1.1	3.3	
10.0	--	--	--	5	0	1.1	.46	1.7	
9.0	--	<1	<1	4	0	1.0	.45	1.7	
10.0	--	<1	>100	8	0	1.9	.79	2.5	
10.5	3	--	--	11	0	2.9	1.0	2.2	FR BD 44
11.0	--	<1	36	10	0	2.5	.88	2.3	
11.0	--	<1	<1	10	4	2.4	.88	2.4	
--	0	--	--	12	0	3.4	.80	2.7	FR BD 49
15.0	--	--	--	0	0	.20	.10	.90	
10.0	--	<1	27	12	0	3.6	.75	2.6	
13.0	--	<1	47	13	0	3.9	.75	3.0	
13.0	--	<1	<1	15	0	4.6	.81	3.8	
10.0	--	<1	<1	18	0	5.6	.95	3.8	
10.0	--	--	--	18	0	5.6	.95	3.8	
10.0	--	<1	<1	16	0	4.8	.88	2.8	
12.0	--	<1	<1	16	0	4.9	.83	2.9	
13.5	--	<1	<1	15	0	4.7	.81	2.7	
8.0	--	<1	K19	20	0	4.6	2.1	2.8	FR BD 72
10.5	--	<1	K6	19	0	4.4	2.1	2.7	
11.0	--	K4	<1	18	0	4.1	2.0	3.0	
8.0	--	<1	K17	26	11	6.1	2.7	2.9	FR BD 73
10.5	--	K4	K140	26	10	5.9	2.7	3.3	
11.5	--	<1	32	26	17	6.0	2.7	5.3	
7.0	--	>60	24	29	10	6.7	3.0	3.8	
11.0	--	<1	<1	27	8	6.3	2.7	2.8	
12.0	--	<1	<1	26	8	6.1	2.6	2.7	
15.0	--	<1	K11	27	12	6.3	2.8	3.1	
11.0	--	--	--	21	4	5.2	2.0	2.7	FR BD 105
11.5	--	--	--	23	10	5.5	2.2	3.4	
8.0	--	<1	K1	--	--	--	--	--	FR BD 106
9.5	--	<1	51	25	16	6.3	2.3	2.2	
13.0	--	K4	K2	19	9	4.5	1.8	2.5	
9.0	--	K4	K8	41	9	2.3	8.5	12	FR BD 107
9.0	--	4	8	92	61	23	8.5	12	
12.5	--	K3	23	16	0	4.0	1.5	18	
13.0	--	<1	<1	48	21	12	4.6	11	
15.0	--	<1	K6	50	19	12	4.8	14	
10.0	--	K8	K3	100	60	26	9.6	31	
13.0	--	K6	62	81	38	20	7.5	24	
16.0	--	<1	K6	48	17	12	4.5	11	
10.0	--	>60	>200	--	--	--	--	--	FR BD 108
14.0	--	24	25	46	13	12	4.0	10	
14.0	--	K6	<1	51	19	13	4.4	11	
12.5	--	K3	K21	51	15	13	4.6	11	
12.0	--	K1	K3	53	22	13	4.9	9.1	
12.0	--	<1	K10	47	21	12	4.2	8.3	
15.0	--	22	K8	48	20	12	4.5	9.9	
10.0	--	<1	20	45	11	10	4.6	12	FR BD 109
15.0	--	<1	<1	49	19	13	4.3	10	
10.0	--	K1	K23	--	--	--	--	--	FR BD 110
9.5	--	<1	<1	72	55	18	6.9	2.8	

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FR BD 38	83-06-13	1.4	--	--	--	61	30	4.3	10	--
	83-07-19	.96	--	--	--	62	74	4.3	11	--
	83-10-31	1.5	--	--	--	39	47	1.8	7.2	<0.10
	83-11-01	2.0	--	--	--	71	22	5.1	7.8	<.10
	84-03-06	1.8	--	--	--	59	28	3.8	7.0	<.10
	84-05-10	1.8	--	--	--	73	24	4.5	6.7	<.10
	84-08-07	1.7	--	--	--	47	22	2.7	5.7	<.10
FR BD 39	83-05-09	.56	--	--	--	22	86	4.9	8.5	--
	83-06-14	.47	--	--	--	24	86	5.4	8.7	--
	83-07-28	.38	--	--	--	24	44	5.6	6.2	--
	83-11-02	.30	--	--	--	26	32	5.0	9.6	.10
	84-03-07	.40	--	--	--	24	37	5.0	9.9	<.10
	84-05-09	.40	--	--	--	25	23	5.4	9.9	<.10
	84-08-08	.40	--	--	--	24	48	5.0	9.6	<.10
FR BD 40	66-03-17	.30	31	--	25	--	4.9	.6	.80	.20
	83-05-02	.57	--	--	--	25	56	.3	2.1	--
	83-06-13	.35	--	--	--	25	38	.9	1.5	--
	83-07-18	.53	--	--	--	26	83	.3	2.9	--
	83-11-03	.40	--	--	--	30	29	.5	3.7	<.10
	84-03-08	.40	--	--	--	26	38	.3	1.7	<.10
	84-05-09	.40	--	--	--	25	51	.6	1.3	<.10
	84-08-09	.40	--	--	--	28	24	1.8	1.5	<.10
FR BD 41	66-03-22	.50	44	--	36	--	11	1.2	.70	.20
	83-05-02	.75	--	--	--	32	40	.2	1.8	--
	83-06-13	.57	--	--	--	34	33	.8	2.7	--
	83-07-18	.65	--	--	--	34	86	.1	2.8	--
FR BD 43	83-04-27	.92	--	--	--	6.6	56	1.1	1.7	--
	83-06-07	1.2	--	--	--	8.0	88	.4	1.7	--
	83-07-25	1.1	--	--	--	11	277	.5	1.6	--
	83-11-03	.80	--	--	--	18	23	.8	1.9	<.10
	84-03-08	.90	--	--	--	8.0	31	1.3	1.8	<.10
	84-05-09	.90	--	--	--	8.0	50	.8	1.3	<.10
	84-08-09	.80	--	--	--	13	23	9.2	1.2	.10
FR BD 44	66-05-16	1.1	19	--	16	--	3.0	1.4	1.0	.10
	83-04-27	.84	--	--	--	11	60	.6	2.1	--
	83-06-07	.84	--	--	--	11	22	.2	2.1	--
FR BD 49	71-04-07	1.7	19	--	16	--	38	3.2	1.0	.10
	81-08-21	1.0	--	--	--	3.0	7.3	2.2	1.1	<.10
	83-04-18	1.1	--	--	--	13	12	3.4	1.6	--
	83-06-06	1.8	--	--	--	16	68	3.9	1.7	--
	83-07-13	1.8	--	--	--	--	58	3.3	2.5	--
	83-11-04	1.6	--	--	--	23	31	4.3	1.8	<.10
	83-11-09	1.6	--	--	--	23	28	4.3	1.8	<.10
	84-03-07	1.6	--	--	--	20	21	3.8	1.3	<.10
	84-05-09	1.6	--	--	--	19	22	4.1	1.3	.10
	84-08-08	1.5	--	--	--	19	44	4.4	1.3	<.10
FR BD 72	83-05-10	.75	--	--	--	20	24	2.0	2.3	--
	83-06-07	.58	--	--	--	20	38	2.2	2.3	--
	83-07-12	.81	--	--	--	20	37	2.1	1.7	--
FR BD 73	83-05-10	.84	--	--	--	16	19	6.2	2.2	--
	83-06-07	.72	--	--	--	16	24	6.5	2.4	--
	83-07-12	1.3	--	--	--	16	22	6.0	2.5	--
	83-11-04	.50	--	--	--	19	9.2	7.4	2.4	<.10
	84-03-06	.60	--	--	--	17	58	7.1	2.0	<.10
	84-05-10	.60	--	--	--	17	35	8.1	1.9	<.10
	84-08-08	.30	--	--	--	18	48	6.7	2.3	<.10
FR BD 105	82-06-08	.80	--	--	--	17	5.2	3.0	3.6	<.10
	83-04-07	.80	--	--	13	13	32	3.4	4.8	<.10
FR BD 106	83-04-11	--	--	--	--	--	21	--	--	--
	83-06-01	.48	--	--	--	9.0	60	4.3	6.3	--
	83-07-27	.38	--	--	--	11	76	4.3	6.3	--
FR BD 107	83-04-05	2.3	--	--	--	32	98	12	32	--
	83-04-05	2.3	--	--	--	32	98	12	32	--
	83-06-01	2.3	--	--	--	34	41	7.6	17	--
	83-07-19	1.3	--	--	--	28	166	4.7	21	--
	83-11-02	1.7	--	--	--	32	60	6.3	27	<.10
	84-03-07	2.2	--	--	--	41	54	9.0	91	<.10
	84-05-09	2.0	--	--	--	42	41	12	55	<.10
	84-08-08	1.5	--	--	--	32	62	5.9	21	<.10
FR BD 108	83-04-12	--	--	--	--	--	76	--	--	--
	83-06-08	1.4	--	--	--	30	16	12	8.5	--
	83-08-03	1.0	--	--	--	33	76	9.4	7.5	--
	83-11-02	1.3	--	--	--	34	14	12	12	<.10
	84-03-06	1.2	--	--	--	31	60	16	13	<.10
	84-05-08	1.1	--	--	--	24	51	14	13	<.10
	84-08-07	1.2	--	--	--	29	70	9.3	16	<.10
FR BD 109	83-06-08	1.7	--	--	--	34	103	12	9.2	--
	83-08-03	1.3	--	--	--	31	148	7.9	9.8	--
FR BD 110	83-04-11	--	--	--	--	--	28	--	--	--
	83-06-01	.92	--	--	--	--	67	3.0	4.6	--

Table 7.—Quality of ground water in Frederick County, Md.—continued

SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SITE NUMBER
--	--	--	--	2.3	--	0.10	--	--	FR BD 38
--	--	--	--	2.3	--	.10	--	--	
21	92	76	--	2.5	--	--	--	0.020	
23	127	120	--	2.6	--	--	--	.050	
22	112	98	--	2.3	--	--	--	.020	
22	137	110	--	2.5	--	--	--	<.010	
22	102	83	--	2.4	--	--	--	.020	
--	--	--	--	2.4	--	--	--	--	FR BD 39
--	--	--	--	3.1	--	.20	--	--	
--	--	--	--	3.1	0.011	<.10	--	.011	
19	93	68	--	2.8	--	--	--	.030	
19	84	67	--	2.7	--	--	--	.020	
20	103	68	--	2.5	--	--	--	<.010	
19	93	67	--	2.6	--	--	--	.040	
17	48	46	0.38	--	--	--	--	--	FR BD 40
--	--	--	--	1.7	--	--	--	.015	
--	--	--	--	1.7	.030	.20	--	--	
--	--	--	--	1.5	.106	--	--	.061	
16	49	51	--	<.10	--	--	--	.040	
16	49	45	--	1.7	--	--	--	.060	
15	58	45	--	1.6	--	--	--	.040	
16	52	51	--	1.4	--	--	--	.120	
19	58	58	.18	--	--	--	--	--	FR BD 41
--	--	--	--	1.3	--	--	--	--	
--	--	--	--	1.5	--	.10	--	.031	
--	--	--	1.2	1.3	.056	.20	--	.087	
--	--	--	--	.08	--	--	--	--	FR BD 43
--	--	--	--	.08	.056	.20	--	--	
--	--	--	--	.10	--	<.10	--	.080	
20	37	40	--	<.10	--	--	--	.060	
10	25	22	--	.25	--	--	--	<.010	
11	25	22	--	.13	--	--	--	<.010	
17	36	42	--	<.10	--	--	--	.040	
14	36	33	--	--	--	--	--	--	FR BD 44
--	--	--	--	.59	--	--	--	.066	
--	--	--	--	.38	--	.10	--	.062	
10	28	33	.09	--	--	--	--	--	FR BD 49
6.5	16	14	--	--	--	--	--	--	
--	--	--	--	.06	--	--	--	--	
--	--	--	--	.08	--	.50	--	.145	
--	--	--	--	.02	--	<.10	--	.119	
11	39	44	--	.96	--	--	--	.080	
11	39	44	--	.96	--	--	--	.080	
10	41	39	--	.20	--	--	--	.120	
10	41	37	--	.17	--	--	--	.120	
10	39	38	--	.11	--	--	--	.180	
--	--	--	--	.55	--	--	--	.012	FR BD 72
--	--	--	--	.46	--	.60	--	--	
--	--	--	--	.53	.030	.10	--	--	
--	--	--	--	2.0	--	--	--	.006	FR BD 73
--	--	--	--	1.9	--	--	--	.169	
--	--	--	--	2.4	--	<.10	--	--	
19	65	54	--	.19	--	--	--	.020	
19	61	52	--	2.3	--	--	--	<.010	
19	60	52	--	1.9	--	--	--	<.010	
20	57	51	--	2.4	--	--	--	.040	
19	72	47	--	3.5	--	--	--	.010	FR BD 105
20	66	48	--	3.5	--	.20	0.030	<.010	
--	--	--	--	--	--	--	--	--	FR BD 106
--	--	--	1.0	1.1	--	.20	--	.167	
--	--	--	1.0	1.1	.014	.20	--	.149	
--	--	--	2.5	2.5	--	--	--	--	FR BD 107
--	--	--	2.5	2.5	--	--	--	--	
--	--	--	--	2.4	.025	.10	--	.050	
--	--	--	--	2.4	--	.50	--	.087	
17	127	100	--	2.0	--	--	--	<.010	
14	225	210	--	2.6	--	--	--	<.010	
14	201	160	--	2.1	--	--	--	<.010	
16	107	91	--	2.0	--	--	--	.020	
--	--	--	--	--	--	--	--	--	FR BD 108
--	--	--	--	3.5	--	.40	--	.029	
--	--	--	--	4.5	.019	.30	--	.013	
15	112	91	--	3.8	--	--	--	.040	
15	111	91	--	3.8	--	--	--	.020	
15	111	83	--	3.0	--	--	--	<.010	
16	117	86	--	3.9	--	--	--	.020	
--	--	--	--	3.7	--	.40	--	.032	FR BD 109
--	--	--	--	5.3	.033	.50	--	.026	
--	--	--	--	--	--	--	--	--	FR BD 110
--	--	--	--	1.8	.081	.20	--	.046	

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH FIELD	PH LAB	TEMPER-ATURE, AIR (DEG C)
FR BD 110	83-07-28	400MTRL	--	--	--	77	5.3	6.2	23.0
FR BD 111	83-11-02	400MTRL	263	10	75	167	7.4	7.3	16.0
	83-12-01	400MTRL	263	100	75	190	5.8	5.7	10.0
	83-12-01	400MTRL	263	210	75	190	5.8	5.8	5.0
FR BD 114	83-11-30	400MTRL	145	150	60	200	6.3	6.0	7.0
	83-11-30	400MTRL	145	300	60	205	6.3	6.0	3.0
FR BE 3	55-06-14	377FDCK	151	--	155	168	7.0	--	--
FR BE 11	56-05-04	231GBRG	113	10	8.0	414	7.2	--	--
FR BE 39	72-01-19	231GBRG	294	--	--	526	7.6	--	--
FR BE 40	72-07-28	231GBRG	210	--	--	166	7.7	--	--
FR BE 48	72-11-03	231GBRG	125	5	25	80	7.0	--	--
FR BE 59	73-04-12	231GBRG	100	3	--	433	7.8	--	--
FR BE 91	82-06-08	231GBRG	200	15	5.0	292	8.2	7.7	--
	83-04-11	231GBRG	200	15	11	310	7.8	7.8	11.0
FR BF 4	55-12-20	231NOXF	82	10	5.5	440	7.3	--	--
FR BF 24	72-01-03	231NOXF	85	--	--	316	7.4	--	--
FR CB 5	70-05-14	400CTCN	50	--	--	130	6.6	--	--
FR CC 3	70-05-14	400CTCN	92	--	--	440	6.7	--	--
FR CC 6	70-05-14	400CTCN	--	--	--	195	6.0	--	--
FR CC 8	70-05-12	400CTCN	--	--	--	300	6.3	--	--
FR CC 16	70-05-14	400CTCN	23	--	--	150	6.8	--	--
FR CD 43	82-06-16	231GBRG	325	9000	100	279	7.9	7.8	--
	83-04-12	231GBRG	325	>1440	100	274	7.8	7.4	12.0
FR CD 71	82-06-16	231GBRG	100	15	10	72	6.1	6.3	--
	83-04-13	231GBRG	100	15	9.0	98	6.2	6.2	12.5
FR CD 88	83-01-12	231GBRG	69	15	1.5	209	6.7	7.5	--
	83-04-12	231GBRG	69	20	2.5	449	7.5	7.4	15.0
FR CE 6	55-12-20	367GROV	264	15	--	417	7.7	--	--
FR CE 7	56-05-09	377FDCK	29	--	--	440	7.7	--	--
FR CE 8	56-05-09	377FDCK	275	--	--	982	7.7	--	--
FR CE 41	73-04-12	231NOXF	110	--	--	452	7.4	--	--
FR CE 89	82-06-17	231GBRG	200	15	3.0	420	7.8	7.6	--
	83-04-12	231GBRG	200	15	6.0	380	7.8	7.5	12.5
FR CF 1	55-03-15	367GROV	200	--	--	413	7.4	--	--
FR CF 17	55-12-20	300IJMV	66	--	--	68	6.9	--	--
FR CF 20	56-05-09	377FDCK	29	--	--	493	8.0	--	--
FR CG 1	51-03-20	300IJMV	43	--	--	163	6.3	--	--
FR CG 29	82-07-21	300IJMV	220	20	5.0	252	8.0	7.7	--
	83-04-08	300IJMV	220	15	9.0	264	7.8	7.7	13.5
FR CH 1	55-06-22	300IJMV	46	--	--	200	6.1	--	--
FR DB 1	70-05-12	400CTCN	49	--	--	200	6.3	--	--
FR DB 2	55-04-01	400CTCN	30	--	--	191	6.7	--	--
FR DB 3	70-05-12	400CTCN	--	--	--	180	6.4	--	--
FR DB 4	70-05-12	400CTCN	70	--	--	235	6.5	--	--
FR DC 3	70-05-14	400CTCN	58	--	--	420	6.4	--	--
FR DC 4	70-05-14	400CTCN	112	--	--	285	6.8	--	--
FR DC 6	55-12-20	400CTCN	130	15	--	192	7.5	--	--
	70-05-11	400CTCN	130	--	--	340	6.9	--	--
	70-05-20	400CTCN	130	--	--	75	6.1	--	--
FR DC 7	70-05-12	400PCMB	66	--	--	320	6.6	--	--
FR DC 9	70-05-12	400CTCN	93	--	--	800	6.8	--	--
FR DC 13	70-05-12	400CTCN	69	--	--	215	7.0	--	--
FR DC 14	70-05-11	377LUDN	45	--	--	285	6.4	--	--
FR DC 16	56-05-09	400CTCN	130	--	--	95	6.3	--	--
FR DC 19	70-05-11	377LUDN	117	--	--	155	6.3	--	--
FR DC 20	70-05-11	400GBGG	40	--	--	190	6.3	--	--
FR DC 21	55-12-20	400GBGG	--	--	4.0	147	7.2	--	--
FR DC 28	70-05-12	400CTCN	76	--	--	150	6.5	--	--
FR DC 29	70-05-12	400CTCN	--	--	--	175	6.2	--	--
FR DC 30	70-05-12	400CTCN	230	--	--	220	6.6	--	--
FR DD 1	53-04-14	377FDCK	--	--	--	527	8.0	--	--
FR DD 3	53-04-14	231NOXFB	140	--	--	283	7.8	--	--
FR DD 11	56-05-11	400CTCN	--	--	--	138	6.5	--	--
FR DD 65	56-05-04	231NOXF	56	20	--	319	7.7	--	--
FR DD 77	56-12-13	377HRPR	73	--	--	161	6.0	--	--
FR DD 146	72-08-04	231NOXF	130	--	--	362	8.5	--	--
	82-10-05	231NOXF	130	20	15	405	7.8	8.2	28.5
	83-04-12	231NOXF	130	15	3.0	385	7.5	7.4	16.5
FR DD 176	81-08-21	377FDCK	400	--	--	510	7.2	8.0	--
FR DD 188	82-06-16	377FDCK	205	15	20	614	7.3	7.3	--
FR DE 2	53-04-14	377FDCK	--	--	--	469	7.8	--	--
FR DE 15	56-05-09	377FDCK	71	--	--	359	7.9	--	--
FR DE 16	56-05-04	377FDCK	55	20	13	319	7.5	--	--
FR DE 48	69-10-03	367GROV	72	--	--	537	8.1	--	--
FR DE 83	82-06-15	367GROV	300	240	450	552	7.6	7.6	--
	83-04-12	367GROV	300	270	475	536	7.7	7.4	14.5
FR DF 1	70-05-20	300IJMV	24	--	--	350	6.9	--	--

Table 7.—Quality of ground water in Frederick County, Md.—continued

TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SITE NUMBER
9.0	--	<1	K7	26	10	6.6	2.3	2.7	FR BD 110
13.0	--	<1	<1	56	8	15	4.6	9.9	FR BD 111
10.0	--	<1	21	58	26	15	4.9	9.8	
10.0	--	<1	<1	60	29	16	4.9	9.9	
10.0	--	--	--	77	34	19	7.1	7.3	FR BD 114
10.0	--	--	--	75	32	18	7.3	7.8	
12.0	12	--	--	82	8	--	--	--	FR BE 3
--	10	--	--	180	27	56	10	12	FR BE 11
12.0	0	--	--	190	46	55	12	10	FR BE 39
--	--	--	--	73	0	22	4.3	4.8	FR BE 40
--	--	--	--	28	8	8.0	1.9	4.5	FR BE 48
--	--	--	--	200	53	54	16	13	FR BE 59
14.0	--	--	--	130	0	35	10	5.3	FR BE 91
13.0	--	--	--	150	12	39	13	7.9	
--	2	--	--	210	39	46	23	8.9	FR BF 4
12.0	0	--	--	130	3	27	16	11	FR BF 24
19.0	--	--	--	--	--	--	--	--	FR CB 5
16.0	--	--	--	--	--	--	--	--	FR CC 3
12.0	--	--	--	--	--	--	--	--	FR CC 6
14.0	--	--	--	--	--	--	--	--	FR CC 8
11.0	--	--	--	--	--	--	--	--	FR CC 16
12.5	--	--	--	130	9	35	11	4.5	FR CD 43
12.0	--	--	--	130	6	35	11	4.9	
14.5	--	--	--	40	0	9.1	4.1	3.5	FR CD 71
12.5	--	--	--	46	0	11	4.5	4.1	
12.0	--	--	--	220	20	53	22	9.0	FR CD 88
13.0	--	--	--	220	15	52	21	8.1	
8.0	2	--	--	210	43	41	27	1.8	FR CE 6
--	2	--	--	210	43	--	--	--	FR CE 7
--	7	--	--	450	72	--	--	--	FR CE 8
--	--	--	--	190	74	50	17	19	FR CE 41
14.0	--	--	--	190	66	62	8.8	8.4	FR CE 89
13.0	--	--	--	190	64	61	8.8	9.1	
11.5	5	--	--	210	35	70	7.6	1.2	FR CF 1
--	2	--	--	29	0	7.7	2.3	.60	FR CF 17
--	5	--	--	260	55	--	--	--	FR CF 20
--	0	--	--	30	12	6.0	3.6	8.7	FR CG 1
13.5	--	--	--	120	11	40	4.4	3.6	FR CG 29
12.5	--	--	--	130	14	41	5.5	5.2	
--	10	--	--	66	40	--	--	--	FR CH 1
13.0	--	--	--	--	--	--	--	--	FR DB 1
--	12	--	--	70	45	18	6.0	7.0	FR DB 2
13.0	--	--	--	--	--	--	--	--	FR DB 3
11.0	--	--	--	--	--	--	--	--	FR DB 4
22.0	--	--	--	--	--	--	--	--	FR DC 3
20.0	--	--	--	--	--	--	--	--	FR DC 4
--	2	--	--	80	12	19	7.8	5.7	FR DC 6
25.0	--	--	--	--	--	--	--	--	
27.0	--	--	--	--	--	--	--	--	
20.0	--	--	--	--	--	--	--	--	FR DC 7
13.0	--	--	--	--	--	--	--	--	FR DC 9
17.0	--	--	--	--	--	--	--	--	FR DC 13
16.0	--	--	--	--	--	--	--	--	FR DC 14
11.0	65	--	--	35	25	--	--	--	FR DC 16
17.0	--	--	--	--	--	--	--	--	FR DC 19
12.0	--	--	--	--	--	--	--	--	FR DC 20
8.0	2	--	--	54	27	14	4.7	5.1	FR DC 21
19.0	--	--	--	--	--	--	--	--	FR DC 28
14.0	--	--	--	--	--	--	--	--	FR DC 29
22.0	--	--	--	--	--	--	--	--	FR DC 30
--	5	--	--	230	32	61	19	--	FR DD 1
10.0	5	--	--	130	7	31	13	--	FR DD 3
--	5	--	--	54	24	--	--	--	FR DD 11
13.0	10	--	--	160	24	51	9.0	2.5	FR DD 65
--	--	--	--	36	17	--	--	--	FR DD 77
--	--	--	--	170	45	54	8.0	8.9	FR DD 146
14.0	--	--	--	170	57	55	8.8	9.2	
12.5	--	--	--	180	48	57	8.9	9.7	
15.0	--	--	--	230	53	78	9.1	10	FR DD 176
14.0	--	--	--	300	54	96	15	8.8	FR DD 188
11.0	5	--	--	230	24	58	21	--	FR DE 2
--	7	--	--	180	22	--	--	--	FR DE 15
11.5	10	--	--	150	25	55	3.1	5.0	FR DE 16
--	0	--	--	250	44	85	9.0	13	FR DE 48
12.5	--	--	--	260	46	84	11	9.1	FR DE 83
12.0	--	--	--	240	38	81	10	9.3	
13.0	--	--	--	--	--	--	--	--	FR DF 1

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FR BD 110	83-07-28	1.0	--	--	--	18	151	1.9	3.7	--
FR BD 111	83-11-02	1.8	--	--	--	34	3.7	10	17	0.20
	83-12-01	1.9	--	--	--	34	98	12	18	<.10
	83-12-01	1.8	--	--	--	34	96	11	17	<.10
FR BD 114	83-11-30	2.1	--	--	--	47	41	12	23	<.10
	83-11-30	2.0	--	--	--	45	41	11	25	<.10
FR BE 3	55-06-14	--	90	--	74	--	14	5.4	.40	--
FR BE 11	56-05-04	.80	190	--	154	--	19	45	6.0	<.05
FR BE 39	72-01-19	1.4	170	--	141	--	6.9	5.7	30	<.05
FR BE 40	72-07-28	.30	92	--	75	--	2.9	.5	1.5	.10
FR BE 48	72-11-03	.40	24	0	20	--	3.8	.2	3.0	<.10
FR BE 59	73-04-12	2.2	180	0	148	--	4.5	14	16	.10
FR BE 91	82-06-08	1.2	--	--	--	133	1.8	7.0	5.0	.20
	83-04-11	.50	--	--	170	139	4.3	9.5	8.9	<.10
FR BF 4	55-12-20	.60	210	--	171	--	17	22	14	<.05
FR BF 24	72-01-03	.90	160	--	130	--	10	20	4.9	.20
FR CB 5	70-05-14	--	--	--	--	--	--	--	--	--
FR CC 3	70-05-14	--	--	--	--	--	--	--	--	--
FR CC 6	70-05-14	--	--	--	--	--	--	--	--	--
FR CC 8	70-05-12	--	--	--	--	--	--	--	--	--
FR CC 16	70-05-14	--	--	--	--	--	--	--	--	--
FR CD 43	82-06-16	.50	--	--	--	124	3.0	10	7.9	<.10
	83-04-12	.50	--	--	153	127	3.9	10	9.8	<.10
FR CD 71	82-06-16	.50	--	--	--	40	62	2.0	1.4	.10
	83-04-13	.70	--	--	54	46	56	1.4	2.8	<.10
FR CD 88	83-01-12	.40	--	--	245	203	78	21	9.6	.20
	83-04-12	.50	--	--	250	202	12	22	10	.20
FR CE 6	55-12-20	.10	210	--	171	--	6.6	21	1.8	<.05
FR CE 7	56-05-09	--	210	--	171	--	6.6	17	10	--
FR CE 8	56-05-09	--	470	--	382	--	15	17	67	--
FR CE 41	73-04-12	.50	150	0	121	--	9.3	41	44	.10
FR CE 89	82-06-17	.50	--	--	--	125	3.8	28	36	<.10
	83-04-12	.80	--	--	152	125	3.8	32	38	<.10
FR CF 1	55-03-15	1.9	210	--	171	--	13	10	7.7	<.05
FR CF 17	55-12-20	.10	39	--	32	--	7.8	.2	1.4	.10
FR CF 20	56-05-09	--	260	--	210	--	4.1	34	5.0	--
FR CG 1	51-03-20	2.0	22	0	18	--	18	3.0	7.4	.00
FR CG 29	82-07-21	1.0	--	--	--	107	2.1	8.0	3.6	.10
	83-04-08	1.4	--	--	134	111	3.4	10	4.9	<.10
FR CH 1	55-06-22	--	32	0	26	--	40	8.4	19	--
FR DB 1	70-05-12	--	--	--	--	--	--	--	--	--
FR DB 2	55-04-01	.60	31	--	25	--	9.8	13	11	.10
FR DB 3	70-05-12	--	--	--	--	--	--	--	--	--
FR DB 4	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 3	70-05-14	--	--	--	--	--	--	--	--	--
FR DC 4	70-05-14	--	--	--	--	--	--	--	--	--
FR DC 6	55-12-20	.30	83	--	68	--	4.2	19	4.1	<.05
	70-05-11	--	--	--	--	--	--	--	--	--
	70-05-20	--	--	--	--	--	--	--	--	--
FR DC 7	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 9	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 13	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 14	70-05-11	--	--	--	--	--	--	--	--	--
FR DC 16	56-05-09	--	12	--	10	--	9.6	4.0	17	--
FR DC 19	70-05-11	--	--	--	--	--	--	--	--	--
FR DC 20	70-05-11	--	--	--	--	--	--	--	--	--
FR DC 21	55-12-20	.80	33	--	27	--	3.3	28	5.0	.10
FR DC 28	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 29	70-05-12	--	--	--	--	--	--	--	--	--
FR DC 30	70-05-12	--	--	--	--	--	--	--	--	--
FR DD 1	53-04-14	--	240	--	199	--	3.9	29	12	<.05
FR DD 3	53-04-14	--	150	--	124	--	3.8	8.2	10	<.05
FR DD 11	56-05-11	--	37	--	30	--	19	10	9.0	--
FR DD 65	56-05-04	.40	170	--	141	--	5.5	10	3.5	<.05
FR DD 77	56-12-13	--	23	--	19	--	37	--	7.2	--
FR DD 146	72-08-04	.60	150	2	123	--	.7	26	12	.10
	82-10-05	.60	--	--	165	117	3.6	26	14	<.10
	83-04-12	.90	--	--	157	131	8.0	30	22	<.10
FR DD 176	81-08-21	1.7	--	--	--	180	22	16	25	<.10
FR DD 188	82-06-16	1.8	--	--	--	248	24	31	12	.10
FR DE 2	53-04-14	--	250	--	208	--	6.4	20	6.0	.20
FR DE 15	56-05-09	--	190	--	154	--	3.8	5.2	4.5	--
FR DE 16	56-05-04	.80	150	--	125	--	7.6	14	7.2	<.05
FR DE 48	69-10-03	2.9	250	--	206	--	3.2	17	23	.10
FR DE 83	82-06-15	2.5	--	--	--	209	10	15	21	<.10
	83-04-12	2.7	--	--	250	206	7.9	20	15	<.10
FR DF 1	70-05-20	--	--	--	--	--	--	--	--	--

Table 7.—Quality of ground water in Frederick County, Md.—continued

SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SITE NUMBER
--	--	--	--	1.7	0.025	<0.10	--	0.043	FR BD 110
19	125	110	--	4.4	--	--	--	.020	FR BD 111
18	131	99	--	4.4	--	--	--	<.010	
18	131	98	--	4.3	--	--	--	<.010	
21	147	120	--	3.5	--	--	--	.010	FR BD 114
20	147	120	--	2.3	--	--	--	.020	
--	--	--	1.4	--	--	--	--	--	FR BE 3
14	269	250	2.5	--	--	--	--	--	FR BE 11
16	232	230	4.1	--	--	--	--	--	FR BE 39
26	--	110	1.9	--	--	--	--	--	FR BE 40
20	--	63	3.0	--	--	--	--	--	FR BE 48
21	--	260	8.5	--	--	--	--	--	FR BE 59
24	186	170	--	2.5	--	.30	0.070	.070	FR BE 91
25	205	190	--	3.1	--	--	--	.070	
44	306	290	5.9	--	--	--	--	--	FR BF 4
33	191	200	1.4	--	--	--	--	--	FR BF 24
--	--	--	.81	--	--	--	--	--	FR CB 5
--	--	--	5.0	--	--	--	--	--	FR CC 3
--	--	--	5.6	--	--	--	--	--	FR CC 6
--	--	--	4.5	--	--	--	--	--	FR CC 8
--	--	--	.05	--	--	--	--	--	FR CC 16
18	172	160	--	1.2	--	.20	.050	.040	FR CD 43
19	170	170	--	.74	--	--	--	.040	
17	72	62	--	2.3	--	.20	.040	.040	FR CD 71
18	77	70	--	2.4	--	--	--	.050	
17	264	250	--	2.2	--	.10	.050	.040	FR CD 88
17	253	250	--	2.2	--	--	--	.050	
6.1	245	240	7.7	--	--	--	--	--	FR CE 6
--	--	--	7.7	--	--	--	--	--	FR CE 7
--	--	--	7.9	--	--	--	--	--	FR CE 8
8.1	--	270	4.0	--	--	--	--	--	FR CE 41
19	297	240	--	2.6	--	--	--	.050	FR CE 89
20	269	240	--	2.5	--	<.10	.050	.050	
8.3	249	240	6.6	--	--	--	--	--	FR CF 1
6.6	42	39	.16	--	--	--	--	--	FR CF 17
--	--	--	5.4	--	--	--	--	--	FR CF 20
6.8	100	88	9.0	--	--	--	--	--	FR CG 1
12	157	140	--	2.3	--	.40	.070	.050	FR CG 29
12	151	150	--	2.6	--	--	--	.050	
--	--	--	4.7	--	--	--	--	--	FR CH 1
--	--	--	3.8	--	--	--	--	--	FR DB 1
19	138	130	8.8	--	--	--	--	--	FR DB 2
--	--	--	5.4	--	--	--	--	--	FR DB 3
--	--	--	7.7	--	--	--	--	--	FR DB 4
--	--	--	28	--	--	--	--	--	FR DC 3
--	--	--	2.5	--	--	--	--	--	FR DC 4
17	128	120	2.5	--	--	--	--	--	FR DC 6
--	--	--	1.1	--	--	--	--	--	
--	--	--	2.5	--	--	--	--	--	
--	--	--	2.9	--	--	--	--	--	FR DC 7
--	--	--	15	--	--	--	--	--	FR DC 9
--	--	--	3.6	--	--	--	--	--	FR DC 13
--	--	--	6.6	--	--	--	--	--	FR DC 14
--	--	--	.68	--	--	--	--	--	FR DC 16
--	--	--	5.0	--	--	--	--	--	FR DC 19
--	--	--	2.2	--	--	--	--	--	FR DC 20
26	114	110	1.5	--	--	--	--	--	FR DC 21
--	--	--	4.7	--	--	--	--	--	FR DC 28
--	--	--	5.6	--	--	--	--	--	FR DC 29
--	--	--	5.0	--	--	--	--	--	FR DC 30
10	322	--	7.2	--	--	--	--	--	FR DD 1
11	162	--	1.3	--	--	--	--	--	FR DD 3
--	--	--	3.6	--	--	--	--	--	FR DD 11
9.8	203	190	3.6	--	--	--	--	--	FR DD 65
--	--	--	8.1	--	--	--	--	--	FR DD 77
24	--	230	5.1	--	--	--	--	--	FR DD 146
24	234	210	--	5.0	--	.20	.090	.070	
25	257	230	--	5.6	--	--	--	.080	
8.7	290	260	--	--	--	--	--	--	FR DD 176
6.1	400	320	--	6.1	--	.20	.090	.030	FR DD 188
11	268	--	4.1	--	--	--	--	--	FR DE 2
--	--	--	5.9	--	--	--	--	--	FR DE 15
7.2	208	190	4.1	--	--	--	--	--	FR DE 16
9.9	313	310	6.6	--	--	--	--	--	FR DE 48
8.2	333	280	--	8.8	--	.30	.050	.010	FR DE 83
8.3	313	270	--	8.1	--	--	--	.010	
--	--	--	1.3	--	--	--	--	--	FR DF 1

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH FIELD	PH LAB	TEMPER-ATURE, AIR (DEG C)
FR DF 2	55-12-21	300LBRN	86	--	--	229	6.5	--	--
FR DF 8	70-05-20	300IJMV	73	--	--	75	6.1	--	--
FR DF 11	70-05-20	300IJMV	--	--	--	180	6.2	--	--
FR DF 13	70-05-20	300LBRN	74	--	--	130	6.5	--	--
FR DF 15	56-05-02	300LBRN	95	--	--	106	6.6	--	--
FR DG 4	70-05-19	300IJMV	94	--	--	85	6.6	--	--
FR DG 6	70-05-20	300LBRN	65	--	--	425	7.6	--	--
FR DG 8	70-05-20	300IJMV	62	--	--	950	7.0	--	--
FR DG 15	70-05-19	300IJMV	90	--	--	95	7.8	--	--
FR DG 18	70-05-19	300SMCK	45	--	--	300	7.2	--	--
FR DG 21	82-09-01	300IJMV	114	15	3.0	739	6.3	8.0	--
	83-04-12	300IJMV	114	15	9.0	775	6.5	6.4	13.0
FR EB 1	70-05-11	400GBGG	76	--	--	1800	5.6	--	--
FR EB 3	70-05-07	400GBGG	72	--	--	130	6.2	--	--
FR EB 5	70-05-07	400GBGG	100	--	--	115	7.1	--	--
FR EB 8	70-05-07	400CTCN	202	--	--	200	7.2	--	--
FR EB 18	70-05-07	400GBGG	99	--	--	365	6.1	--	--
FR EB 19	70-05-07	400GBGG	54	--	--	230	5.9	--	--
FR EB 25	82-10-06	400PCMB	108	15	12	100	6.2	6.1	20.0
	83-04-14	400PCMB	108	15	12	64	5.7	6.2	18.0
FR EB 33	82-09-02	400PCMB	87	15	.50	275	6.5	6.8	--
	83-04-14	400PCMB	87	15	7.0	216	6.2	5.9	15.5
FR EC 2	70-05-07	400GBGG	--	--	--	250	7.5	--	--
FR EC 8	70-05-07	400GBGG	70	--	--	760	6.6	--	--
FR EC 9	70-05-11	400GBGG	71	--	--	300	6.5	--	--
FR EC 10	70-05-07	400GBGG	131	--	--	400	6.0	--	--
FR EC 11	70-05-07	400CTCN	62	--	--	380	6.4	--	--
FR EC 14	70-05-07	400CTCN	72	--	--	240	6.1	--	--
FR EC 15	70-05-11	400GBGG	83	--	--	125	6.5	--	--
FR EC 16	70-05-07	400CTCN	76	--	--	220	6.7	--	--
FR ED 9	82-09-02	377FDCK	115	15	3.0	436	7.5	--	--
	83-04-13	377FDCK	115	15	9.0	446	7.8	7.6	17.0
FR ED 14	56-05-09	377FDCK	22	--	--	1160	8.0	--	--
FR ED 85	72-08-08	231NOXF	125	--	--	414	8.2	--	--
FR EE 2	51-03-21	367GROV	155	--	--	504	7.7	--	--
FR EE 126	82-07-20	377FDCK	125	15	20	295	7.2	7.2	--
	83-04-13	377FDCK	125	15	9.0	270	7.4	7.2	16.5
FR EF 11	70-05-18	300SMCK	32	--	--	535	7.3	--	--
FR EF 13	70-05-18	300URBN	112	--	--	155	6.3	--	--
FR EF 36	82-07-28	300URBN	180	25	5.0	427	6.8	7.2	--
	83-04-13	300URBN	180	15	9.0	457	7.1	7.0	15.5
FR EF 40	82-07-28	300URBN	77	15	2.0	94	6.4	6.7	--
	83-04-15	300URBN	77	15	6.0	100	6.5	6.3	12.0
FR EG 11	70-05-19	300MRBG	87	--	--	80	6.1	--	--
FR EG 14	70-05-19	300SMCK	85	--	--	200	6.7	--	--
FR EG 16	70-05-19	300LBRN	72	--	--	420	7.8	--	--
FR EG 33	82-07-20	300MRBG	120	20	25	124	5.6	6.0	--
	83-04-13	300MRBG	120	15	9.0	118	5.9	5.8	13.0
FR EH 1	55-03-10	300MRBG	125	--	--	383	8.1	--	--
FR EH 4	70-05-19	300MRBG	--	--	--	155	6.2	--	--
FR EH 5	70-05-20	300MRBG	53	--	--	95	6.6	--	--
FR FB 1	55-04-01	400GBGG	63	15	15	107	6.4	--	--
FR FB 12	81-08-21	400PCMB	--	--	--	385	6.5	7.1	--
	83-06-16	400PCMB	--	--	4.0	335	6.9	6.5	28.0
FR FC 5	70-05-07	400GBGG	53	--	--	240	7.1	--	--
FR FC 14	55-12-20	400CTCN	77	15	10	76	6.0	--	--
FR FC 15	70-05-07	400CTCN	--	--	--	140	6.3	--	--
FR FC 24	69-03-24	231NOXFB	135	--	--	564	8.2	--	--
FR FC 30	69-05-28	400CTCN	150	--	--	584	7.6	--	--
FR FC 31	82-07-29	377TMSN 377ANTM	583	120	23	307	8.1	--	--
	83-04-14	377TMSN 377ANTM	583	>1440	23	310	8.0	7.7	16.0
FR FC 33	72-08-07	231NOXFB	115	--	--	470	8.3	--	--
FR FD 4	46-12-26	377FDCK	60	--	--	566	7.6	--	--
FR FD 16	56-05-09	377FDCK	49	--	--	363	7.5	--	--
FR FD 53	82-10-06	377FDCK	--	15	3.0	1040	6.8	6.8	21.0
	83-04-15	377FDCK	--	15	7.0	1070	6.8	6.9	11.5
FR FD 83	72-07-28	231NOXF	170	--	--	230	7.5	--	--
FR FE 1	70-05-19	300URBN	80	--	--	380	7.1	--	--
FR FE 13	70-05-18	300URBN	--	--	--	120	6.9	--	--
FR FE 14	70-05-18	300URBN	75	--	--	235	6.0	--	--
FR FE 18	47-04-30	300URBN	62	--	--	179	6.8	--	--
FR FE 20	70-05-18	300URBN	128	--	--	135	7.1	--	--
FR FE 22	70-05-18	300URBN	127	--	--	500	7.4	--	--
FR FF 1	70-05-17	300URBN	41	--	--	160	6.7	--	--
FR FF 2	70-05-18	300URBN	--	--	--	175	6.5	--	--
FR FF 3	70-05-18	300SMCK	86	--	--	200	6.6	--	--
FR FF 4	70-05-18	300SMCK	58	--	--	300	7.1	--	--

Table 7.—Quality of ground water in Frederick County, Md.—continued

TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SITE NUMBER
--	3	--	--	84	35	19	--	--	FR DF 2
27.0	--	--	--	--	--	--	--	--	FR DF 8
13.0	--	--	--	--	--	--	--	--	FR DF 11
22.0	--	--	--	--	--	--	--	--	FR DF 13
--	5	--	--	37	17	--	--	--	FR DF 15
14.0	--	--	--	--	--	--	--	--	FR DG 4
23.0	--	--	--	--	--	--	--	--	FR DG 6
20.0	--	--	--	--	--	--	--	--	FR DG 8
14.0	--	--	--	--	--	--	--	--	FR DG 15
20.0	--	--	--	--	--	--	--	--	FR DG 18
14.5	--	--	--	180	71	43	17	59	FR DG 21
13.5	--	--	--	180	84	45	17	63	
16.0	--	--	--	--	--	--	--	--	FR EB 1
14.0	--	--	--	--	--	--	--	--	FR EB 3
17.0	--	--	--	--	--	--	--	--	FR EB 5
13.0	--	--	--	--	--	--	--	--	FR EB 8
19.0	--	--	--	--	--	--	--	--	FR EB 18
16.0	--	--	--	--	--	--	--	--	FR EB 19
13.5	--	--	--	36	12	8.5	3.6	4.7	FR EB 25
13.0	--	--	--	36	7	8.5	3.6	4.9	
16.5	--	--	--	100	58	23	11	11	FR EB 33
13.5	--	--	--	70	54	20	4.8	8.9	
14.0	--	--	--	--	--	--	--	--	FR EC 2
13.0	--	--	--	--	--	--	--	--	FR EC 8
22.0	--	--	--	--	--	--	--	--	FR EC 9
14.0	--	--	--	--	--	--	--	--	FR EC 10
14.0	--	--	--	--	--	--	--	--	FR EC 11
18.0	--	--	--	--	--	--	--	--	FR EC 14
19.0	--	--	--	--	--	--	--	--	FR EC 15
13.0	--	--	--	--	--	--	--	--	FR EC 16
14.5	--	--	--	--	--	--	--	--	FR ED 9
12.5	--	--	--	220	38	70	10	4.0	
--	5	--	--	400	170	--	--	--	FR ED 14
--	--	--	--	200	33	57	13	15	FR ED 85
10.0	2	--	--	260	38	66	24	2.8	FR EE 2
20.0	--	--	--	130	20	46	3.4	6.7	FR EE 126
17.5	--	--	--	120	13	42	2.8	5.1	
19.0	--	--	--	--	--	--	--	--	FR EF 11
13.0	--	--	--	--	--	--	--	--	FR EF 13
16.0	--	--	--	190	0	51	16	7.5	FR EF 36
13.0	--	--	--	220	0	57	19	9.1	
14.5	--	--	--	35	15	9.0	3.0	2.2	FR EF 40
13.5	--	--	--	38	16	9.6	3.4	2.9	
17.0	--	--	--	--	--	--	--	--	FR EG 11
17.0	--	--	--	--	--	--	--	--	FR EG 14
14.0	--	--	--	--	--	--	--	--	FR EG 16
14.5	--	--	--	37	25	6.9	4.7	7.8	FR EG 33
13.0	--	--	--	35	23	7.1	4.2	6.9	
--	10	--	--	88	0	12	14	52	FR EH 1
17.0	--	--	--	--	--	--	--	--	FR EH 4
17.0	--	--	--	--	--	--	--	--	FR EH 5
--	7	--	--	30	8	8.9	2.0	6.2	FR FB 1
15.0	--	--	--	130	82	33	11	15	FR FB 12
12.5	--	--	--	120	79	31	11	14	
19.0	--	--	--	--	--	--	--	--	FR FC 5
11.0	2	--	--	14	5	1.6	2.4	5.5	FR FC 14
11.0	--	--	--	--	--	--	--	--	FR FC 15
--	5	--	--	290	57	79	23	10	FR FC 24
--	0	--	--	280	63	64	30	12	FR FC 30
13.5	--	--	--	--	--	--	--	--	FR FC 31
13.5	--	--	--	150	8	33	16	2.8	
--	--	--	--	230	41	46	27	2.2	FR FC 33
13.5	3	--	--	290	64	99	10	7.5	FR FD 4
--	2	--	--	180	27	--	--	--	FR FD 16
14.0	--	--	--	490	0	160	23	12	FR FD 53
12.5	--	--	--	500	0	160	25	12	
18.0	--	--	--	100	10	35	3.9	4.6	FR FD 83
15.0	--	--	--	--	--	--	--	--	FR FE 1
20.0	--	--	--	--	--	--	--	--	FR FE 13
15.0	--	--	--	--	--	--	--	--	FR FE 14
--	0	--	--	78	6	--	--	--	FR FE 18
13.0	--	--	--	--	--	--	--	--	FR FE 20
20.0	--	--	--	--	--	--	--	--	FR FE 22
16.0	--	--	--	--	--	--	--	--	FR FF 1
13.0	--	--	--	--	--	--	--	--	FR FF 2
25.0	--	--	--	--	--	--	--	--	FR FF 3
17.0	--	--	--	--	--	--	--	--	FR FF 4

Table 7.—Quality of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FR DF 2	55-12-21	--	60	--	49	--	30	9.6	11	--
FR DF 8	70-05-20	--	--	--	--	--	--	--	--	--
FR DF 11	70-05-20	--	--	--	--	--	--	--	--	--
FR DF 13	70-05-20	--	--	--	--	--	--	--	--	--
FR DF 15	56-05-02	--	24	--	20	--	9.6	.4	2.0	--
FR DG 4	70-05-19	--	--	--	--	--	--	--	--	--
FR DG 6	70-05-20	--	--	--	--	--	--	--	--	--
FR DG 8	70-05-20	--	--	--	--	--	--	--	--	--
FR DG 15	70-05-19	--	--	--	--	--	--	--	--	--
FR DG 18	70-05-19	--	--	--	--	--	--	--	--	--
FR DG 21	82-09-01	5.2	--	--	--	107	104	58	100	<0.10
	83-04-12	21	--	--	145	99	61	55	110	<.10
FR EB 1	70-05-11	--	--	--	--	--	--	--	--	--
FR EB 3	70-05-07	--	--	--	--	--	--	--	--	--
FR EB 5	70-05-07	--	--	--	--	--	--	--	--	--
FR EB 8	70-05-07	--	--	--	--	--	--	--	--	--
FR EB 18	70-05-07	--	--	--	--	--	--	--	--	--
FR EB 19	70-05-07	--	--	--	--	--	--	--	--	--
FR EB 25	82-10-06	.40	--	--	34	24	29	8.0	3.1	.10
	83-04-14	.70	--	--	35	29	112	10	3.4	.10
FR EB 33	82-09-02	2.9	--	--	--	45	28	27	35	.20
	83-04-14	.70	--	--	21	16	20	36	21	<.10
FR EC 2	70-05-07	--	--	--	--	--	--	--	--	--
FR EC 8	70-05-07	--	--	--	--	--	--	--	--	--
FR EC 9	70-05-11	--	--	--	--	--	--	--	--	--
FR EC 10	70-05-07	--	--	--	--	--	--	--	--	--
FR EC 11	70-05-07	--	--	--	--	--	--	--	--	--
FR EC 14	70-05-07	--	--	--	--	--	--	--	--	--
FR EC 15	70-05-11	--	--	--	--	--	--	--	--	--
FR EC 16	70-05-07	--	--	--	--	--	--	--	--	--
FR ED 9	82-09-02	--	--	--	--	--	--	--	--	--
	83-04-13	.80	--	--	216	178	5.4	27	9.5	<.10
FR ED 14	56-05-09	--	280	--	231	--	4.5	66	110	--
FR ED 85	72-08-08	.80	200	<0	163	--	2.0	15	12	.10
FR EE 2	51-03-21	5.6	270	--	226	--	8.7	12	7.5	<.50
FR EE 126	82-07-20	3.5	--	--	--	109	13	12	4.9	.10
	83-04-13	3.6	--	--	127	104	8.0	13	5.0	<.10
FR EF 11	70-05-18	--	--	--	--	--	--	--	--	--
FR EF 13	70-05-18	--	--	--	--	--	--	--	--	--
FR EF 36	82-07-28	<.10	--	--	--	205	63	6.0	8.9	<.10
	83-04-13	.40	--	--	288	232	36	10	8.6	<.10
FR EF 40	82-07-28	.30	--	--	--	20	15	2.0	4.0	<.10
	83-04-15	.60	--	--	26	22	13	2.0	4.5	<.10
FR EG 11	70-05-19	--	--	--	--	--	--	--	--	--
FR EG 14	70-05-19	--	--	--	--	--	--	--	--	--
FR EG 16	70-05-19	--	--	--	--	--	--	--	--	--
FR EG 33	82-07-20	.50	--	--	--	12	58	<1.0	10	<.10
	83-04-13	.80	--	--	15	12	29	.3	10	<.10
FR EH 1	55-03-10	10	260	0	212	--	3.3	1.9	1.9	.40
FR EH 4	70-05-19	--	--	--	--	--	--	--	--	--
FR EH 5	70-05-20	--	--	--	--	--	--	--	--	--
FR FB 1	55-04-01	.80	28	--	23	--	18	8.1	3.2	.10
FR FB 12	81-08-21	1.4	--	--	--	46	28	39	32	<.10
	83-06-16	1.2	--	--	44	37	11	55	30	.10
FR FC 5	70-05-07	--	--	--	--	--	--	--	--	--
FR FC 14	55-12-20	3.4	11	--	9	--	17	.2	7.5	<.05
FR FC 15	70-05-07	--	--	--	--	--	--	--	--	--
FR FC 24	69-03-24	1.3	290	<0	235	--	2.9	53	9.5	<.05
FR FC 30	69-05-28	4.7	270	--	221	--	11	76	15	.20
FR FC 31	82-07-29	--	--	--	--	--	--	--	--	--
	83-04-14	2.0	--	--	170	140	2.7	20	3.9	.20
FR FC 33	72-08-07	.90	220	<0	185	--	1.8	16	4.2	.10
FR FD 4	46-12-26	1.8	270	--	225	--	11	48	8.4	.10
FR FD 16	56-05-09	--	190	--	153	--	9.4	21	3.5	--
FR FD 53	82-10-06	7.9	--	--	507	339	156	30	9.2	<.10
	83-04-15	8.7	--	--	510	359	157	35	52	<.10
FR FD 83	72-07-28	.50	110	0	94	--	5.8	8.0	4.0	.10
FR FE 1	70-05-19	--	--	--	--	--	--	--	--	--
FR FE 13	70-05-18	--	--	--	--	--	--	--	--	--
FR FE 14	70-05-18	--	--	--	--	--	--	--	--	--
FR FE 18	47-04-30	--	88	--	72	--	22	2.0	3.0	.10
FR FE 20	70-05-18	--	--	--	--	--	--	--	--	--
FR FE 22	70-05-18	--	--	--	--	--	--	--	--	--
FR FF 1	70-05-17	--	--	--	--	--	--	--	--	--
FR FF 2	70-05-18	--	--	--	--	--	--	--	--	--
FR FF 3	70-05-18	--	--	--	--	--	--	--	--	--
FR FF 4	70-05-18	--	--	--	--	--	--	--	--	--

Geologic unit (aquifer):

231GBRG - Gettysburg Shale
231NOXF - New Oxford Formation
231NOXFB - New Oxford Formation, basal conglomerate
300IJMV - Ijamsville Formation
300LBRN - Libertytown Metarhyolite
300MRBG - Marburg Formation
300SMCK - Sams Creek Metabasalt
300URBN - Urbana Formation
367GROV - Grove Limestone
377ANTM - Antietam Formation
377FDCK - Frederick Limestone
377HRPR - Harpers Formation
377LUDN - Loudoun Formation
377TMSN - Tomstown Dolomite
400CTCN - Catoctin Metabasalt
400GBGG - Granodiorite and Biotite Granite Gneiss
400MTRL - Metarhyolite and Associated Pyroclastic Sediments
400PCMB - Precambrian Erathem

K Results based on colony count outside the acceptable range (non-ideal colony count).

Table 7.—Quality of ground water in Frederick County, Md.—continued

SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SITE NUMBER
--	--	--	13	--	--	--	--	--	FR DF 2
--	--	--	2.5	--	--	--	--	--	FR DF 8
--	--	--	11	--	--	--	--	--	FR DF 11
--	--	--	3.6	--	--	--	--	--	FR DF 13
--	--	--	6.3	--	--	--	--	--	FR DF 15
--	--	--	4.5	--	--	--	--	--	FR DG 4
--	--	--	14	--	--	--	--	--	FR DG 6
--	--	--	4.3	--	--	--	--	--	FR DG 8
--	--	--	.05	--	--	--	--	--	FR DG 15
--	--	--	5.6	--	--	--	--	--	FR DG 18
14	406	360	--	<0.10	--	--	--	<0.010	FR DG 21
5.3	436	380	--	9.5	--	3.2	0.020	.020	
--	--	--	37	--	--	--	--	--	FR EB 1
--	--	--	1.5	--	--	--	--	--	FR EB 3
--	--	--	1.6	--	--	--	--	--	FR EB 5
--	--	--	2.0	--	--	--	--	--	FR EB 8
--	--	--	5.4	--	--	--	--	--	FR EB 18
--	--	--	1.5	--	--	--	--	--	FR EB 19
41	88	84	--	1.5	--	--	--	.100	FR EB 25
39	88	88	--	1.5	--	.20	.090	.090	
39	182	180	--	.51	--	--	--	<.010	FR EB 33
26	159	130	--	3.6	--	<.10	<.010	<.010	
--	--	--	.05	--	--	--	--	--	FR EC 2
--	--	--	1.5	--	--	--	--	--	FR EC 8
--	--	--	1.3	--	--	--	--	--	FR EC 9
--	--	--	5.9	--	--	--	--	--	FR EC 10
--	--	--	3.2	--	--	--	--	--	FR EC 11
--	--	--	4.7	--	--	--	--	--	FR EC 14
--	--	--	.45	--	--	--	--	--	FR EC 15
--	--	--	.99	--	--	--	--	--	FR EC 16
--	--	--	--	--	--	--	--	--	FR ED 9
8.9	264	240	--	5.8	--	--	--	.020	
--	--	--	40	--	--	--	--	--	FR ED 14
15	--	240	4.3	--	--	--	--	--	FR ED 85
7.8	290	300	8.1	--	--	--	--	--	FR EE 2
12	201	150	--	5.8	--	5.0	.210	.210	FR EE 126
12	159	150	--	4.3	--	--	--	.190	
--	--	--	1.4	--	--	--	--	--	FR EF 11
--	--	--	3.8	--	--	--	--	--	FR EF 13
30	261	250	--	.94	--	--	--	.050	FR EF 36
32	287	280	--	1.6	--	.20	.060	.060	
7.5	80	40	--	4.8	--	--	--	.010	FR EF 40
7.7	73	44	--	5.3	--	<.10	.020	.020	
--	--	--	2.9	--	--	--	--	--	FR EG 11
--	--	--	9.9	--	--	--	--	--	FR EG 14
--	--	--	9.7	--	--	--	--	--	FR EG 16
6.7	112	--	--	7.1	--	<.10	.020	.020	FR EG 33
6.4	86	43	--	7.6	--	--	--	.020	
6.1	283	230	.14	--	--	--	--	--	FR EH 1
--	--	--	9.7	--	--	--	--	--	FR EH 4
--	--	--	2.9	--	--	--	--	--	FR EH 5
30	92	89	3.6	--	--	--	--	--	FR FB 1
21	250	180	--	--	--	--	--	--	FR FB 12
23	230	190	--	6.3	--	.20	.120	.120	
--	--	--	4.7	--	--	--	--	--	FR FC 5
12	58	58	4.5	--	--	--	--	--	FR FC 14
--	--	--	4.1	--	--	--	--	--	FR FC 15
12	--	340	1.9	--	--	--	--	--	FR FC 24
18	--	350	.02	--	--	--	--	--	FR FC 30
--	--	--	--	--	--	--	--	--	FR FC 31
12	166	170	--	<.10	--	--	--	<.010	
7.8	--	220	2.1	--	--	--	--	--	FR FC 33
11	345	340	3.8	--	--	--	--	--	FR FD 4
--	--	--	2.9	--	--	--	--	--	FR FD 16
16	613	560	--	21	--	--	--	<.010	FR FD 53
17	641	620	--	19	--	.20	<.010	<.010	
17	--	140	1.8	--	--	--	--	--	FR FD 83
--	--	--	9.5	--	--	--	--	--	FR FE 1
--	--	--	3.4	--	--	--	--	--	FR FE 13
--	--	--	7.9	--	--	--	--	--	FR FE 14
--	--	--	2.5	--	--	--	--	--	FR FE 18
--	--	--	.14	--	--	--	--	--	FR FE 20
--	--	--	13	--	--	--	--	--	FR FE 22
--	--	--	4.5	--	--	--	--	--	FR FF 1
--	--	--	5.4	--	--	--	--	--	FR FF 2
--	--	--	3.8	--	--	--	--	--	FR FF 3
--	--	--	1.2	--	--	--	--	--	FR FF 4

Table 8.—Trace-element analyses of ground water in Frederick County, Md.

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FR AD 2	55-04-04	400CTCN	<50	--	--	--	--	--	<5	1400
FR AD 12	82-06-11	400CTCN	--	200	--	--	--	--	--	--
	83-04-07	400CTCN	--	100	--	--	--	--	--	--
FR AD 36	82-06-08	400MTRL	--	<100	--	--	--	--	--	--
	83-06-16	400MTRL	--	100	1	30	<1	10	--	--
FR AE 50	82-06-11	400CTCN	--	300	--	--	--	--	--	--
	83-04-07	400CTCN	--	<100	--	--	--	--	--	--
FR AE 52	82-06-11	400CTCN	--	100	--	--	--	--	--	--
	83-04-07	400CTCN	--	<100	--	--	--	--	--	--
FR AE 53	82-06-15	400CTCN	--	100	--	--	--	--	--	--
	83-04-07	400CTCN	--	<100	1	10	<1	10	--	--
FR AF 4	55-04-04	231GBRG	<50	--	--	--	--	--	<5	110
FR AF 23	72-04-14	231GBRG	--	--	--	--	--	--	--	ND
FR AF 38	82-06-15	231DIBS	--	100	--	--	--	--	--	--
	83-04-08	231DIBS	--	<100	<1	20	<1	10	--	--
FR AG 2	82-06-16	231GBRG	--	100	--	--	--	--	--	--
FR BC 2	55-04-04	400MTRL	1100	--	--	--	--	--	40	460
FR BD 3	52-07-30	400MTRL	<50	--	--	--	--	--	--	20
FR BD 4	84-03-08	400MTRL	--	--	--	<20	--	--	--	--
	84-05-10	400MTRL	--	--	--	<20	--	--	--	--
	84-08-09	400MTRL	--	--	--	<20	--	--	--	--
FR BD 6	55-06-06	400MTRL	<50	--	--	--	--	--	20	500
FR BD 8	83-11-04	400CTCN	--	--	--	<20	--	--	--	--
	84-03-07	400CTCN	--	--	--	<20	--	--	--	--
	84-05-09	400CTCN	--	--	--	<20	--	--	--	--
	84-08-08	400CTCN	--	--	--	<20	--	--	--	--
FR BD 9	56-05-11	377WVRN	--	--	--	--	--	--	--	20
FR BD 35	83-10-31	400MTRL	--	--	--	<20	--	--	--	--
	83-11-01	400MTRL	--	--	--	<20	--	--	--	--
	84-03-06	400MTRL	--	--	--	<20	--	--	--	--
	84-03-20	400MTRL	--	--	--	<20	--	--	--	--
	84-03-30	400MTRL	--	--	--	20	--	--	--	--
	84-04-10	400MTRL	--	--	--	<20	--	--	--	--
	84-04-17	400MTRL	--	--	--	100	--	--	--	--
	84-04-24	400MTRL	--	--	--	<20	--	--	--	--
	84-05-10	400MTRL	--	--	--	<20	--	--	--	--
	84-08-07	400MTRL	--	--	--	<20	--	--	--	--
FR BD 36	83-10-31	400MTRL	--	--	--	<20	--	--	--	--
	83-11-01	400MTRL	--	--	--	<20	--	--	--	--
	84-03-06	400MTRL	--	--	--	<20	--	--	--	--
	84-03-08	400MTRL	--	--	--	<20	--	--	--	--
	84-03-20	400MTRL	--	--	--	<20	--	--	--	--
	84-03-30	400MTRL	--	--	--	50	--	--	--	--
	84-04-10	400MTRL	--	--	--	<20	--	--	--	--
	84-04-17	400MTRL	--	--	--	30	--	--	--	--
	84-04-24	400MTRL	--	--	--	<20	--	--	--	--
	84-05-10	400MTRL	--	--	--	<20	--	--	--	--
	84-08-07	400MTRL	--	--	--	<20	--	--	--	--
FR BD 38	83-10-31	400MTRL	--	--	--	<20	--	--	--	--
	83-11-01	400MTRL	--	--	--	<20	--	--	--	--
	84-03-06	400MTRL	--	--	--	<20	--	--	--	--
	84-08-07	400MTRL	--	--	--	<20	--	--	--	--
FR BD 39	83-11-02	400CTCN	--	--	--	<20	--	--	--	--
	84-03-07	400CTCN	--	--	--	<20	--	--	--	--
	84-05-09	400CTCN	--	--	--	<20	--	--	--	--
	84-08-08	400CTCN	--	--	--	<20	--	--	--	--
FR BD 40	66-03-17	400CTCN	--	--	--	--	--	--	--	60
	83-11-03	400CTCN	--	--	--	<20	--	--	--	--
	84-03-08	400CTCN	--	--	--	<20	--	--	--	--
	84-05-09	400CTCN	--	--	--	<20	--	--	--	--
	84-08-09	400CTCN	--	--	--	<20	--	--	--	--
FR BD 41	66-03-22	400MTRL	--	--	--	--	--	--	--	40
FR BD 43	83-11-03	400CTCN	--	--	--	<20	--	--	--	--
	84-03-08	400CTCN	--	--	--	90	--	--	--	--
	84-05-09	400CTCN	--	--	--	<20	--	--	--	--
	84-08-09	400CTCN	--	--	--	<20	--	--	--	--
FR BD 44	66-05-16	400CTCN	--	--	--	--	--	--	--	470
FR BD 49	71-04-07	377WVRN	--	--	--	--	--	--	--	40
	81-08-21	377WVRN	200	200	--	--	--	--	2	190
	83-11-09	377WVRN	--	--	--	<20	--	--	--	--
	84-03-07	377WVRN	--	--	--	<20	--	--	--	--
	84-05-09	377WVRN	--	--	--	<20	--	--	--	--
	84-08-08	377WVRN	--	--	--	<20	--	--	--	--
FR BD 73	83-11-04	400MTRL	--	--	--	<20	--	--	--	--
	84-03-06	400MTRL	--	--	--	<20	--	--	--	--
	84-05-10	400MTRL	--	--	--	<20	--	--	--	--
	84-08-08	400MTRL	--	--	--	<20	--	--	--	--
FR BD 105	82-06-08	400MTRL	--	100	--	--	--	--	--	--
	83-04-07	400MTRL	--	<100	--	--	--	--	--	--
FR BD 107	83-11-02	400MTRL	--	--	--	<20	--	--	--	--

Table 8.—Trace-element analyses of ground water in Frederick County, Md.—continued

IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SITE NUMBER
--	--	100	40	--	--	--	--	1400	FR AD 2
14	--	--	--	<1	--	--	--	--	FR AD 12
8	--	--	--	<1	--	--	--	--	
<3	--	--	--	3	--	--	--	--	FR AD 36
3	<10	--	--	2	.4	--	--	--	
60	--	--	--	3	--	--	--	--	FR AE 50
68	--	--	--	3	--	--	--	--	
10	--	--	--	3	--	--	--	--	FR AE 52
3	--	--	--	1	--	--	--	--	
6	--	--	--	33	--	--	--	--	FR AE 53
49	<10	--	--	27	<.1	--	--	--	
--	--	400	30	--	--	--	--	1300	FR AF 4
--	--	--	<0	--	--	--	--	--	FR AF 23
74	--	--	--	86	--	--	--	--	FR AF 38
400	<10	--	--	200	.1	--	--	--	
6	--	--	--	1	--	--	--	--	FR AG 2
--	--	<50	20	--	--	--	--	2200	FR BC 2
--	--	--	<5	--	--	--	--	--	FR BD 3
9	--	--	--	--	--	--	--	--	FR BD 4
13	--	--	--	--	--	--	--	--	
4	--	--	--	--	--	--	--	--	
--	--	<50	350	--	--	--	--	ND	FR BD 6
<3	--	--	--	--	--	--	--	--	FR BD 8
11	--	--	--	--	--	--	--	--	
6	--	--	--	--	--	--	--	--	
17	--	--	--	--	--	--	--	--	
--	--	--	<5	--	--	--	--	--	FR BD 9
30	--	--	--	--	--	--	--	--	FR BD 35
36	--	--	--	--	--	--	--	--	
130	--	--	--	--	--	--	--	--	
710	--	--	--	--	--	--	--	--	
33	--	--	--	--	--	--	--	--	
250	--	--	--	--	--	--	--	--	
180	--	--	--	--	--	--	--	--	
160	--	--	--	--	--	--	--	--	
45	--	--	--	--	--	--	--	--	
45	--	--	--	--	--	--	--	--	
11	--	--	--	--	--	--	--	--	FR BD 36
6	--	--	--	--	--	--	--	--	
190	--	--	--	--	--	--	--	--	
76	--	--	--	--	--	--	--	--	
370	--	--	--	--	--	--	--	--	
34	--	--	--	--	--	--	--	--	
320	--	--	--	--	--	--	--	--	
200	--	--	--	--	--	--	--	--	
11	--	--	--	--	--	--	--	--	
75	--	--	--	--	--	--	--	--	
9	--	--	--	--	--	--	--	--	
11	--	--	--	--	--	--	--	--	FR BD 38
5	--	--	--	--	--	--	--	--	
8	--	--	--	--	--	--	--	--	
18	--	--	--	--	--	--	--	--	
<3	--	--	--	--	--	--	--	--	FR BD 39
5	--	--	--	--	--	--	--	--	
7	--	--	--	--	--	--	--	--	
7	--	--	--	--	--	--	--	--	
--	--	--	10	--	--	--	--	--	FR BD 40
240	--	--	--	--	--	--	--	--	
20	--	--	--	--	--	--	--	--	
14	--	--	--	--	--	--	--	--	
6	--	--	--	--	--	--	--	--	
--	--	--	<5	--	--	--	--	--	FR BD 41
10	--	--	--	--	--	--	--	--	FR BD 43
<3	--	--	--	--	--	--	--	--	
5	--	--	--	--	--	--	--	--	
5	--	--	--	--	--	--	--	--	
--	--	--	<5	--	--	--	--	--	FR BD 44
--	--	--	ND	--	--	--	--	--	FR BD 49
20	--	--	10	<10	--	5	2	10	
450	--	--	--	--	--	--	--	--	
420	--	--	--	--	--	--	--	--	
470	--	--	--	--	--	--	--	--	
980	--	--	--	--	--	--	--	--	
6	--	--	--	--	--	--	--	--	FR BD 73
6	--	--	--	--	--	--	--	--	
13	--	--	--	--	--	--	--	--	
5	--	--	--	--	--	--	--	--	
<3	--	--	--	<1	--	--	--	--	FR BD 105
<3	--	--	--	2	--	--	--	--	
28	--	--	--	--	--	--	--	--	FR BD 107

Table 8.—Trace-element analyses of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FR BD 107	84-03-07	400MTRL	--	--	--	<20	--	--	--	--
	84-05-09	400MTRL	--	--	--	<20	--	--	--	--
	84-08-08	400MTRL	--	--	--	<20	--	--	--	--
FR BD 108	83-11-02	400MTRL	--	--	--	100	--	--	--	--
	84-03-06	400MTRL	--	--	--	<20	--	--	--	--
	84-05-08	400MTRL	--	--	--	50	--	--	--	--
	84-08-07	400MTRL	--	--	--	60	--	--	--	--
FR BD 111	83-11-02	400MTRL	--	--	--	40	--	--	--	--
	83-12-01	400MTRL	--	--	--	<20	--	--	--	--
	83-12-01	400MTRL	--	--	--	<20	--	--	--	--
FR BD 114	83-11-30	400MTRL	--	--	--	<20	--	--	--	--
	83-11-30	400MTRL	--	--	--	<20	--	--	--	--
FR BE 3	55-06-14	377FDCK	--	--	--	--	--	--	--	80
FR BE 11	56-05-04	231GBRG	<50	--	--	--	--	--	50	20
FR BE 39	72-01-19	231GBRG	--	--	--	--	--	--	--	620
FR BE 40	72-07-28	231GBRG	--	--	--	--	--	--	--	20
FR BE 48	72-11-03	231GBRG	--	--	--	--	--	--	--	<10
FR BE 59	73-04-12	231GBRG	--	--	--	--	--	--	--	30
FR BE 91	82-06-08	231GBRG	--	<100	--	--	--	--	--	--
	83-04-11	231GBRG	--	200	--	--	--	--	--	--
FR BF 4	55-12-20	231NOXF	50	--	--	--	--	--	5	30
FR BF 24	72-01-03	231NOXF	--	--	--	--	--	--	--	70
FR CD 43	82-06-16	231GBRG	--	200	--	--	--	--	--	--
	83-04-12	231GBRG	--	<100	1	30	<1	<10	--	--
FR CD 71	82-06-16	231GBRG	--	100	--	--	--	--	--	--
	83-04-13	231GBRG	--	200	--	--	--	--	--	--
FR CD 88	83-01-12	231GBRG	--	<100	--	--	--	--	--	--
	83-04-12	231GBRG	--	<100	--	--	--	--	--	--
FR CE 6	55-12-20	367GROV	200	--	--	--	--	--	<5	90
FR CE 7	56-05-09	377FDCK	--	--	--	--	--	--	--	550
FR CE 8	56-05-09	377FDCK	--	--	--	--	--	--	--	40
FR CE 41	73-04-12	231NOXF	--	--	--	--	--	--	--	260
FR CE 89	82-06-17	231GBRG	--	<100	--	--	--	--	--	--
	83-04-12	231GBRG	--	<100	--	--	--	--	--	--
FR CF 1	55-03-15	367GROV	<50	--	--	--	--	--	<5	50
FR CF 17	55-12-20	300IJMV	100	--	--	--	--	--	40	180
FR CF 20	56-05-09	377FDCK	--	--	--	--	--	--	--	170
FR CG 1	51-03-20	300IJMV	1900	--	--	--	--	--	--	100
FR CG 29	82-07-21	300IJMV	--	200	--	--	--	--	--	--
	83-04-08	300IJMV	--	<100	--	--	--	--	--	--
FR CH 1	55-06-22	300IJMV	--	--	--	--	--	--	--	40
FR DB 2	55-04-01	400CTCN	<50	--	--	--	--	--	<5	40
FR DC 6	55-12-20	400CTCN	1200	--	--	--	--	--	20	110
FR DC 16	56-05-09	400CTCN	--	--	--	--	--	--	--	2100
FR DC 21	55-12-20	400GBGG	<50	--	--	--	--	--	<5	100
FR DD 1	53-04-14	377FDCK	--	--	--	--	--	--	--	--
FR DD 3	53-04-14	231NOXFB	--	--	--	--	--	--	--	1300
FR DD 11	56-05-11	400CTCN	--	--	--	--	--	--	--	30
FR DD 65	56-05-04	231NOXF	<50	--	--	--	--	--	30	40
FR DD 77	56-12-13	377HRPR	<50	--	--	--	--	--	3300	60
FR DD 146	72-08-04	231NOXF	--	--	--	--	--	--	--	100
	82-10-05	231NOXF	--	<100	--	--	--	--	--	--
	83-04-12	231NOXF	--	200	--	--	--	--	--	--
FR DD 176	81-08-21	377FDCK	200	100	--	--	--	--	2	140
FR DD 188	82-06-16	377FDCK	--	100	--	--	--	--	--	--
FR DE 2	53-04-14	377FDCK	--	--	--	--	--	--	--	40
FR DE 15	56-05-09	377FDCK	--	--	--	--	--	--	--	20
FR DE 16	56-05-04	377FDCK	50	--	--	--	--	--	110	40
FR DE 48	69-10-03	367GROV	--	--	--	--	--	--	--	ND
FR DE 83	82-06-15	367GROV	--	200	--	--	--	--	--	--
	83-04-12	367GROV	--	<100	1	20	<1	<10	--	--
FR DF 15	56-05-02	300LBRN	--	--	--	--	--	--	--	90
FR DG 21	82-09-01	300IJMV	--	400	--	--	--	--	--	--
	83-04-12	300IJMV	--	<100	--	--	--	--	--	--
FR EB 25	82-10-06	400PCMB	--	<100	--	--	--	--	--	--
	83-04-14	400PCMB	--	100	--	--	--	--	--	--
FR EB 33	82-09-02	400PCMB	--	300	--	--	--	--	--	--
	83-04-14	400PCMB	--	<100	--	--	--	--	--	--
FR ED 9	83-04-13	377FDCK	--	<100	--	--	--	--	--	--
FR ED 14	56-05-09	377FDCK	--	--	--	--	--	--	--	0
FR ED 85	72-08-08	231NOXF	--	--	--	--	--	--	--	20
FR EE 2	51-03-21	367GROV	100	--	--	--	--	--	--	400
FR EE 126	82-07-20	377FDCK	--	300	--	--	--	--	--	--
	83-04-13	377FDCK	--	<100	--	--	--	--	--	--
FR EF 36	82-07-28	300URBN	--	<100	--	--	--	--	--	--
	83-04-13	300URBN	--	200	--	--	--	--	--	--
FR EF 40	82-07-28	300URBN	--	100	--	--	--	--	--	--
	83-04-15	300URBN	--	100	--	--	--	--	--	--
FR EG 33	82-07-20	300MRBG	--	100	--	--	--	--	--	--
	83-04-13	300MRBG	--	300	1	50	<1	<10	--	--

Table 8.—Trace-element analyses of ground water in Frederick County, Md.—continued

IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SITE NUMBER
<3	--	--	--	--	--	--	--	--	FR BD 107
12	--	--	--	--	--	--	--	--	
12	--	--	--	--	--	--	--	--	
11	--	--	--	--	--	--	--	--	FR BD 108
8	--	--	--	--	--	--	--	--	
14	--	--	--	--	--	--	--	--	
9	--	--	--	--	--	--	--	--	
94	--	--	--	--	--	--	--	--	FR BD 111
180	--	--	--	--	--	--	--	--	
580	--	--	--	--	--	--	--	--	
74	--	--	--	--	--	--	--	--	FR BD 114
72	--	--	--	--	--	--	--	--	
--	--	--	--	--	--	--	--	--	FR BE 3
--	--	400	50	--	--	--	--	1200	FR BE 11
--	--	--	<5	--	--	--	--	--	FR BE 39
--	--	--	ND	--	--	--	--	--	FR BE 40
--	--	--	<10	--	--	--	--	--	FR BE 48
--	--	--	<10	--	--	--	--	--	FR BE 59
<3	--	--	--	<1	--	--	--	--	FR BE 91
<3	--	--	--	<1	--	--	--	--	
--	--	200	20	--	--	--	--	4800	FR BF 4
--	--	--	<5	--	--	--	--	--	FR BF 24
<3	--	--	--	<1	--	--	--	--	FR CD 43
<3	<10	--	--	<1	<.1	--	--	--	
8	--	--	--	2	--	--	--	--	FR CD 71
13	--	--	--	9	--	--	--	--	
<3	--	--	--	<1	--	--	--	--	FR CD 88
4	--	--	--	1	--	--	--	--	
--	--	300	10	--	--	--	--	850	FR CE 6
--	--	--	30	--	--	--	--	--	FR CE 7
--	--	--	580	--	--	--	--	--	FR CE 8
--	--	--	<10	--	--	--	--	--	FR CE 41
<3	--	--	--	<1	--	--	--	--	FR CE 89
<3	--	--	--	<1	--	--	--	--	
--	--	300	20	--	--	--	--	180	FR CF 1
--	--	100	20	--	--	--	--	1400	FR CF 17
--	--	--	100	--	--	--	--	--	FR CF 20
--	--	--	ND	--	--	--	--	--	FR CG 1
9	--	--	--	2	--	--	--	--	FR CG 29
<3	--	--	--	<1	--	--	--	--	
--	--	--	--	--	--	--	--	--	FR CH 1
--	--	<50	30	--	--	--	--	100	FR DB 2
--	--	<50	20	--	--	--	--	2800	FR DC 6
--	--	--	20	--	--	--	--	--	FR DC 16
--	--	200	<5	--	--	--	--	110	FR DC 21
--	--	--	--	--	--	--	--	--	FR DD 1
--	--	--	--	--	--	--	--	--	FR DD 3
--	--	--	<5	--	--	--	--	--	FR DD 11
--	--	200	20	--	--	--	--	ND	FR DD 65
--	--	--	20	--	--	80	--	ND	FR DD 77
--	--	--	ND	--	--	--	--	--	FR DD 146
<3	--	--	--	<1	--	--	--	--	
6	--	--	--	2	--	--	--	--	
10	--	--	10	<10	--	3	--	10	FR DD 176
8	--	--	--	<1	--	--	--	--	FR DD 188
--	--	--	--	--	--	--	--	--	FR DE 2
--	--	--	90	--	--	--	--	--	FR DE 15
--	--	400	60	--	--	--	--	770	FR DE 16
--	--	--	<5	--	--	--	--	--	FR DE 48
<3	--	--	--	<1	--	--	--	--	FR DE 83
<3	<10	--	--	<1	<.1	--	--	--	
--	--	--	10	--	--	--	--	--	FR DF 15
160	--	--	--	350	--	--	--	--	FR DG 21
<3	--	--	--	10	--	--	--	--	
3	--	--	--	<1	--	--	--	--	FR EB 25
7	--	--	--	<1	--	--	--	--	
400	--	--	--	15	--	--	--	--	FR EB 33
150	--	--	--	64	--	--	--	--	
5	--	--	--	<1	--	--	--	--	FR ED 9
--	--	--	30	--	--	--	--	--	FR ED 14
--	--	--	ND	--	--	--	--	--	FR ED 85
--	--	--	<5	--	--	--	--	--	FR EE 2
5	--	--	--	26	--	--	--	--	FR EE 126
<3	--	--	--	9	--	--	--	--	
10	--	--	--	1200	--	--	--	--	FR EF 36
4	--	--	--	1900	--	--	--	--	
14	--	--	--	5	--	--	--	--	FR EF 40
26	--	--	--	6	--	--	--	--	
<3	--	--	--	10	--	--	--	--	FR EG 33
5	<10	--	--	9	<.1	--	--	--	

Table 8.—Trace-element analyses of ground water in Frederick County, Md.—continued

SITE NUMBER	DATE OF SAMPLE	GEO-LOGIC UNIT	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FR EH 1	55-03-10	300MRBG	<50	--	--	--	--	--	<5	100
FR FB 1	55-04-01	400GBGG	<50	--	--	--	--	--	20	160
FR FB 12	81-08-21	400PCMB	200	200	--	--	--	--	5	160
	83-06-16	400PCMB	--	<100	--	--	--	--	--	--
FR FC 14	55-12-20	400CTCN	<50	--	--	--	--	--	40	530
FR FC 31	83-04-14	377TMSN 377ANTM	--	<100	--	--	--	--	--	--
FR FC 33	72-08-07	231NOXFB	--	--	--	--	--	--	--	70
FR FD 4	46-12-26	377FDCK	--	--	--	--	--	--	--	660
FR FD 16	56-05-09	377FDCK	--	--	--	--	--	--	--	20
FR FD 53	82-10-06	377FDCK	--	100	--	--	--	--	--	--
	83-04-15	377FDCK	--	<100	--	--	--	--	--	--
FR FD 83	72-07-28	231NOXF	--	--	--	--	--	--	--	60
FR FE 18	47-04-30	300URBN	--	--	--	--	--	--	--	70

Geologic unit (aquifer):

231GBRG - Gettysburg Shale
231NOXF - New Oxford Formation
231NOXFB - New Oxford Formation, basal conglomerate
300IJMV - Ijamsville Formation
300LBRN - Libertytown Metarhyolite
300MRBG - Marburg Formation
300SMCK - Sams Creek Metabasalt
300URBN - Urbana Formation
367GROV - Grove Limestone
377ANTM - Antietam Formation
377FDCK - Frederick Limestone
377HRPR - Harpers Formation
377LUDN - Loudoun Formation
377TMSN - Tomstown Dolomite
400CTCN - Catoctin Metabasalt
400GBGG - Granodiorite and Biotite Granite Gneiss
400MTRL - Metarhyolite and Associated Pyroclastic Sediments
400PCMB - Precambrian Erathem

ND, not detected

Table 8.—Trace-element analyses of ground water in Frederick County, Md.—continued

IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SITE NUMBER
--	--	500	10	--	--	--	--	ND	FR EH 1
--	--	<50	30	--	--	--	--	1400	FR FB 1
10	--	--	<10	<10	--	6	4	10	FR FB 12
6	--	--	--	<1	--	--	--	--	
--	--	400	20	--	--	--	--	2800	FR FC 14
4	--	--	--	8	--	--	--	--	FR FC 31
--	--	--	ND	--	--	--	--	--	FR FC 33
--	--	--	--	--	--	--	--	--	FR FD 4
--	--	--	<5	--	--	--	--	--	FR FD 16
8	--	--	--	6	--	--	--	--	FR FD 53
10	--	--	--	5	--	--	--	--	
--	--	--	100	--	--	--	--	--	FR FD 83
--	--	--	--	--	--	--	--	--	FR FE 18

Table 9.—Quality of surface water in Frederick County, Md.

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
01636850	L CATOCTIN C NR BRUNSWICK, MD	82-03-10	0900	10	257	7.7	--	1.5
		82-08-19	1700	.55	261	8.3	--	25.0
		83-01-21	1245	.59	256	8.6	2.0	.5
		83-06-16	1130	3.8	228	8.2	30.0	24.5
01637000	L CATOCTIN C AT HARMONY, MD	68-02-29	1330	6.6	100	6.9	--	3.0
		68-04-24	0950	6.9	110	7.3	--	11.0
		68-06-10	1100	16	100	7.4	--	21.0
		68-07-19	1200	2.2	130	7.0	--	27.0
		68-09-04	1230	.74	140	7.6	--	--
		68-12-19	1115	2.6	137	7.6	--	2.0
01637500	CATOCTIN C NR MIDDLETOWN, MD	82-03-08	1730	137	175	8.2	--	6.0
		82-08-19	1445	13	192	8.7	--	24.0
		83-01-21	1115	20	191	8.0	-.5	.0
		83-06-16	0930	48	144	7.4	29.0	21.5
01638050	CATOCTIN C AT OLIVE, MD	82-03-10	1215	193	194	7.9	--	3.0
		82-08-19	1945	22	214	8.6	--	23.5
		83-01-21	1445	33	218	8.2	3.5	.0
		83-06-16	1245	73	183	8.0	30.0	25.5
01638520	POTOMAC R TR AT POINT OF ROCKS, MD	82-07-29	1115	.35	398	8.2	--	20.0
		82-03-09	1600	.93	313	8.9	--	10.0
		83-01-27	1430	.12	227	9.1	7.5	1.5
		83-06-15	1530	11	351	8.2	32.5	25.5
01638600	TUSCARORA C AT TUSCARORA, MD	82-03-10	1545	18	375	8.9	--	5.5
		82-08-23	1215	5.0	492	8.0	--	18.0
		83-01-27	1530	8.1	421	8.7	6.5	5.0
		83-06-15	1315	13	421	8.0	35.0	20.5
01639325	FRIENDS C NR EMMITSBURG, MD	82-03-04	1030	20	131	8.0	--	1.0
		82-07-22	1220	7.9	182	8.4	--	23.5
		83-01-14	1100	8.6	155	8.5	3.5	1.5
		83-06-17	1030	5.4	158	8.2	26.5	22.0
01639390	TOMS C NR KEYSVILLE, MD	82-03-03	1620	135	161	7.9	--	4.5
		82-07-23	0945	13	196	7.6	--	25.5
		83-01-13	1600	75	182	8.1	-.5	1.5
		83-06-17	1445	35	162	8.5	31.0	27.0
01640200	L PIPE C AT KEYMAR, MD	82-03-11	1300	84	353	8.5	--	5.5
		82-07-27	1500	33	383	8.0	--	26.0
		83-01-17	1445	24	352	8.5	-1.0	1.0
		83-07-19	1400	38	366	8.1	32.0	26.0
01640500	OWENS C AT LANTZ, MD	82-02-05	0915	13	104	7.5	--	1.0
		82-08-10	1410	1.5	104	8.0	--	23.0
		83-01-14	1245	3.1	104	8.3	3.0	2.5
		83-06-16	1915	5.6	100	7.5	24.5	19.0
01640750	OWENS C NR ROCKY RIDGE, MD	82-03-08	1330	92	159	7.8	--	3.0
		82-07-22	1000	8.3	155	7.7	--	21.0
		83-01-13	0945	22	186	7.9	1.0	.5
		83-06-16	1645	19	131	8.2	34.5	25.0
01641000	HUNTING C AT JIMTOWN, MD	61-06-19	--	6.8	96	6.4	--	--
		82-03-08	1045	42	135	8.8	--	2.5
		82-08-13	0830	4.8	301	7.6	--	17.0
		83-01-17	1730	8.6	271	9.5	-1.0	1.5
		83-06-23	1145	30	140	7.5	27.0	18.0
01641500	FISHING C NR LEWISTOWN, MD	68-11-01	1445	1.4	15	6.6	--	9.0
		82-02-04	1500	17	25	6.4	--	3.5
		82-08-11	1700	2.7	19	7.6	--	17.0
		83-01-19	1700	2.6	19	8.1	-6.0	.0
		83-06-13	1730	8.8	17	7.3	26.0	16.0
01641600	FISHING C NR UTICA, MD	82-03-12	1145	48	104	8.4	--	8.0
		82-07-23	1200	3.8	97	7.5	--	23.5
		83-01-20	1200	2.1	234	8.2	-3.5	.5
		83-06-16	1530	11	70	7.6	34.0	23.5
01641900	TUSCARORA C NR FREDERICK, MD	82-03-09	0915	20	196	7.9	--	3.0
		82-07-23	1530	4.7	290	7.8	--	24.0
		83-01-18	1130	6.6	276	8.2	-6.0	.5
		83-06-14	1710	8.6	232	7.8	33.0	26.0
01642050	ISRAEL C NR WALKERSVILLE, MD	82-03-11	1530	29	230	8.1	--	9.0
		82-08-11	1130	2.9	382	7.9	--	22.0

Table 9.—Quality of surface water in Frederick County, Md.—continued

COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	DATE OF SAMPLE	STATION NUMBER
12	13.7	92	54	25	7.1	15	4.4	82-03-10	01636850
19	8.7	93	26	25	7.4	11	5.2	82-08-19	
10	--	99	36	26	8.2	12	2.6	83-01-21	
19	7.8	85	23	23	6.7	8.8	4.2	83-06-16	
2	--	35	13	7.6	3.8	3.3	.80	68-02-29	01637000
0	--	42	16	9.8	4.2	3.6	1.2	68-04-24	
6	--	39	13	9.2	3.8	3.3	.90	68-06-10	
6	--	51	15	13	4.5	4.9	3.0	68-07-19	
6	--	58	15	14	5.6	4.9	3.0	68-09-04	
10	--	50	24	12	4.9	3.8	2.4	68-12-19	
5	12.1	56	31	15	4.5	9.1	1.6	82-03-08	01637500
15	9.2	74	21	19	6.4	8.3	2.3	82-08-19	
5	--	75	22	18	7.3	8.5	1.8	83-01-21	
20	8.3	55	7	14	4.9	5.6	1.6	83-06-16	
5	12.8	68	40	17	6.3	10	2.0	82-03-10	01638050
16	8.0	84	24	22	7.1	8.1	2.9	82-08-19	
5	--	84	26	21	7.7	9.1	2.5	83-01-21	
17	8.2	73	18	19	6.2	6.5	2.3	83-06-16	
--	8.0	--	--	--	--	--	--	82-07-29	01638520
8	12.3	160	38	40	14	6.3	2.2	82-03-09	
8	--	110	0	25	11	3.9	2.4	83-01-27	
30	7.0	180	0	44	17	4.1	3.0	83-06-15	
5	16.0	160	53	50	9.1	14	2.7	82-03-10	01638600
15	8.4	220	38	68	11	12	3.0	82-08-23	
5	--	180	18	57	9.7	13	2.4	83-01-27	
17	8.7	190	43	62	9.3	9.5	2.3	83-06-15	
4	13.5	53	26	12	5.6	4.4	.60	82-03-04	01639325
7	8.1	71	20	17	6.9	6.1	.90	82-07-22	
5	--	65	24	15	6.6	6.0	.70	83-01-14	
20	8.6	67	15	16	6.6	5.4	.70	83-06-17	
18	12.6	63	28	17	5.0	5.0	1.2	82-03-03	01639390
8	5.6	77	12	22	5.4	6.7	1.4	82-07-23	
10	--	78	21	21	6.2	7.2	1.5	83-01-13	
30	9.3	68	2	19	5.1	5.5	1.4	83-06-17	01639390
<1	13.0	150	51	47	8.2	10	2.4	82-03-11	01640200
8	7.9	160	29	51	7.5	9.2	3.1	82-07-27	
5	--	160	73	51	8.0	9.4	3.2	83-01-17	
17	7.7	160	13	52	7.9	8.0	3.1	83-07-19	
5	13.4	38	11	9.2	3.7	5.3	.70	82-02-05	01640500
3	8.3	43	5	11	3.7	3.9	.80	82-08-10	
8	--	42	12	10	4.1	4.8	.60	83-01-14	
20	9.0	39	0	9.8	3.6	4.2	.70	83-06-16	
10	13.6	46	19	14	2.8	10	1.6	82-03-08	01640750
8	7.3	59	8	17	4.0	4.9	1.5	82-07-22	
15	--	76	36	22	5.1	7.1	1.9	83-01-13	
17	8.3	53	2	15	3.8	4.5	1.1	83-06-16	
7	--	36	6	10	2.7	--	--	61-06-19	01641000
6	13.3	41	16	12	2.8	15	1.2	82-03-08	
7	7.2	84	23	25	5.2	24	2.0	82-08-13	
5	--	74	27	21	5.3	25	1.8	83-01-17	
19	9.3	51	3	15	3.4	6.6	1.2	83-06-23	
2	--	4	2	1.0	.40	.60	.70	68-11-01	01641500
<1	12.7	7	5	1.8	.69	.70	.70	82-02-04	
3	8.9	7	2	1.7	.55	.70	.30	82-08-11	
5	--	6	0	1.7	.50	.80	.70	83-01-19	
15	9.2	5	0	1.4	.45	1.2	.60	83-06-13	
5	12.6	36	15	9.9	2.7	4.7	1.4	82-03-12	01641600
12	6.9	41	4	12	2.7	2.4	1.2	82-07-23	
5	--	98	6	27	7.4	8.5	2.1	83-01-20	
20	8.4	29	0	8.2	2.0	2.2	1.1	83-06-16	
3	13.4	79	25	25	4.0	6.6	2.1	82-03-09	01641900
12	7.5	120	24	40	5.5	5.2	3.4	82-07-23	
8	--	130	8	40	6.7	6.6	2.1	83-01-18	
20	7.9	100	8	34	4.8	5.0	2.7	83-06-14	
8	11.7	98	42	30	5.6	5.5	2.3	82-03-11	01642050
5	8.0	170	54	54	8.6	7.2	3.9	82-08-11	

Table 9.—Quality of surface water in Frederick County, Md.—continued

STATION NUMBER	DATE OF SAMPLE	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
01636850	82-03-10	--	--	--	38	1.5	29	30	0.10	14	172
	82-08-19	--	--	--	67	.6	14	24	.20	18	169
	83-01-21	--	--	63	49	.3	25	29	.10	17	158
	83-06-16	--	--	62	49	.8	19	20	.20	15	175
01637000	68-02-29	27	0	22	--	5.4	11	6.2	.20	12	--
	68-04-24	32	0	26	--	2.5	12	5.8	.10	14	--
	68-06-10	32	0	26	--	2.0	11	5.0	.10	15	--
	68-07-19	44	0	36	--	7.0	10	8.2	.10	17	--
	68-09-04	52	0	43	--	2.1	13	10	.10	17	--
	68-12-19	32	0	26	--	1.3	16	8.9	.10	16	--
01637500	82-03-08	--	--	--	25	.3	20	17	<.10	11	119
	82-08-19	--	--	--	53	.2	14	15	.20	11	135
	83-01-21	--	--	53	40	1.0	20	21	<.10	12	123
	83-06-16	--	--	48	37	3.7	13	11	.10	11	112
01638050	82-03-10	--	--	--	28	.7	22	22	<.10	13	132
	82-08-19	--	--	--	60	.3	15	15	<.10	9.4	130
	83-01-21	--	--	58	45	.7	21	23	<.10	13	136
	83-06-16	--	--	55	45	1.1	17	14	.20	12	138
01638520	82-07-29	--	--	--	--	--	--	--	--	--	--
	82-03-09	--	--	--	120	.3	20	11	<.10	6.2	196
	83-01-27	--	--	121	98	.2	9.0	8.0	<.10	7.8	110
	83-06-15	--	--	190	150	2.3	12	8.5	<.10	9.1	214
01638600	82-03-10	--	--	--	110	.3	36	21	.30	4.9	238
	82-08-23	--	--	--	177	3.4	28	16	.50	6.8	316
	83-01-27	--	--	165	137	.6	35	21	.20	5.1	258
	83-06-15	--	--	150	145	2.9	24	17	.30	7.3	237
01639325	82-03-04	--	--	--	27	.5	16	11	<.10	9.4	94
	82-07-22	--	--	--	51	.4	14	10	.10	15	120
	83-01-14	--	--	41	32	.2	18	13	<.10	11	111
	83-06-17	--	--	52	42	.6	15	11	.10	12	110
01639390	82-03-03	--	--	--	35	.9	19	10	<.10	10	109
	82-07-23	--	--	--	65	3.2	15	8.8	<.10	9.5	136
	83-01-13	--	--	57	46	.9	23	11	<.10	12	125
	83-06-17	--	--	67	53	.4	14	7.0	.20	8.9	114
01640200	82-03-11	--	--	--	100	.6	27	23	.20	5.2	223
	82-07-27	--	--	--	129	2.5	19	17	.10	6.7	242
	83-01-17	--	--	88	121	.5	23	22	.10	5.7	206
	83-07-19	--	--	150	126	2.3	21	19	.10	5.0	216
01640500	82-02-05	--	--	--	27	1.9	10	10	.00	12	83
	82-08-10	--	--	--	38	.7	5.0	5.8	<.10	19	72
	83-01-14	--	--	30	25	.3	10	9.5	<.10	14	77
	83-06-16	--	--	49	29	3.0	8.8	6.2	<.10	17	87
01640750	82-03-08	--	--	--	28	.9	19	12	<.10	7.0	104
	82-07-22	--	--	--	51	2.0	10	7.3	<.10	9.1	101
	83-01-13	--	--	50	40	1.0	22	16	<.10	8.1	124
	83-06-16	--	--	51	43	.6	9.8	6.7	<.10	8.8	94
01641000	61-06-19	36	--	30	--	23	6.0	4.5	.10	9.9	63
	82-03-08	--	--	--	26	.0	12	25	<.10	7.8	103
	82-08-13	--	--	--	61	3.0	9.0	44	<.10	10	167
	83-01-17	--	--	47	47	.0	11	42	<.10	9.3	155
	83-06-23	--	--	49	39	3.0	10	12	<.10	9.7	86
01641500	68-11-01	3	0	2	--	1.2	2.1	1.2	.10	5.9	--
	82-02-04	--	--	--	2.0	1.7	5.7	1.6	.00	3.9	24
	82-08-11	--	--	--	5.0	.2	2.0	.90	<.10	5.6	20
	83-01-19	--	--	8	5.0	.1	4.0	1.6	<.10	4.8	20
	83-06-13	--	--	8	4.0	.8	3.8	1.5	<.10	4.8	16
01641600	82-03-12	--	--	--	21	.2	12	10	<.10	4.2	68
	82-07-23	--	--	--	37	2.3	4.0	3.5	<.10	5.5	62
	83-01-20	--	--	92	74	1.1	18	15	<.10	5.5	144
	83-06-16	--	--	28	24	1.4	9.3	3.2	.10	5.7	84
01641900	82-03-09	--	--	--	54	1.3	17	8.9	<.10	6.4	121
	82-07-23	--	--	--	99	3.0	11	9.6	<.10	9.2	170
	83-01-18	--	--	120	81	1.5	18	14	<.10	8.6	179
	83-06-14	--	--	97	78	3.0	12	10	.10	8.3	146
01642050	82-03-11	--	--	--	56	.9	26	11	<.10	5.4	145
	82-08-11	--	--	--	117	2.8	33	15	.10	6.1	245

Table 9.—Quality of surface water in Frederick County, Md.—continued

SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	DATE OF SAMPLE	STATION NUMBER
150	4.7	--	3.0	--	0.48	3.5	0.100	--	0.080	82-03-10	01636850
150	.25	--	.99	--	--	--	.120	--	.100	82-08-19	
160	.25	--	3.4	2.8	--	--	.030	0.040	--	83-01-21	
130	1.8	--	2.7	--	.70	3.4	.130	--	.090	83-06-16	
58	1.0	--	--	--	--	--	--	--	--	68-02-29	01637000
66	1.2	--	--	--	--	--	--	--	--	68-04-24	
64	2.8	--	--	--	--	--	--	--	--	68-06-10	
82	.49	--	--	--	--	--	--	--	--	68-07-19	
93	.19	--	--	--	--	--	--	--	--	68-09-04	
80	.56	--	--	--	--	--	--	--	--	68-12-19	
93	44	--	2.1	--	--	--	.050	--	--	82-03-08	01637500
110	4.7	--	.59	--	--	--	.380	--	.390	82-08-19	
120	6.6	--	1.8	1.8	--	--	.130	.130	--	83-01-21	
90	15	--	.90	--	.50	1.4	.080	--	.050	83-06-16	
110	69	--	2.4	--	.57	3.0	.050	--	.050	82-03-10	01638050
120	7.8	--	.47	--	--	--	.110	--	.090	82-08-19	
130	12	--	2.4	2.3	--	--	.100	.100	--	83-01-21	
110	27	--	1.7	--	.50	2.2	.120	--	.090	83-06-16	
--	--	--	--	--	--	--	--	--	--	82-07-29	01638520
170	.49	--	5.0	--	.56	5.6	.030	--	.020	82-03-09	
140	.04	--	1.2	--	--	--	.030	--	.020	83-01-27	
210	6.4	--	2.0	--	1.1	3.1	.130	--	.060	83-06-15	
200	11	--	5.7	--	.34	6.0	.040	--	.030	82-03-10	01638600
250	4.3	--	4.8	--	--	--	.080	--	.060	82-08-23	
240	5.6	--	5.6	--	--	--	.040	--	.040	83-01-27	
220	8.3	--	6.0	--	.20	6.2	.080	--	.050	83-06-15	
75	5.1	--	1.5	--	.20	1.7	<.010	--	<.010	82-03-04	01639325
100	2.6	--	.73	--	.80	1.5	.040	--	.030	82-07-22	
95	2.6	--	1.9	--	--	--	.010	--	<.010	83-01-14	
98	1.6	--	.90	--	.30	1.2	.040	--	.040	83-06-17	
88	40	--	1.5	--	.33	1.8	.040	--	.040	82-03-03	01639390
110	4.6	--	.59	--	.80	1.4	.160	--	.140	82-07-23	
120	25	--	1.9	--	--	--	.040	--	.030	83-01-13	
100	11	--	.80	--	.70	1.5	.110	--	.090	83-06-17	
180	50	--	5.4	--	.81	6.2	.140	--	.120	82-03-11	01640200
190	21	--	3.6	--	.30	3.9	.280	--	.230	82-07-27	
180	13	--	5.0	--	--	--	.290	--	.270	83-01-17	
210	22	--	3.9	--	.60	4.5	.220	--	.210	83-07-19	
80	2.9	--	1.5	--	1.3	2.8	.030	--	--	82-02-05	01640500
72	.29	--	.52	--	--	--	.030	--	.010	82-08-10	
71	.64	--	1.3	--	--	--	<.010	--	<.010	83-01-14	
80	1.3	--	.90	--	.20	1.1	.020	--	<.010	83-06-16	
83	26	--	1.9	--	.35	2.3	.040	--	.020	82-03-08	01640750
84	2.3	--	.68	--	.70	1.4	.030	--	.020	82-07-22	
110	7.2	--	3.0	--	--	--	.030	--	<.010	83-01-13	
80	4.8	--	.80	--	.20	1.0	.030	--	.020	83-06-16	
--	1.2	--	--	--	--	--	--	--	--	61-06-19	01641000
91	12	--	.96	--	--	--	.090	--	--	82-03-08	
160	2.2	--	2.0	--	--	--	.520	--	.530	82-08-13	
140	3.6	--	1.4	--	--	--	.410	--	.410	83-01-17	
87	7.0	--	.90	--	.50	1.4	.140	--	.110	83-06-23	
13	.05	--	--	--	--	--	--	--	--	68-11-01	01641500
16	1.1	--	.14	--	.99	1.1	<.010	--	.010	82-02-04	
15	.15	--	<.10	--	--	--	.010	--	<.010	82-08-11	
19	.14	--	.10	.26	--	--	<.010	.020	--	83-01-19	
19	.38	--	<.10	--	<.10	--	.020	--	<.010	83-06-13	
58	8.8	--	.69	--	.43	1.1	.040	--	.020	82-03-12	01641600
54	.64	--	.53	--	1.0	1.5	.060	--	.040	82-07-23	
140	.82	--	1.8	1.8	--	--	.040	.030	--	83-01-20	
49	2.5	--	.50	--	.30	.80	.060	--	.030	83-06-16	
100	6.4	--	2.6	--	.43	3.0	.040	--	.040	82-03-09	01641900
140	2.1	--	4.4	--	1.6	6.0	.180	--	.120	82-07-23	
170	3.2	--	3.5	4.2	--	--	.060	.060	--	83-01-18	
140	3.4	--	3.0	--	.60	3.6	.080	--	.100	83-06-14	
120	11	--	2.8	--	.74	3.5	.030	--	.020	82-03-11	01642050
200	1.9	--	2.2	--	--	--	.060	--	.040	82-08-11	

Table 9.—Quality of surface water in Frederick County, Md.—continued

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)
01642050	ISRAEL C NR WALKERSVILLE, MD	83-01-19	1245	14	319	8.3	-6.0	0.5
		83-06-14	1930	9.5	352	8.0	29.0	26.0
01642500	LINGANORE C NR FREDERICK, MD	61-06-19	--	45	128	6.6	--	--
		68-11-04	0925	19	145	7.4	--	10.0
		82-02-02	1400	112	172	7.5	-.5	2.0
		82-08-11	1430	28	185	8.5	19.0	23.0
		83-01-19	1530	27	187	8.4	-5.0	2.5
		83-06-13	1400	74	165	8.8	31.0	24.5
01643000	MONOCACY R AT JUG BRIDGE NR FREDERICK, MD	62-01-07	--	6750	140	6.3	--	--
		62-03-13	--	11600	107	6.3	--	--
01643110	BUSH C AT REELS MILL, MD	82-03-18	1015	43	277	7.5	--	7.0
		82-08-12	1330	14	212	8.1	--	20.5
		83-01-20	1700	7.5	228	8.7	-4.5	.0
		83-06-15	0945	24	190	7.7	27.0	20.5
01643125	BALLENGER C NR LIME KILN, MD	82-03-23	1430	26	406	8.3	--	10.0
		82-08-12	1645	8.9	515	7.6	--	18.0
		83-01-20	1350	5.6	440	8.3	-3.0	2.5
		83-06-15	1145	20	473	7.7	34.0	18.0
01643500	BENNETT C AT PARK MILLS, MD	68-03-05	1030	39	82	6.9	--	--
		68-04-24	0840	42	90	7.3	--	13.0
		68-06-06	1045	38	92	7.2	--	17.0
		68-07-17	1200	21	108	7.0	--	24.0
		68-09-12	1625	18	120	7.2	--	19.0
		69-07-17	1200	6.5	130	7.4	--	24.5
		69-08-28	1150	12	120	7.3	--	18.0
		69-09-24	1420	17	115	6.5	--	16.0
		69-10-08	1335	18	100	6.7	--	17.5
		69-11-20	1253	51	160	7.5	--	5.5
		69-12-11	1224	157	140	7.3	--	6.5
		70-01-07	1345	48	110	7.3	--	.0
		70-02-04	1400	115	120	7.8	--	.0
		70-03-12	1300	50	100	8.0	--	5.0
		70-04-20	1230	152	90	7.6	--	9.5
		70-05-13	1300	53	90	7.3	--	19.0
		70-05-19	1205	51	100	7.0	--	15.0
		70-06-04	1245	34	100	7.1	--	20.0
		70-07-29	1253	23	100	7.9	--	24.0
		70-08-17	1200	22	110	7.4	--	23.0
		70-09-30	0954	12	100	7.4	--	12.0
		70-10-20	1207	12	119	7.7	--	10.5
		70-11-24	1206	26	128	7.5	--	1.5
		70-12-22	1113	301	145	7.1	--	3.0
		71-01-20	1320	46	120	7.9	--	.0
		71-02-08	1225	737	105	7.6	--	1.0
		71-03-08	1205	115	98	7.6	--	3.0
		71-04-07	1141	242	132	7.2	--	5.0
		71-05-06	1130	48	98	7.7	--	13.5
		71-06-16	1352	61	107	7.4	--	15.0
		71-07-14	1245	21	100	8.3	--	22.0
		71-08-18	1420	39	130	8.2	--	19.5
		71-09-28	1145	68	123	7.2	--	16.5
		71-10-26	1322	312	110	6.8	--	15.5
		71-11-17	1417	58	115	8.6	--	9.0
		71-12-14	1210	98	120	6.0	--	5.0
		72-01-10	1217	136	125	7.9	--	6.0
		72-02-10	1155	85	110	7.7	--	1.0
		72-03-15	1250	117	115	7.8	--	6.0
		72-04-05	1255	81	105	7.9	--	8.0
		72-05-09	1325	200	120	7.4	--	13.0
		72-06-12	1420	60	110	6.6	--	16.5
		82-03-10	1745	56	142	8.5	--	4.0
		82-08-23	1845	17	133	8.1	--	20.0
		83-01-20	1450	33	134	9.2	-2.0	.0
		83-06-23	1445	63	127	7.8	27.0	22.0
01643580	MONOCACY R NR DICKERSON, MD	76-09-01	0930	170	320	7.9	--	19.5
		82-08-23	1645	189	296	9.2	--	22.0
		83-07-19	1300	265	326	8.1	33.0	25.0

Table 9.—Quality of surface water in Frederick County, Md.—continued

COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	DATE OF SAMPLE	STATION NUMBER
8	--	140	28	44	8.1	7.6	2.9	83-01-19	01642050
20	7.4	160	31	51	8.1	7.3	2.9	83-06-14	
4	--	56	13	16	4.0	--	--	61-06-19	01642500
3	--	66	12	19	4.5	2.8	2.2	68-11-04	
5	15.4	73	19	21	5.1	4.9	3.4	82-02-02	
8	7.7	77	11	22	5.3	4.0	4.6	82-08-11	
10	--	82	12	23	5.9	4.9	3.7	83-01-19	
17	7.3	71	9	20	5.1	4.5	2.0	83-06-13	
10	--	56	20	16	3.8	6.4	--	62-01-07	01643000
3	--	40	19	11	3.0	2.8	2.2	62-03-13	
5	--	69	31	19	5.3	16	2.1	82-03-18	01643110
9	8.3	75	19	22	4.8	10	2.3	82-08-12	
15	--	79	15	22	5.8	13	2.0	83-01-20	
18	6.9	67	10	19	4.7	9.6	1.9	83-06-15	
3	13.8	170	53	51	11	11	2.1	82-03-23	01643125
7	8.5	230	59	71	12	9.0	2.4	82-08-12	
--	--	--	--	--	--	--	--	83-01-20	
17	9.4	220	30	68	12	9.3	2.4	83-06-15	
2	--	31	8	8.4	2.5	3.0	1.0	68-03-05	01643500
3	--	35	7	9.7	2.6	3.0	1.1	68-04-24	
3	--	35	7	9.5	2.7	3.1	1.3	68-06-06	
5	--	41	6	12	2.8	3.2	2.7	68-07-17	
8	--	43	9	13	2.6	3.3	3.7	68-09-12	
--	8.7	--	--	--	--	--	--	69-07-17	
--	10.4	--	--	--	--	--	--	69-08-28	
--	8.8	--	--	--	--	--	--	69-09-24	
3	9.4	45	6	--	--	--	--	69-10-08	
--	11.4	--	--	--	--	--	--	69-11-20	
--	11.4	--	--	--	--	--	--	69-12-11	
--	13.2	--	--	--	--	--	--	70-01-07	
--	13.3	--	--	--	--	--	--	70-02-04	
--	12.4	--	--	--	--	--	--	70-03-12	
--	10.2	--	--	--	--	--	--	70-04-20	
--	9.0	--	--	--	--	--	--	70-05-13	
--	9.5	--	--	--	--	--	--	70-05-19	
--	8.2	--	--	--	--	--	--	70-06-04	
--	10.0	--	--	--	--	--	--	70-07-29	
--	8.3	--	--	--	--	--	--	70-08-17	
--	9.6	--	--	--	--	--	--	70-09-30	
5	10.7	50	10	--	--	--	--	70-10-20	
--	13.2	--	--	--	--	--	--	70-11-24	
--	12.2	--	--	--	--	--	--	70-12-22	
--	14.2	--	--	--	--	--	--	71-01-20	
--	12.8	--	--	--	--	--	--	71-02-08	
--	13.0	--	--	--	--	--	--	71-03-08	
--	13.1	--	--	--	--	--	--	71-04-07	
--	11.0	--	--	--	--	--	--	71-05-06	
--	10.5	--	--	--	--	--	--	71-06-16	
--	10.2	--	--	--	--	--	--	71-07-14	
--	9.8	--	--	--	--	--	--	71-08-18	
0	9.8	46	16	--	--	--	--	71-09-28	
--	8.8	--	--	--	--	--	--	71-10-26	
--	11.2	--	--	--	--	--	--	71-11-17	
--	12.0	--	--	--	--	--	--	71-12-14	
--	11.4	--	--	--	--	--	--	72-01-10	
--	13.4	--	--	--	--	--	--	72-02-10	
--	11.4	--	--	--	--	--	--	72-03-15	
--	12.8	--	--	--	--	--	--	72-04-05	
--	9.4	--	--	--	--	--	--	72-05-09	
--	10.0	--	--	--	--	--	--	72-06-12	
<1	13.3	49	22	13	3.9	8.3	1.6	82-03-10	
17	8.9	51	9	15	3.4	4.4	1.5	82-08-23	
8	--	54	9	15	3.9	5.3	1.4	83-01-20	
18	9.4	49	3	14	3.3	3.8	2.1	83-06-23	
--	7.5	--	--	--	--	--	--	76-09-01	01643580
17	--	130	33	41	6.8	13	3.0	82-08-23	
20	7.1	140	6	43	6.8	9.0	3.2	83-07-19	

Table 9.—Quality of surface water in Frederick County, Md.—continued

STATION NUMBER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
01642050	83-01-19	--	--	115	94	1.1	38	16	<0.10	7.2	196
	83-06-14	--	--	130	109	2.5	35	15	.10	6.8	216
01642500	61-06-19	54	--	44	--	22	5.6	4.5	.20	7.0	78
	68-11-04	66	0	54	--	4.2	7.0	5.4	.20	4.3	--
	82-02-02	--	--	--	55	3.1	11	10	.10	5.8	118
	82-08-11	--	--	--	66	.4	9.0	9.5	.10	5.9	121
	83-01-19	--	--	70	63	.5	11	11	<.10	2.6	110
	83-06-13	--	--	62	50	.2	10	9.4	<.10	--	113
01643000	62-01-07	44	--	--	--	35	21	7.0	.10	6.4	91
	62-03-13	25	--	--	--	20	16	5.6	.30	6.4	70
01643110	82-03-18	--	--	--	38	2.3	7.1	31	<.10	5.2	137
	82-08-12	--	--	--	56	.9	7.0	21	<.10	7.5	137
	83-01-20	--	--	64	52	.2	12	27	<.10	5.8	142
	83-06-15	--	--	57	44	2.2	10	20	<.10	6.8	128
01643125	82-03-23	--	--	--	120	1.2	28	29	<.10	5.8	242
	82-08-12	--	--	--	168	8.2	23	27	<.10	7.3	282
	83-01-20	--	--	182	--	1.7	--	--	--	--	--
	83-06-15	--	--	190	155	7.3	23	25	.10	8.4	285
01643500	68-03-05	28	0	23	--	5.6	6.6	4.9	.20	7.2	50
	68-04-24	34	0	28	--	2.7	5.2	4.4	.10	12	--
	68-06-06	34	0	28	--	3.4	5.8	4.4	.10	8.8	--
	68-07-17	44	0	36	--	7.0	5.4	5.1	.10	8.0	--
	68-09-12	4	0	34	--	.4	9.1	6.4	.10	7.4	--
	69-07-17	--	--	--	--	--	--	--	--	--	--
	69-08-28	--	--	--	--	--	--	--	--	--	--
	69-09-24	--	--	--	--	--	--	--	--	--	--
	69-10-08	47	0	38	--	2.4	5.0	5.6	.10	--	70
	69-11-20	--	--	--	--	--	--	--	--	--	--
	69-12-11	--	--	--	--	--	--	--	--	--	--
	70-01-07	--	--	--	--	--	--	--	--	--	--
	70-02-04	--	--	--	--	--	--	--	--	--	--
	70-03-12	--	--	--	--	--	--	--	--	--	--
	70-04-20	--	--	--	--	--	--	--	--	--	--
	70-05-13	--	--	--	--	--	--	--	--	--	--
	70-05-19	--	--	--	--	--	--	--	--	--	--
	70-06-04	--	--	--	--	--	--	--	--	--	--
	70-07-29	--	--	--	--	--	--	--	--	--	--
	70-08-17	--	--	--	--	--	--	--	--	--	--
	70-09-30	--	--	--	--	--	--	--	--	--	--
	70-10-20	49	0	40	--	1.6	4.8	5.7	.10	--	61
	70-11-24	--	--	--	--	--	--	--	--	--	--
	70-12-22	--	--	--	--	--	--	--	--	--	--
	71-01-20	--	--	--	--	--	--	--	--	--	--
	71-02-08	--	--	--	--	--	--	--	--	--	--
	71-03-08	--	--	--	--	--	--	--	--	--	--
	71-04-07	--	--	--	--	--	--	--	--	--	--
	71-05-06	--	--	--	--	--	--	--	--	--	--
	71-06-16	--	--	--	--	--	--	--	--	--	--
	71-07-14	--	--	--	--	--	--	--	--	--	--
	71-08-18	--	--	--	--	--	--	--	--	--	--
	71-09-28	36	0	30	--	3.6	7.0	5.7	.10	--	65
	71-10-26	--	--	--	--	--	--	--	--	--	--
	71-11-17	--	--	--	--	--	--	--	--	--	--
	71-12-14	--	--	--	--	--	--	--	--	--	--
	72-01-10	--	--	--	--	--	--	--	--	--	--
	72-02-10	--	--	--	--	--	--	--	--	--	--
	72-03-15	--	--	--	--	--	--	--	--	--	--
	72-04-05	--	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--	--
	72-06-12	--	--	--	--	--	--	--	--	--	--
	82-03-10	--	--	--	27	.2	11	13	<.10	6.1	85
	82-08-23	--	--	--	43	.7	9.0	9.2	.20	7.0	92
	83-01-20	--	--	45	37	.0	8.0	11	<.10	6.9	89
	83-06-23	--	--	46	34	1.4	8.6	9.7	<.10	8.5	80
01643580	76-09-01	--	--	--	--	--	--	--	--	--	--
	82-08-23	--	--	--	98	.1	18	24	.20	1.3	199
	83-07-19	--	--	130	109	2.0	19	22	.10	3.5	179

Table 9.—Quality of surface water in Frederick County, Md.—continued

SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	DATE OF SAMPLE	STATION NUMBER
190	7.1	--	3.4	3.3	--	--	0.040	0.030	--	83-01-19	01642050
200	5.5	--	2.9	--	0.40	3.3	.080	--	0.050	83-06-14	
--	9.5	--	--	--	--	--	--	--	--	61-06-19	01642500
78	4.0	--	--	--	--	--	--	--	--	68-11-04	
94	36	--	2.4	--	1.3	3.7	.080	--	.060	82-02-02	
100	9.1	--	1.5	--	--	--	.090	--	<.010	82-08-11	
100	7.9	--	2.1	2.0	--	--	.060	.040	--	83-01-19	
--	23	--	2.1	--	--	--	.040	--	.010	83-06-13	
--	1660	--	--	--	--	--	--	--	--	62-01-07	01643000
60	2190	--	--	--	--	--	--	--	--	62-03-13	
110	16	--	.49	--	.61	1.1	.050	--	.020	82-03-18	01643110
110	5.1	--	1.8	--	--	--	.020	--	.010	82-08-12	
130	2.9	--	2.7	2.7	--	--	.040	<.010	--	83-01-20	
110	8.3	--	2.5	--	.40	2.9	.050	--	.030	83-06-15	
210	17	--	2.3	--	.31	2.6	.030	--	.060	82-03-23	01643125
250	6.8	--	6.5	--	--	--	.040	--	.030	82-08-12	
--	--	--	--	6.7	--	--	--	.020	.020	83-01-20	
260	15	--	6.9	--	.20	7.1	.050	--	.030	83-06-15	
48	5.3	--	--	--	--	--	--	--	--	68-03-05	01643500
55	6.2	--	--	--	--	--	--	--	--	68-04-24	
52	5.4	--	--	--	--	--	--	--	--	68-06-06	
61	3.5	--	--	--	--	--	--	--	--	68-07-17	
48	2.3	--	--	--	--	--	--	--	--	68-09-12	
--	--	--	--	--	--	--	--	--	--	69-07-17	
--	--	--	--	--	--	--	--	--	--	69-08-28	
--	--	--	--	--	--	--	--	--	--	69-09-24	
--	3.4	--	--	--	--	--	.040	--	--	69-10-08	
--	--	--	--	--	--	--	--	--	--	69-11-20	
--	--	--	--	--	--	--	--	--	--	69-12-11	
--	--	--	--	--	--	--	--	--	--	70-01-07	
--	--	--	--	--	--	--	--	--	--	70-02-04	
--	--	--	--	--	--	--	--	--	--	70-03-12	
--	--	--	--	--	--	--	--	--	--	70-04-20	
--	--	--	--	--	--	--	--	--	--	70-05-13	
--	--	--	--	--	--	--	--	--	--	70-05-19	
--	--	--	--	--	--	--	--	--	--	70-06-04	01643500
--	--	--	--	--	--	--	--	--	--	70-07-29	
--	--	--	--	--	--	--	--	--	--	70-08-17	
--	--	--	--	--	--	--	--	--	--	70-09-30	
--	2.0	--	--	--	--	--	.003	--	--	70-10-20	
--	--	--	--	--	--	--	--	--	--	70-11-24	
--	--	--	--	--	--	--	--	--	--	70-12-22	
--	--	--	--	--	--	--	--	--	--	71-01-20	
--	--	--	--	--	--	--	--	--	--	71-02-08	
--	--	--	--	--	--	--	--	--	--	71-03-08	
--	--	--	--	--	--	--	--	--	--	71-04-07	
--	--	--	--	--	--	--	--	--	--	71-05-06	
--	--	--	--	--	--	--	--	--	--	71-06-16	
--	--	--	--	--	--	--	--	--	--	71-07-14	
--	--	--	--	--	--	--	--	--	--	71-08-18	
--	12	--	--	--	--	--	.070	--	--	71-09-28	
--	--	--	--	--	--	--	--	--	--	71-10-26	
--	--	--	--	--	--	--	--	--	--	71-11-17	
--	--	--	--	--	--	--	--	--	--	71-12-14	
--	--	--	--	--	--	--	--	--	--	72-01-10	
--	--	--	--	--	--	--	--	--	--	72-02-10	
--	--	--	--	--	--	--	--	--	--	72-03-15	
--	--	--	--	--	--	--	--	--	--	72-04-05	
--	--	--	--	--	--	--	--	--	--	72-05-09	
--	--	--	--	--	--	--	--	--	--	72-06-12	
73	13	--	2.0	--	--	--	.020	--	--	82-03-10	
76	4.2	--	1.5	--	--	--	.020	--	.030	82-08-23	
79	7.9	--	2.4	2.3	--	--	<.010	.010	--	83-01-20	
78	14	--	2.3	--	.30	2.6	.050	--	.030	83-06-23	
--	--	2.2	2.2	--	.45	2.7	.260	--	.140	76-09-01	01643580
170	102	--	1.0	--	--	--	.130	--	.090	82-08-23	
180	128	--	2.9	--	.10	3.0	.120	--	.120	83-07-19	

Table 9.—Quality of surface water in Frederick County, Md.—continued

STATION NUMBER	DATE OF SAMPLE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
01636850	82-03-10	--	510	110	120	110	4.0
	82-08-19	--	620	150	100	72	3.6
	83-01-21	0.020	230	63	60	68	2.1
	83-06-16	--	590	110	40	47	4.2
01637000	68-02-29	--	50	--	0	--	--
	68-04-24	--	110	--	10	--	--
	68-06-10	--	230	--	10	--	--
	68-07-19	--	180	--	20	--	--
	68-09-04	--	210	--	90	--	--
	68-12-19	--	--	--	--	--	--
01637500	82-03-08	--	490	31	40	23	2.3
	82-08-19	--	190	34	20	11	2.7
	83-01-21	.110	150	39	20	22	2.3
	83-06-16	--	510	64	20	21	4.3
01638050	82-03-10	--	490	36	50	23	2.1
	82-08-19	--	360	38	30	17	2.2
	83-01-21	.100	200	40	20	26	--
	83-06-16	--	670	63	20	22	2.9
01638520	22-07-29	--	--	--	--	--	--
	82-03-09	--	190	16	30	29	2.2
	83-01-27	--	190	20	20	16	2.0
	83-06-15	--	880	18	120	82	3.3
01638600	82-03-10	--	260	23	90	79	2.0
	82-08-23	--	250	13	70	53	2.6
	83-01-27	--	170	6	80	81	--
	83-06-15	--	360	14	40	32	1.7
01639325	82-03-04	--	40	5	<10	3	1.1
	82-07-22	--	170	16	<10	4	2.9
	83-01-14	--	130	<3	<10	<1	1.5
	83-06-17	--	200	20	20	5	2.0
01639390	82-03-03	--	120	40	20	13	7.9
	82-07-23	--	190	50	30	20	2.6
	83-01-13	--	290	56	20	13	3.3
	83-06-17	--	200	37	<10	8	3.5
01640200	82-03-11	--	280	14	80	70	1.7
	82-07-27	--	580	27	80	34	2.1
	83-01-17	--	240	12	60	56	2.0
	83-07-19	--	400	8	50	24	--
01640500	82-02-05	--	120	21	10	2	1.3
	82-08-10	--	140	17	10	4	1.3
	83-01-14	--	140	<3	<10	1	1.2
	83-06-16	--	280	13	20	4	1.7
01640750	82-03-08	--	190	52	30	22	3.2
	82-07-22	--	390	25	20	1	1.6
	83-01-13	--	530	40	30	21	3.1
	83-06-16	--	180	52	30	9	2.3
01641000	61-06-19	--	150	--	0	--	--
	82-03-08	--	210	54	30	18	2.6
	82-08-13	--	220	85	30	18	3.1
	83-01-17	--	190	34	30	19	2.9
	83-06-23	--	270	45	20	19	3.0
01641500	68-11-01	--	80	--	0	--	--
	82-02-04	--	50	16	10	6	1.5
	82-08-11	--	140	18	20	7	1.1
	83-01-19	<.010	120	8	<10	1	1.0
	83-06-13	--	100	25	10	4	1.3
01641600	82-03-12	--	270	39	20	16	2.6
	82-07-23	--	290	88	20	17	2.4
	83-01-20	.020	300	52	40	37	--
	83-06-16	--	370	350	10	17	2.8
01641900	82-03-09	--	230	57	50	43	2.1
	82-07-23	--	750	72	90	63	2.6
	83-01-18	.040	230	40	30	25	--
	83-06-14	--	330	74	50	38	3.6
01642050	82-03-11	--	290	31	60	46	1.6
	82-08-11	--	300	29	60	44	2.3

Table 9.—Quality of surface water in Frederick County, Md.—continued

STATION NUMBER	DATE OF SAMPLE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
01642050	83-01-19	0.030	190	29	50	52	1.4
	83-06-14	--	250	16	40	28	2.2
01642500	61-06-19	--	40	--	0	--	--
	68-11-04	--	140	--	20	--	--
	82-02-02	--	550	74	130	77	2.9
	82-08-11	--	960	51	700	500	4.9
	83-01-19	.030	310	50	140	93	--
	83-06-13	--	190	17	170	120	--
01643000	62-01-07	--	80	--	--	--	--
	62-03-13	--	40	--	0	--	--
01643110	82-03-18	--	300	76	60	62	1.2
	82-08-12	--	440	77	70	41	2.1
	83-01-20	<.010	210	44	60	63	--
	83-06-15	--	240	38	40	27	1.7
01643125	82-03-23	--	160	10	30	24	.90
	82-08-12	--	320	34	30	19	1.4
	83-01-20	.010	--	--	--	--	--
	83-06-15	--	250	9	30	28	1.2
01643500	68-03-05	--	170	--	20	--	--
	68-04-24	--	110	--	10	--	--
	68-06-06	--	200	--	20	--	--
	68-07-17	--	--	--	--	--	--
	68-09-12	--	180	--	30	--	--
	69-07-17	--	--	--	--	--	--
	69-08-28	--	--	--	--	--	--
	69-09-24	--	--	--	--	--	--
	69-10-08	--	--	110	--	240	--
	69-11-20	--	--	--	--	--	--
	69-12-11	--	--	--	--	--	--
	70-01-07	--	--	--	--	--	--
	70-02-04	--	--	--	--	--	--
	70-03-12	--	--	--	--	--	--
	70-04-20	--	--	--	--	--	--
	70-05-13	--	--	--	--	--	--
	70-05-19	--	--	--	--	--	--
01643500	70-06-04	--	--	--	--	--	--
	70-07-29	--	--	--	--	--	--
	70-08-17	--	--	--	--	--	--
	70-09-30	--	--	--	--	--	--
	70-10-20	--	--	140	--	10	--
	70-11-24	--	--	--	--	--	--
	70-12-22	--	--	--	--	--	--
	71-01-20	--	--	--	--	--	--
	71-02-08	--	--	--	--	--	--
	71-03-08	--	--	--	--	--	--
	71-04-07	--	--	--	--	--	--
	71-05-06	--	--	--	--	--	--
	71-06-16	--	--	--	--	--	--
	71-07-14	--	--	--	--	--	--
	71-08-18	--	--	--	--	--	--
	71-09-28	--	--	50	--	41	--
	71-10-26	--	--	--	--	--	--
	71-11-17	--	--	--	--	--	--
	71-12-14	--	--	--	--	--	--
	72-01-10	--	--	--	--	--	--
	72-02-10	--	--	--	--	--	--
	72-03-15	--	--	--	--	--	--
	72-04-05	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--
	72-06-12	--	--	--	--	--	--
	82-03-10	--	170	58	60	42	1.4
	82-08-23	--	160	67	30	17	1.3
	83-01-20	<.010	230	71	50	50	--
	83-06-23	--	380	38	30	19	2.5
01643580	76-09-01	--	1100	--	160	--	10
	82-08-23	--	290	12	110	4	5.2
	83-07-19	--	250	<3	50	9	1.7

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD
WATER YEAR OCTOBER 1960 TO SEPTEMBER 1961

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	BICAR BONATE FET-FLD (MG/L AS HCO3)
JUN 09...	1805	7240	232	7.0	26.0	4	100	27	30	6.6	5.5	91

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
JUN 09...	75	14	28	6.0	0.20	4.9	132	130	2580	90	10

WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
MAR 02...	--	48600	141	6.6	--	10	61	23
23...	0845	116000	129	7.1	6.5	3	56	19

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
MAR 02...	19	3.3	2.6	1.4	46	--	--	18	21
23...	18	2.7	2.1	1.8	45	0	37	5.7	19

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
MAR 02...	4.2	0.00	6.1	93	80	12200	0	0
23...	2.4	.00	8.1	96	76	30100	40	10

WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
MAY 16...	1940	3450	277	8.0	21.0	120	29	34	7.9	9.1	1.9	110
SEP 01...	0900	1200	427	7.2	22.0	160	53	38	15	26	2.5	130

DATE	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
MAY 16...	0	89	1.7	40	7.0	0.10	0.1	177	150	1650	--	--
SEP 01...	0	104	13	74	26	.20	.3	241	240	781	170	0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

DATE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
OCT												
14...	800	441	7.3	--	--	170	52	48	12	25	2.5	140
MAR												
11...	36000	163	7.0	--	--	67	24	21	3.5	2.4	1.3	53
JUN												
23...	3420	361	7.4	24.5	2	170	48	49	11	10	2.6	150
SEP												
16...	680	538	7.3	--	--	170	59	42	15	48	2.7	130

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT											
14...	118	11	73	24	0.20	0.6	262	260	566	200	40
MAR											
11...	43	8.4	21	3.3	.00	5.9	101	84	9820	1100	0
JUN											
23...	120	9.2	46	14	.20	2.8	242	210	2230	540	100
SEP											
16...	108	11	120	31	.20	1.8	335	330	615	200	0

WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

DATE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
DEC											
16...	7860	242	6.8	--	110	37	34	5.1	6.8	2.0	84
JAN											
26...	46900	193	7.5	--	86	32	26	5.1	4.4	1.9	66
FEB											
01...	11300	173	6.9	5	72	26	22	4.1	4.8	.40	56
MAR											
01...	15300	193	7.0	10	80	24	24	4.9	5.4	1.2	68
07...	69200	153	7.4	--	64	23	21	2.8	3.2	1.9	50
APR											
01...	21900	167	6.9	5	72	27	22	4.1	4.2	.60	55
MAY											
06...	8520	186	7.7	--	83	29	25	5.0	4.9	1.0	66
JUN											
02...	2810	291	7.2	--	120	37	37	7.9	11	1.7	110
JUL											
02...	1400	380	7.2	--	160	57	41	13	20	1.8	120
AUG											
01...	1020	472	7.0	--	150	57	42	12	38	2.5	120
09...	1120	417	8.3	--	140	51	38	10	--	--	100
SEP											
03...	1040	443	7.7	--	150	57	41	12	31	2.8	120

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DEC											
16...	69	21	35	8.3	0.10	5.1	143	140	3030	130	0
JAN											
26...	54	3.3	28	5.4	.20	7.1	126	110	16000	--	--
FEB											
01...	46	11	28	6.2	.00	6.6	105	100	3200	0	0
MAR											
01...	56	11	27	6.8	.00	5.7	127	110	5250	20	0
07...	41	3.2	21	4.8	.10	6.1	108	85	20200	--	--
APR											
01...	45	11	28	5.1	.00	7.3	104	98	6150	0	0
MAY											
06...	54	2.1	28	6.1	.10	4.2	126	110	2900	--	--
JUN											
02...	88	11	44	11	.20	1.1	183	170	1390	--	--
JUL											
02...	99	12	65	19	.20	1.4	236	220	892	--	--
AUG											
01...	98	19	98	29	.20	1.8	297	280	818	--	--
09...	85	.8	83	28	--	--	255	--	771	--	--
SEP											
03...	95	3.7	83	31	.10	1.8	269	260	755	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DATE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT											
05...	1360	523	7.3	9.0	--	180	59	51	12	38	3.2
NOV											
07...	1080	482	7.6	11.0	8	190	62	54	13	26	3.4
DEC											
10...	1160	550	7.6	3.5	6	210	70	61	14	33	3.3
JAN											
19...	1300	363	6.8	.5	--	150	59	48	7.4	14	1.3
FEB											
09...	1500	515	7.2	.0	--	190	62	55	12	37	2.3
15...	63800	222	6.6	3.0	5	98	31	33	3.9	3.4	2.2
MAR											
04...	30000	183	6.9	7.0	--	76	32	23	4.6	4.7	1.8
APR											
08...	3300	330	7.0	8.5	5	140	49	44	7.3	9.2	1.8
MAY											
08...	13400	185	7.3	18.5	5	78	24	25	3.9	3.4	1.4
JUN											
02...	4540	265	7.4	18.5	7	120	35	35	7.2	7.6	2.4
JUL											
07...	1240	379	7.8	28.0	10	140	43	40	9.7	26	3.5
AUG											
04...	731	570	7.2	23.5	5	160	62	44	13	52	2.4
SEP											
01...	675	507	7.5	25.0	4	170	80	46	13	34	2.6

DATE	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT											
05...	140	0	11	90	36	0.20	1.1	314	300	1150	0
NOV											
07...	160	0	6.2	67	28	.10	.7	277	270	808	0
DEC											
10...	170	0	6.8	82	33	.10	.4	317	310	993	10
JAN											
19...	110	0	28	72	13	.20	2.2	227	210	797	0
FEB											
09...	150	0	15	110	24	.20	2.1	328	320	1330	0
15...	83	0	33	26	6.0	.10	6.1	129	120	22200	0
MAR											
04...	54	0	11	31	6.5	.20	4.6	129	100	10400	0
APR											
08...	110	0	18	46	14	.20	.3	183	180	1630	0
MAY											
08...	66	0	5.3	26	5.5	.00	4.7	103	100	3730	0
JUN											
02...	100	0	6.3	34	9.1	.10	.1	173	140	2120	10
JUL											
07...	120	0	3.0	65	20	.10	1.6	239	220	800	0
AUG											
04...	120	0	12	130	29	.20	.6	340	330	671	10
SEP											
01...	110	0	5.4	96	41	.20	.5	301	290	549	0

WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DATE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
OCT											
03...	19400	272	6.8	5	120	41	37	6.6	7.2	2.4	96
NOV											
01...	254	355	7.4	6	150	52	44	10	14	2.4	120
DEC											
02...	14000	236	7.0	5	93	40	28	5.6	8.3	2.2	65
JAN											
05...	6580	246	6.9	2	100	38	31	6.4	7.2	1.9	81
FEB											
03...	9960	200	6.8	0	84	33	25	5.2	4.8	1.7	62
MAR											
01...	6210	247	6.9	2	100	34	31	6.2	7.6	1.4	84
08...	144000	166	7.2	6	75	27	24	3.6	3.0	2.3	58
APR											
08...	9000	240	7.3	3	110	42	34	6.8	4.9	1.7	86
MAY											
02...	7140	224	7.8	0	98	40	30	5.7	5.6	1.6	72
JUN											
10...	4160	224	7.8	--	98	36	29	6.1	5.4	1.6	76
JUL											
12...	7670	274	7.9	3	120	34	37	7.0	6.4	2.9	110
AUG											
03...	3510	269	7.3	5	120	39	37	7.3	6.0	2.8	100
SEP											
04...	3480	280	7.2	5	120	37	37	7.6	8.0	2.7	110

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DATE	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT											
03...	79	24	36	10	0.20	7.0	167	150	8750	0	10
NOV											
01...	99	7.7	50	18	.20	.6	207	200	142	0	10
DEC											
02...	53	10	39	13	.10	5.4	162	130	6140	--	--
JAN											
05...	66	16	33	11	.10	5.3	160	140	2840	--	--
FEB											
03...	51	16	28	7.8	.20	7.9	126	110	3390	--	--
MAR											
01...	69	17	35	11	.20	2.5	160	140	2680	--	--
08...	48	5.8	24	4.7	.10	9.1	118	99	45900	0	0
APR											
08...	71	6.8	34	7.5	.00	3.9	154	140	3740	--	--
MAY											
02...	59	1.8	37	8.5	.10	2.6	126	130	2430	--	--
JUN											
10...	62	1.9	35	8.0	.10	2.3	--	120	1400	--	--
JUL											
12...	87	2.1	32	12	.20	4.6	160	150	3310	--	--
AUG											
03...	84	8.2	33	10	.20	4.7	157	150	1490	--	--
SEP											
04...	87	11	36	14	.20	4.5	169	160	1590	0	0

WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
OCT												
04...	0805	4060	290	7.2	18.0	5	120	49	38	7.0	9.8	2.8
DEC												
09...	1055	18100	173	7.3	4.0	5	84	35	25	5.2	4.5	1.8
JAN												
09...	0820	5000	327	7.9	.0	3	150	44	45	8.3	10	1.7
FEB												
01...	0935	39800	188	7.6	3.0	5	77	29	23	4.8	5.1	1.7
MAR												
01...	1400	4960	340	7.8	2.0	3	150	42	44	10	9.4	1.6
APR												
01...	0800	13500	220	7.7	11.0	5	95	29	28	6.1	4.6	1.6
MAY												
01...	1745	4820	300	7.9	14.0	4	140	42	42	8.3	6.9	1.9
JUN												
01...	1015	39100	139	7.4	6.0	5	61	22	18	3.8	2.9	1.3
JUL												
01...	1600	4470	315	8.0	29.0	3	150	47	44	8.9	8.1	2.0
AUG												
01...	1725	1650	385	7.7	28.0	7	150	57	40	13	19	2.4
SEP												
01...	1213	1140	435	7.8	22.0	5	150	53	39	13	31	2.7

DATE	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
04...	92	0	75	9.2	37	19	0.20	4.4	160	1790	150	50
DEC												
09...	60	0	49	4.8	27	8.9	.10	7.0	110	5330	310	90
JAN												
09...	130	0	103	2.5	40	13	.20	5.0	190	2500	160	60
FEB												
01...	58	0	48	2.3	29	7.8	.10	6.6	110	11400	1600	250
MAR												
01...	130	0	109	3.3	42	11	.20	2.1	190	2490	--	--
APR												
01...	80	0	66	2.5	28	6.0	.20	5.2	120	4340	--	--
MAY												
01...	120	0	97	2.4	37	10	.10	1.9	170	2160	140	10
JUN												
01...	48	0	39	3.0	22	4.0	.10	6.4	82	8670	430	150
JUL												
01...	120	0	100	1.9	40	12	.20	3.2	180	2150	280	100
AUG												
01...	120	0	97	3.7	64	23	.30	1.4	220	985	150	110
SEP												
01...	120	0	98	3.0	90	25	.30	.5	260	800	110	50

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
01...	2110	1060	493	8.2	20.0	5	170	53	47	13	38	2.8
NOV												
01...	1655	1500	514	7.6	11.0	10	200	66	57	14	29	3.7
DEC												
01...	1435	3600	289	8.0	6.0	5	120	46	38	7.1	6.9	2.1
JAN												
01...	1355	3600	364	8.1	1.0	5	150	64	45	8.2	14	1.8
FEB												
01...	1730	8090	274	8.0	4.0	15	110	54	32	6.5	11	2.6
MAR												
01...	1600	3920	313	7.8	3.0	1	130	56	40	7.6	9.7	1.7
APR												
01...	1815	9280	189	7.7	10.0	3	74	30	22	4.6	4.9	1.3
MAY												
01...	1715	4610	259	7.6	--	5	110	43	32	6.4	7.6	1.7
JUN												
01...	1320	1950	327	7.3	27.0	4	130	52	37	8.1	13	2.0
JUL												
01...	1130	1280	432	7.3	28.0	7	140	58	39	11	29	2.7
AUG												
01...	1620	8200	336	7.9	26.0	7	120	41	38	7.2	14	3.6
SEP												
01...	1330	2810	277	7.5	27.0	5	110	35	34	7.3	10	1.8

DATE	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT												
01...	140	0	118	1.4	100	26	0.30	0.2	300	862	80	30
NOV												
01...	160	0	134	6.5	82	32	.30	.8	300	1210	--	--
DEC												
01...	95	0	78	1.5	38	10	.20	6.6	160	1510	60	0
JAN												
01...	100	0	82	1.3	61	20	.20	2.8	200	1970	190	70
FEB												
01...	65	0	53	1.0	43	18	.20	5.0	150	3280	430	180
MAR												
01...	92	0	75	2.3	46	19	.20	.4	170	1800	240	40
APR												
01...	54	0	44	1.7	28	7.3	.20	4.7	100	2490	200	50
MAY												
01...	77	0	63	3.1	41	15	.20	2.4	140	1790	190	50
JUN												
01...	90	0	74	7.2	55	16	.20	.6	180	927	100	120
JUL												
01...	100	0	85	8.3	82	25	.20	.3	240	831	140	190
AUG												
01...	100	0	84	2.1	44	19	.20	6.9	180	4060	240	100
SEP												
01...	97	0	80	4.9	44	10	.20	.1	160	1180	--	--

WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
01...	1700	2790	348	7.8	20.0	5	150	52	43	9.5	14	2.2
NOV												
01...	1300	1690	438	7.6	12.0	5	180	61	51	12	21	2.6
DEC												
01...	1835	2970	300	7.9	5.0	2	120	50	36	7.6	12	1.8
JAN												
01...	1100	11900	260	7.7	--	2	110	45	32	6.9	9.3	2.0
FEB												
01...	1450	28800	163	6.8	4.0	5	61	43	18	3.8	4.3	1.7
MAR												
01...	1250	10900	215	7.3	6.0	3	89	41	26	5.9	5.8	1.5
APR												
01...	1845	24000	194	7.3	11.0	3	79	36	23	5.3	5.6	1.4
MAY												
01...	1815	15700	211	7.8	21.0	2	93	36	28	5.6	3.7	1.6
JUN												
01...	1935	3760	355	7.5	26.0	4	150	66	45	9.9	8.7	2.1
JUL												
01...	1915	4750	264	7.4	25.0	0	110	36	34	6.7	6.0	2.4
AUG												
01...	1750	6800	351	7.6	29.0	0	150	41	44	9.0	9.7	3.0
SEP												
01...	1830	2270	404	8.1	27.0	0	170	66	53	10	14	2.8

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
01...	120	0	95	2.9	54	18	0.20	2.9	200	1510	--	--
NOV												
01...	140	0	116	5.6	69	22	.20	1.0	250	1130	80	30
DEC												
01...	86	0	71	1.7	47	20	.20	2.4	170	1360	150	40
JAN												
01...	77	0	63	2.4	40	14	.20	6.3	150	4770	410	100
FEB												
01...	22	0	18	5.5	38	7.1	.10	5.5	89	6950	3000	570
MAR												
01...	59	0	48	4.7	35	9.1	.10	5.0	120	3460	--	--
APR												
01...	53	0	43	4.2	32	8.2	.10	5.1	110	6910	--	--
MAY												
01...	70	0	57	1.8	31	6.1	.10	6.1	120	4940	--	--
JUN												
01...	110	0	87	5.3	61	17	.10	2.4	200	2010	--	--
JUL												
01...	94	0	77	5.9	33	10	.20	6.8	150	1860	1300	80
AUG												
01...	130	0	106	5.1	43	16	.20	3.2	190	3520	830	60
SEP												
01...	130	0	108	1.7	60	24	.20	3.0	230	1420	240	60

WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
OCT												
01...	2035	2000	434	8.1	--	5	170	65	48	12	21	2.9
NOV												
01...	1350	2840	458	8.0	16.0	5	190	83	57	11	19	3.5
DEC												
01...	1730	6220	273	7.8	7.0	2	120	43	37	7.6	6.0	1.9
05...	--	5140	481	8.0	--	5	190	83	57	11	20	3.4
JAN												
03...	1145	8200	246	8.1	1.0	5	110	44	32	6.9	5.0	1.7
FEB												
01...	1755	9000	285	8.0	--	3	120	51	35	7.6	8.5	1.8
JUN												
03...	1700	24900	164	7.6	--	0	71	16	22	3.9	3.5	1.8
AUG												
06...	1410	14500	308	7.6	24.0	0	120	110	36	6.2	13	2.8

DATE	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA DISSOLVED (MG/L AS SIO2)	SOLIDS SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT												
01...	130	0	105	1.6	75	24	0.20	2.3	250	1340	70	80
NOV												
01...	130	0	105	2.0	73	32	.20	5.9	260	2030	570	150
DEC												
01...	99	0	81	2.5	33	11	.10	7.1	150	2560	20	20
05...	130	0	105	2.0	82	32	.30	5.4	270	3800	0	0
JAN												
03...	78	0	64	1.0	37	9.2	.20	7.0	140	3040	270	60
FEB												
01...	83	0	68	1.3	45	16	.20	6.7	160	3930	320	100
JUN												
03...	67	0	55	2.7	21	4.1	.10	7.2	97	6490	500	70
AUG												
06...	94	0	8	3.8	48	16	.20	5.5	170	6810	300	100

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
06...	1950	10700	314	7.7	--	3	130	44	39	8.5
DEC										
03...	1340	19300	217	7.2	3.5	--	84	41	24	5.8
JAN										
25...	1220	7410	268	7.8	6.0	0	110	34	32	7.1
MAR										
24...	1340	15500	232	7.4	6.5	0	110	37	31	6.7
MAY										
23...	1315	23500	191	7.6	18.0	5	84	27	25	5.2
JUN										
23...	0845	278000	143	7.1	--	12	59	17	19	2.7
SEP										
01...	1800	3600	392	8.2	--	--	170	46	50	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
06...	9.8	2.3	110	0	89	3.4	45	13	0.20
DEC									
03...	5.4	2.4	53	0	43	5.3	39	8.4	.10
JAN									
25...	7.6	1.7	91	0	75	2.3	37	8.7	.10
MAR									
24...	5.9	1.8	83	0	68	5.3	35	7.2	.10
MAY									
23...	4.3	1.8	70	0	57	2.8	25	5.2	.10
JUN									
23...	2.3	2.3	51	0	42	6.4	16	3.8	.50
SEP									
01...	16	2.6	150	0	124	1.5	60	15	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT									
06...	5.9	--	180	5210	--	0.79	--	--	--
DEC									
03...	5.7	--	120	6340	--	1.1	--	--	--
JAN									
25...	2.5	--	150	2930	--	1.1	--	260	60
MAR									
24...	6.0	--	140	5830	--	1.1	--	200	90
MAY									
23...	6.0	--	110	6980	--	.66	--	230	70
JUN									
23...	.6	102	76	76600	0.86	.86	0.033	--	--
SEP									
01...	3.0	--	240	2290	--	.90	--	--	--

WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
OCT												
19...	1355	5100	308	7.7	11.0	140	47	42	8.6	8.6	2.0	110
DEC												
06...	1240	15300	216	7.5	7.5	93	36	28	5.5	5.5	1.5	70
JAN												
22...	1300	8880	313	7.9	--	150	44	44	8.9	8.2	1.6	120
MAR												
02...	1230	8640	312	7.3	8.5	150	46	45	8.8	8.0	1.5	120
APR												
06...	1340	43600	142	7.2	14.0	66	27	20	3.8	3.3	1.6	47
MAY												
03...	1100	25700	188	7.5	14.5	88	32	27	5.1	3.4	1.4	69
JUN												
14...	0930	11900	261	7.7	23.0	120	34	38	7.2	4.7	2.0	110
AUG												
06...	1600	3730	379	7.4	27.0	160	57	46	12	17	2.6	130
SEP												
07...	1715	3160	328	7.9	27.0	120	28	33	9.8	17	2.9	120

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
26...	--	2500	391	7.5	14.5	--	160	63	48
NOV									
29...	1255	4000	301	7.6	8.5	--	130	40	37
JAN									
08...	1250	15300	241	7.4	3.0	--	100	43	31
FEB									
06...	1125	9920	272	7.6	3.0	--	120	38	36
MAR									
11...	1400	9610	230	7.9	10.5	--	100	39	30
MAY									
22...	--	8140	200	7.2	22.0	1	91	29	27
JUL									
11...	1510	5180	--	--	28.5	2	110	45	32
SEP									
04...	1630	3630	381	--	23.5	3	160	50	47

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
26...	10	13	2.8	120	0	98	6.0	63	23
NOV									
29...	8.2	7.2	1.5	100	0	86	4.2	40	12
JAN									
08...	6.5	5.9	1.5	74	0	61	4.7	37	8.3
FEB									
06...	7.3	6.0	1.7	100	0	82	4.0	35	8.7
MAR									
11...	6.7	5.5	1.7	78	0	64	1.6	35	7.7
MAY									
22...	5.8	4.8	1.8	75	0	62	7.5	25	6.2
JUL									
11...	7.0	6.4	2.1	78	--	64	--	49	10
SEP									
04...	10	14	3.5	130	--	109	--	51	17

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT									
26...	0.40	1.3	220	1490	1.4	1.4	--	440	50
NOV									
29...	.30	2.1	160	1730	1.1	1.1	--	440	50
JAN									
08...	.10	5.9	130	5480	1.4	1.4	--	1200	140
FEB									
06...	.20	5.0	150	3990	1.3	1.3	--	410	80
MAR									
11...	<.10	1.7	130	3290	.74	.74	--	850	320
MAY									
22...	.10	5.3	110	2480	--	.92	0.070	1000	90
JUL									
11...	.10	3.4	150	2070	--	.78	.070	580	110
SEP									
04...	.20	8.7	220	2120	--	1.1	.210	2200	70

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
23...	1235	2370	580	7.7	12.0	6	200	60	60
NOV									
14...	1025	2270	430	8.3	8.5	10	150	43	46
DEC									
23...	1415	9110	250	7.1	4.0	20	86	30	25
FEB									
03...	1050	15200	220	7.1	3.5	9	73	30	21
MAR									
06...	1530	9760	275	7.7	5.5	6	86	20	25
APR									
14...	1200	8140	295	8.8	9.0	3	120	42	35
MAY									
16...	1410	13800	240	6.9	17.5	8	89	32	27
JUL									
18...	1215	6890	265	7.4	25.5	6	130	26	38
AUG									
27...	1205	4380	340	8.2	26.5	2	150	43	44
SEP									
27...	1345	120000	146	7.4	18.0	35	65	19	20

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 23...	11	28	3.2	160	0	135	5.2	83	27
NOV 14...	9.7	14	3.3	140	0	112	1.1	50	19
DEC 23...	5.8	5.1	1.6	68	0	56	8.6	26	7.8
FEB 03...	5.1	4.8	1.7	54	0	44	6.8	26	7.9
MAR 06...	5.7	4.7	1.6	81	0	66	2.6	30	8.1
APR 14...	7.2	5.7	1.7	92	0	75	.2	36	9.1
MAY 16...	5.3	4.2	2.2	69	0	57	14	29	6.8
JUL 18...	8.2	7.7	2.6	130	0	103	8.0	27	6.3
AUG 27...	9.0	7.8	2.5	130	0	104	1.3	41	8.9
SEP 27...	3.6	2.3	2.8	56	0	46	3.5	17	4.1

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 23...	0.10	1.3	290	1880	0.83	0.510	140	20
NOV 14...	.20	2.5	210	1300	.73	.440	400	60
DEC 23...	.20	7.5	110	2770	1.3	.280	360	60
FEB 03...	.10	6.0	99	4070	1.1	.050	1100	80
MAR 06...	.20	7.2	120	3220	1.5	.040	370	70
APR 14...	.20	4.9	150	3190	1.3	.030	280	40
MAY 16...	<.10	7.1	120	4300	.92	.090	1000	70
JUL 18...	.10	6.6	160	2950	1.3	.090	420	30
AUG 27...	.20	5.1	180	2140	1.1	.060	330	50
SEP 27...	.20	7.2	85	27500	.96	.220	5400	360

WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT 17...	1040	6850	375	7.5	--	15.5	1	--	150	35	43	11
NOV 19...	1000	10000	260	7.8	--	8.5	1	--	110	37	32	7.1
DEC 22...	1010	4780	360	--	--	2.0	4	--	140	50	40	9.2
FEB 05...	1150	12500	240	8.0	--	2.0	2	--	84	27	24	5.8
MAR 12...	1115	6750	300	7.8	--	6.5	3	--	120	39	35	7.3
APR 21...	1200	5660	295	8.6	27.5	21.5	3	--	130	37	39	8.1
MAY 20...	1100	5400	370	8.3	--	16.5	1	--	150	39	44	10
JUL 23...	1130	2500	365	8.2	22.5	25.0	3	--	140	31	39	9.9
AUG 23...	1415	1720	345	8.9	32.5	27.5	7	--	120	28	38	7.3
31...	1515	1630	400	9.1	--	23.5	--	13.3	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
17...	7.9	2.4	140	0	118	7.2	42	12	0.20	4.1	--	190
NOV												
19...	4.4	2.1	88	0	72	2.2	27	6.8	<.10	8.6	--	130
DEC												
22...	8.3	1.8	110	--	88	--	39	14	.10	4.0	--	170
FEB												
05...	4.6	1.7	70	0	57	1.1	25	10	.10	7.8	--	110
MAR												
12...	7.6	1.9	96	0	79	2.4	34	12	.10	3.0	--	150
APR												
21...	7.4	1.8	110	--	94	.5	34	9.6	.10	.8	--	160
MAY												
20...	11	2.2	140	0	112	1.1	47	13	.10	.8	--	200
JUL												
23...	20	2.3	130	--	107	1.3	53	16	.20	3.0	190	210
AUG												
23...	16	2.6	120	0	97	.2	49	15	.10	4.0	200	190
31...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
17...	3580	--	1.5	--	--	0.170	--	220	--	60	--	--
NOV												
19...	3540	--	1.3	--	--	.050	--	970	--	30	--	--
DEC												
22...	2180	--	1.4	--	--	.060	--	340	--	30	--	--
FEB												
05...	3830	--	1.6	--	--	.100	--	430	--	40	--	--
MAR												
12...	2700	--	.94	--	--	.050	--	250	--	30	--	--
APR												
21...	2400	--	.73	--	--	.070	--	200	--	40	--	--
MAY												
20...	2850	--	.77	--	--	.080	--	240	--	70	--	--
JUL												
23...	1280	--	.66	--	--	.100	--	270	<10	70	30	--
AUG												
23...	927	--	.14	--	--	.070	--	190	<10	70	<10	--
31...	--	.09	.10	0.63	0.73	.110	0.030	220	--	70	--	10

WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
08...	1300	9300	250	8.0	19.5	17.0	10	93	30	27
NOV										
19...	1200	6200	370	8.6	.5	4.5	0	160	49	48
MAR										
21...	1300	15600	215	7.8	12.5	9.5	0	78	34	23
MAY										
17...	1500	3740	270	8.4	--	--	10	130	36	34
JUN										
16...	1100	2350	418	8.4	--	22.0	10	180	59	53
JUL										
14...	1430	2270	385	9.2	--	29.0	10	170	77	47
AUG										
22...	1045	1660	390	8.4	24.0	27.0	55	150	65	42

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
08...	6.2	6.6	3.1	77	0	63	1.2	30	8.2	0.10
NOV										
19...	10	12	1.9	140	0	112	.5	48	16	<.10
MAR										
21...	4.9	5.8	1.7	54	0	44	1.4	30	7.0	.10
MAY										
17...	10	16	2.4	110	0	90	.7	53	15	.10
JUN										
16...	12	21	2.8	150	0	123	.9	63	21	.10
JUL										
14...	12	26	2.9	110	0	90	.1	77	28	.10
AUG										
22...	12	34	3.1	110	0	90	.7	90	31	.10

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
08...	8.7	150	130	3770	1.3	0.200	2600	70	120	<10
NOV										
19...	1.1	201	200	3360	1.2	.020	170	20	20	<10
MAR										
21...	6.1	115	110	4840	.65	.020	750	30	40	<10
MAY										
17...	.2	199	180	2010	.39	.060	530	20	60	<10
JUN										
16...	4.4	272	250	1730	.90	.120	560	50	70	20
JUL										
14...	.3	278	250	1700	.01	.120	1000	40	110	<10
AUG										
22...	.3	293	270	1310	.01	.120	1000	<10	120	<10

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
20...	1400	3150	395	8.5	12.0	17.5	18	170	76	53	10
NOV											
21...	1200	5340	275	7.9	10.0	8.0	10	110	36	33	6.8
DEC											
08...	1045	15000	210	--	1.0	2.5	6	84	33	25	5.2
JAN											
16...	1200	9880	225	7.7	-2.0	.5	33	100	38	31	6.0
FEB											
21...	1115	5960	380	--	2.5	1.5	10	150	50	44	9.2
MAR											
16...	1530	136000	160	7.3	2.0	4.0	320	47	14	14	2.9
APR											
27...	1030	7420	325	8.2	13.5	11.5	10	130	45	40	8.5
JUN											
08...	1045	5960	330	8.1	25.0	23.0	3	140	39	40	8.9
JUL											
20...	1100	5370	340	8.6	29.5	25.5	10	140	30	41	9.2
SEP											
12...	1330	2530	375	8.9	31.0	25.5	40	160	43	47	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
20...	25	3.6	120	0	98	0.6	80	28	0.10	2.8	279
NOV											
21...	9.8	2.2	91	0	75	1.8	40	12	.10	7.2	157
DEC											
08...	6.0	1.8	62	--	51	--	29	7.2	<.10	7.0	114
JAN											
16...	7.6	2.0	78	0	64	2.5	30	8.5	<.10	6.6	141
FEB											
21...	14	--	120	--	98	--	49	15	.10	11	214
MAR											
16...	3.2	2.4	40	0	33	3.2	19	5.4	<.10	5.1	83
APR											
27...	11	1.7	110	0	90	1.1	47	10	.10	2.0	190
JUN											
08...	9.2	2.0	120	0	98	1.5	41	8.7	.10	2.6	189
JUL											
20...	11	2.4	120	5	110	.5	40	10	.10	4.7	215
SEP											
12...	16	3.0	140	1	120	.3	50	17	.10	3.2	272

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 20...	260	2370	0.92	--	0.100	--	1400	30	70	20
NOV 21...	160	2260	1.3	--	.060	--	440	50	30	20
DEC 08...	110	4620	1.3	--	.050	--	450	30	40	20
JAN 16...	130	3760	1.6	--	.040	--	570	30	50	30
FEB 21...	200	3440	2.0	--	.050	--	100	--	20	--
MAR 16...	72	30500	1.1	1.1	0.020	0.020	17000	50	690	20
APR 27...	170	3810	1.1	--	.020	--	280	20	30	<10
JUN 08...	170	3040	.82	--	.050	--	600	190	50	<10
JUL 20...	190	3120	.93	--	.060	--	510	20	50	<10
SEP 12...	220	1860	.63	--	.070	--	340	50	50	<10

WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 31...	1130	1610	560	8.9	14.0	12.5	20	220	67	62
NOV 30...	1100	2530	555	8.5	9.5	6.5	20	200	71	59
FEB 01...	1400	13200	240	8.2	.5	1.5	0	100	33	30
MAR 14...	1130	20900	240	8.2	12.0	7.5	5	91	36	27
MAY 01...	1215	14900	265	8.5	18.5	14.5	5	100	38	30
JUN 01...	1115	13200	220	7.9	22.5	19.0	10	81	21	24
JUL 16...	1110	4300	360	8.4	26.5	26.0	5	150	43	43
AUG 29...	0930	4180	405	8.4	23.5	24.5	5	160	48	45

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 31...	15	30	3.0	180	0	150	0.4	84	28	.10
NOV 30...	13	33	3.4	160	0	130	.8	90	27	.10
FEB 01...	6.2	6.0	1.8	83	0	68	.8	29	7.8	.10
MAR 14...	5.7	4.5	1.5	67	0	55	.7	30	7.3	.10
MAY 01...	6.8	8.0	1.7	79	0	65	.4	38	9.6	.10
JUN 01...	5.1	6.1	1.7	73	0	60	1.5	28	6.0	.10
JUL 16...	11	17	2.6	130	0	110	.8	54	13	.10
AUG 29...	11	21	2.7	140	0	110	.9	53	17	.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 31...	0.2	324	310	1410	0.88	0.090	140	<10	30	<10
NOV 30...	2.3	332	310	2270	1.2	.130	170	20	20	20
FEB 01...	6.9	146	130	5200	1.5	.060	550	70	50	30
MAR 14...	7.1	131	120	7390	1.3	.050	1000	50	70	40
MAY 01...	3.4	160	140	6440	.83	.040	440	20	30	4
JUN 01...	6.9	136	110	4850	1.0	.070	1200	20	70	8
JUL 16...	2.3	242	210	2810	.62	.080	610	<10	80	5
AUG 29...	4.1	242	220	2730	.85	.120	760	<10	80	<10

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV										
08...	1200	17100	166	8.2	11.0	9.0	10	11.4	90	27
DEC										
19...	1015	7620	320	8.4	1.0	2.0	2	13.0	130	40
MAR										
06...	1045	7270	295	8.6	7.5	3.0	5	--	120	30
MAY										
01...	1115	31000	220	7.7	19.5	12.0	5	--	84	25
JUN										
06...	1315	8270	260	8.4	21.0	19.0	5	--	120	36
JUL										
22...	1100	2690	345	8.2	32.0	28.0	11	--	130	39
AUG										
19...	1200	2610	420	8.2	--	23.0	5	--	170	--

DATE	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)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV										
08...	26	6.0	6.0	2.0	63	0.8	27	5.4	0.10	7.3
DEC										
19...	38	7.8	11	1.9	87	.7	39	11	.10	3.0
MAR										
06...	34	7.6	11	1.5	86	.4	40	12	.10	2.0
MAY										
01...	25	5.3	5.3	2.0	59	2.3	31	6.0	.10	6.5
JUN										
06...	35	7.1	6.8	1.6	81	.6	33	7.7	.10	3.4
JUL										
22...	35	10	18	2.5	90	1.1	54	14	.20	6.7
AUG										
19...	48	12	18	3.0	--	--	60	17	.00	.0

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV									
08...	126	120	5820	1.1	0.030	300	40	30	7
DEC									
19...	226	160	4650	1.1	.030	180	160	20	20
MAR									
06...	170	160	3340	1.3	.070	150	40	30	30
MAY									
01...	137	120	11500	1.2	.120	1900	50	100	5
JUN									
06...	185	140	4130	1.3	.050	540	10	40	4
JUL									
22...	230	190	1670	.56	.070	570	10	60	5
AUG									
19...	--	21	148	.01	.070	340	10	60	0

WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV										
24...	1130	2820	500	7.5	5.0	4.5	5	11.7	170	60
JAN										
28...	1330	2000	492	8.8	10.0	.5	8	14.7	180	60
JUN										
30...	1215	3970	262	8.1	28.5	24.0	2	7.8	110	37
SEP										
18...	1330	2370	405	8.1	--	20.0	5	--	150	41

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	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)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 24...	50	11	28	3.8	110	6.7	71	32	0.20	0.0
JAN 28...	54	11	31	2.5	120	.4	79	28	.10	.2
JUN 30...	34	6.3	7.0	2.1	74	1.1	39	11	.10	4.4
SEP 18...	44	10	22	2.7	110	1.7	67	17	.10	4.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 24...	284	260	2160	0.78	0.120	210	20	10	5
JAN 28...	319	280	1720	1.7	.100	180	<10	30	10
JUN 30...	180	150	1930	1.1	.050	420	10	50	4
SEP 18...	256	230	1640	1.1	.110	400	10	40	10

WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV 20...	1300	2400	470	8.8	10.0	4	150	55	46
APR 19...	1315	9160	265	8.9	15.0	<1	110	33	33

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 20...	9.6	22	2.2	100	0.3	58	16	0.10	0.0
APR 19...	7.4	8.0	1.5	80	.2	35	8.5	<.10	1.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 20...	242	210	1570	0.88	0.050	150	18	20	7
APR 19...	160	140	3960	1.1	.040	170	31	20	7

WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC 28...	1230	4750	270	7.9	13.0	8.0	--	110	29
FEB 25...	0945	25500	210	7.5	6.0	6.0	12.7	81	27
JUL 26...	1245	2630	430	8.2	30.0	25.5	8.2	180	56

Table 9.—Quality of surface water in Frederick County, Md.—continued

01638500 - POTOMAC R AT POINT OF ROCKS, MD (continued)
WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	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)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC									
28...	32	6.3	8.9	1.6	77	1.9	34	12	<.10
FEB									
25...	24	5.0	5.3	1.8	54	3.3	26	8.4	.10
JUL									
26...	50	13	19	2.6	123	1.5	59	22	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
DEC								
28...	4.1	152	150	1950	1.3	0.050	<3	6
FEB								
25...	5.6	118	110	8120	1.3	.040	31	13
JUL								
26...	3.6	259	240	1840	1.2	.030	6	3

01639000 - MONOCACY R AT BRIDGEPORT, MD
WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)
NOV								
01...	1115	8.4	270	8.0	7.0	20	--	110
JUL								
24...	1100	110	280	7.5	22.0	--	6.7	--
AUG								
21...	1257	17	275	7.3	23.0	--	7.2	--
SEP								
01...	1040	3.8	310	7.2	24.0	--	7.9	--

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
NOV									
01...	33	30	8.1	11	4.9	92	0	75	1.5
JUL									
24...	--	--	--	--	--	--	--	--	--
AUG									
21...	--	--	--	--	--	--	--	--	--
SEP									
01...	--	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV								
01...	35	15	0.10	6.1	160	3.5	260	60
JUL								
24...	--	--	--	--	--	--	--	--
AUG								
21...	--	--	--	--	--	--	--	--
SEP								
01...	--	--	--	--	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD
WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
OCT											
21...	1210	12	350	6.7	14.5	20	9.2	140	52	110	0
NOV											
18...	0825	33	290	7.5	3.5	--	11.0	--	--	--	--
DEC											
09...	0816	480	320	7.5	.5	--	12.6	--	--	--	--
JAN											
05...	0839	170	260	7.2	.0	--	13.4	--	--	--	--
FEB											
02...	0915	1160	190	7.2	.0	--	13.4	--	--	--	--
MAR											
10...	0805	160	200	7.4	3.0	--	11.8	--	--	--	--
APR											
06...	0800	302	170	7.5	6.5	--	11.2	--	--	--	--
MAY											
04...	0850	282	180	7.0	16.0	--	8.2	--	--	--	--
JUN											
02...	0716	26	210	7.3	22.5	--	6.3	--	--	--	--
JUL											
29...	1030	39	200	7.6	26.0	--	7.0	--	--	--	--
AUG											
19...	1258	15	220	8.2	25.0	--	9.8	--	--	--	--
SEP											
15...	0945	6.8	250	7.6	21.0	--	7.5	--	--	--	--

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
21...	92	4.5	45	18	0.20	193	6.3	0.320	50	270
NOV										
18...	--	--	--	--	--	--	--	--	--	--
DEC										
09...	--	--	--	--	--	--	--	--	--	--
JAN										
05...	--	--	--	--	--	--	--	--	--	--
FEB										
02...	--	--	--	--	--	--	--	--	--	--
MAR										
10...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
MAY										
04...	--	--	--	--	--	--	--	--	--	--
JUN										
02...	--	--	--	--	--	--	--	--	--	--
JUL										
29...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
15...	--	--	--	--	--	--	--	--	--	--

WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
OCT											
14...	0954	6.5	275	7.7	17.5	7	6.9	110	20	110	0
NOV											
17...	1000	254	215	7.3	6.0	--	11.1	--	--	--	--
DEC											
07...	1148	80	240	7.5	1.0	--	13.2	--	--	--	--
JAN											
04...	1207	136	215	7.1	.0	--	13.4	--	--	--	--
FEB											
09...	0925	1130	187	6.8	.0	--	13.3	--	--	--	--
MAR											
09...	0839	305	165	7.0	.0	--	13.7	--	--	--	--
APR											
05...	0943	76	195	8.5	7.5	--	12.3	--	--	--	--
MAY											
03...	1055	88	220	8.3	12.0	--	10.4	--	--	--	--
JUN											
14...	1007	45	205	7.4	21.5	--	6.3	--	--	--	--
JUL											
12...	1115	19	225	7.4	20.0	--	6.3	--	--	--	--
AUG											
16...	1117	12	255	7.5	22.0	--	7.8	--	--	--	--
SEP											
16...	1110	20	265	7.0	22.0	10	6.0	98	23	92	0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
14...	94	3.6	32	17	0.20	182	3.2	0.173	20	8
NOV										
17...	--	--	--	--	--	--	--	--	--	--
DEC										
07...	--	--	--	--	--	--	--	--	--	--
JAN										
04...	--	--	--	--	--	--	--	--	--	--
FEB										
09...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
APR										
05...	--	--	--	--	--	--	--	--	--	--
MAY										
03...	--	--	--	--	--	--	--	--	--	--
JUN										
14...	--	--	--	--	--	--	--	--	--	--
JUL										
12...	--	--	--	--	--	--	--	--	--	--
AUG										
16...	--	--	--	--	--	--	--	--	--	--
SEP										
16...	75	4.6	28	14	.30	169	9.1	.600	90	54

WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
OCT						
29...	1148	170	255	7.5	15.0	9.4
NOV						
18...	1015	49	255	6.8	6.0	11.6
DEC						
13...	0945	260	185	7.1	6.0	11.4
JAN						
07...	1000	170	220	7.2	1.0	11.7
FEB						
14...	1058	1350	120	7.1	2.0	12.2
MAR						
20...	1030	210	185	6.5	6.5	9.8
APR						
06...	1015	99	200	7.8	8.0	15.1
MAY						
08...	1107	192	190	6.7	18.0	7.5
JUN						
07...	1245	88	220	6.9	19.0	8.3

WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB										
25...	1040	120	186	7.2	--	3.5	13.0	--	--	--
MAR										
12...	1130	88	221	7.7	7.0	7.0	12.7	86	32	23
25...	1045	132	186	7.5	-2.5	5.0	12.0	--	--	--
APR										
08...	1050	261	155	7.2	12.0	9.0	11.0	--	--	--
22...	1030	130	180	7.5	23.0	15.0	10.1	--	--	--
MAY										
06...	1100	54	202	8.0	12.5	13.0	10.4	--	--	--
20...	1030	74	185	7.2	17.5	18.0	7.8	--	--	--
JUN										
03...	1030	101	220	7.2	25.0	17.0	8.5	--	--	--
18...	1015	36	215	6.9	23.5	19.5	7.1	--	--	--
JUL										
01...	1000	44	255	7.5	27.0	20.5	7.5	--	--	--
15...	1000	8.0	265	7.9	28.5	25.5	7.0	--	--	--
29...	1000	13	310	8.1	24.0	24.0	7.5	--	--	--
AUG										
12...	0950	8.4	260	7.9	22.0	21.0	7.8	--	--	--
26...	0945	3.6	325	7.8	24.5	23.5	7.4	--	--	--
SEP										
09...	0945	32	240	7.0	19.5	18.5	7.1	--	--	--
24...	1000	11	290	7.8	10.0	12.5	9.0	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB										
25...	--	--	--	--	--	--	--	--	--	--
MAR										
12...	7.0	9.0	2.0	66	0	54	2.1	32	13	0.10
25...	--	--	--	--	--	--	--	--	--	--
APR										
08...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
MAY										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
JUN										
03...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	83	--	68	17	19	11	--
JUL										
01...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
12...	--	--	--	--	--	--	--	23	12	--
26...	--	--	--	--	--	--	--	--	--	--
SEP										
09...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	84	--	69	2.1	35	16	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
25...	139	45	1.4	1.4	0.57	2.0	0.140	--	5.0
MAR									
12...	160	38	.92	.96	.49	1.5	.200	--	4.7
25...	107	38	1.2	1.2	.29	1.5	.100	--	4.3
APR									
08...	107	75	1.3	1.3	.24	1.5	.010	--	3.1
22...	93	33	.87	.89	.28	1.2	.100	--	--
MAY									
06...	119	17	.38	.39	.42	.81	.170	--	5.1
20...	132	26	.64	.66	.57	1.2	.160	--	3.8
JUN									
03...	132	36	1.2	1.2	.44	1.6	.300	--	2.9
18...	121	12	.05	.06	.47	.53	.220	0.160	3.9
JUL									
01...	157	19	.63	.65	.38	1.0	.370	--	4.7
15...	135	2.9	.00	.01	.65	.66	.070	--	6.0
29...	192	6.7	.00	<.10	.46	.46	.360	--	4.5
AUG									
12...	170	3.9	.00	<.10	.58	.58	.430	--	4.9
26...	179	1.7	.01	.01	.58	.59	.350	--	6.1
SEP									
09...	151	13	.84	.90	.67	1.6	.560	--	8.2
24...	166	4.9	.38	.39	.42	.81	.340	--	6.6

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BICARBONATE FET-FLD (MG/L AS HCO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
OCT										
07...	1015	5.0	360	7.5	17.5	12.0	9.1	--	--	--
21...	1015	13	360	6.9	2.5	5.0	8.4	--	--	--
NOV										
05...	1015	12	350	7.2	15.5	14.5	5.8	--	--	--
18...	1215	30	295	7.8	10.0	4.0	12.2	--	--	--
DEC										
03...	1000	340	230	7.3	6.0	3.0	12.5	--	--	--
17...	1030	908	190	7.2	6.0	4.0	12.6	27	22	2.7
JAN										
06...	1015	57	275	7.1	.0	.0	13.7	--	--	--
21...	1045	20	235	6.8	-4.0	.0	14.5	--	--	--
FEB										
03...	1015	155	290	7.0	3.5	.0	14.4	--	--	--
18...	1000	494	275	6.8	7.0	.5	14.6	--	--	--
MAR										
03...	1115	175	195	6.8	.0	1.0	14.1	--	--	--
17...	0945	872	200	7.1	6.5	4.0	13.0	38	31	4.8
31...	1000	324	195	6.9	2.0	5.0	12.4	--	--	--
APR										
21...	1000	57	220	7.8	10.0	10.0	10.6	--	--	--
MAY										
05...	1000	720	160	7.1	11.0	12.0	9.9	--	--	--
19...	1000	143	200	7.6	21.5	18.0	9.0	--	--	--
JUN										
09...	1010	170	210	7.5	18.0	16.0	9.1	--	--	--
23...	1015	53	200	7.5	27.0	23.0	7.6	73	60	3.7
JUL										
15...	0945	372	205	7.4	23.0	20.5	8.2	--	--	--
28...	1010	27	240	7.7	26.0	23.0	7.1	--	--	--
AUG										
11...	1015	16	250	7.6	27.0	23.0	6.8	--	--	--
25...	0940	18	290	8.6	29.0	24.0	9.4	--	--	--
SEP										
09...	1030	33	255	7.6	20.0	20.0	7.0	--	--	--
22...	1000	231	190	7.4	16.0	17.0	8.9	50	41	3.2

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
07...	--	--	200	2.7	0.32	0.32	0.51	0.83	0.310	6.1
21...	--	--	191	6.7	.49	.51	2.3	2.8	.910	7.4
NOV										
05...	--	--	203	6.6	.16	.16	.45	.61	.450	7.6
18...	--	--	163	13	.79	.80	.41	1.2	.270	7.2
DEC										
03...	--	--	132	121	2.6	2.6	.68	3.3	.310	13
17...	26	7.8	120	294	3.3	3.3	.83	4.1	.220	5.3
JAN										
06...	--	--	155	24	2.3	2.3	.37	2.7	.150	3.4
21...	--	--	152	8.2	1.6	1.6	.42	2.0	.110	4.4
FEB										
03...	--	--	159	67	2.8	2.8	.44	3.2	.110	3.8
18...	--	--	146	195	1.9	2.0	.67	2.7	.250	3.6
MAR										
03...	--	--	110	52	1.6	1.6	.32	1.9	.080	3.7
17...	28	11	111	261	1.6	1.6	.46	2.1	.150	3.8
31...	--	--	115	101	1.1	1.1	.48	1.6	.120	5.7
APR										
21...	--	--	136	21	.53	.56	.40	.96	.140	4.0
MAY										
05...	--	--	111	216	1.3	1.3	.78	2.1	.150	6.8
19...	--	--	129	50	.64	.65	.35	1.0	.110	4.4
JUN										
09...	--	--	142	65	1.3	1.3	.40	1.7	.150	6.5
23...	19	8.1	131	19	.67	.68	.52	1.2	.120	5.4
JUL										
15...	--	--	135	136	1.5	1.5	.80	2.3	.210	9.8
28...	--	--	138	10	.65	.66	.40	1.1	.160	1.2
AUG										
11...	--	--	152	6.4	.77	.82	.46	1.3	.230	9.6
25...	--	--	173	8.6	.15	.17	.87	1.0	.290	6.2
SEP										
09...	--	--	173	15	1.4	1.4	.47	1.9	.280	10
22...	23	7.1	139	87	1.4	1.4	1.0	2.4	.190	9.1

WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT											
07...	1000	99	195	7.5	12.0	12.5	9.9	--	--	--	--
21...	1015	430	185	7.6	16.5	11.5	10.2	--	--	--	--
NOV											
03...	1000	90	230	8.0	20.0	8.5	11.6	--	--	--	--
17...	0950	226	195	7.5	8.5	6.0	11.8	--	--	--	--
DEC											
01...	0945	103	230	7.9	3.0	6.0	12.3	--	--	--	--
15...	1000	116	230	7.9	12.0	4.5	13.0	65	53	1.3	27
JAN											
05...	1015	210	190	7.5	-5.5	.0	14.2	--	--	--	--
20...	0945	69	235	7.2	-2.0	.0	14.1	--	--	--	--
FEB											
03...	1000	205	143	7.6	-4.0	.0	14.0	--	--	--	--
18...	0945	373	220	7.5	7.0	6.0	11.9	--	--	--	--
MAR											
10...	0945	90	220	8.2	4.0	2.0	14.0	64	53	.6	26
22...	1000	194	196	7.9	3.5	9.0	11.6	--	--	--	--
APR											
06...	1015	262	185	7.5	15.0	8.0	11.6	--	--	--	--
19...	1000	64	197	8.0	31.0	19.0	8.9	--	--	--	--
MAY											
04...	0940	52	255	7.7	9.5	12.0	9.2	--	--	--	--
19...	0930	63	275	7.6	10.5	14.5	8.2	--	--	--	--
JUN											
02...	0945	590	205	7.5	15.5	18.5	8.0	--	--	--	--
23...	0945	118	180	7.2	25.5	23.5	--	52	43	5.2	18
JUL											
14...	0950	30	270	7.6	22.0	21.0	6.1	--	--	--	--
28...	0945	17	270	8.9	25.0	23.0	7.9	--	--	--	--
AUG											
11...	0940	42	205	7.4	22.0	20.0	6.4	--	--	--	--
25...	0945	7.0	290	7.8	22.5	24.0	5.2	--	--	--	--
SEP											
08...	0940	6.0	320	8.0	22.0	17.5	7.4	110	90	1.7	29
22...	0945	20	235	7.5	14.0	16.0	7.5	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
07...	--	139	37	1.3	1.3	0.25	1.6	0.080	--	2.6
21...	--	131	152	.97	.99	.07	1.1	.120	0.090	5.6
NOV										
03...	--	123	30	.80	.81	.26	1.1	.110	--	2.6
17...	--	114	70	1.5	1.5	.34	1.8	.110	--	2.8
DEC										
01...	--	133	37	1.1	1.1	.19	1.3	.110	--	--
15...	8.6	136	43	1.1	1.1	.30	1.4	.120	--	3.6
JAN										
05...	--	118	67	1.6	1.6	.42	2.0	.100	--	--
20...	--	136	25	2.0	2.0	.45	2.5	.150	--	--
FEB										
03...	--	89	49	1.4	1.4	.81	2.2	.180	--	6.4
18...	--	123	124	1.4	1.4	.82	2.2	.220	--	4.8
MAR										
10...	10	118	29	.69	.71	.29	1.0	.150	--	3.2
22...	--	123	64	.79	.82	.44	1.3	.090	--	2.9
APR										
06...	--	106	75	1.8	1.8	.48	2.3	.090	--	4.4
19...	--	140	24	.42	.46	.43	.89	.110	--	3.4
MAY										
04...	--	157	22	.85	.92	.55	1.5	.260	--	1.7
19...	--	155	26	.80	.91	1.2	2.1	.440	--	4.1
JUN										
02...	--	139	221	2.2	2.3	.73	3.0	.190	--	7.8
23...	7.9	117	37	1.5	1.5	.93	2.4	.180	--	8.8
JUL										
14...	--	145	12	1.3	1.3	.68	2.0	.440	--	5.5
28...	--	163	7.5	.32	.35	1.1	1.5	.350	--	8.2
AUG										
11...	--	131	15	.85	.89	.88	1.8	.270	--	9.2
25...	--	163	3.1	.09	.10	.65	.75	.240	--	5.4
SEP										
08...	17	171	2.8	.00	.01	.73	.74	.230	--	--
22...	--	136	7.3	.76	.77	.55	1.3	.260	--	--

WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)
OCT											
13...	1030	250	190	7.5	14.0	10.0	10.9	--	--	--	--
27...	1000	497	185	7.9	1.0	6.0	12.4	--	--	--	--
NOV											
10...	0950	112	235	7.9	6.0	2.5	13.4	--	--	--	--
24...	0945	61	235	8.1	3.0	.5	14.2	66	--	54	0.8
DEC											
08...	1020	508	153	7.5	-5.0	.0	--	30	--	25	1.5
20...	0930	72	255	7.6	5.0	1.0	14.1	--	--	--	--
JAN											
12...	1015	30	300	7.7	-8.0	.0	13.4	--	--	--	--
25...	1015	29	345	7.4	.0	.0	11.9	--	--	--	--
FEB											
09...	1000	22	330	7.6	-5.0	.0	12.0	--	--	--	--
23...	1015	45	295	7.5	12.0	.0	13.6	--	--	--	--
MAR											
09...	1000	192	240	7.5	12.0	5.0	12.7	--	--	--	--
23...	1000	988	155	7.6	6.0	3.0	13.2	32	--	26	1.3
APR											
06...	1000	907	165	8.0	6.0	6.0	12.2	--	--	--	--
20...	1000	73	171	8.9	21.5	16.5	10.8	--	--	--	--
MAY											
04...	0945	69	198	8.2	12.0	16.0	8.3	--	--	--	--
18...	0930	28	225	7.3	29.5	20.0	6.1	--	--	--	--
JUN											
08...	0940	24	238	7.7	13.5	15.0	7.5	93	0	76	2.9
22...	0945	16	252	7.9	22.0	20.5	8.8	--	--	--	--
JUL											
06...	0930	4.5	297	8.7	27.5	25.0	7.6	--	--	--	--
20...	0930	17	279	7.9	26.0	26.5	5.9	--	--	--	--
AUG											
03...	1015	3.9	315	8.0	23.0	23.5	7.1	--	--	--	--
17...	0930	9.4	364	7.5	27.5	25.0	--	--	--	--	--
31...	0945	35	243	8.1	24.0	24.0	7.1	79	0	65	1.0
SEP											
14...	1015	3.5	333	8.0	22.0	20.0	8.2	--	--	--	--
28...	1015	37	373	8.0	19.0	16.5	7.5	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
13...	--	--	110	74	1.9	1.9	0.25	2.2	0.110	5.2
27...	--	--	101	136	1.6	1.6	.55	2.2	.120	6.2
NOV										
10...	--	--	93	28	1.4	1.4	.26	1.7	.110	2.7
24...	26	10	136	22	.98	1.0	.45	1.5	.150	3.4
DEC										
08...	20	7.8	103	141	1.4	1.4	1.2	2.6	.230	5.2
20...	--	--	130	25	1.7	1.7	.40	2.1	.160	2.4
JAN										
12...	--	--	168	14	1.9	1.9	.72	2.6	.260	1.4
25...	--	--	187	15	1.9	1.9	1.0	2.9	.320	1.8
FEB										
09...	--	--	145	8.6	1.8	1.8	1.0	2.8	.370	5.4
23...	--	--	159	19	1.6	1.6	.96	2.6	.200	6.0
MAR										
09...	--	--	146	76	2.3	2.3	.44	2.7	.090	3.2
23...	20	6.8	120	320	1.7	1.7	.83	2.5	.120	6.7
APR										
06...	--	--	95	233	1.5	1.5	.55	2.1	.100	--
20...	--	--	113	22	.26	.26	.38	.64	.070	7.2
MAY										
04...	--	--	133	25	.53	.54	.38	.92	.100	4.9
18...	--	--	131	9.9	.31	.32	.68	1.0	.120	5.3
JUN										
08...	27	16	151	9.8	.78	.84	.75	1.6	.230	6.8
22...	--	--	171	7.4	1.3	1.3	1.2	2.5	.380	7.5
JUL										
06...	--	--	209	2.5	.00	<.10	1.1	1.1	.280	6.0
20...	--	--	161	7.4	.26	.27	.54	.81	.330	7.1
AUG										
03...	--	--	222	2.3	.00	<.10	.76	.76	.350	5.1
17...	--	--	175	4.4	.01	.02	.97	.99	.370	5.7
31...	27	16	158	15	.07	.08	1.1	1.2	.350	5.6
SEP										
14...	--	--	213	2.0	.33	.33	.89	1.2	.500	10
28...	--	--	239	24	1.2	--	--	--	.520	12

WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT												
12...	0945	19	378	7.9	12.5	11.0	8.5	--	--	--	--	--
26...	0945	31	252	8.0	10.5	10.0	8.8	--	--	--	--	--
NOV												
09...	0930	472	200	7.6	14.5	12.0	9.7	--	--	--	--	--
30...	0930	338	272	8.1	1.5	2.0	13.2	--	--	--	--	--
DEC												
19...	1030	1870	162	8.3	3.0	.5	14.2	31	0	25	0.2	22
JAN												
04...	0930	61	202	--	-6.0	1.0	13.7	--	--	--	--	--
18...	1330	345	198	7.2	1.5	.5	13.6	--	--	--	--	--
31...	1000	277	175	7.3	-5.5	.5	13.6	--	--	--	--	--
FEB												
15...	1000	73	240	7.4	-2.5	1.0	13.0	--	--	--	--	--
MAR												
01...	1015	65	330	7.2	.0	.5	13.0	--	--	--	--	--
15...	0945	3210	125	6.8	8.0	.5	14.0	25	0	21	6.3	14
29...	0945	602	165	6.9	12.5	9.0	11.2	--	--	--	--	--
APR												
12...	0940	98	195	8.9	18.0	13.5	12.2	--	--	--	--	--
26...	0945	63	220	8.4	11.5	12.5	10.4	--	--	--	--	--
MAY												
09...	0945	247	255	7.8	17.0	13.5	8.3	--	--	--	--	--
24...	1000	149	180	7.3	14.0	17.5	8.6	65	0	53	5.2	21
JUN												
07...	1015	43	205	7.4	20.0	21.0	6.9	--	--	--	--	--
21...	1000	24	245	7.6	26.0	25.0	6.0	--	--	--	--	--
JUL												
12...	1030	52	240	7.6	19.0	21.5	7.0	--	--	--	--	--
26...	1000	17	250	8.1	23.0	23.5	6.2	--	--	--	--	--
AUG												
16...	0945	19	260	7.9	26.0	27.0	5.7	91	0	75	1.8	23
30...	1000	21	275	8.0	24.5	25.5	6.0	--	--	--	--	--
SEP												
13...	0950	8.7	300	8.3	15.0	22.0	6.9	--	--	--	--	--
27...	1000	5.0	350	8.1	15.5	15.0	8.2	--	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	--	--	238	12	1.8	1.9	1.5	3.4	0.840	--	5.9
26...	--	--	170	14	.83	.84	.76	1.6	.270	--	8.1
NOV											
09...	--	--	119	152	2.7	2.7	.82	3.5	.060	--	8.3
30...	--	--	145	132	2.9	2.9	.76	3.7	.110	--	8.5
DEC											
19...	7.1	--	100	505	2.1	2.1	.92	3.0	.170	--	12
JAN											
04...	--	--	114	19	2.1	2.1	.47	2.6	.120	--	12
18...	--	--	113	105	2.2	2.2	.64	2.8	.110	--	10
31...	--	--	105	79	1.5	1.5	.48	2.0	.050	--	9.1
FEB											
15...	--	--	137	27	1.8	1.8	.67	2.5	.150	--	1.3
MAR											
01...	--	10	178	31	1.6	1.6	1.1	2.7	.210	--	4.1
15...	8.3	4.2	70	607	1.5	1.5	1.7	3.2	.240	3200	8.6
29...	--	10	79	128	1.7	1.7	.40	2.1	.080	590	4.0
APR											
12...	--	1.4	101	27	1.4	1.4	--	--	.030	210	4.9
26...	--	.8	124	21	.32	.34	.41	.75	.080	240	8.7
MAY											
09...	--	6.4	154	103	.76	.83	1.3	2.1	.310	350	6.4
24...	8.4	8.1	105	42	1.1	1.1	.50	1.6	.100	460	5.2
JUN											
07...	--	7.5	121	14	.65	.66	.49	1.2	.140	170	4.9
21...	--	6.7	129	8.4	1.3	1.3	.97	2.3	.290	--	13
JUL											
12...	--	--	157	22	2.3	2.3	.58	2.9	.190	--	10
26...	--	5.2	146	6.7	.19	.20	.65	.85	.160	370	10
AUG											
16...	14	6.5	145	7.4	.37	.38	.63	1.0	.360	840	5.6
30...	--	5.7	151	8.6	.25	.26	.84	1.1	.350	1100	5.8
SEP											
13...	--	2.2	176	4.1	.04	.04	1.1	1.1	.350	1800	4.4
27...	--	3.9	201	2.7	.23	.24	.43	.67	.190	430	3.8

WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)
OCT												
11...	0945	6.4	420	8.3	12.5	11.0	10.6	--	--	--	--	--
25...	1000	32	230	7.8	7.0	9.0	10.1	--	--	--	--	--
NOV												
15...	0950	12	340	7.8	12.5	12.0	8.6	--	--	--	--	--
29...	1315	46	350	8.1	5.0	3.5	13.5	95	0	78	1.2	38
DEC												
20...	1030	43	340	7.8	2.5	1.5	13.1	--	--	--	--	--
JAN												
03...	0945	826	175	8.1	-8.0	2.0	13.2	--	--	--	--	--
17...	1030	109	275	8.1	-1.0	.5	14.1	--	--	--	--	--
31...	1030	293	200	8.3	.0	1.5	13.4	--	--	--	--	--
FEB												
14...	1015	76	245	7.9	-10.0	1.0	13.1	--	--	--	--	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
11...	--	2.3	237	4.1	0.69	0.70	0.53	1.2	0.290	280	2.4
25...	--	4.9	122	11	.83	.87	.78	1.7	.360	260	5.2
NOV											
15...	--	3.1	192	6.2	.27	.28	.33	.61	.290	360	8.8
29...	25	--	186	23	.78	.78	.35	1.1	.330	130	4.5
DEC											
20...	--	--	173	20	2.9	2.9	.39	3.3	.180	--	3.9
JAN											
03...	--	--	110	245	2.5	2.5	.90	3.4	.180	1200	6.6
17...	--	--	63	19	1.1	1.1	.11	1.2	.050	110	--
31...	--	--	107	85	2.1	2.1	.39	2.5	.080	210	3.3
FEB											
14...	--	--	144	30	1.8	1.8	.82	2.6	.170	440	3.2

Table 9.—Quality of surface water in Frederick County, Md.—continued

01639000 - MONOCACY R AT BRIDGEPORT, MD (continued)
WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAR											
03...	0945	249	184	8.4	2.0	22	11.6	66	29	17	5.7
AUG											
10...	1200	16	262	8.2	26.0	15	8.2	86	14	24	6.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
MAR											
03...	6.3	2.8	37	0.3	23	10	<0.10	7.7	124	95	83
AUG											
10...	15	4.0	72	.9	22	21	.10	6.1	142	140	6.1

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR										
03...	2.5	0.77	3.3	0.140	0.110	300	56	20	15	3.5
AUG										
10...	<.10	--	--	.300	.250	260	37	100	22	4.7

WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JAN												
28...	1600	114	238	9.6	1.0	1.0	5	--	88	35	23	7.5
JUN												
17...	1245	27	230	8.3	31.5	26.5	25	6.9	88	6	24	6.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN											
28...	11	2.4	53	43	0.0	31	17	0.10	8.2	133	130
JUN											
17...	12	3.6	82	68	.8	21	17	.20	1.0	140	130

WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN											
28...	41	2.7	--	--	0.090	0.090	160	35	10	11	4.1
JUN											
17...	10	.10	0.50	0.60	.090	.050	120	23	30	2	4.4

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB										
27...	1140	448	198	7.6	--	1.0	14.2	75	27	21
MAR										
14...	1530	378	197	8.6	11.5	6.0	15.0	80	23	23
27...	1035	488	180	7.7	6.5	6.0	12.0	69	21	19
APR										
09...	1020	3490	160	7.3	5.5	8.0	11.2	60	25	17
24...	1005	1140	162	7.4	9.0	13.5	9.4	--	--	--
MAY										
08...	1030	388	192	8.1	11.0	11.5	11.0	--	--	--
22...	1110	480	180	7.5	27.0	19.5	8.2	--	--	--
JUN										
05...	0945	360	200	7.1	26.0	19.0	8.3	--	--	--
20...	1030	270	225	7.4	28.0	22.0	7.5	--	--	--
JUL										
01...	1200	346	220	8.0	28.5	21.5	8.3	--	--	--
22...	1030	104	260	7.8	25.0	22.0	6.7	--	--	--
AUG										
05...	1030	144	245	7.6	24.0	23.0	6.9	--	--	--
12...	1150	90	260	7.7	25.5	21.5	7.8	--	--	--
26...	1210	108	245	7.8	28.0	24.0	7.0	--	--	--
SEP										
09...	1130	303	245	7.3	19.0	18.5	8.3	--	--	--
24...	1300	176	260	8.2	16.0	14.5	10.0	--	--	--

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
FEB										
27...	5.4	5.0	1.5	59	0	48	2.4	21	9.2	--
MAR										
14...	5.5	5.5	1.5	69	0	57	.3	20	9.3	119
27...	5.3	5.0	1.4	58	0	48	1.8	19	7.9	100
APR										
09...	4.2	4.0	2.4	43	0	35	3.4	21	5.7	133
24...	--	--	--	51	0	42	3.2	16	6.8	94
MAY										
08...	--	--	--	68	0	56	.9	14	7.5	115
22...	--	--	--	63	0	52	3.2	14	6.8	145
JUN										
05...	--	--	--	68	0	56	8.6	15	9.2	117
20...	--	--	--	77	--	63	4.9	14	8.3	135
JUL										
01...	--	--	--	77	--	63	1.2	17	9.4	145
22...	--	--	--	99	--	81	2.5	15	11	174
AUG										
05...	--	--	--	96	--	79	3.8	15	11	150
12...	--	--	--	100	--	83	3.2	17	11	160
26...	--	--	--	96	--	79	2.4	13	10	133
SEP										
09...	--	--	--	74	--	61	5.9	21	12	153
24...	--	--	--	94	--	77	.9	20	11	152

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
27...	--	2.1	2.1	0.37	2.5	0.060	250	70	3.8
MAR									
14...	121	1.7	1.7	.21	1.9	.070	170	20	3.9
27...	132	1.6	1.6	.19	1.8	.050	160	20	2.5
APR									
09...	1250	1.4	1.4	.91	2.3	.220	1800	190	9.0
24...	289	1.4	1.4	.46	1.9	.080	670	30	6.0
MAY									
08...	120	1.6	1.6	.33	1.9	.080	90	30	3.2
22...	188	1.7	1.7	.28	2.0	.100	280	30	3.3
JUN									
05...	114	1.9	1.9	1.1	3.0	.150	1100	1000	2.9
20...	98	--	--	--	--	--	930	90	5.7
JUL									
01...	135	1.8	1.8	.54	2.3	.250	800	80	5.7
22...	49	1.5	1.5	.15	1.7	.120	500	80	2.6
AUG									
05...	58	--	--	.14	--	.150	740	80	2.2
12...	39	1.8	1.8	.40	2.2	.180	730	560	4.5
26...	39	2.0	2.1	1.2	3.3	.440	470	70	4.5
SEP									
09...	125	1.5	1.5	.68	2.2	.320	800	80	8.4
24...	72	2.2	2.2	.36	2.6	.170	350	80	4.9

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT												
07...	1240	118	290	8.7	20.0	13.0	11.2	110	--	88	0.3	16
21...	1230	144	310	7.7	7.0	5.5	11.6	100	--	84	3.3	25
NOV												
05...	1230	120	260	7.5	17.5	15.5	7.8	110	--	89	5.5	14
18...	1445	173	270	8.2	12.0	5.0	13.6	85	--	70	.9	22
DEC												
04...	1010	819	230	7.3	4.0	2.0	12.6	49	--	40	3.9	26
17...	1240	7290	160	7.2	7.5	4.0	12.2	29	--	24	2.9	20
JAN												
08...	1230	415	250	7.4	.5	.5	13.0	65	--	53	4.1	23
21...	1230	785	225	7.4	-4.0	.0	13.9	51	--	42	3.2	23
FEB												
03...	1145	810	235	7.4	1.5	1.0	14.4	48	--	39	3.0	24
18...	1130	1110	245	7.4	6.5	2.0	14.0	56	--	46	3.5	20
MAR												
03...	1250	899	190	7.3	-.5	2.0	14.4	48	--	39	3.8	23
17...	1215	2460	200	7.3	11.0	4.0	12.6	45	--	37	3.6	24
31...	1130	1770	180	7.3	5.0	6.0	12.2	47	--	39	3.7	16
APR												
21...	1200	468	198	8.8	14.0	11.0	12.2	66	--	54	.2	15
MAY												
05...	1200	3610	155	7.1	10.5	12.0	10.1	42	--	34	5.3	15
19...	1200	967	183	7.6	26.0	17.0	9.4	64	--	53	2.6	17
JUN												
09...	1230	1080	205	7.4	23.0	16.0	9.2	68	--	56	4.3	17
23...	1145	472	210	7.9	31.0	23.0	8.6	78	--	64	1.6	13
JUL												
15...	1130	1630	195	7.5	27.0	21.0	8.0	64	--	53	3.2	18
28...	1200	315	245	8.0	31.0	23.5	8.3	93	--	76	1.5	15
AUG												
11...	1245	201	255	8.2	30.0	23.0	8.8	98	--	80	1.0	13
25...	1100	197	250	9.0	29.5	23.5	9.9	100	0	82	.2	15
SEP												
09...	1230	268	260	8.0	22.0	21.0	8.0	92	--	75	1.5	17
22...	1130	1040	180	7.4	22.0	17.5	8.6	59	--	48	3.7	14

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
07...	8.5	160	51	2.2	2.2	0.28	2.5	0.100	270	20	2.4
21...	16	174	68	1.5	1.5	.48	2.0	.310	200	100	5.1
NOV											
05...	12	147	48	1.2	1.2	.29	1.5	.170	400	70	4.5
18...	12	147	69	1.8	1.8	.39	2.2	.210	200	50	4.7
DEC											
04...	11	134	296	2.7	2.7	.75	3.5	.230	940	80	8.2
17...	6.1	105	2070	2.4	2.4	1.3	3.7	.470	3600	270	7.5
JAN											
08...	11	123	138	2.6	2.6	.52	3.1	.090	130	<10	2.9
21...	13	140	297	2.3	2.3	.54	2.8	.140	300	20	5.0
FEB											
03...	12	129	282	2.7	2.7	.76	3.5	.070	210	20	2.8
18...	12	127	381	2.3	2.3	.42	2.7	.140	390	40	4.1
MAR											
03...	8.5	104	252	2.0	2.0	.21	2.2	.050	180	20	1.7
17...	9.1	104	691	1.7	1.7	.62	2.3	.160	1300	60	6.0
31...	8.5	109	521	1.4	1.4	.42	1.8	.130	540	40	4.1
APR											
21...	9.1	128	162	1.5	1.5	.14	1.6	.050	330	20	2.5
MAY											
05...	4.7	107	1040	1.3	1.3	.93	2.2	.200	1800	90	8.9
19...	7.6	129	337	1.6	1.6	.31	1.9	.090	560	40	3.8
JUN											
09...	8.0	128	373	2.0	2.0	.42	2.4	.120	900	60	5.3
23...	8.6	127	162	2.0	2.0	.41	2.4	.080	290	20	3.2
JUL											
15...	9.3	129	568	1.8	1.8	1.1	2.9	.280	1800	110	6.6
28...	8.4	142	121	2.4	2.4	.40	2.8	.120	400	40	4.6
AUG											
11...	9.0	153	83	2.2	2.2	.20	2.4	.100	140	20	2.0
25...	8.9	148	79	1.8	1.8	.88	2.7	.140	770	130	8.4
SEP											
09...	10	170	123	2.1	2.1	.38	2.5	.160	510	60	6.3
22...	6.1	136	382	1.3	1.3	1.2	2.5	.210	3300	230	9.4

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
07...	1115	872	215	7.7	17.5	13.5	9.8	--	--	--	--
21...	1230	1970	195	7.2	22.5	12.5	9.6	--	--	--	--
NOV											
03...	1145	668	225	8.0	22.5	10.0	11.5	--	--	--	--
17...	1130	1240	185	7.5	15.0	7.0	12.0	--	--	--	--
DEC											
01...	1115	599	210	7.8	6.0	7.0	12.1	--	--	--	--
15...	1115	574	225	7.9	15.0	5.0	12.8	--	--	--	--
JAN											
05...	1230	1380	185	7.4	-3.0	.0	13.8	--	--	--	--
20...	1130	566	215	7.2	-2.0	.0	15.0	--	--	--	--
FEB											
03...	1130	1390	155	7.1	-1.0	.0	14.0	--	--	--	--
18...	1130	1250	210	7.4	12.5	7.5	11.7	--	--	--	--
MAR											
10...	1115	553	205	8.4	6.0	2.0	14.6	--	--	--	--
22...	1115	744	193	8.1	6.0	9.0	12.0	--	--	--	--
APR											
06...	1130	1350	180	7.4	16.5	8.0	11.6	--	--	--	--
19...	1130	486	185	7.9	31.5	20.5	9.1	--	--	--	--
MAY											
04...	1100	390	213	7.8	11.0	13.0	9.8	--	--	--	--
19...	1115	486	225	7.6	10.5	14.5	8.8	--	--	--	--
JUN											
02...	1120	1160	195	7.5	17.0	18.5	7.5	--	--	--	--
23...	1130	677	165	7.4	29.5	24.0	--	--	--	--	--
JUL											
14...	1115	310	235	7.7	24.5	21.0	7.5	--	--	--	--
28...	1130	207	245	9.0	31.0	23.0	10.9	100	20	31	6.0
AUG											
11...	1115	236	220	7.6	26.5	21.0	7.1	85	23	26	4.9
25...	1110	112	275	7.9	25.5	24.0	6.4	100	21	33	4.7
SEP											
08...	1110	99	275	8.0	26.5	19.0	7.6	110	17	33	5.6
22...	1120	172	250	7.8	15.5	16.0	8.2	90	23	26	6.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT										
07...	--	--	73	60	2.3	15	9.6	137	323	2.4
21...	--	--	63	52	6.3	19	7.4	119	633	1.5
NOV										
03...	--	--	76	62	1.2	16	7.9	128	231	2.1
17...	--	--	53	43	2.7	17	6.9	104	348	2.0
DEC										
01...	--	--	70	57	1.8	17	7.8	119	192	2.1
15...	--	--	68	56	1.4	18	7.8	118	183	1.5
JAN										
05...	--	--	51	42	3.2	16	8.0	206	768	2.2
20...	--	--	68	56	6.8	19	8.7	124	189	2.8
FEB										
03...	--	--	38	31	4.8	13	7.6	102	383	1.8
18...	--	--	57	47	3.6	22	10	113	381	2.0
MAR										
10...	--	--	64	53	.4	17	8.8	105	157	1.8
22...	--	--	56	46	.7	19	8.5	117	235	1.4
APR										
06...	--	--	51	42	3.2	20	7.8	99	361	2.7
19...	--	--	69	57	1.4	16	8.2	116	152	1.6
MAY										
04...	--	--	70	57	1.8	15	7.7	130	137	1.6
19...	--	--	84	69	3.4	14	8.7	135	177	2.0
JUN										
02...	--	--	56	46	2.8	17	8.8	127	398	2.4
23...	--	--	52	43	3.3	13	6.5	107	196	1.7
JUL										
14...	--	--	80	66	2.5	28	14	163	136	1.6
28...	6.2	2.7	100	82	.2	16	11	158	88	1.1
AUG										
11...	6.1	3.4	75	62	3.0	17	11	137	87	1.5
25...	7.6	2.8	99	81	2.0	14	11	160	48	1.5
SEP										
08...	7.5	2.5	110	89	1.7	15	13	157	42	1.6
22...	6.6	3.3	82	67	2.1	19	13	132	61	1.6

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
07...	2.4	0.21	2.6	0.060	--	250	--	30	--	2.0
21...	1.5	.20	1.7	.110	.070	450	--	40	--	3.6
NOV										
03...	2.1	.18	2.3	.060	--	120	--	20	--	2.7
17...	2.0	.23	2.2	.070	--	180	--	20	--	2.1
DEC										
01...	2.1	.18	2.3	.060	--	180	--	<10	--	--
15...	1.5	.27	1.8	.080	--	390	--	<10	--	2.3
JAN										
05...	2.2	.34	2.5	.090	--	280	--	20	--	--
20...	2.8	.29	3.1	.090	--	190	--	20	--	1.8
FEB										
03...	1.8	.70	2.5	.180	--	810	--	50	--	4.7
18...	2.0	.44	2.4	.130	--	550	--	40	--	5.2
MAR										
10...	1.8	.19	2.0	.090	--	130	--	<10	--	4.4
22...	1.4	<.10	1.4	.060	--	230	--	30	--	2.0
APR										
06...	2.7	.40	3.1	.080	--	330	--	30	--	3.1
19...	1.6	.38	2.0	.080	--	250	--	30	--	3.5
MAY										
04...	1.6	.40	2.0	.100	--	330	--	30	--	3.0
19...	2.1	.85	3.0	.190	--	480	--	50	--	5.5
JUN										
02...	2.5	1.2	3.7	.280	--	2500	--	180	--	9.3
23...	1.7	.93	2.6	.140	--	1900	--	120	--	6.6
JUL										
14...	1.6	.53	2.1	.220	--	--	--	--	--	5.9
28...	1.1	1.3	2.4	.140	--	840	20	120	<10	6.0
AUG										
11...	1.5	.75	2.3	.240	--	960	40	100	30	5.2
25...	1.5	.55	2.1	.160	--	1000	<10	120	40	3.8
SEP										
08...	1.6	.48	2.1	.160	--	850	<10	90	20	3.8
22...	1.6	.53	2.1	.180	--	590	60	80	30	3.6

WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT											
13...	1230	1270	185	7.6	16.5	11.0	10.4	66	21	19	4.6
27...	1200	2050	180	7.6	4.0	7.0	11.8	63	23	17	4.9
NOV											
10...	1115	613	215	7.8	7.0	3.5	13.0	79	25	23	5.3
24...	1115	363	235	8.2	4.0	1.5	15.0	87	25	25	5.9
DEC											
08...	1230	2320	158	7.4	-3.0	.0	--	52	22	15	3.6
20...	1100	395	235	7.9	7.5	2.0	14.4	82	26	24	5.4
JAN											
12...	1230	230	220	8.1	-7.0	.0	15.2	89	32	26	5.9
25...	1200	278	255	7.5	1.0	.0	13.2	95	31	28	6.0
FEB											
09...	1200	195	270	7.7	1.0	.0	15.4	100	36	30	6.3
23...	1130	273	240	7.8	11.0	.0	15.6	86	31	25	5.8
MAR											
09...	1140	768	200	7.6	12.0	6.0	12.7	66	28	18	5.2
23...	1130	7570	155	7.4	7.0	3.0	12.8	50	25	14	3.6
APR											
06...	1130	5180	160	7.5	8.0	6.5	12.4	56	24	15	4.5
20...	1130	546	166	8.8	16.0	16.0	10.2	72	19	21	4.7
MAY											
04...	1115	409	180	7.8	13.0	16.5	8.1	80	27	23	5.6
18...	1050	254	202	7.8	30.0	20.5	7.7	88	25	26	5.6
JUN											
08...	1110	200	229	7.7	16.0	16.0	8.7	99	30	30	5.8
22...	1100	167	238	7.8	24.5	21.0	7.0	98	30	30	5.7
JUL											
06...	1045	110	261	8.4	32.0	26.0	8.3	110	24	35	6.3
20...	1100	169	234	8.1	29.0	27.5	7.9	100	24	32	5.9
AUG											
03...	1145	83	265	8.1	23.5	24.0	7.9	110	24	35	6.3
17...	1115	129	252	7.8	26.5	26.0	--	110	25	33	6.0
31...	1140	104	270	8.0	28.5	25.0	6.8	110	23	35	6.1
SEP											
14...	1145	68	279	7.9	20.5	20.0	7.5	110	25	35	6.6
28...	1130	129	256	7.9	18.0	17.0	8.2	110	20	34	6.1

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
13...	3.9	2.1	55	--	45	2.2	18	7.4	100	343
27...	3.8	2.8	49	--	40	2.0	19	6.4	99	548
NOV										
10...	5.2	1.8	66	--	54	1.7	18	7.8	79	131
24...	5.1	1.4	75	--	62	.8	18	8.4	128	125
DEC										
08...	3.9	3.9	37	--	30	2.3	17	8.2	96	601
20...	5.7	1.6	68	--	56	1.4	20	8.6	134	143
JAN										
12...	7.7	1.7	70	--	57	.9	18	12	135	84
25...	6.6	1.8	78	--	64	3.9	16	11	134	101
FEB										
09...	7.9	1.8	79	--	65	2.5	16	12	117	62
23...	7.2	2.0	67	--	55	1.7	20	12	135	100
MAR										
09...	5.8	2.1	46	0	38	1.8	21	10	131	272
23...	4.3	2.4	30	--	25	1.9	16	6.1	111	2270
APR										
06...	4.0	2.1	39	0	32	2.0	16	6.1	88	1230
20...	4.8	1.6	65	0	53	.2	14	7.4	105	155
MAY										
04...	5.2	1.8	66	0	54	1.7	15	8.4	118	130
18...	5.5	2.1	77	--	63	1.9	14	8.3	106	73
JUN										
08...	6.8	2.5	84	0	69	2.7	13	11	126	68
22...	6.7	4.2	84	--	69	2.1	19	11	151	68
JUL										
06...	7.6	3.3	110	0	90	.7	14	13	196	58
20...	7.6	4.0	97	0	80	1.2	15	12	147	67
AUG										
03...	8.6	3.2	110	0	90	1.4	15	14	185	41
17...	3.9	4.0	100	0	82	2.5	15	12	163	57
31...	8.8	3.9	110	0	90	1.7	16	15	167	47
SEP										
14...	10	3.6	110	0	90	2.2	17	15	178	33
28...	9.0	3.4	110	0	90	2.2	16	14	155	54

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
13...	2.0	2.0	0.23	2.2	0.120	220	40	20	<10	3.9
27...	1.4	1.4	.50	1.9	.100	730	60	30	<10	5.8
NOV										
10...	2.1	2.1	.11	2.2	.070	110	40	<10	<10	5.4
24...	2.0	2.0	.12	2.1	.060	110	30	<10	<10	3.3
DEC										
08...	1.4	1.4	1.7	3.1	.320	4800	380	190	60	4.8
20...	2.3	2.3	.10	2.4	.070	110	60	20	20	2.2
JAN										
12...	2.7	2.7	.08	2.8	.080	50	40	<10	<10	1.1
25...	2.8	2.8	.55	3.4	.120	110	20	40	<10	.80
FEB										
09...	2.9	2.9	.29	3.2	.130	70	20	20	<10	6.4
23...	2.5	2.5	.17	2.7	.090	130	30	20	20	4.6
MAR										
09...	2.3	2.3	.21	2.5	.070	250	60	20	<10	4.0
23...	1.5	1.5	1.3	2.8	.280	8700	60	260	20	13
APR										
06...	1.7	1.7	.70	2.4	.130	2500	80	110	20	--
20...	1.3	1.3	.38	1.7	.050	140	50	20	<10	7.0
MAY										
04...	1.3	1.3	.32	1.6	.060	290	80	20	20	4.3
18...	1.5	1.5	.49	2.0	.090	320	160	40	<10	6.3
JUN										
08...	2.3	2.3	.32	2.6	.130	500	30	50	50	6.5
22...	2.6	2.7	.70	3.4	.240	2500	60	90	20	9.2
JUL										
06...	2.0	2.0	1.1	3.1	.200	2400	60	150	30	7.3
20...	1.1	1.1	1.4	2.5	.210	1300	50	160	30	7.9
AUG										
03...	1.1	1.1	1.2	2.3	.170	2000	30	150	30	5.2
17...	.77	.79	.64	1.4	.190	1800	50	120	40	5.9
31...	1.7	1.7	.76	2.5	.210	1500	<10	140	50	6.7
SEP										
14...	1.6	1.6	.31	1.9	.190	1600	30	130	40	8.2
28...	1.8	1.8	.74	2.5	.290	2700	30	170	20	15

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
12...	1115	136	256	7.9	12.5	12.0	10.3	100	26	30	6.4
26...	1110	128	261	7.7	12.0	11.0	9.6	110	33	32	6.9
NOV											
09...	1115	1700	180	7.5	14.5	12.0	9.3	66	31	18	5.0
30...	1150	732	225	7.6	3.0	3.0	12.2	84	33	24	5.9
DEC											
19...	1215	9280	144	7.1	3.5	1.0	12.8	53	29	15	3.8
JAN											
04...	1115	490	198	--	-2.5	1.0	13.5	77	36	22	5.3
18...	1140	1370	202	7.3	.0	1.0	13.4	72	37	21	4.7
31...	1145	1300	171	7.0	-3.0	1.0	13.6	61	31	17	4.4
FEB											
15...	1145	490	220	7.2	-.5	1.0	13.4	75	34	22	4.9
MAR											
01...	1145	450	260	7.5	.5	2.0	13.4	83	33	24	5.7
15...	1130	11300	140	6.7	9.0	1.0	13.6	36	14	10	2.6
29...	1115	2650	160	7.3	16.0	9.0	10.6	56	--	16	4.0
APR											
12...	1100	680	185	8.7	18.5	13.5	11.6	65	--	19	4.2
26...	1115	470	195	8.7	11.5	12.5	11.0	77	--	23	4.7
MAY											
09...	1100	608	200	7.5	17.5	13.5	8.6	75	--	22	4.9
24...	1115	952	170	7.2	15.0	16.5	8.8	63	7	18	4.4
JUN											
07...	1130	371	205	7.4	20.0	20.5	7.9	78	--	23	5.1
21...	1130	257	220	7.5	25.5	25.0	7.7	83	--	25	5.1
JUL											
12...	1145	335	230	7.6	24.5	23.0	7.9	88	--	26	5.6
26...	1130	183	250	8.3	24.0	24.0	8.3	110	--	33	6.3
AUG											
16...	1130	169	240	7.9	29.5	28.0	6.6	99	24	30	5.9
30...	1130	212	210	8.0	26.5	26.0	6.6	78	--	24	4.5
SEP											
13...	1110	138	160	8.4	16.0	22.5	7.4	100	100	32	5.8
27...	1130	97	280	8.3	19.0	16.5	8.7	110	--	34	6.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
12...	10	4.1	92	0	75	1.8	22	15	--	149	--
26...	9.5	3.7	91	--	75	2.9	22	14	--	163	--
NOV											
09...	5.0	3.5	43	0	35	2.2	24	8.7	--	101	--
30...	6.6	2.6	62	0	51	2.5	27	10	--	123	--
DEC											
19...	3.6	3.1	29	0	24	3.7	18	7.7	--	88	--
JAN											
04...	5.6	1.8	50	--	41	--	18	8.9	--	116	--
18...	9.0	2.2	43	0	35	3.4	16	15	--	114	--
31...	5.8	1.9	36	0	30	5.7	17	9.9	--	93	--
FEB											
15...	7.0	1.6	50	0	41	5.0	17	11	--	114	--
MAR											
01...	9.0	2.9	62	0	51	3.1	18	17	6.6	141	110
15...	4.6	3.1	27	0	22	8.6	14	8.4	4.0	68	60
29...	4.9	2.1	--	--	--	--	--	--	8.1	71	--
APR											
12...	5.4	1.7	--	--	--	--	--	--	1.9	94	--
26...	5.8	1.8	--	--	--	--	--	--	.7	89	--
MAY											
09...	6.6	2.3	--	--	--	--	--	--	4.6	121	--
24...	4.7	1.5	68	0	56	6.8	15	7.5	7.6	100	92
JUN											
07...	5.2	1.9	--	--	--	--	--	--	5.7	180	--
21...	6.1	2.0	--	--	--	--	--	--	5.4	122	--
JUL											
12...	6.5	2.4	--	--	--	--	--	--	8.0	143	--
26...	6.9	2.7	--	--	--	--	--	--	2.2	152	--
AUG											
16...	7.0	3.5	91	0	75	1.8	14	12	7.0	150	120
30...	6.2	5.6	--	--	--	--	--	--	5.0	151	--
SEP											
13...	8.5	3.0	--	--	--	--	--	--	3.5	162	--
27...	8.0	2.8	--	--	--	--	--	--	3.5	166	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	55	1.4	1.4	0.54	1.9	0.220	560	50	50	<10	--
26...	56	1.6	1.6	.53	2.1	.170	940	60	70	30	7.8
NOV											
09...	464	2.0	2.0	.82	2.8	.220	2000	100	110	20	7.4
30...	243	2.7	2.7	.74	3.4	.090	<10	40	20	20	8.8
DEC											
19...	2200	2.1	2.1	1.1	3.2	.250	1000	70	170	30	13
JAN											
04...	153	2.9	2.9	.22	3.1	.060	190	30	20	20	10
18...	422	2.9	2.9	.82	3.7	.160	1800	40	110	20	9.0
31...	326	2.3	2.3	.34	2.6	.040	440	30	20	20	4.5
FEB											
15...	151	2.7	2.7	.25	3.0	.060	140	20	<10	<10	.70
MAR											
01...	171	2.6	2.6	.69	3.3	.110	180	50	30	30	2.4
15...	2070	1.5	1.5	1.9	3.4	.340	10000	50	370	60	6.4
29...	508	2.0	2.0	.31	2.3	.080	1200	--	50	--	3.2
APR											
12...	173	1.8	1.8	--	--	.090	200	--	30	--	5.3
26...	113	1.2	1.2	.42	1.6	.030	150	--	30	--	7.4
MAY											
09...	199	1.4	1.4	.79	2.2	.150	650	--	70	--	5.1
24...	257	1.7	1.7	.50	2.2	.080	810	--	50	20	4.9
JUN											
07...	180	1.7	1.7	.37	2.1	.070	310	--	40	--	5.2
21...	85	1.4	1.4	.12	1.5	.100	340	--	50	--	12
JUL											
12...	129	2.5	2.5	.57	3.1	.120	--	--	--	--	9.2
26...	75	1.2	1.2	.62	1.8	.090	330	--	50	--	11
AUG											
16...	68	1.7	1.7	.44	2.1	.210	1200	30	90	30	4.0
30...	86	1.6	1.6	.96	2.6	.230	1100	--	90	--	6.0
SEP											
13...	60	1.3	1.3	.74	2.0	.180	1100	--	110	--	2.9
27...	43	1.6	1.6	.37	2.0	.150	650	--	100	--	2.7

WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
11...	1120	95	300	8.3	16.5	12.0	10.4	120	120	35	7.9
25...	1130	114	300	8.2	9.0	10.0	10.8	110	110	33	7.0
NOV											
15...	1115	112	285	7.8	13.0	12.5	8.3	110	--	33	6.4
29...	1130	214	300	8.1	4.5	3.5	12.6	110	37	34	7.0
DEC											
20...	1145	242	280	7.7	1.5	2.5	12.5	100	--	30	7.2
JAN											
03...	1130	4310	170	7.3	-7.0	4.0	12.3	54	--	15	4.0
17...	1200	604	255	7.6	.0	.5	13.2	87	--	24	6.5
31...	1145	1300	195	7.4	.5	2.0	13.2	64	--	18	4.7
FEB											
14...	1145	490	235	7.4	-2.0	1.0	13.3	83	--	24	5.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
11...	10	3.1	--	--	--	--	--	--	2.4	166	--
25...	11	3.2	--	--	--	--	--	--	1.6	150	--
NOV											
15...	9.0	2.8	--	--	--	--	--	--	1.4	169	--
29...	11	3.4	94	0	77	1.2	21	20	5.1	162	150
DEC											
20...	8.3	2.6	--	--	--	--	--	--	9.2	149	--
JAN											
03...	4.0	3.5	--	--	--	--	--	--	7.4	104	--
17...	11	2.0	--	--	--	--	--	--	8.6	130	--
31...	6.4	1.8	--	--	--	--	--	--	8.7	106	--
FEB											
14...	6.6	1.7	--	--	--	--	--	--	9.7	128	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01641810 - MONOCACY R NR WALKERSVILLE, MD (continued)
WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
11...	43	1.7	1.7	0.32	2.0	0.140	340	--	30	--	3.2
25...	46	1.6	1.6	.55	2.2	.240	270	--	30	--	3.4
NOV											
15...	51	1.4	1.4	.32	1.7	.120	340	--	40	--	8.7
29...	94	1.9	1.9	.39	2.3	.230	130	50	20	<10	3.6
DEC											
20...	97	3.5	3.5	.27	3.8	.120	140	--	20	--	2.2
JAN											
03...	1210	2.3	2.3	1.1	3.4	.280	3700	--	170	--	7.8
17...	212	2.7	2.7	.70	3.4	.090	210	--	20	--	2.8
31...	372	2.5	2.5	.30	2.8	.070	190	--	20	--	2.2
FEB											
14...	169	3.0	3.0	.17	3.2	.140	130	--	20	--	4.5

WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
AUG										
19...	1215	124	265	8.8	22.5	12	9.0	110	22	34

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
AUG										
19...	6.6	9.4	2.4	90	0.3	14	14	0.10	3.4	153

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
AUG										
19...	140	51	1.3	0.130	0.110	510	16	70	2	3.3

WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JAN												
28...	1430	271	232	8.2	6.5	1.5	10	--	88	27	25	6.1
JUL												
19...	1600	138	253	8.5	32.0	29.0	20	9.3	110	9	33	6.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JAN											
28...	9.0	2.4	61	53	0.7	22	18	<0.10	6.5	134	130
JUL											
19...	6.8	2.6	100	87	.6	18	15	<.10	2.8	173	140

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN											
28...	98	2.6	--	--	0.110	0.100	150	31	10	9	3.8
JUL											
19...	64	1.9	0.40	2.3	.110	.080	150	15	30	4	4.1

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD
WATER YEAR OCTOBER 1961 TO SEPTEMBER 1962

DATE	STREAM-FLOW INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)
JAN 07...	6750	140	6.3	10	56	20	16	3.8	6.4	44	36

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JAN 07...	35	21	7.0	0.10	6.4	91	63	1660	0.02	80

WATER YEAR OCTOBER 1962 TO SEPTEMBER 1963

DATE	TIME	STREAM-FLOW INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)
AUG 28...	1115	72	292	7.1	22.0	7	120	15	37	6.7	130	0

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
AUG 28...	105	16	14	16	0.20	4.9	176	160	34	1.5

WATER YEAR OCTOBER 1963 TO SEPTEMBER 1964

DATE	STREAM FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)
OCT 14...	50	300	7.7	15.5	--	130	28	40	7.1	8.8	4.6	120
MAR 19...	1000	176	6.8	--	--	67	28	20	4.1	4.4	1.5	48
JUN 23...	183	213	7.3	26.5	4	98	18	31	5.0	5.3	2.3	98
SEP 16...	65	336	7.2	16.5	--	150	24	46	7.5	11	3.9	150

DATE	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 14...	101	3.9	19	13	0.20	1.9	176	170	24	2.9	380	110
MAR 19...	39	12	19	6.7	.10	7.5	109	95	294	1.9	220	30
JUN 23...	80	7.8	13	7.4	.10	4.2	138	120	68	1.5	160	20
SEP 16...	122	15	19	18	.20	4.7	197	190	35	2.5	160	0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1964 TO SEPTEMBER 1965

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC								
16...	1015	254	229	7.4	1.0	--	96	32
FEB								
08...	1710	10700	100	7.1	--	--	40	25
MAR								
04...	1755	750	172	6.8	8.5	7	70	24
05...	1900	6000	114	7.2	4.5	--	44	22
APR								
03...	--	926	170	6.9	--	5	68	21
MAY								
03...	2005	460	175	6.7	23.0	--	74	14
JUN								
02...	2015	292	212	6.7	23.0	--	92	18
AUG								
02...	2100	105	271	7.3	24.0	--	120	17
09...	--	67	318	7.8	--	--	140	13
SEP								
01...	1720	63	310	7.1	24.0	--	130	21

DATE	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 FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DEC									
16...	29	5.7	7.4	3.3	78	64	4.9	26	11
FEB									
08...	13	1.8	3.1	3.4	18	15	2.3	15	7.0
MAR									
04...	20	4.9	5.5	.80	56	46	14	20	8.0
05...	13	2.8	3.3	2.8	27	22	2.7	17	5.7
APR									
03...	20	4.4	4.9	1.0	57	47	11	18	7.4
MAY									
03...	22	4.6	5.6	1.2	73	60	23	16	7.4
JUN									
02...	28	5.4	6.1	2.0	90	74	29	15	8.8
AUG									
02...	40	4.6	7.2	3.2	120	102	9.9	16	12
09...	43	6.9	--	--	150	123	3.8	16	15
SEP									
01...	40	6.8	12	4.9	130	107	17	21	16

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
DEC								
16...	0.10	8.6	136	140	93	1.9	160	0
FEB								
08...	.20	5.1	87	66	2510	1.9	--	--
MAR								
04...	.10	8.2	105	100	213	2.1	--	--
05...	.10	6.0	93	73	1510	2.0	--	--
APR								
03...	.00	6.0	105	98	263	1.9	--	--
MAY								
03...	.10	1.3	107	94	133	.05	--	--
JUN								
02...	.20	4.4	146	120	115	1.1	--	--
AUG								
02...	.20	.8	170	150	48	1.4	--	--
09...	--	--	180	--	33	.18	--	--
SEP								
01...	.20	5.2	183	180	31	1.2	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT								
02...	0900	171	232	7.3	16.5	--	93	18
NOV								
01...	1710	78	297	7.2	10.5	5	120	23
DEC								
02...	1825	92	282	6.9	6.5	7	120	23
JAN								
02...	1725	150	265	6.6	5.5	7	110	22
FEB								
14...	1140	13400	121	6.1	1.5	12	44	29
MAR								
05...	1640	2540	174	6.4	9.0	--	71	37
APR								
07...	1820	242	214	6.6	10.5	5	90	20
MAY								
02...	1710	2540	173	6.7	13.0	13	74	31
AUG								
01...	1910	274	357	7.2	26.5	5	150	22
SEP								
04...	1415	24	463	6.9	25.5	5	170	28

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT									
02...	29	5.0	7.5	4.8	92	0	75	7.3	16
NOV									
01...	41	4.2	8.5	3.8	120	0	97	12	20
DEC									
02...	38	5.6	9.0	3.0	120	0	95	23	18
JAN									
02...	37	4.5	8.1	3.0	110	0	89	43	19
FEB									
14...	14	2.3	2.2	3.3	20	0	16	25	18
MAR									
05...	20	5.2	4.7	2.3	42	0	34	27	27
APR									
07...	28	4.9	6.1	1.7	85	0	70	34	18
MAY									
02...	21	5.2	4.3	2.3	52	0	43	16	27
AUG									
01...	46	7.7	14	3.5	150	0	125	15	22
SEP									
04...	53	9.3	26	7.4	170	0	143	35	25

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT								
02...	12	0.10	5.2	137	130	63	1.6	10
NOV								
01...	14	.20	2.6	166	160	35	1.6	0
DEC								
02...	14	.10	1.6	155	150	39	1.1	0
JAN								
02...	14	.10	1.7	145	140	59	.38	0
FEB								
14...	6.3	.10	5.0	78	69	2820	1.9	0
MAR								
05...	8.0	.20	8.1	130	110	892	2.3	0
APR								
07...	12	.10	1.6	124	110	81	.05	0
MAY								
02...	7.0	.10	7.2	123	110	844	1.3	0
AUG								
01...	18	.20	3.1	202	190	149	1.2	10
SEP								
04...	35	.30	8.4	274	260	18	2.9	0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT								
02...	2100	2130	228	6.6	12.0	20	88	39
NOV								
02...	1310	168	217	7.2	.5	6	96	22
DEC								
04...	--	292	209	6.7	--	0	87	35
JAN								
02...	--	932	217	6.8	--	0	85	40
FEB								
03...	--	1630	117	6.8	--	0	50	17
MAR								
02...	--	450	204	7.9	--	5	88	31
APR								
02...	--	823	180	7.9	--	3	79	26
JUN								
06...	--	296	191	7.0	--	2	83	18
JUL								
06...	--	328	208	7.3	--	7	83	18
AUG								
02...	--	296	223	6.8	--	3	87	21
SEP								
04...	--	260	239	7.8	--	5	110	27

DATE	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 FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
02...	25	6.3	5.9	3.6	60	49	24	33	9.9
NOV									
02...	30	5.0	5.4	2.0	90	74	9.0	16	9.9
DEC									
04...	25	6.0	5.3	2.0	64	52	20	26	8.3
JAN									
02...	24	6.1	6.4	1.9	55	45	14	28	12
FEB									
03...	16	2.4	2.1	.70	40	33	10	14	3.5
MAR									
02...	27	5.0	5.6	1.3	69	57	1.4	20	9.2
APR									
02...	23	5.2	4.7	1.3	65	53	1.3	19	8.0
JUN									
06...	26	4.5	5.6	1.8	80	66	13	14	9.0
JUL									
06...	26	4.5	7.0	3.9	81	66	6.5	17	13
AUG									
02...	26	5.4	6.7	4.0	80	66	20	20	10
SEP									
04...	32	6.5	6.0	2.8	97	80	2.4	19	9.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT								
02...	0.20	9.1	149	130	857	2.5	20	0
NOV								
02...	.10	2.0	122	120	55	1.2	0	20
DEC								
04...	.20	9.8	142	120	112	2.3	0	0
JAN								
02...	.20	8.6	142	130	357	2.7	--	--
FEB								
03...	.20	9.0	76	72	334	1.1	--	--
MAR								
02...	.00	7.1	128	120	156	2.7	--	--
APR								
02...	.00	4.9	113	110	251	2.0	--	--
JUN								
06...	.10	1.6	104	110	83	.72	--	--
JUL								
06...	.10	.9	116	110	103	.59	--	--
AUG								
02...	.30	7.3	132	130	105	1.7	--	--
SEP								
04...	.20	3.9	138	140	97	1.9	0	0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT									
01...	1745	235	250	7.2	21.0	5	110	26	33
NOV									
04...	2100	872	188	7.9	11.0	--	79	25	--
JAN									
15...	1940	4650	145	6.7	.0	10	50	24	14
FEB									
04...	1510	1670	165	7.1	4.0	8	76	37	22
MAR									
05...	1810	232	185	7.6	--	3	77	21	23
APR									
02...	2005	862	185	8.1	12.0	3	81	26	24
MAY									
02...	0655	428	174	9.1	12.0	5	74	9	23
JUN									
01...	0730	3500	167	7.3	17.0	8	70	31	20
JUL									
01...	0730	412	212	7.5	29.0	15	90	24	27
AUG									
01...	1750	102	265	7.6	28.0	6	120	17	38
SEP									
03...	2145	85	312	8.1	23.0	2	140	22	44

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT									
01...	5.7	7.8	4.0	98	0	80	9.8	20	12
NOV									
04...	--	--	--	66	0	54	1.3	--	10
JAN									
15...	3.6	5.7	2.8	32	0	26	10	18	11
FEB									
04...	5.1	4.7	2.0	48	0	39	6.1	25	10
MAR									
05...	4.8	5.7	1.6	68	0	56	2.7	16	8.8
APR									
02...	5.0	5.0	1.6	67	0	55	.8	18	8.2
MAY									
02...	4.1	5.3	1.6	61	9	65	.0	14	8.1
JUN									
01...	4.9	4.3	1.8	48	0	39	3.8	23	6.9
JUL									
01...	5.6	6.6	3.5	82	0	67	4.1	18	9.9
AUG									
01...	6.4	8.6	3.2	130	0	104	5.1	17	12
SEP									
03...	6.6	9.7	3.7	140	0	115	1.8	18	15

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT								
01...	0.20	5.8	150	92	2.0	--	--	0
NOV								
04...	--	--	--	--	--	--	--	--
JAN								
15...	.20	6.5	86	1080	1.9	1200	200	--
FEB								
04...	.10	8.8	110	493	1.8	170	30	--
MAR								
05...	.20	.0	100	64	1.8	130	0	--
APR								
02...	.10	.0	100	234	1.3	180	10	--
MAY								
02...	.10	3.3	110	125	.05	--	--	--
JUN								
01...	.10	8.8	100	953	1.7	--	--	--
JUL								
01...	.20	9.6	130	144	1.9	--	--	--
AUG								
01...	.20	2.4	150	42	.75	--	--	--
SEP								
03...	.20	2.9	180	40	1.7	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
01...	1930	86	290	7.6	19.0	2	--	120	21	39	6.5	9.4
NOV												
01...	1650	128	280	7.8	11.0	5	--	120	23	36	6.5	8.6
DEC												
02...	1945	512	202	8.0	7.0	0	--	83	32	25	5.1	5.4
FEB												
02...	1110	990	216	7.5	3.0	15	--	80	41	23	5.5	7.4
MAR												
02...	1200	691	235	7.8	3.0	5	--	87	37	25	5.9	10
APR												
01...	1315	600	193	7.4	9.0	0	--	77	30	22	5.3	5.6
MAY												
04...	1205	324	195	--	21.0	--	--	85	19	25	5.4	5.9
JUN												
05...	1720	220	223	--	24.0	15	--	85	10	28	3.7	6.7
JUL												
01...	2000	91	263	8.5	27.0	10	--	100	12	32	6.0	8.6
17...	1330	97	250	8.3	29.0	--	10.6	--	--	--	--	--
AUG												
02...	1800	205	221	7.6	26.0	10	--	91	22	27	5.8	6.9
12...	1649	203	290	7.5	23.0	--	8.6	--	--	--	--	--
28...	1320	106	290	7.5	23.0	--	8.6	--	--	--	--	--
SEP												
24...	1000	174	260	6.8	17.0	--	6.2	--	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
OCT												
01...	3.3	130	0	103	5.0	19	14	0.20	1.8	160	38	2.2
NOV												
01...	3.8	110	0	94	2.9	19	15	.20	5.3	160	56	2.3
DEC												
02...	2.0	64	0	52	1.0	20	9.1	.10	7.2	110	159	2.1
FEB												
02...	4.0	48	0	39	2.4	26	15	.20	6.5	120	329	2.7
MAR												
02...	2.6	61	0	50	1.5	26	20	.10	.0	130	237	1.7
APR												
01...	1.7	57	0	47	3.6	21	9.7	.10	6.2	110	174	1.8
MAY												
04...	1.7	--	--	66	--	16	9.1	.10	.5	100	92	.38
JUN												
05...	3.0	--	--	75	--	13	12	.20	4.4	120	69	.05
JUL												
01...	3.0	110	3	93	.5	17	13	.20	.3	140	35	.54
17...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
02...	3.9	84	0	69	3.4	20	11	.20	3.6	130	69	1.2
12...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
24...	--	--	--	--	--	--	--	--	--	--	--	--

WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
08...	0900	220	262	6.6	17.0	10	6.6	110	27	--
NOV										
20...	1417	2700	200	7.4	6.5	--	10.2	--	--	--
DEC										
11...	1424	10500	170	7.4	4.0	--	12.1	--	--	--
JAN										
03...	1445	1450	221	7.3	2.0	4	--	88	42	25
07...	1440	735	220	7.5	.5	--	13.0	--	--	--
FEB										
03...	1830	9770	160	7.8	.0	5	13.0	33	16	9.6
MAR										
03...	1800	779	199	7.4	5.0	4	--	79	29	23
12...	1415	768	200	7.8	5.5	--	11.2	--	--	--
APR										
02...	1800	11200	146	6.6	6.0	20	--	56	29	16
20...	1420	1920	190	7.6	10.5	--	9.8	--	--	--
MAY										
03...	2030	2190	171	7.3	15.0	5	--	70	22	20
13...	1543	595	210	7.4	22.5	--	8.0	--	--	--
19...	1413	660	220	7.2	18.0	--	8.2	--	--	--
JUN										
04...	1500	306	240	7.4	23.0	--	6.7	--	--	--
JUL										
02...	1810	392	244	7.8	26.0	0	--	97	27	30
29...	1420	317	240	8.1	27.5	--	8.7	--	--	--
AUG										
02...	2000	424	183	7.9	26.0	15	--	82	17	25
17...	1400	238	270	7.9	26.5	--	8.3	--	--	--
SEP										
02...	1815	217	275	8.2	23.0	5	--	120	23	36
30...	1155	169	270	7.6	15.0	--	8.0	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT										
08...	--	--	--	97	0	80	6.1	23	12	0.20
NOV										
20...	--	--	--	--	--	--	--	--	--	--
DEC										
11...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	6.3	7.0	3.0	56	0	46	4.5	30	13	.20
07...	--	--	--	--	--	--	--	--	--	--
FEB										
03...	2.2	2.1	1.7	21	0	17	1.1	13	4.2	.10
04...	--	--	--	--	--	--	--	--	--	--
MAR										
03...	5.3	5.6	1.5	61	0	50	3.9	19	9.5	.10
12...	--	--	--	--	--	--	--	--	--	--
APR										
02...	4.0	5.1	3.0	34	0	28	14	23	7.0	.20
20...	--	--	--	--	--	--	--	--	--	--
MAY										
03...	4.8	4.5	2.4	59	0	48	4.7	19	6.8	.10
13...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
02...	5.4	5.2	2.7	85	0	70	2.1	20	11	.20
29...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	4.8	4.9	3.3	79	0	65	1.6	19	7.6	.20
17...	--	--	--	--	--	--	--	--	--	--
SEP										
02...	6.2	7.6	3.6	110	0	93	1.1	17	13	.20
30...	--	--	--	--	--	--	--	--	--	--

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	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)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
OCT										
08...	--	157	--	93	--	0.300	--	60	--	420
NOV										
20...	--	--	--	--	--	--	--	--	--	--
DEC										
11...	--	--	--	--	--	--	--	--	--	--
JAN										
03...	7.8	--	130	512	2.5	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
FEB										
03...	1.7	--	45	1190	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--
MAR										
03...	5.6	--	110	231	2.3	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
APR										
02...	6.5	--	82	2480	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
MAY										
03...	.7	--	87	516	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
JUN										
04...	--	--	--	--	--	--	--	--	--	--
JUL										
02...	7.1	--	130	134	.79	--	650	--	80	--
29...	--	--	--	--	--	--	--	--	--	--
AUG										
02...	.6	--	100	119	--	--	110	--	40	--
17...	--	--	--	--	--	--	--	--	--	--
SEP										
02...	2.1	--	140	83	--	--	120	--	40	--
30...	--	--	--	--	--	--	--	--	--	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
01...	1815	139	230	7.8	18.0	5	--	88	18	25
20...	1322	127	280	7.6	13.0	5	8.7	130	23	--
NOV										
02...	1720	432	241	7.8	13.0	15	--	97	33	28
24...	1308	762	215	7.4	3.0	--	12.0	--	--	--
30...	1000	555	225	7.4	6.5	--	11.6	--	--	--
DEC										
22...	0939	1190	210	7.0	3.0	--	12.0	--	--	--
JAN										
04...	1745	1130	222	7.9	2.0	3	--	76	30	22
20...	1409	650	250	7.4	.0	--	14.0	--	--	--
FEB										
08...	1323	5180	190	7.0	.0	--	12.6	--	--	--
MAR										
08...	1301	2840	175	7.4	3.0	15	12.4	65	31	18
APR										
07...	1300	1120	196	7.9	7.0	5	13.0	77	26	23
MAY										
06...	1315	436	245	7.7	11.5	0	8.6	92	23	28
JUN										
16...	1436	889	175	7.2	17.5	9	8.0	71	24	21
JUL										
14...	1410	220	245	7.9	25.0	15	8.0	110	24	33
AUG										
18...	1535	264	235	7.6	23.5	10	7.5	100	24	32
SEP										
28...	1350	420	270	7.5	17.5	5	8.5	110	29	33

DATE	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 FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
01...	6.2	8.6	3.6	85	0	70	2.1	16	15	0.30
20...	--	--	--	130	0	107	3.3	21	15	.10
NOV										
02...	6.5	7.4	4.2	78	0	64	2.0	29	13	.20
24...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
DEC										
22...	--	--	--	--	--	--	--	--	--	--
JAN										
04...	5.0	12	1.8	56	0	46	1.1	21	20	.10
20...	--	--	--	--	--	--	--	--	--	--
FEB										
08...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	4.8	5.4	2.0	42	0	34	3.3	24	10	.10
APR										
07...	4.8	6.0	2.2	62	0	51	2.0	18	12	.20
MAY										
06...	5.4	7.1	2.0	84	0	69	8.4	17	12	.10
JUN										
16...	4.4	4.9	3.2	57	0	47	11	18	7.8	.20
JUL										
14...	5.8	7.0	2.7	100	0	82	5.0	17	12	.20
AUG										
18...	5.1	5.9	3.6	94	0	77	3.8	17	13	.10
SEP										
28...	6.1	7.1	3.0	97	0	79	3.1	21	12	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT									
01...	4.6	--	120	45	--	70	--	20	--
20...	--	180	--	62	0.440	--	50	--	40
NOV									
02...	6.6	--	130	155	--	190	--	20	--
24...	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
DEC									
22...	--	--	--	--	--	--	--	--	--
JAN									
04...	8.0	--	120	358	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
FEB									
08...	--	--	--	--	--	--	--	--	--
MAR									
08...	7.6	--	93	710	--	220	--	20	--
APR									
07...	2.7	--	99	301	--	160	--	20	--
MAY									
06...	1.8	--	110	135	--	250	--	80	--
JUN									
16...	8.3	--	96	230	--	860	--	220	--
JUL									
14...	4.6	--	130	78	--	140	--	60	--
AUG									
18...	5.0	--	130	91	--	140	--	40	--
SEP									
28...	8.8	153	140	174	.350	--	20	--	41

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
26...	1436	7590	175	6.9	15.0	35	8.1	63	25	18	4.5
NOV											
18...	1443	440	245	8.1	8.5	0	11.8	99	26	29	6.5
DEC											
14...	1320	1340	210	6.9	5.5	3	11.6	77	29	22	5.4
JAN											
10...	1330	2100	190	7.2	4.0	5	12.0	74	29	21	5.2
FEB											
10...	1300	750	200	7.0	1.5	3	13.2	80	29	23	5.6
MAR											
15...	1355	2340	185	7.2	6.0	3	11.0	71	29	20	5.0
APR											
05...	1345	861	205	7.6	8.0	0	13.0	79	26	23	5.2
MAY											
09...	1430	1930	185	7.1	14.0	2	8.9	71	22	20	5.0
JUN											
12...	1505	620	220	7.5	19.0	--	9.2	93	28	28	5.6
23...	0900	74000	87	6.8	--	15	--	31	15	8.6	2.2
JUL											
20...	1330	878	225	7.6	25.0	--	6.7	89	23	27	5.3
AUG											
29...	1520	310	245	8.1	22.5	--	11.2	110	26	35	5.8
SEP											
19...	1511	190	295	7.5	20.5	4	5.2	130	30	42	6.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
26...	4.3	4.8	48	0	39	--	22	8.7	0.20	8.4
NOV										
18...	6.4	2.0	89	0	73	--	20	6.6	.10	5.5
DEC										
14...	5.0	2.0	59	0	48	--	20	7.4	.10	9.1
JAN										
10...	5.0	2.5	55	0	45	--	21	8.0	.10	6.5
FEB										
10...	5.7	1.8	63	0	52	--	21	10	.10	9.2
MAR										
15...	5.1	2.1	51	0	42	--	21	8.5	.10	7.6
APR										
05...	5.6	1.8	65	0	53	--	17	9.6	.10	4.4
MAY										
09...	5.0	2.2	60	0	49	--	17	7.6	.10	6.5
JUN										
12...	5.4	1.8	79	0	65	--	15	9.5	.10	8.3
23...	1.8	2.6	19	0	16	4.8	9.7	4.0	.50	4.2
JUL										
20...	7.4	3.0	81	0	66	--	15	9.5	.10	6.9
AUG										
29...	6.9	2.7	100	0	85	--	15	12	.10	2.9
SEP										
19...	7.6	2.6	120	0	101	--	16	13	.10	5.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
26...	--	100	2100	1.8	--	--	2400	--	530	--
NOV										
18...	--	130	156	2.5	--	--	160	--	0	--
DEC										
14...	--	110	402	2.5	--	--	160	--	10	--
JAN										
10...	--	110	604	2.3	--	--	380	--	50	--
FEB										
10...	--	120	243	2.9	--	--	130	--	10	--
MAR										
15...	--	100	653	2.0	--	--	180	--	90	--
APR										
05...	--	110	249	1.9	--	--	130	--	60	--
MAY										
09...	--	100	523	1.7	--	--	260	--	130	--
JUN										
12...	--	120	208	2.7	--	--	430	--	70	--
23...	70	50	14000	1.6	--	0.090	--	--	--	--
JUL										
20...	--	120	294	2.3	--	--	440	--	70	--
AUG										
29...	--	140	118	2.1	--	--	130	--	50	--
SEP										
19...	167	170	86	2.9	0.330	--	--	30	--	40

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
19...	1200	199	295	7.8	10.5	--	8.4	130	33	42	6.5
NOV											
17...	0946	834	210	7.4	5.0	--	11.5	88	39	26	5.7
DEC											
06...	1015	972	235	7.4	6.0	3	11.7	94	40	28	5.9
JAN											
10...	1305	984	215	7.5	.0	--	14.0	87	35	26	5.3
FEB											
08...	1245	3340	185	7.4	5.0	--	12.7	70	32	20	4.8
MAR											
13...	1330	1340	200	7.4	10.0	3	12.0	77	28	22	5.3
APR											
04...	1330	2500	165	7.5	9.5	--	11.6	69	25	20	4.6
MAY											
09...	1345	1270	180	7.2	--	--	--	82	27	25	4.8
JUN											
06...	1315	1640	195	7.5	22.0	70	7.3	77	21	23	4.8
JUL											
11...	1250	412	250	7.6	25.0	--	6.4	110	27	33	6.0
AUG											
08...	1320	196	265	8.8	26.0	--	13.5	120	28	38	6.5
SEP											
14...	1430	1080	215	7.3	20.0	--	6.5	76	23	24	4.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
19...	8.8	2.8	120	0	99	6.1	16	15	0.70	2.1
NOV										
17...	5.8	4.0	61	0	50	3.1	28	10	.10	8.3
DEC										
06...	5.9	2.3	66	0	54	2.7	27	12	.10	8.4
JAN										
10...	4.8	1.5	63	0	52	8.0	17	8.5	.10	8.6
FEB										
08...	5.2	2.1	46	0	38	7.3	21	8.5	.10	7.6
MAR										
13...	5.0	1.6	60	0	49	1.0	20	9.0	<.10	6.7
APR										
04...	4.5	1.8	54	0	44	1.7	19	7.0	.10	7.5
MAY										
09...	4.6	1.6	67	0	55	6.7	15	7.7	.20	5.8
JUN										
06...	4.4	2.6	68	0	56	4.3	20	7.9	.30	7.0
JUL										
11...	5.7	2.6	98	0	80	4.9	15	11	.20	7.4
AUG										
08...	7.1	2.9	110	0	94	12	13	13	.30	.6
SEP										
14...	6.6	4.8	66	0	54	10	14	11	.40	3.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT										
19...	--	170	90	2.9	--	--	140	--	40	--
NOV										
17...	--	130	291	2.6	--	--	300	--	50	--
DEC										
06...	141	130	370	2.8	--	0.120	--	60	--	20
JAN										
10...	--	120	310	3.1	--	--	230	--	40	--
FEB										
08...	--	100	929	2.5	--	--	670	--	70	--
MAR										
13...	114	110	412	2.2	--	.094	--	130	--	20
APR										
04...	--	100	677	2.1	--	--	1100	--	200	--
MAY										
09...	--	110	370	2.3	--	--	350	--	20	--
JUN										
06...	123	110	545	2.1	2.1	.270	--	60	--	30
JUL										
11...	--	140	157	2.8	--	--	890	--	110	--
AUG										
08...	--	150	79	2.7	--	--	670	--	160	--
SEP										
14...	129	110	376	1.6	1.6	.300	14000	--	1300	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
17...	1415	169	275	7.7	--	15.0	8.1	120	24	37	7.1
NOV											
07...	1340	686	190	7.6	--	9.0	10.4	83	16	24	5.7
DEC											
05...	1540	268	285	7.4	--	8.5	11.4	110	23	34	6.4
JAN											
23...	1405	2900	165	7.2	--	4.0	12.9	63	30	18	4.5
FEB											
27...	1500	570	235	7.7	--	3.0	14.2	89	27	--	--
MAR											
15...	1030	485	233	7.9	6.5	5.0	12.6	85	21	--	--
27...	1220	625	207	7.7	8.0	6.5	12.4	79	22	--	--
APR											
09...	1255	4960	168	7.4	5.5	8.0	11.2	63	22	--	--
24...	1220	1360	182	7.5	10.0	14.0	9.0	--	--	--	--
MAY											
08...	1230	498	225	7.9	15.5	12.5	11.3	--	--	--	--
22...	1310	600	205	7.5	31.0	20.0	8.6	--	--	--	--
JUN											
05...	1215	454	235	7.2	28.5	20.0	8.1	--	--	--	--
20...	1245	348	240	7.4	29.0	23.0	6.8	--	--	--	--
JUL											
01...	1315	444	253	8.0	28.5	22.0	7.5	--	--	--	--
22...	1230	130	310	7.7	27.0	23.0	7.3	--	--	--	--
AUG											
05...	1145	187	295	7.5	24.0	24.0	6.1	--	--	--	--
12...	1315	115	305	7.6	26.0	23.0	7.2	--	--	--	--
26...	1345	139	320	7.7	30.0	25.0	7.0	--	--	--	--
SEP											
10...	1410	271	280	--	25.0	21.0	7.3	--	--	--	--
25...	1045	202	320	7.8	15.0	13.5	8.6	--	--	--	--

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
17...	8.7	3.6	120	0	98	3.8	17	13	0.30	2.8	--
NOV											
07...	6.5	4.2	83	0	68	3.3	12	12	.40	4.1	--
DEC											
05...	8.7	2.7	110	0	88	6.8	22	14	.30	3.4	175
JAN											
23...	4.3	2.1	42	0	34	4.2	24	7.2	.20	6.7	--
FEB											
27...	--	--	75	0	62	2.4	21	13	--	--	--
MAR											
15...	--	--	79	0	65	1.6	21	12	--	--	120
27...	--	--	70	0	57	2.2	20	9.3	--	--	117
APR											
09...	--	--	50	0	41	3.2	19	6.6	--	--	--
24...	--	--	60	0	49	3.0	16	7.5	--	--	99
MAY											
08...	--	--	82	0	67	1.6	14	10	--	--	128
22...	--	--	74	0	61	3.7	14	8.1	--	--	159
JUN											
05...	--	--	78	0	64	7.8	15	10	--	--	129
20...	--	--	92	--	75	5.8	14	10	--	--	150
JUL											
01...	--	--	87	--	71	1.4	17	12	--	--	159
22...	--	--	120	--	96	3.7	18	15	--	--	187
AUG											
05...	--	--	110	--	94	5.7	18	14	--	--	189
12...	--	--	110	--	93	4.5	19	16	--	--	196
26...	--	--	110	--	89	3.4	17	15	--	--	181
SEP											
10...	--	--	91	--	75	--	21	14	--	--	165
25...	--	--	110	--	91	2.8	13	14	--	--	185

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
17...	150	68	2.5	2.5	--	--	--	--	450	100	--
NOV											
07...	110	203	1.7	1.7	--	--	--	--	990	220	--
DEC											
05...	140	127	2.1	2.1	--	--	0.340	--	260	70	--
JAN											
23...	88	686	2.4	2.4	--	--	--	--	1400	110	--
FEB											
27...	--	--	2.4	2.4	0.52	2.9	.260	--	470	40	3.3
MAR											
15...	--	157	2.0	2.0	.53	2.5	.210	--	150	20	3.5
27...	99	197	1.9	1.9	.35	2.3	.140	--	240	30	3.2
APR											
09...	79	1060	1.7	1.7	.92	2.6	.230	--	1400	150	7.0
24...	--	364	1.7	1.7	.62	2.3	.130	--	1200	140	5.3
MAY											
08...	--	172	2.0	2.0	.42	2.4	.140	--	140	40	2.9
22...	--	258	1.9	1.9	.97	2.9	.160	--	480	60	3.8
JUN											
05...	--	158	2.1	2.1	.66	2.8	.250	--	1100	70	4.0
20...	--	141	--	--	--	--	--	--	1100	90	5.0
JUL											
01...	--	191	2.1	2.2	.64	2.8	.320	--	1600	110	6.5
22...	--	66	2.0	2.1	.26	2.4	.330	0.310	380	100	2.7
AUG											
05...	--	95	--	--	.23	--	.390	--	550	150	4.1
12...	--	61	2.1	2.2	.88	3.1	.420	--	870	170	3.4
26...	--	68	1.6	1.6	.42	2.0	.140	--	600	150	6.3
SEP											
10...	--	121	1.9	1.9	.76	2.7	.410	--	1200	110	7.3
25...	--	101	2.4	2.4	.76	3.2	.390	--	480	110	5.0

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
09...	1300	139	340	8.0	13.5	13.0	--	9.6	--	--	--
23...	1315	175	345	7.6	15.0	9.0	--	10.4	--	--	--
NOV											
06...	1400	163	310	7.4	14.5	14.0	--	7.2	--	--	--
20...	1000	217	300	7.8	10.5	7.0	--	10.7	--	--	--
DEC											
04...	1215	1010	230	7.6	5.0	3.0	--	12.4	--	--	--
17...	1400	5850	160	7.3	6.5	5.0	--	12.0	--	--	--
JAN											
08...	1430	532	290	7.5	4.0	1.5	--	12.8	--	--	--
21...	1415	967	240	7.3	.0	.0	--	14.2	--	--	--
FEB											
03...	1330	1020	265	7.5	1.5	2.0	--	14.2	--	--	--
18...	1315	1480	255	7.5	7.0	3.0	--	13.8	--	--	--
MAR											
03...	1445	1140	205	7.4	1.0	3.0	--	14.2	--	--	--
17...	1430	3460	200	7.4	12.0	5.0	--	12.4	--	--	--
31...	1330	2120	200	7.3	7.0	7.0	--	11.9	--	--	--
APR											
21...	1400	472	225	8.6	14.0	12.0	--	12.2	--	--	--
MAY											
05...	1345	4080	155	7.1	13.0	12.5	--	10.0	--	--	--
19...	1330	1220	200	7.6	25.5	18.0	--	9.2	--	--	--
JUN											
10...	0930	1220	220	7.5	20.5	17.0	--	8.4	--	--	--
23...	1315	605	240	7.8	33.0	24.0	--	8.4	--	--	--
JUL											
15...	1300	1910	215	7.5	27.5	21.0	--	7.6	--	--	--
28...	1320	408	285	7.8	31.0	24.0	--	7.7	--	--	--
AUG											
12...	1230	258	295	7.7	27.0	24.0	--	6.8	--	--	--
25...	1230	252	290	9.2	32.0	24.0	--	14.8	--	--	--
SEP											
09...	1330	340	295	7.8	21.5	22.0	--	7.1	--	--	--
22...	1300	1260	180	7.6	22.5	18.0	--	8.2	--	--	--
26...	1500	54400	88	7.1	--	--	60	--	39	5	12

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT											
09...	--	--	--	120	--	94	1.8	18	15	--	--
23...	--	--	--	120	--	100	4.9	23	17	--	--
NOV											
06...	--	--	--	130	--	106	8.2	18	14	--	--
20...	--	--	--	110	--	86	2.6	21	14	--	--
DEC											
04...	--	--	--	55	--	45	2.2	24	11	--	--
17...	--	--	--	33	--	27	2.6	19	6.1	--	--
JAN											
08...	--	--	--	80	--	66	4.0	22	13	--	--
21...	--	--	--	58	--	48	4.6	21	14	--	--
FEB											
03...	--	--	--	60	--	49	3.0	24	16	--	--
18...	--	--	--	65	--	53	3.3	19	12	--	--
MAR											
03...	--	--	--	58	--	48	3.7	19	9.5	--	--
17...	--	--	--	47	--	39	3.0	22	10	--	--
31...	--	--	--	54	--	44	4.3	17	9.7	--	--
APR											
21...	--	--	--	77	--	63	.3	15	11	--	--
MAY											
05...	--	--	--	44	--	36	5.6	15	5.2	--	--
19...	--	--	--	68	--	56	2.7	17	8.5	--	--
JUN											
10...	--	--	--	77	--	63	3.9	17	8.2	--	--
23...	--	--	--	93	--	76	2.3	14	11	--	--
JUL											
15...	--	--	--	68	--	56	3.4	18	10	--	--
28...	--	--	--	110	--	90	2.8	17	10	--	--
AUG											
12...	--	--	--	120	--	95	3.7	15	12	--	--
25...	--	--	--	130	--	103	.1	16	11	--	--
SEP											
09...	--	--	--	100	--	84	2.6	18	12	--	--
22...	--	--	--	58	--	48	2.3	17	5.4	--	--
26...	2.1	1.6	2.8	41	0	34	5.2	8.9	4.2	0.20	5.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
09...	194	--	73	2.4	2.4	0.82	3.2	0.420	200	30	4.1
23...	194	--	92	2.2	2.2	.67	2.9	.440	190	110	2.2
NOV											
06...	173	--	76	1.4	1.5	.73	2.2	.360	230	90	5.7
20...	178	--	104	2.0	2.0	.81	2.8	.430	260	50	4.6
DEC											
04...	133	--	363	2.5	2.5	.84	3.3	.300	1500	110	9.3
17...	111	--	1750	2.2	2.2	1.1	3.3	.610	4200	330	8.8
JAN											
08...	125	--	180	2.7	2.7	.74	3.4	.200	150	<10	3.4
21...	140	--	366	2.4	2.4	.66	3.1	.180	330	40	4.2
FEB											
03...	143	--	396	2.8	2.8	.36	3.2	.120	200	20	3.7
18...	129	--	515	2.4	2.4	.52	2.9	.170	500	50	3.4
MAR											
03...	97	--	300	2.2	2.2	.37	2.6	.100	210	20	3.7
17...	104	--	972	1.8	1.8	.85	2.7	.170	1500	80	3.7
31...	118	--	675	1.7	1.7	.51	2.2	.150	600	50	4.3
APR											
21...	141	--	180	1.9	1.9	.38	2.3	.110	150	30	3.3
MAY											
05...	106	--	1170	1.3	1.3	1.1	2.4	.210	1500	110	6.5
19...	131	--	432	1.7	1.7	.38	2.1	.130	800	60	6.0
JUN											
10...	139	--	458	2.3	2.3	.62	2.9	.160	1000	70	8.7
23...	149	--	243	2.3	2.3	.66	3.0	.140	510	50	3.5
JUL											
15...	145	--	748	2.0	2.0	1.1	3.1	.330	2400	160	2.6
28...	163	--	180	2.8	2.8	.60	3.4	.190	550	80	8.2
AUG											
12...	173	--	121	2.4	2.4	.40	2.8	.240	230	60	3.2
25...	174	--	118	1.9	1.9	1.4	3.3	.250	650	120	11
SEP											
09...	190	--	174	2.2	2.2	.64	2.8	.220	690	80	8.9
22...	138	--	469	1.4	1.4	1.2	2.6	.230	3400	180	13
26...	--	57	8420	.88	.88	--	--	.350	5100	250	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
07...	1230	1110	250	7.6	21.0	14.0	9.3	--	--	--	--
21...	1400	2450	210	7.6	23.5	13.0	9.2	--	--	--	--
NOV											
03...	1330	856	255	8.0	23.5	11.0	11.0	--	--	--	--
17...	1300	1580	215	7.6	17.5	8.0	12.0	--	--	--	--
DEC											
01...	1245	768	240	7.7	6.0	7.0	12.2	--	--	--	--
15...	1245	741	250	7.8	18.0	5.5	13.0	--	--	--	--
JAN											
05...	1330	1770	200	7.4	-2.5	.0	13.4	--	--	--	--
20...	1250	747	245	7.3	-1.0	.0	14.6	--	--	--	--
FEB											
03...	1330	1720	175	7.2	.0	.0	14.0	--	--	--	--
18...	1300	1620	225	7.4	14.5	8.0	12.0	--	--	--	--
MAR											
10...	1240	715	245	8.1	3.5	4.0	13.8	--	--	--	--
22...	1245	961	215	8.2	7.5	10.0	12.0	--	--	--	--
APR											
06...	1300	1700	200	7.5	19.0	9.0	11.2	--	--	--	--
19...	1300	623	215	7.8	29.5	21.0	9.0	--	--	--	--
MAY											
04...	1230	496	235	7.7	13.5	13.5	9.9	--	--	--	--
19...	1245	608	225	7.7	11.5	15.0	9.1	--	--	--	--
JUN											
02...	1240	1600	200	7.4	17.5	18.5	7.8	--	--	--	--
23...	1245	817	180	7.3	29.5	25.0	--	--	--	--	--
JUL											
14...	1240	394	250	7.6	25.0	21.0	7.1	--	--	--	--
28...	1330	262	260	9.1	33.0	25.0	11.6	110	25	35	6.1
AUG											
11...	1300	303	270	7.6	30.0	22.0	6.6	97	23	30	5.4
25...	1245	143	335	7.6	28.0	25.0	4.8	110	22	38	4.8
SEP											
08...	1230	127	345	7.8	26.0	20.5	5.9	130	24	42	6.4
22...	1300	220	290	7.6	17.0	17.0	7.3	110	26	33	5.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT										
07...	--	--	89	73	3.6	16	12	144	432	2.7
21...	--	--	71	58	2.8	19	8.7	139	919	1.7
NOV										
03...	--	--	92	75	1.5	16	9.9	203	469	2.4
17...	--	--	65	53	2.6	18	8.1	117	499	2.2
DEC										
01...	--	--	84	69	2.7	17	9.4	130	270	2.4
15...	--	--	82	67	2.1	17	8.0	142	284	2.0
JAN										
05...	--	--	55	45	3.5	16	8.9	111	530	2.3
20...	--	--	81	66	6.5	17	10	139	280	1.9
FEB										
03...	--	--	47	39	4.7	14	9.1	110	511	1.9
18...	--	--	64	53	4.0	21	11	116	507	2.3
MAR										
10...	--	--	77	63	1.0	17	16	124	239	2.0
22...	--	--	68	56	.7	18	10	124	322	1.7
APR										
06...	--	--	58	48	2.9	18	8.7	114	523	2.4
19...	--	--	79	65	2.0	17	9.8	133	224	1.9
MAY										
04...	--	--	80	66	2.5	15	8.7	142	190	1.9
19...	--	--	84	69	2.7	14	9.3	132	217	1.8
JUN										
02...	--	--	62	51	3.9	16	9.2	148	639	2.1
23...	--	--	60	49	4.8	15	7.8	119	263	1.7
JUL										
14...	--	--	85	70	3.4	17	9.6	150	160	1.8
28...	7.3	3.4	110	88	.1	18	14	160	113	1.1
AUG										
11...	8.1	3.6	90	74	3.6	20	14	154	126	1.7
25...	12	3.6	110	93	4.5	18	16	190	73	1.7
SEP										
08...	12	3.3	130	107	3.3	20	19	190	65	1.7
22...	7.9	3.9	98	80	3.9	21	15	165	98	1.6

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
07...	2.7	0.10	2.8	0.100	--	310	--	40	--	2.2
21...	1.7	.33	2.0	.140	0.080	470	--	50	--	3.0
NOV										
03...	2.4	.43	2.8	.100	--	170	--	20	--	2.9
17...	2.2	.43	2.6	.110	--	210	--	30	--	2.8
DEC										
01...	2.4	.36	2.8	.080	--	190	--	<10	--	--
15...	2.0	.37	2.4	.110	--	210	--	<10	--	--
JAN										
05...	2.3	.45	2.8	.130	--	420	--	40	--	--
20...	1.9	.79	2.7	.130	--	230	--	20	--	--
FEB										
03...	1.9	.58	2.5	.250	--	850	--	60	--	5.4
18...	2.3	.51	2.8	.160	--	550	--	50	--	3.4
MAR										
10...	2.0	.29	2.3	.120	--	160	--	30	--	2.7
22...	1.7	.40	2.1	.110	--	240	--	40	--	2.4
APR										
06...	2.4	.55	3.0	.110	--	400	--	40	--	3.2
19...	1.9	.55	2.5	.130	--	370	--	50	--	3.5
MAY										
04...	1.9	.58	2.5	.160	--	280	--	50	--	5.6
19...	1.9	1.2	3.1	.230	--	530	--	80	--	5.3
JUN										
02...	2.2	1.2	3.4	.280	--	2500	--	170	--	9.7
23...	1.8	.98	2.8	.260	--	2000	--	170	--	9.4
JUL										
14...	1.9	.93	2.8	.280	--	1000	--	140	--	7.3
28...	1.2	.90	2.1	.200	--	710	30	150	20	6.7
AUG										
11...	1.8	1.2	3.0	.350	--	1700	20	160	80	7.4
25...	1.8	1.1	2.9	.340	--	710	<10	160	100	6.1
SEP										
08...	1.8	1.2	3.0	.440	--	460	<10	140	80	4.0
22...	1.7	.83	2.5	.350	--	790	50	150	90	3.4

WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
OCT											
13...	1330	1620	200	7.6	18.5	12.0	10.4	77	24	23	4.8
27...	1330	2520	195	7.6	5.0	8.0	11.4	75	27	21	5.4
NOV											
10...	1245	787	255	7.9	8.5	4.0	12.6	93	30	28	5.6
24...	1245	465	275	8.1	4.0	2.0	14.0	100	33	31	6.2
DEC											
08...	1420	2620	175	7.5	-3.5	1.0	--	58	21	17	3.8
20...	1220	507	255	8.0	10.0	3.0	13.8	96	32	29	5.8
JAN											
12...	1400	300	295	8.1	-7.0	.0	14.4	110	35	33	6.4
25...	1345	357	295	7.7	1.0	.0	13.2	110	36	34	6.5
FEB											
09...	1320	250	300	7.8	3.0	.5	15.2	110	38	35	6.6
23...	1300	350	270	7.8	15.0	2.5	14.8	94	33	28	5.8
MAR											
09...	1300	985	225	7.7	16.5	7.0	12.4	75	31	21	5.4
23...	1300	7890	155	7.2	9.5	4.5	12.8	52	25	15	3.6
APR											
06...	1315	6110	160	7.6	9.5	7.0	12.0	50	16	14	3.6
20...	1300	696	198	8.7	24.0	17.0	10.4	86	22	26	5.1
MAY											
04...	1240	524	216	7.9	13.5	16.5	8.5	93	25	28	5.6
18...	1215	325	234	7.7	31.0	20.5	7.5	110	29	32	6.3
JUN											
08...	1230	256	270	7.7	19.5	17.0	8.9	120	34	36	6.3
22...	1230	211	269	7.6	22.5	21.0	6.3	110	35	35	6.1
JUL											
06...	1215	141	310	7.7	34.0	27.0	5.0	140	26	43	6.9
20...	1245	202	283	7.9	31.5	27.5	4.7	120	29	37	6.5
AUG											
03...	1315	107	333	8.1	29.0	25.0	5.8	140	26	43	7.0
17...	1245	165	292	7.7	24.5	25.5	--	120	18	36	6.2
31...	1315	134	306	7.5	32.0	26.5	4.3	120	26	37	5.6
SEP											
14...	1315	87	360	7.7	23.0	20.5	5.2	140	27	43	7.2
28...	1300	165	351	7.8	19.5	18.5	6.1	140	31	45	7.0

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
13...	4.3	2.4	64	--	53	2.6	18	8.7	119	521
27...	4.2	3.0	58	--	48	2.3	19	7.1	108	735
NOV										
10...	5.8	2.2	77	--	63	1.5	18	9.6	83	176
24...	5.8	1.8	85	--	70	1.1	18	10	147	185
DEC										
08...	4.3	3.7	45	--	37	2.3	17	8.9	107	757
20...	6.1	1.9	78	--	64	1.2	20	9.9	145	198
JAN										
12...	9.1	2.0	90	--	74	1.1	18	15	148	120
25...	7.9	2.2	93	--	76	2.9	16	14	157	151
FEB										
09...	8.7	2.2	94	--	77	2.4	16	14	138	93
23...	7.4	2.4	74	--	61	1.9	19	13	138	130
MAR										
09...	6.6	2.3	54	0	44	1.7	21	11	142	378
23...	4.5	2.5	33	--	27	3.3	16	6.5	119	2540
APR										
06...	4.0	2.3	41	0	34	1.6	15	6.5	93	1530
20...	5.6	1.9	78	0	64	.2	14	9.6	135	254
MAY										
04...	5.9	2.0	83	0	68	1.7	16	10	142	201
18...	6.6	2.4	94	--	77	3.0	15	16	138	121
JUN										
08...	8.4	2.9	100	0	82	3.2	14	23	156	108
22...	8.2	4.5	95	--	78	3.8	20	14	170	97
JUL										
06...	11	4.0	130	0	110	4.1	16	18	221	84
20...	9.2	4.6	110	0	90	2.2	15	16	178	97
AUG										
03...	14	4.1	130	0	110	1.6	19	23	232	67
17...	11	5.0	120	0	98	3.8	18	18	219	98
31...	12	5.8	110	0	90	5.5	19	21	184	67
SEP										
14...	16	4.6	130	0	110	4.1	22	26	225	53
28...	14	4.5	130	0	110	3.3	22	23	204	91

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
13...	2.1	2.1	0.30	2.4	0.180	330	50	50	30	4.6
27...	1.5	1.5	.78	2.3	.170	940	80	70	20	9.2
NOV										
10...	2.3	2.3	.36	2.7	.120	140	50	30	20	11
24...	1.7	1.7	.23	1.9	.120	140	30	20	30	2.3
DEC										
08...	1.4	1.4	1.9	3.3	.380	5300	70	210	30	5.0
20...	2.5	2.5	.40	2.9	.130	140	50	20	20	3.1
JAN										
12...	3.2	3.2	.47	3.7	.230	70	40	30	30	3.2
25...	3.1	3.1	.53	3.6	.200	90	20	<10	<10	1.4
FEB										
09...	3.0	3.0	.70	3.7	.240	100	30	50	40	5.8
23...	2.7	2.7	.62	3.3	.190	170	30	30	30	5.6
MAR										
09...	2.4	2.4	.59	3.0	.130	350	60	40	30	3.2
23...	1.4	1.4	1.5	2.9	.300	9500	60	300	20	11
APR										
06...	1.7	1.7	1.2	2.9	.210	4200	30	180	30	--
20...	1.7	1.7	.46	2.2	.100	260	40	30	<10	6.9
MAY										
04...	1.6	1.6	.47	2.1	.130	230	60	30	20	5.6
18...	1.9	2.0	.63	2.6	.170	280	40	50	30	5.8
JUN										
08...	2.4	2.5	.45	3.0	.280	230	20	60	40	7.3
22...	3.1	3.2	.97	4.2	.390	2400	40	110	50	8.1
JUL										
06...	2.4	2.5	1.2	3.7	.430	1000	30	120	70	5.3
20...	1.8	1.9	1.1	3.0	.420	1100	50	170	100	8.1
AUG										
03...	1.2	1.3	1.4	2.7	.520	1000	40	170	90	4.7
17...	1.6	1.7	1.1	2.8	.630	1700	40	170	80	6.2
31...	1.9	2.0	1.3	3.3	.770	1500	20	170	90	7.1
SEP										
14...	2.0	2.2	1.4	3.6	.670	900	30	180	130	7.9
28...	2.2	2.3	1.4	3.7	.590	1100	40	170	110	10

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
12...	1245	174	293	7.8	14.0	13.0	8.9	120	31	38	6.4
26...	1245	164	306	7.9	12.0	12.0	8.5	130	38	39	7.3
NOV											
09...	1300	2180	180	7.4	16.5	12.5	8.9	68	29	19	4.9
30...	1330	939	234	7.6	3.0	3.0	12.2	88	41	26	5.7
DEC											
19...	1345	11900	158	7.1	3.5	1.0	12.2	53	19	15	3.7
JAN											
04...	1300	628	225	--	-1.5	1.0	13.1	85	33	25	5.5
18...	1030	1760	243	7.3	.5	1.0	14.0	74	37	22	4.6
31...	1315	1660	185	7.1	-2.0	1.0	13.2	68	34	20	4.4
FEB											
15...	1330	633	260	7.3	.5	2.0	13.4	90	33	27	5.4
MAR											
01...	1315	580	300	7.4	4.5	3.0	12.3	100	35	31	6.2
15...	1300	14500	140	6.8	10.5	1.0	13.0	39	16	11	2.7
29...	1245	3390	180	7.2	15.5	9.5	10.6	60	--	17	4.2
APR											
12...	1230	874	215	8.4	19.5	14.5	10.8	78	--	24	4.4
26...	1230	602	230	8.4	11.5	12.5	10.4	88	--	27	5.0
MAY											
09...	1300	779	240	7.4	22.0	15.0	8.6	94	--	29	5.3
24...	1245	1220	200	7.4	15.5	17.0	8.4	80	21	24	4.8
JUN											
07...	1315	476	235	7.5	22.0	20.5	7.7	98	--	30	5.7
21...	1215	329	255	7.4	22.0	24.0	6.5	100	--	31	5.5
JUL											
12...	1315	430	270	--	25.0	24.0	7.5	100	--	32	6.0
26...	1230	235	295	8.1	25.0	24.0	7.0	120	--	39	6.6
AUG											
16...	1230	217	305	7.7	31.5	28.0	5.8	120	32	38	6.6
30...	1230	272	280	8.3	26.5	25.5	7.5	110	--	33	5.9
SEP											
13...	1200	177	180	8.1	17.0	22.0	5.8	100	100	34	4.8
27...	1315	124	355	7.9	22.0	18.0	--	140	--	43	7.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
12...	10	4.2	110	0	90	2.8	20	16	--	173	--
26...	11	4.1	110	--	90	2.2	23	17	--	187	--
NOV											
09...	5.0	3.7	48	0	39	3.0	24	9.0	--	107	--
30...	6.9	2.9	58	0	48	2.3	25	11	--	130	--
DEC											
19...	4.3	3.3	41	0	34	5.2	17	7.8	--	85	--
JAN											
04...	6.3	2.0	63	--	52	--	18	11	--	134	--
18...	15	2.2	45	0	37	3.6	16	26	--	134	--
31...	6.1	2.0	42	0	34	5.3	17	11	--	107	--
FEB											
15...	8.5	1.8	69	0	57	5.5	19	15	--	132	--
MAR											
01...	10	3.3	83	0	68	5.3	19	20	6.9	162	140
15...	4.7	3.3	28	0	23	7.1	13	9.0	3.7	77	62
29...	5.4	2.3	--	--	--	--	--	--	7.7	85	--
APR											
12...	6.2	1.9	--	--	--	--	--	--	2.7	112	--
26...	6.4	1.7	--	--	--	--	--	--	1.2	121	--
MAY											
09...	7.0	2.5	--	--	--	--	--	--	4.1	144	--
24...	5.3	1.8	72	0	59	4.6	17	9.6	7.6	85	110
JUN											
07...	6.5	2.2	--	--	--	--	--	--	5.9	141	--
21...	7.0	2.4	--	--	--	--	--	--	5.7	140	--
JUL											
12...	7.6	2.5	--	--	--	--	--	--	7.9	161	--
26...	8.2	3.1	--	--	--	--	--	--	3.8	175	--
AUG											
16...	8.6	3.7	110	0	90	3.5	17	16	7.6	168	150
30...	9.2	4.8	--	--	--	--	--	--	4.1	170	--
SEP											
13...	11	3.9	--	--	--	--	--	--	3.7	179	--
27...	12	4.1	--	--	--	--	--	--	5.4	203	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
12...	81	2.2	2.3	0.77	3.1	0.420	1200	50	90	40	5.2
26...	83	2.0	2.1	.87	3.0	.440	900	70	100	50	9.4
NOV											
09...	630	1.9	1.9	.83	2.7	.280	2800	100	170	20	8.0
30...	330	2.6	2.6	.84	3.4	.140	800	40	40	20	9.3
DEC											
19...	2730	2.0	2.0	1.1	3.1	.290	1000	100	190	40	14
JAN											
04...	227	3.2	3.2	.67	3.9	.100	330	30	70	60	13
18...	637	.57	.58	.81	1.4	.120	1400	30	100	30	8.1
31...	480	2.3	2.3	.42	2.7	.070	570	30	30	20	6.3
FEB											
15...	226	3.4	3.4	.33	3.7	.100	190	20	40	30	4.2
MAR											
01...	254	3.0	3.0	.94	3.9	.200	240	50	50	40	4.1
15...	3010	1.5	1.5	2.3	3.8	.410	15000	360	490	60	7.9
29...	778	2.2	2.2	.57	2.8	.110	1400	--	60	--	3.0
APR											
12...	264	.48	.50	--	--	.100	390	--	60	--	8.7
26...	197	1.6	1.6	.57	2.2	.110	230	--	40	--	6.3
MAY											
09...	303	1.8	1.8	.81	2.6	.180	570	--	60	--	5.9
24...	280	1.9	1.9	.63	2.5	.130	1000	--	70	20	7.2
JUN											
07...	181	2.1	2.1	.62	2.7	.140	460	--	70	--	4.7
21...	124	1.9	1.9	.75	2.7	.200	260	--	60	--	15
JUL											
12...	187	2.8	2.8	.76	3.6	.170	--	--	--	--	11
26...	111	1.7	1.8	.62	2.4	.190	250	--	60	--	13
AUG											
16...	98	2.2	2.3	.84	3.1	.320	1100	30	90	40	4.0
30...	125	1.4	1.4	1.1	2.5	.330	1500	--	170	--	3.7
SEP											
13...	86	1.3	1.4	1.5	2.9	.460	1500	--	200	--	6.2
27...	68	2.2	2.3	1.3	3.6	.510	520	--	140	--	3.9

WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT											
11...	1215	122	350	7.9	17.0	13.0	8.4	140	140	43	8.2
25...	1230	148	355	8.0	14.0	11.0	9.4	140	140	42	7.8
NOV											
15...	1200	143	350	7.6	12.0	13.0	12.5	130	--	40	6.9
29...	0945	275	340	8.1	3.5	5.0	11.1	130	37	39	7.1
DEC											
20...	1245	311	325	7.6	.5	3.0	11.4	110	--	34	7.2
JAN											
03...	1330	5520	175	7.3	-5.5	4.0	11.7	56	--	16	4.0
17...	1330	774	295	7.6	1.0	1.0	12.8	100	--	29	6.7
31...	1315	1670	220	7.4	-1.0	2.5	12.8	72	--	21	4.8
FEB											
14...	1315	628	270	7.4	-6.0	.5	13.2	98	--	30	5.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
11...	12	3.7	--	--	--	--	--	--	4.0	197	--
25...	13	3.6	--	--	--	--	--	--	2.7	185	--
NOV											
15...	12	3.2	--	--	--	--	--	--	2.9	202	--
29...	12	3.7	110	0	90	1.4	22	24	5.1	175	170
DEC											
20...	8.8	3.1	--	--	--	--	--	--	8.8	159	--
JAN											
03...	4.0	3.5	--	--	--	--	--	--	7.1	103	--
17...	13	2.4	--	--	--	--	--	--	8.3	153	--
31...	6.9	2.1	--	--	--	--	--	--	8.2	117	--
FEB											
14...	7.0	1.8	--	--	--	--	--	--	9.0	148	--

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
11...	65	2.3	2.4	1.1	3.5	0.470	430	--	90	--	5.3
25...	74	2.0	2.1	.51	2.6	.490	220	--	20	--	5.5
NOV											
15...	78	1.8	1.9	1.0	2.9	.560	470	--	90	--	--
29...	130	2.0	2.0	.92	2.9	.350	210	50	50	20	5.5
DEC											
20...	134	3.4	3.4	.51	3.9	.210	160	--	40	--	3.6
JAN											
03...	1540	2.3	2.3	1.0	3.3	.290	4100	--	190	--	7.7
17...	320	2.9	2.9	1.1	4.0	.160	120	--	30	--	8.6
31...	528	2.7	2.7	.41	3.1	.110	320	--	30	--	2.3
FEB											
14...	251	3.4	3.4	.28	3.7	.130	170	--	30	--	2.5

WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV										
24...	1330	370	315	7.3	--	3.5	5	--	110	35
JAN										
28...	1430	146	320	7.2	8.5	2.5	5	12.2	120	33
JUN										
30...	1030	374	252	7.9	29.0	23.0	2	6.4	100	29
SEP										
18...	1430	196	300	8.6	--	20.0	10	--	120	17

DATE	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)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV										
24...	34	6.9	11	4.1	78	7.6	23	22	0.10	3.6
JAN										
28...	36	6.7	15	2.8	85	10	25	24	.10	1.4
JUN										
30...	32	5.5	6.2	3.2	74	1.8	14	15	<.10	7.6
SEP										
18...	37	5.6	11	3.7	99	.5	18	20	.10	2.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV									
24...	165	150	165	2.1	0.340	530	40	40	30
JAN									
28...	185	160	73	2.6	.350	190	<10	60	40
JUN									
30...	167	130	169	2.9	.220	980	20	90	30
SEP									
18...	188	160	99	1.2	.380	1300	40	170	50

WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH, FIELD	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
14...	1100	109	410	7.6	15.0	12.5	14	6.5	150	26	46
MAR											
24...	0915	993	157	7.6	11.5	4.0	4	10.7	78	28	22
APR											
19...	1145	957	220	7.5	--	15.5	7	--	78	23	22
AUG											
12...	1030	182	316	8.0	22.0	21.0	8	7.0	130	28	42

Table 9.—Quality of surface water in Frederick County, Md.—continued

01643020 - MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD (continued)
WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT											
14...	7.5	18	4.2	120	5.8	21	26	0.20	3.3	211	200
MAR											
24...	5.6	7.4	1.9	50	2.4	19	14	.10	6.0	123	110
APR											
19...	5.6	8.3	2.1	55	3.4	18	12	<.10	4.9	131	110
AUG											
12...	6.6	15	3.6	104	2.0	18	26	.10	4.7	193	180

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
14...	62	1.7	--	--	0.680	--	760	25	110	86	--
MAR											
24...	330	2.4	0.47	2.9	.100	0.020	270	32	40	26	1.6
APR											
19...	338	1.8	--	--	.150	--	780	71	60	16	--
AUG											
12...	95	2.3	--	--	.170	.200	480	48	110	44	4.0

WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH, FIELD	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
DEC												
28...	1115	311	300	7.6	--	8.5	--	--	110	30	32	7.3
JAN												
27...	1700	450	254	9.2	3.5	2.0	10	13.6	93	18	27	6.1
FEB												
24...	1145	3880	220	7.3	6.5	4.0	--	12.8	76	35	21	5.7
JUL												
19...	1915	229	298	7.7	30.0	28.0	17	6.3	140	6	43	6.9
26...	1130	214	345	7.6	3.5	24.0	--	7.2	140	25	45	7.4

DATE	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)
DEC												
28...	11	2.9	--	80	3.9	23	18	0.10	3.5	191	150	160
JAN												
27...	12	3.1	75	59	.0	21	23	<.10	6.1	135	140	164
FEB												
24...	6.8	3.4	--	41	4.0	24	15	.20	7.3	130	110	1360
JUL												
19...	9.2	3.2	130	104	5.0	20	21	.10	3.8	216	190	134
26...	12	3.2	--	118	5.7	18	22	.20	4.6	198	180	114

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC												
28...	--	2.7	--	--	--	--	0.190	--	21	--	28	--
JAN												
27...	2.5	--	--	--	0.250	0.240	--	590	29	60	11	4.5
FEB												
24...	--	3.2	--	--	--	--	.110	--	72	--	14	--
JUL												
19...	2.8	--	0.80	3.6	.160	.120	--	260	7	40	15	4.5
26...	--	2.8	--	--	--	--	.200	--	15	--	27	--

TABLE 10.—TRACE-ELEMENT ANALYSES OF SURFACE WATER IN FREDERICK COUNTY, MD.

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

(ND, not detected)

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
01638500	POTOMAC R AT POINT OF ROCKS, MD	76-08-31	1515	1630	130	--	1	ND	--	<20
01639000	MONOCACY R AT BRIDGEPORT, MD	69-10-21	1210	12	--	100	--	--	ND	3
		70-10-14	0954	6	--	ND	--	--	ND	ND
		71-09-16	1110	20	--	100	--	--	ND	ND
01640500	OWENS C AT LANTZ, MD	82-02-05	0915	13	--	--	--	--	--	--
01641810	MONOCACY R NR WALKERSVILLE, MD	74-02-27	1140	448	<100	--	<1	ND	--	<20
		74-03-14	1530	378	<100	--	ND	ND	--	ND
		74-03-27	1035	488	<100	--	<1	ND	--	<20
		74-04-09	1020	3490	1100	--	3	ND	--	<20
		74-04-24	1005	1140	700	--	1	ND	--	ND
		74-05-08	1030	388	500	--	<1	ND	--	ND
		74-05-22	1110	480	300	--	2	<2	--	ND
		74-06-05	0945	360	740	--	<1	ND	--	<20
		74-06-20	1030	270	<100	--	1	ND	--	<20
		74-07-01	1200	346	480	--	2	ND	--	<20
		74-07-22	1030	104	280	--	1	ND	--	<20
		74-08-05	1030	144	410	--	1	ND	--	ND
		74-08-12	1150	90	620	--	1	ND	--	<20
		74-08-26	1210	108	270	--	1	ND	--	<20
		74-09-09	1130	303	450	--	2	ND	--	<20
		74-09-24	1300	176	230	--	<1	ND	--	<20
		74-10-07	1240	118	160	--	<1	<2	--	ND
		74-10-21	1230	144	70	--	<1	ND	--	ND
		74-11-05	1230	120	320	--	1	ND	--	<20
		74-11-18	1445	173	<100	--	<1	ND	--	<20
		74-12-04	1010	819	650	--	1	ND	--	ND
		74-12-17	1240	7290	3100	--	3	ND	--	ND
		75-01-08	1230	415	30	--	1	ND	--	ND
		75-01-21	1230	785	160	--	2	ND	--	ND
		75-02-03	1145	810	80	--	<1	ND	--	ND
		75-02-18	1130	1110	220	--	1	<2	--	ND
		75-03-03	1250	899	120	--	<1	ND	--	<20
		75-03-17	1215	2460	750	--	2	ND	--	ND
		75-03-31	1130	1770	430	--	<1	ND	--	ND
		75-04-21	1200	468	60	--	<1	ND	--	ND
		75-05-05	1200	3610	1600	--	2	ND	--	<20
		75-05-19	1200	967	310	--	<1	ND	--	<20
		75-06-09	1230	1080	640	--	1	ND	--	<20
		75-06-23	1145	472	200	--	<1	ND	--	<20
		75-07-15	1130	1630	1200	--	2	ND	--	ND
		75-07-28	1200	315	270	--	1	ND	--	<20
		75-08-11	1245	201	80	--	<1	ND	--	<20
		75-08-25	1100	197	580	--	<1	ND	--	<20
		75-09-09	1230	268	600	--	1	ND	--	<20
		75-09-22	1130	1040	2200	--	3	ND	--	<20
		75-10-07	1115	872	180	--	<1	ND	--	ND
		75-10-21	1230	1970	240	--	1	ND	--	<20
		75-11-03	1145	668	10	--	<1	<2	--	ND
		75-11-17	1130	1240	110	--	<1	ND	--	ND
		75-12-01	1115	599	50	--	<1	<2	--	<20
		75-12-15	1115	574	240	--	<1	<2	--	ND
		76-01-05	1230	1380	150	--	1	<2	--	<20
		76-01-20	1130	566	180	--	<1	ND	--	<20
		76-02-03	1130	1390	520	--	1	<2	--	<20
		76-02-18	1130	1250	310	--	1	<2	--	<20
		76-03-10	1115	553	50	--	<1	2	--	<20
		76-03-22	1115	744	<100	--	<1	ND	--	<20
		76-04-06	1130	1350	200	--	<1	<2	--	<20
		76-04-19	1130	486	90	--	<1	ND	--	<20
		76-05-04	1100	390	110	--	<1	<2	--	<20
		76-05-19	1115	486	260	--	<1	ND	--	<20
		76-06-02	1120	1160	2000	--	<1	<2	--	<20
		76-06-23	1130	677	1400	--	2	<2	--	<20
		76-07-28	1130	207	540	--	<1	ND	--	<20
		76-08-11	1115	236	690	--	1	<2	--	<20
		76-08-25	1110	112	590	--	1	<2	--	<20
		76-09-08	1110	99	550	--	1	ND	--	<20
		76-09-22	1120	172	270	--	1	<2	--	<20
		76-10-13	1230	1270	50	--	<1	ND	--	<20
		76-10-27	1200	2050	470	--	1	ND	--	<20
		76-11-10	1115	613	60	--	<1	ND	--	30
		76-11-24	1115	363	80	--	1	ND	--	20
		76-12-08	1230	2320	4400	--	2	ND	--	<20
		76-12-20	1100	395	60	--	1	ND	--	<20
		77-01-12	1230	230	80	--	<1	ND	--	<20
		77-01-25	1200	278	50	--	1	ND	--	<20
		77-02-09	1200	195	40	--	1	ND	--	<20
		77-02-23	1130	273	80	--	1	ND	--	20
		77-03-09	1140	768	150	--	<1	ND	--	40
		77-03-23	1130	7570	6000	--	1	ND	--	20

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	STATION NUMBER
--	ND	ND	--	24	--	<0.5	ND	--	<20	--	01638500
--	--	--	5	--	11	--	--	--	--	90	01639000
--	--	--	8	--	ND	--	--	--	--	10	
--	--	--	8	--	ND	--	--	--	--	4	
--	--	--	--	--	--	--	<1	<1	--	--	01640500
--	--	ND	--	ND	--	--	ND	--	ND	--	01641810
--	--	ND	--	ND	--	--	ND	--	50	--	
--	--	20	--	2	--	--	ND	--	100	--	
--	--	20	--	5	--	--	ND	--	20	--	
--	--	<20	--	2	--	--	ND	--	<20	--	
--	--	<20	--	<2	--	--	ND	--	160	--	
--	--	<20	--	ND	--	--	ND	--	20	--	
--	--	<20	--	2	--	--	ND	--	ND	--	
--	--	ND	--	6	--	--	<2	--	30	--	
--	--	<20	--	5	--	--	ND	--	20	--	
--	--	<20	--	<2	--	--	ND	--	20	--	
--	--	20	--	<2	--	--	ND	--	20	--	
--	--	ND	--	2	--	--	ND	--	40	--	
--	--	60	--	2	--	--	ND	--	<20	--	
--	--	ND	--	2	--	--	<2	--	ND	--	
--	--	ND	--	2	--	--	<2	--	20	--	
--	--	ND	--	ND	--	--	ND	--	20	--	
--	--	<20	--	<2	--	--	<2	--	170	--	
--	--	<20	--	2	--	--	ND	--	70	--	
--	--	ND	--	ND	--	--	ND	--	ND	--	
--	--	ND	--	4	--	--	<2	--	ND	--	
--	--	<20	--	9	--	--	ND	--	20	--	
--	--	ND	--	ND	--	--	ND	--	ND	--	
--	--	ND	--	2	--	--	ND	--	ND	--	
--	--	ND	--	<2	--	--	ND	--	<20	--	
--	--	ND	--	3	--	--	ND	--	<20	--	
--	--	ND	--	2	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	ND	--	
--	--	ND	--	<2	--	--	ND	--	ND	--	
--	--	ND	--	3	--	--	ND	--	20	--	
--	--	<20	--	3	--	--	ND	--	20	--	
--	--	<20	--	3	--	--	ND	--	20	--	
--	--	<20	--	2	--	--	ND	--	<20	--	
--	--	<20	--	7	--	--	ND	--	20	--	
--	--	<20	--	6	--	--	ND	--	<20	--	
--	--	<20	--	2	--	--	<2	--	ND	--	
--	--	ND	--	4	--	--	ND	--	20	--	
--	--	<20	--	7	--	--	<2	--	<20	--	
--	--	<20	--	11	--	--	ND	--	30	--	
--	--	<20	--	16	--	--	<2	--	<20	--	
--	--	<20	--	2	--	--	2	--	<20	--	
--	--	<20	--	3	--	--	ND	--	ND	--	
--	--	ND	--	4	--	--	<2	--	<20	--	
--	--	ND	--	5	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	<2	--	<20	--	
--	--	ND	--	3	--	--	ND	--	<20	--	
--	--	<20	--	16	--	--	<2	--	<20	--	
--	--	ND	--	8	--	--	<2	--	<20	--	
--	--	ND	--	5	--	--	ND	--	ND	--	
--	--	ND	--	6	--	--	ND	--	<20	--	
--	--	<20	--	8	--	--	<2	--	<20	--	
--	--	<20	--	4	--	--	ND	--	<20	--	
--	--	ND	--	5	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	<20	--	
--	--	<20	--	11	--	--	ND	--	20	--	
--	--	ND	--	10	--	--	ND	--	20	--	
--	--	30	--	5	--	--	ND	--	ND	--	
--	--	ND	--	8	--	--	ND	--	20	--	
--	--	ND	--	10	--	--	ND	--	30	--	
--	--	ND	--	22	--	--	ND	--	<20	--	
--	--	ND	--	8	--	--	ND	--	<20	--	
--	--	ND	--	11	--	--	ND	--	<20	--	
--	--	2	--	7	--	--	ND	--	ND	--	
--	--	<2	--	4	--	--	ND	--	ND	--	
--	--	ND	--	8	--	--	ND	--	60	--	
--	--	9	--	15	--	--	ND	--	80	--	
--	--	3	--	7	--	--	ND	--	<20	--	
--	--	2	--	<2	--	--	ND	--	<20	--	
--	--	3	--	5	--	--	ND	--	ND	--	
--	--	4	--	8	--	--	ND	--	<20	--	
--	--	3	--	6	--	--	ND	--	<20	--	
--	--	ND	--	5	--	--	ND	--	ND	--	
--	--	24	--	20	--	--	<2	--	50	--	

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW. INSTAN-TANEOUS (CFS)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM. TOTAL RECOV-ERABLE (UG/L AS CR)
01641810	MONOCACY R NR WALKERSVILLE, MD	77-04-06	1130	5180	1400	--	1	ND	--	20
		77-04-20	1130	546	200	--	1	ND	--	<20
		77-05-04	1115	409	170	--	1	ND	--	<20
		77-05-18	1050	254	200	--	<1	ND	--	<20
		77-06-08	1110	200	310	--	1	ND	--	<20
		77-06-22	1100	167	30	--	1	ND	--	<20
		77-07-06	1045	110	1500	--	3	ND	--	<20
		77-07-20	1100	169	940	--	2	ND	--	<20
		77-08-03	1145	83	1600	--	<1	ND	--	<20
		77-08-17	1115	129	1000	--	<1	ND	--	<20
		77-08-31	1140	104	1100	--	1	ND	--	<20
		77-09-14	1145	68	1100	--	<1	ND	--	<20
		77-09-28	1130	129	1900	--	1	ND	--	<20
		77-10-12	1115	136	260	--	<1	ND	--	<20
		77-10-26	1110	128	560	--	<1	ND	--	<20
		77-11-09	1115	1700	1000	--	<1	ND	--	<20
		77-11-30	1150	732	130	--	<1	<2	--	<20
		77-12-19	1215	9280	3000	--	3	<2	--	30
		78-01-04	1115	490	<100	--	1	<2	--	<20
		78-01-18	1140	1370	1000	--	<1	<2	--	<20
		78-01-31	1145	1300	10	--	<1	ND	--	<20
		78-02-15	1145	490	90	--	<1	4	--	<20
		78-03-01	1145	450	120	--	<1	<2	--	<20
		78-03-15	1130	11300	7000	40	1	ND	--	20
		78-03-29	1115	2650	570	--	--	<2	--	<20
		78-04-12	1100	680	170	--	--	3	--	<20
		78-04-26	1115	470	150	--	--	<2	--	<20
		78-05-09	1100	608	340	--	--	ND	--	<20
		78-05-24	1115	952	460	40	--	<2	--	<20
		78-06-07	1130	371	190	--	--	5	--	<20
		78-06-21	1130	257	280	--	--	4	--	<20
		78-07-12	1145	335	--	--	<1	--	--	--
		78-07-26	1130	183	120	--	--	ND	--	<20
		78-08-16	1130	169	380	30	--	5	--	20
		78-08-30	1130	212	750	--	1	6	--	<20
		78-09-13	1110	138	650	--	1	5	--	<20
		78-09-27	1130	97	400	--	1	9	--	<20
		78-10-11	1120	95	170	--	--	ND	--	<20
		78-10-25	1130	114	160	--	--	3	--	<20
		78-11-15	1115	112	200	--	1	<2	--	<20
		78-11-29	1130	214	50	10	1	2	--	<20
		78-12-20	1145	242	60	--	<1	8	--	<20
		79-01-03	1130	4310	1500	--	1	2	--	20
		79-01-17	1200	604	80	--	1	<2	--	<20
		79-01-31	1145	1300	150	--	1	ND	--	<20
		79-02-14	1145	490	40	--	<1	3	--	<20
01643020	MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD	69-10-08	0900	220	--	100	--	--	1	ND
		70-10-20	1322	127	--	ND	--	--	ND	ND
		71-09-28	1350	420	--	100	--	--	ND	ND
		72-09-19	1511	190	--	100	--	--	ND	--
		72-12-06	1015	972	--	<100	--	--	ND	--
		73-03-13	1330	1340	--	<100	--	--	ND	--
		73-06-06	1315	1640	--	<100	--	--	ND	ND
		73-09-14	1430	1080	8800	--	--	ND	--	20
		73-12-05	1540	268	200	--	--	ND	--	ND
		74-02-27	1500	570	<100	--	ND	ND	--	<20
		74-03-15	1030	485	<100	--	<1	ND	--	<20
		74-03-27	1220	625	<100	--	ND	<2	--	ND
		74-04-09	1255	4960	800	--	ND	ND	--	<20
		74-04-24	1220	1360	1200	--	1	ND	--	<20
		74-05-08	1230	498	400	--	<1	ND	--	ND
		74-05-22	1310	600	300	--	2	<2	--	ND
		74-06-05	1215	454	770	--	<1	<2	--	<20
		74-06-20	1245	348	<100	--	1	ND	--	<20
		74-07-01	1315	444	860	--	2	ND	--	<20
		74-07-22	1230	130	180	--	2	<2	--	20
		74-08-05	1145	187	510	--	1	ND	--	ND
		74-08-12	1315	115	730	--	1	ND	--	ND
		74-08-26	1345	139	280	--	<1	ND	--	ND
		74-09-10	1410	271	890	--	2	ND	--	<20
		74-09-25	1045	202	360	--	1	ND	--	ND
		74-10-09	1300	139	<100	--	<1	ND	--	ND
		74-10-23	1315	175	60	--	1	ND	--	<20
		74-11-06	1400	163	150	--	1	ND	--	ND
		74-11-20	1000	217	60	--	<1	<2	--	ND
		74-12-04	1215	1010	1000	--	1	ND	--	ND
		74-12-17	1400	5850	3500	--	4	ND	--	ND
		75-01-08	1430	532	40	--	<1	ND	--	ND
		75-01-21	1415	967	160	--	2	ND	--	ND
		75-02-03	1330	1020	110	--	<1	ND	--	ND

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	STATION NUMBER
--	--	ND	--	ND	--	--	ND	--	<20	--	01641810
--	--	2	--	7	--	--	ND	--	ND	--	
--	--	3	--	4	--	--	ND	--	<20	--	
--	--	12	--	11	--	--	ND	--	<20	--	
--	--	5	--	6	--	--	ND	--	30	--	
--	--	6	--	20	--	--	ND	--	<20	--	
--	--	6	--	6	--	--	ND	--	20	--	
--	--	5	--	11	--	--	ND	--	<20	--	
--	--	<20	--	17	--	--	ND	--	20	--	
--	--	9	--	27	--	--	ND	--	20	--	
--	--	6	--	14	--	--	ND	--	ND	--	
--	--	7	--	32	--	--	ND	--	20	--	
--	--	6	--	ND	--	--	ND	--	20	--	
--	--	5	--	4	--	--	ND	--	<20	--	
--	--	3	--	7	--	--	ND	--	<20	--	
--	--	5	--	21	--	--	ND	--	<20	--	
--	--	2	--	17	--	--	ND	--	<20	--	
--	--	8	--	35	--	--	ND	--	30	--	
--	--	4	--	14	--	--	ND	--	<20	--	
--	--	7	--	14	--	--	ND	--	20	--	
--	--	5	--	10	--	--	ND	--	<20	--	
--	--	4	--	35	--	--	<2	--	<20	--	
--	--	2	--	14	--	--	2	--	ND	--	
--	--	13	--	26	--	--	<2	--	--	<20	
--	--	2	--	16	--	--	<2	--	<20	--	
--	--	4	--	15	--	--	3	--	<20	--	
--	--	<2	--	13	--	--	ND	--	<20	--	
--	--	3	--	11	--	--	ND	--	<20	--	
--	--	ND	--	9	--	--	ND	--	--	ND	
--	--	6	--	12	--	--	ND	--	20	--	
--	--	5	--	14	--	--	ND	--	20	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	4	--	27	--	--	ND	--	20	--	
--	--	4	--	22	--	--	<2	--	--	<20	
--	--	5	--	30	--	--	ND	--	60	--	
--	--	4	--	25	--	--	ND	--	40	--	
--	--	2	--	20	--	--	ND	--	<20	--	
--	--	11	--	<2	--	--	<2	--	30	--	
--	--	5	--	<2	--	--	ND	--	<20	--	
--	--	4	--	8	--	--	ND	--	ND	--	
--	--	4	--	2	--	--	ND	--	--	ND	
--	--	ND	--	6	--	--	ND	--	30	--	
--	--	5	--	13	--	--	ND	--	60	--	
--	--	3	--	13	--	--	ND	--	100	--	
--	--	<2	--	4	--	--	ND	--	<20	--	
--	--	2	--	ND	--	--	ND	--	30	--	
--	--	--	19	--	4	--	--	--	--	100	01643020
--	--	--	9	--	ND	--	--	--	--	10	
--	--	--	ND	--	12	--	--	--	--	140	
ND	--	--	ND	--	ND	--	--	--	--	30	
--	--	--	ND	--	<2	--	--	--	--	20	
ND	--	--	ND	--	ND	--	--	--	--	<20	
--	--	--	ND	--	ND	--	--	--	--	ND	
--	--	<20	--	48	--	--	--	--	80	--	
--	--	ND	--	2	--	--	--	--	40	--	
--	--	ND	--	ND	--	--	ND	--	20	--	
--	--	ND	--	ND	--	--	ND	--	<20	--	
--	--	<20	--	3	--	--	ND	--	300	--	
--	--	<20	--	4	--	--	ND	--	<20	--	
--	--	<20	--	2	--	--	ND	--	<20	--	
--	--	ND	--	<2	--	--	ND	--	60	--	
--	--	<20	--	<2	--	--	ND	--	20	--	
--	--	ND	--	5	--	--	ND	--	30	--	
--	--	ND	--	6	--	--	<2	--	30	--	
--	--	<20	--	16	--	--	ND	--	20	--	
--	--	<20	--	4	--	--	ND	--	140	--	
--	--	<20	--	4	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	20	--	
--	--	ND	--	6	--	--	ND	--	40	--	
--	--	<20	--	6	--	--	<2	--	ND	--	
--	--	ND	--	4	--	--	5	--	<20	--	
--	--	ND	--	3	--	--	ND	--	60	--	
--	--	ND	--	2	--	--	ND	--	20	--	
--	--	ND	--	5	--	--	ND	--	20	--	
--	--	ND	--	3	--	--	ND	--	ND	--	
--	--	ND	--	5	--	--	<2	--	ND	--	
--	--	<20	--	11	--	--	ND	--	30	--	
--	--	ND	--	2	--	--	<2	--	20	--	
--	--	ND	--	3	--	--	ND	--	ND	--	
--	--	ND	--	2	--	--	ND	--	ND	--	

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
01643020	MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD	75-02-18	1315	1480	300	--	1	<2	--	ND
		75-03-03	1445	1140	140	--	<1	ND	--	<20
		75-03-17	1430	3460	780	--	1	ND	--	ND
		75-03-31	1330	2120	480	--	<1	ND	--	<20
		75-04-21	1400	472	90	--	<1	ND	--	ND
		75-05-05	1345	4080	1200	--	2	ND	--	ND
		75-05-19	1330	1220	470	--	1	ND	--	<20
		75-06-10	0930	1220	780	--	1	ND	--	<20
		75-06-23	1315	605	420	--	<1	ND	--	ND
		75-07-15	1300	1910	1400	--	3	ND	--	ND
		75-07-28	1320	408	370	--	1	ND	--	<20
		75-08-12	1230	258	110	--	<1	ND	--	<20
		75-08-25	1230	252	490	--	<1	ND	--	<20
		75-09-09	1330	340	590	--	1	ND	--	ND
		75-09-22	1300	1260	2200	--	3	ND	--	<20
		75-10-07	1230	1110	200	--	<1	ND	--	<20
		75-10-21	1400	2450	260	--	1	ND	--	ND
		75-11-03	1330	856	70	--	<1	ND	--	ND
		75-11-17	1300	1580	80	--	<1	ND	--	ND
		75-12-01	1245	768	80	--	<1	<2	--	<20
		75-12-15	1245	741	110	--	<1	<2	--	<20
		76-01-05	1330	1770	240	--	1	<2	--	<20
		76-01-20	1250	747	<100	--	<1	ND	--	<20
		76-02-03	1330	1720	560	--	2	<2	--	<20
		76-02-18	1300	1620	330	--	1	ND	--	<20
		76-03-10	1240	715	70	--	<1	ND	--	<20
		76-03-22	1245	961	110	--	<1	ND	--	<20
		76-04-06	1300	1700	220	--	<1	ND	--	20
		76-04-19	1300	623	170	--	<1	<2	--	<20
		76-05-04	1230	496	130	--	<1	<2	--	<20
		76-05-19	1245	608	300	--	<1	<2	--	<20
		76-06-02	1240	1600	1600	--	<1	<2	--	<20
		76-06-23	1245	817	1400	--	3	<2	--	<20
		76-07-14	1240	394	700	--	2	ND	--	<20
		76-07-28	1330	262	430	--	1	<2	--	<20
		76-08-11	1300	303	630	--	<1	2	--	<20
		76-08-25	1245	143	460	--	<1	<2	--	<20
		76-09-08	1230	127	340	--	1	<2	--	<20
		76-09-22	1300	220	400	--	2	<2	--	<20
		76-10-13	1330	1620	140	--	1	ND	--	<20
		76-10-27	1330	2520	1300	--	1	ND	--	<20
		76-11-10	1245	787	80	--	<1	ND	--	<20
		76-11-24	1245	465	90	--	1	ND	--	<20
		76-12-08	1420	2620	4100	--	2	ND	--	<20
		76-12-20	1220	507	70	--	1	<2	--	<20
		77-01-12	1400	300	240	--	<1	ND	--	<20
		77-01-25	1345	357	40	--	1	ND	--	<20
		77-02-09	1320	250	70	--	<1	<2	--	<20
		77-02-23	1300	350	<100	--	1	ND	--	20
		77-03-09	1300	985	210	--	<1	ND	--	30
		77-03-23	1300	7890	6300	--	3	ND	--	20
		77-04-06	1315	6110	1500	--	1	ND	--	<20
		77-04-20	1300	696	280	--	1	ND	--	<20
		77-05-04	1240	524	160	--	<1	ND	--	<20
		77-05-18	1215	325	170	--	1	ND	--	<20
		77-06-08	1230	256	220	--	<1	ND	--	<20
		77-06-22	1230	211	30	--	1	ND	--	<20
		77-07-06	1215	141	570	--	4	ND	--	<20
		77-07-20	1245	202	750	--	2	ND	--	20
		77-08-03	1315	107	670	--	1	ND	--	<20
		77-08-17	1245	165	1000	--	<1	ND	--	<20
		77-08-31	1315	134	1000	--	<1	ND	--	<20
		77-09-14	1315	87	490	--	1	ND	--	<20
		77-09-28	1300	165	670	--	1	ND	--	<20
		77-10-12	1245	174	430	--	<1	ND	--	<20
		77-10-26	1245	164	520	--	<1	ND	--	<20
		77-11-09	1300	2180	1700	--	<1	ND	--	<20
		77-11-30	1330	939	140	--	2	<2	--	<20
		77-12-19	1345	11900	3000	--	2	ND	--	30
		78-01-04	1300	628	150	--	1	<2	--	<20
		78-01-18	1030	1760	560	--	3	<2	--	<20
		78-01-31	1315	1660	70	--	<1	<2	--	<20
		78-02-15	1330	633	120	--	<1	5	--	<20
		78-03-01	1315	580	150	--	<1	<2	--	<20
		78-03-15	1300	14500	10000	60	1	ND	--	20
		78-03-29	1245	3390	770	--	--	2	--	<20
		78-04-12	1230	874	300	--	--	2	--	<20
		78-04-26	1230	602	210	--	--	3	--	<20
		78-05-09	1300	779	300	--	--	<2	--	<20
		78-05-24	1245	1220	530	30	--	<2	--	20

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	STATION NUMBER
--	--	ND	--	5	--	--	ND	--	ND	--	01643020
--	--	ND	--	4	--	--	ND	--	ND	--	
--	--	ND	--	3	--	--	ND	--	<20	--	
--	--	ND	--	7	--	--	ND	--	<20	--	
--	--	ND	--	3	--	--	ND	--	ND	--	
--	--	ND	--	7	--	--	ND	--	<20	--	
--	--	<20	--	3	--	--	ND	--	20	--	
--	--	<20	--	3	--	--	ND	--	<20	--	
--	--	ND	--	<2	--	--	ND	--	<20	--	
--	--	<20	--	7	--	--	ND	--	20	--	
--	--	ND	--	6	--	--	ND	--	<20	--	
--	--	<20	--	6	--	--	ND	--	<20	--	
--	--	ND	--	4	--	--	ND	--	<20	--	
--	--	<20	--	6	--	--	2	--	<20	--	
--	--	<20	--	10	--	--	ND	--	20	--	
--	--	ND	--	13	--	--	ND	--	20	--	
--	--	20	--	3	--	--	2	--	<20	--	
--	--	<20	--	<2	--	--	<2	--	<20	--	
--	--	<20	--	2	--	--	<2	--	<20	--	
--	--	<20	--	4	--	--	<2	--	<20	--	
--	--	ND	--	7	--	--	ND	--	<20	--	
--	--	ND	--	3	--	--	ND	--	<20	--	
--	--	ND	--	2	--	--	ND	--	<20	--	
--	--	ND	--	8	--	--	ND	--	<20	--	
--	--	ND	--	8	--	--	<2	--	<20	--	
--	--	ND	--	3	--	--	ND	--	ND	--	
--	--	ND	--	4	--	--	<2	--	<20	--	
--	--	ND	--	5	--	--	<2	--	<20	--	
--	--	ND	--	3	--	--	ND	--	<20	--	
--	--	ND	--	10	--	--	ND	--	<20	--	
--	--	ND	--	8	--	--	ND	--	<20	--	
--	--	<20	--	13	--	--	ND	--	20	--	
--	--	<20	--	14	--	--	ND	--	20	--	
--	--	ND	--	10	--	--	ND	--	20	--	
--	--	30	--	11	--	--	<2	--	<20	--	
--	--	ND	--	11	--	--	ND	--	20	--	
--	--	<20	--	14	--	--	<2	--	30	--	
--	--	<20	--	26	--	--	ND	--	20	--	
--	--	<20	--	18	--	--	ND	--	20	--	
--	--	ND	--	12	--	--	ND	--	<20	--	
--	--	2	--	14	--	--	ND	--	ND	--	
--	--	<2	--	4	--	--	ND	--	ND	--	
--	--	2	--	10	--	--	ND	--	20	--	
--	--	9	--	15	--	--	ND	--	80	--	
--	--	5	--	6	--	--	ND	--	20	--	
--	--	5	--	3	--	--	ND	--	40	--	
--	--	4	--	7	--	--	ND	--	<20	--	
--	--	3	--	10	--	--	ND	--	ND	--	
--	--	4	--	4	--	--	ND	--	<20	--	
--	--	ND	--	8	--	--	ND	--	ND	--	
--	--	9	--	16	--	--	ND	--	40	--	
--	--	7	--	8	--	--	ND	--	50	--	
--	--	3	--	6	--	--	ND	--	ND	--	
--	--	3	--	8	--	--	ND	--	<20	--	
--	--	3	--	13	--	--	ND	--	<20	--	
--	--	4	--	8	--	--	ND	--	40	--	
--	--	15	--	20	--	--	ND	--	<20	--	
--	--	7	--	5	--	--	ND	--	<20	--	
--	--	5	--	11	--	--	ND	--	20	--	
--	--	8	--	14	--	--	ND	--	ND	--	
--	--	8	--	36	--	--	ND	--	<20	--	
--	--	8	--	19	--	--	ND	--	<20	--	
--	--	7	--	15	--	--	ND	--	<20	--	
--	--	6	--	4	--	--	ND	--	20	--	
--	--	5	--	7	--	--	ND	--	ND	--	
--	--	4	--	12	--	--	ND	--	<20	--	
--	--	7	--	12	--	--	ND	--	20	--	
--	--	4	--	13	--	--	ND	--	<20	--	
--	--	9	--	14	--	--	ND	--	30	--	
--	--	4	--	20	--	--	ND	--	<20	--	
--	--	7	--	23	--	--	ND	--	20	--	
--	--	5	--	5	--	--	ND	--	<20	--	
--	--	3	--	12	--	--	<2	--	<20	--	
--	--	2	--	14	--	--	3	--	ND	--	
--	--	18	--	12	--	--	<2	--	--	ND	
--	--	3	--	20	--	--	<2	--	<20	--	
--	--	4	--	12	--	--	<2	--	<20	--	
--	--	2	--	30	--	--	ND	--	<20	--	
--	--	3	--	24	--	--	ND	--	<20	--	
--	--	ND	--	14	--	--	ND	--	--	<20	

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW. INSTAN-TANEOUS (CFS)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
01643020	MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD	78-06-07	1315	476	300	--	--	4	--	<20
		78-06-21	1215	329	230	--	--	5	--	<20
		78-07-12	1315	430	--	--	<1	--	--	--
		78-07-26	1230	235	110	--	--	ND	--	<20
		78-08-16	1230	217	230	20	--	5	--	20
		78-08-30	1230	272	890	--	2	4	--	<20
		78-09-13	1200	177	860	--	1	3	--	<20
		78-09-27	1315	124	270	--	1	5	--	<20
		78-10-11	1215	122	210	--	--	<2	--	<20
		78-10-25	1230	148	140	--	--	4	--	<20
		78-11-15	1200	143	230	--	1	<2	--	<20
		78-11-29	0945	275	<100	20	1	2	--	<20
		78-12-20	1245	311	20	--	<1	<2	--	<20
		79-01-03	1330	5520	1700	--	1	<2	--	<20
		79-01-17	1330	774	<100	--	1	<2	--	<20
		79-01-31	1315	1670	220	--	1	<2	--	<20
		79-02-14	1315	628	60	--	1	<2	--	<20
01643500	BENNETT C AT PARK MILLS, MD	69-10-08	1335	18	--	100	--	--	ND	ND
		70-10-20	1207	12	--	ND	--	--	ND	ND
		71-09-28	1145	68	--	100	--	--	ND	ND
01643580	MONOCACY R NR DICKERSON, MD	76-09-01	0930	170	590	--	2	<2	--	<20

Table 10.—Trace-element analyses of surface water in Frederick County, Md.—continued

CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	STATION NUMBER
--	--	5	--	22	--	--	ND	--	20	--	01643020
--	--	4	--	27	--	--	ND	--	20	--	
--	--	--	--	--	--	--	--	--	--	--	
--	--	4	--	33	--	--	ND	--	20	--	
--	--	4	--	36	--	--	2	--	--	<20	
--	--	4	--	34	--	--	ND	--	<20	--	
--	--	5	--	46	--	--	ND	--	30	--	
--	--	4	--	30	--	--	<2	--	20	--	
--	--	13	--	4	--	--	3	--	30	--	
--	--	5	--	35	--	--	5	--	<20	--	
--	--	5	--	5	--	--	ND	--	<20	--	
--	--	2	--	5	--	--	ND	--	--	<20	
--	--	ND	--	6	--	--	ND	--	40	--	
--	--	5	--	7	--	--	ND	--	30	--	
--	--	<2	--	10	--	--	ND	--	20	--	
--	--	<2	--	2	--	--	ND	--	<20	--	
--	--	2	--	ND	--	--	ND	--	<20	--	
--	--	--	25	--	12	--	--	--	--	60	01643500
--	--	--	3	--	ND	--	--	--	--	10	
--	--	--	5	--	11	--	--	--	--	140	
--	<2	ND	--	12	--	<0.5	ND	--	<20	--	01643580

Table 11.—Trace-element analyses of bottom materials from selected Frederick County streams

[ND, not detected]

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
01638050	CATOCTIN C AT OLIVE, MD	82-08-19	1945	22	<1	<1
01638500	POTOMAC R AT POINT OF ROCKS, MD	72-05-17	--	18900	ND	ND
		76-08-31	1515	1630	4	ND
01638520	POTOMAC R TR AT POINT OF ROCKS, MD	83-06-15	1530	11	<1	<1
01638600	TUSCARORA C AT TUSCARORA, MD	82-08-23	1215	5.0	<1	<1
01639000	MONOCACY R AT BRIDGEPORT, MD	82-08-10	1200	16	<1	<1
01639390	TOMS C NR KEYSVILLE, MD	82-07-23	0945	13	<1	<1
01640750	OWENS C NR ROCKY RIDGE, MD	82-07-22	1000	8.3	<1	<1
01641000	HUNTING C AT JIMTOWN, MD	82-08-13	0830	4.8	<1	<1
01641600	FISHING C NR UTICA, MD	82-07-23	1200	3.8	<1	<1
01643020	MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD	82-08-12	1030	182	<1	<1
01643110	BUSH C AT REELS MILL, MD	82-08-12	1330	14	<1	<1
01643125	BALLENGER C NR LIME KILN, MD	82-08-12	1645	8.9	<1	<1
01643580	MONOCACY R NR DICKERSON, MD	76-09-01	0930	170	2	ND

STATION NUMBER	DATE OF SAMPLE	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
01638050	82-08-19	2	--	ND	2400	10	330	<0.01	--	10
01638500	72-05-17	2	--	ND	850	10	220	.03	ND	20
	76-08-31	10	20	20	17000	30	840	.10	20	140
01638520	83-06-15	10	--	ND	4000	<10	630	<.01	--	40
01638600	82-08-23	2	--	ND	1300	10	320	<.01	--	5
01639000	82-08-10	7	--	ND	7200	10	380	<.01	--	20
01639390	82-07-23	10	--	ND	13000	10	550	<.01	--	30
01640750	82-07-22	8	--	ND	9500	10	420	<.01	--	30
01641000	82-08-13	3	--	ND	1800	10	260	<.01	--	40
01641600	82-07-23	7	--	ND	6400	10	280	<.01	--	30
01643020	82-08-12	4	--	ND	1600	10	460	<.01	--	10
01643110	82-08-12	4	--	ND	2300	10	570	<.01	--	8
01643125	82-08-12	4	--	ND	1600	10	260	<.01	--	7
01643580	76-09-01	10	10	10	7000	10	440	ND	10	30

Table 12.—Pesticide analyses of bottom materials from selected Frederick County streams

STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	2,4-DP, IN BOTTOM MAT. (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
L CATOCTIN C NR BRUNSWICK, MD	82-08-19	1700	0.55	<1.0	<1.0	<0.1	<0.1	<1.0	<0.1	<0.1
CATOCTIN C NR MIDDLETOWN, MD	82-08-19	1445	13	<1.0	<1.0	<.1	<.1	<1.0	.1	<.1
POTOMAC R AT POINT OF ROCKS, MD	72-05-17	--	--	--	--	.0	.0	.00	.0	1.5
	76-08-31	1515	1630	--	--	.0	.0	.00	.0	1.0
FRIENDS C NR EMMITSBURG, MD	82-07-22	1220	7.9	<.1	<1.0	<.1	<.1	<1.0	.3	<.1
L PIPE C AT KEYMAR, MD	82-07-27	1500	33	<.1	<1.0	<.1	<.1	<1.0	.2	.2
MONOCACY R NR WOODSBORO, MD	72-05-17	--	--	--	--	.0	.0	.00	.0	.0
MONOCACY R NR WALKERSVILLE, MD	82-08-19	1215	124	<1.0	<1.0	<.1	<.1	<1.0	<.1	<.1
TUSCARORA C NR FREDERICK, MD	82-07-23	1530	4.7	<.1	<1.0	<.1	<.1	<1.0	.1	<.1
ISRAEL C NR WALKERSVILLE, MD	82-08-11	1130	2.9	<.1	<1.0	<.1	<.1	<1.0	<.1	.2
LINGANORE C NR FREDERICK, MD	82-08-11	1430	28	<.1	<1.0	<.1	<.1	<1.0	<.1	<.1
BENNETT C AT PARK MILLS, MD	82-08-23	1845	17	<.1	<1.0	<.1	<.1	<1.0	<.1	<.1
MONOCACY R NR DICKERSON, MD	76-09-01	0930	170	--	--	.0	.0	.00	.0	.0
	82-08-23	1645	189	<.1	<1.0	<.1	<.1	<1.0	<.1	<.1

STATION NAME	DATE OF SAMPLE	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)
L CATOCTIN C NR BRUNSWICK, MD	82-08-19	<0.1	<0.1	<0.1	<0.1	<0.1	<10	<0.1	<0.1	<0.1
CATOCTIN C NR MIDDLETOWN, MD	82-08-19	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
POTOMAC R AT POINT OF ROCKS, MD	72-05-17	.0	.8	--	.0	--	--	.0	--	--
	76-08-31	.6	.0	--	.0	.0	.00	.0	.0	--
FRIENDS C NR EMMITSBURG, MD	82-07-22	.3	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
L PIPE C AT KEYMAR, MD	82-07-27	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
MONOCACY R NR WOODSBORO, MD	72-05-17	.0	.2	--	.0	--	--	.0	--	--
MONOCACY R NR WALKERSVILLE, MD	82-08-19	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
TUSCARORA C NR FREDERICK, MD	82-07-23	.4	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
ISRAEL C NR WALKERSVILLE, MD	82-08-11	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
LINGANORE C NR FREDERICK, MD	82-08-11	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
BENNETT C AT PARK MILLS, MD	82-08-23	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1
MONOCACY R NR DICKERSON, MD	76-09-01	.0	.0	--	.0	.0	.00	.0	.0	--
	82-08-23	<.1	<.1	<.1	<.1	<.1	<10	<.1	<.1	<.1

STATION NAME	DATE OF SAMPLE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SILVEX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
L CATOCTIN C NR BRUNSWICK, MD	82-08-19	<1	<0.1	<0.1	<0.1	<0.1	<0.10	<1.0	<0.1	<1.0
CATOCTIN C NR MIDDLETOWN, MD	82-08-19	<1	<.1	<.1	<.1	<.1	<.10	<1.0	<.1	<1.0
POTOMAC R AT POINT OF ROCKS, MD	72-05-17	.00	--	--	--	--	--	--	--	--
	76-08-31	.00	.0	.0	.0	.0	.00	.00	--	.0
FRIENDS C NR EMMITSBURG, MD	82-07-22	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
L PIPE C AT KEYMAR, MD	82-07-27	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
MONOCACY R NR WOODSBORO, MD	72-05-17	<10	--	--	--	--	--	--	--	--
MONOCACY R NR WALKERSVILLE, MD	82-08-19	<1	<.1	<.1	<.1	<.1	<.10	<1.0	<.1	<1.0
TUSCARORA C NR FREDERICK, MD	82-07-23	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
ISRAEL C NR WALKERSVILLE, MD	82-08-11	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
LINGANORE C NR FREDERICK, MD	82-08-11	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
BENNETT C AT PARK MILLS, MD	82-08-23	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1
MONOCACY R NR DICKERSON, MD	76-09-01	.00	.0	.0	.0	.0	.00	.00	--	.0
	82-08-23	<1	<.1	<.1	<.1	<.1	<.10	<.10	<.1	<.1

STATION NAME	DATE OF SAMPLE	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)
L CATOCTIN C NR BRUNSWICK, MD	82-08-19	<.1	<.1
CATOCTIN C NR MIDDLETOWN, MD	82-08-19	<0.1	<0.1
POTOMAC R AT POINT OF ROCKS, MD	72-05-17	--	--
	76-08-31	.0	.0
FRIENDS C NR EMMITSBURG, MD	82-07-22	<.1	<.1
L PIPE C AT KEYMAR, MD	82-07-27	<.1	<.1
MONOCACY R NR WOODSBORO, MD	72-05-17	--	--
MONOCACY R NR WALKERSVILLE, MD	82-08-19	<.1	<.1
TUSCARORA C NR FREDERICK, MD	82-07-23	<.1	<.1
ISRAEL C NR WALKERSVILLE, MD	82-08-11	<.1	<.1
LINGANORE C NR FREDERICK, MD	82-08-11	<.1	<.1
BENNETT C AT PARK MILLS, MD	82-08-23	<.1	<.1
MONOCACY R NR DICKERSON, MD	76-09-01	.0	.0
	82-08-23	<.1	<.1

Table 13.—Suspended sediment at selected sites in Frederick County, Md.

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
01638500	POTOMAC R AT POINT OF ROCKS, MD	61-02-21	0440	102000	1.5	656	181000	8	16
		61-02-27	1155	91700	9.0	386	95600	10	15
		61-03-26	1535	42500	9.0	91	10400	16	28
		61-04-14	1835	80400	9.0	257	55800	10	19
		66-02-15	0740	68200	3.0	649	120000	38	52
		66-03-03	0745	39000	4.5	159	16700	45	53
		66-04-30	2000	31000	12.0	90	7530	40	46
		66-05-02	1530	42500	11.5	135	15500	33	40
		69-03-26	2230	25800	7.0	205	14300	49	65
		69-08-05	1700	14000	24.0	105	3970	56	70
		69-08-23	2000	12500	21.0	120	4060	54	62
		69-12-13	1115	23100	3.0	103	6420	--	62
		70-01-03	1440	29400	1.0	189	15000	50	63
		70-01-31	1645	36000	3.0	330	32100	36	56
		70-04-26	1415	50300	16.0	288	39100	42	59
		70-07-12	1710	22600	25.0	142	8660	46	59
		70-11-05	1740	19700	13.0	82	4370	--	--
		70-12-25	1145	54300	6.0	275	40300	39	56
		71-02-25	1715	53900	6.0	162	23600	38	55
		71-10-25	1930	37100	16.0	233	23300	--	37
		71-10-28	2155	28500	16.0	282	21700	--	49
		71-12-09	2130	35000	6.0	149	14100	--	40
		72-02-15	0830	57000	1.0	472	72600	--	52
		72-02-27	2150	79900	3.0	545	118000	--	44
		72-04-17	1150	41400	12.0	151	16900	--	50
		72-06-23	2130	347000	--	662	620000	--	55
		72-10-08	0830	101000	16.0	422	115000	--	60
		72-12-24	0215	78100	6.0	161	33900	--	41
		73-02-04	1915	69100	5.0	254	47400	--	48
		73-04-06	0100	48300	9.0	206	26900	--	50
		73-04-11	0505	49500	8.0	145	19400	--	63
		74-01-13	1505	43500	3.0	145	17000	--	56
		74-06-04	1650	59900	20.0	402	65000	--	49
		74-12-03	1840	28200	5.0	237	18000	36	52
		75-03-21	1210	177000	9.0	893	427000	--	36
		75-04-27	1230	44200	13.0	298	35600	34	49
		75-06-02	1615	21700	23.0	153	8960	46	59
		75-09-26	2135	125000	17.0	421	142000	37	48
		75-09-26	2235	161000	17.0	382	166000	--	44
		76-10-03	1250	24500	16.0	126	8330	33	47
		76-10-11	0545	188000	14.0	413	210000	--	47
		79-01-26	0930	77800	2.0	188	39500	43	54
		79-02-25	1310	92800	2.0	345	86400	33	42
		79-09-07	1845	82600	23.0	669	149000	--	50
		82-03-18	1720	60200	--	692	112000	--	37
		82-03-22	0920	67400	--	313	57000	--	38
		82-03-22	1610	69500	--	392	73600	--	39
		83-04-11	0950	68500	10.0	2730	505000	--	38
		83-12-14	1140	80000	--	445	96100	--	43
		84-02-16	0900	192000	--	625	324000	--	46
		84-02-16	1218	182000	--	555	273000	61	68
		84-02-16	1238	180000	--	649	315000	45	47
		84-02-16	1302	179000	--	507	245000	42	58
		84-02-16	1322	178000	--	515	248000	55	60
		84-03-30	1105	128000	5.0	581	201000	--	33
01641000	HUNTING C AT JIMTOWN, MD	61-02-19	1800	241	1.5	327	213	3	12
01642500	LINGANORE C NR FREDERICK, MD	61-02-19	1410	677	4.0	729	1330	1	5
01643000	MONOCOCY R AT JUG BRIDGE NR FREDERICK, MD	61-01-03	1150	1740	2.0	50	235	11	30
		61-02-18	1510	2790	3.5	116	874	12	26
		61-02-19	1810	7370	3.5	630	12500	5	11
		61-02-20	1345	10400	2.0	486	13600	7	23
		61-02-26	1130	12500	5.5	327	11000	10	15
		61-03-09	1710	5370	4.5	154	2230	16	28
		61-03-23	1810	4680	4.5	117	1480	17	22
		61-04-26	2000	4140	11.0	326	3640	10	29
		61-09-08	1755	2000	25.5	516	2790	32	60
01643020	MONOCACY R AT REICHS FORD BRIDGE NR FREDERICK, MD	65-02-14	0800	13300	1.5	782	28100	--	52
		65-02-14	1100	16500	1.0	684	30500	41	54
		65-03-01	1700	10400	4.5	555	15600	--	49
		65-04-14	1730	1760	8.5	75	356	43	58
		65-04-28	1905	3760	9.0	190	1930	29	41
		65-10-08	1720	1080	13.5	182	531	53	68
		68-11-19	1830	1560	9.0	167	704	51	62
		69-03-26	1745	3200	7.0	146	1260	45	56
		69-06-14	1730	1640	24.0	1100	4880	--	73
		69-07-21	2000	610	23.0	1200	1980	--	78
		69-08-04	2140	3630	22.0	766	7510	--	58
		69-09-04	1800	5910	23.0	617	9850	41	59
		69-09-08	1800	3700	22.0	755	7550	--	57
		69-11-20	1820	2700	6.0	385	2810	49	54

Table 13.—Suspended sediment at selected sites in Frederick County, Md.—continued

SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM	DATE OF SAMPLE	STATION NUMBER
35	56	71	--	87	90	96	99	--	--	61-02-21	01638500
26	37	47	--	79	83	91	98	--	--	61-02-27	
45	60	71	--	90	93	97	99	100	--	61-03-26	
30	40	59	--	73	81	90	96	100	--	61-04-14	
70	84	92	--	96	99	100	--	--	--	66-02-15	
68	84	93	--	98	99	100	--	--	--	66-03-03	
63	73	87	--	94	98	100	--	--	--	66-04-30	
50	64	80	--	91	97	100	--	--	--	66-05-02	
79	87	92	95	95	98	100	--	--	--	69-03-26	
85	93	98	99	99	100	--	--	--	--	69-08-05	
83	91	99	99	99	100	--	--	--	--	69-08-23	
79	89	90	--	93	97	100	--	--	--	69-12-13	
79	90	94	--	99	100	--	--	--	--	70-01-03	
70	85	92	--	96	99	99	100	--	--	70-01-31	
78	83	96	--	98	100	--	--	--	--	70-04-26	
74	88	95	--	99	100	--	--	--	--	70-07-12	
--	--	--	--	93	100	--	--	--	--	70-11-05	
70	84	95	--	98	100	--	--	--	--	70-12-25	
70	84	92	--	96	100	--	--	--	--	71-02-25	
54	68	81	--	90	97	99	100	--	--	71-10-25	
63	73	82	--	87	93	99	100	--	--	71-10-28	
60	73	86	--	91	95	98	99	100	--	71-12-09	
68	83	91	--	95	97	99	100	--	--	72-02-15	
60	74	90	--	92	97	99	100	--	--	72-02-27	
63	74	85	--	91	94	96	100	--	--	72-04-17	
70	82	86	--	93	96	98	100	--	--	72-06-23	
74	84	92	--	95	97	99	100	--	--	72-10-08	
52	62	74	--	81	86	92	100	--	--	72-12-24	
62	75	85	--	91	94	97	100	--	--	73-02-04	
68	82	94	--	97	98	99	100	--	--	73-04-06	
73	82	91	--	97	98	99	100	--	--	73-04-11	
71	82	91	--	94	96	98	100	--	--	74-01-13	
67	81	89	--	95	96	98	100	--	--	74-06-04	
70	82	88	--	91	93	96	100	--	--	74-12-03	
67	81	87	--	95	99	100	--	--	--	75-03-21	
64	78	88	--	96	97	98	98	99	100	75-04-27	
73	86	92	--	97	98	99	100	--	--	75-06-02	
62	76	85	94	--	95	97	100	--	--	75-09-26	
61	80	84	--	90	95	97	100	--	--	75-09-26	
68	83	91	--	96	97	99	100	--	--	76-10-03	
69	80	84	--	90	93	96	100	--	--	76-10-11	
66	78	87	--	92	96	99	100	--	--	79-01-26	
53	63	71	--	80	87	94	100	--	--	79-02-25	
57	71	77	--	81	86	96	99	100	--	79-09-07	
47	59	71	--	83	93	98	100	--	--	82-03-18	
47	57	66	--	74	88	96	99	100	--	82-03-22	
52	60	70	--	79	90	97	100	--	--	82-03-22	
49	54	61	--	79	88	96	100	--	--	83-04-11	
56	67	76	--	84	91	97	100	--	--	83-12-14	
59	71	78	--	84	90	96	100	--	--	84-02-16	
79	87	93	--	97	98	100	--	--	--	84-02-16	
68	80	86	--	96	98	99	100	--	--	84-02-16	
70	82	89	--	94	96	98	99	100	--	84-02-16	
74	80	94	--	98	100	--	--	--	--	84-02-16	
43	51	57	--	68	77	87	99	100	--	84-03-30	
25	34	59	--	70	73	86	93	--	--	61-02-19	01641000
11	29	44	--	63	70	76	90	--	--	61-02-19	01642500
54	76	93	--	94	95	98	99	--	--	61-01-03	01643000
31	57	82	--	90	91	97	99	--	--	61-02-18	
15	36	64	--	83	87	96	98	--	--	61-02-19	
43	70	85	--	93	95	98	99	--	--	61-02-20	
41	70	84	--	94	96	99	100	--	--	61-02-26	
46	69	85	--	92	93	96	97	100	--	61-03-09	
51	75	91	--	95	96	99	100	--	--	61-03-23	
41	65	80	--	89	91	95	97	100	--	61-04-26	
79	94	99	--	99	99	100	100	--	--	61-09-08	
71	87	91	--	97	99	100	--	--	--	65-02-14	01643020
70	83	93	--	96	97	98	--	99	100	65-02-14	
67	82	88	--	98	99	100	--	--	--	65-03-01	
72	81	89	--	96	100	--	--	--	--	65-04-14	
55	70	83	--	97	99	100	--	--	--	65-04-28	
84	95	98	100	--	--	--	--	--	--	65-10-08	
78	89	93	94	94	95	96	98	100	--	68-11-19	
71	81	87	89	89	89	90	90	100	--	69-03-26	
90	97	97	100	100	--	--	--	--	--	69-06-14	
94	97	98	100	100	100	100	100	100	--	69-07-21	
78	92	97	99	99	100	--	--	--	--	69-08-04	
77	91	98	99	99	99	99	100	--	--	69-09-04	
79	92	94	99	99	99	100	--	--	--	69-09-08	
69	83	90	--	95	97	99	100	--	--	69-11-20	

Table 13.—Suspended sediment at selected sites in Frederick County, Md.—continued

STATION NUMBER	STATION NAME	DATE OF SAMPLE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
01643020		69-12-11	1640	10500	5.0	787	22400	--	53
		70-02-03	1830	9770	1.0	259	6830	41	52
		70-02-10	1910	10800	2.0	621	18200	--	46
		70-04-02	1800	11200	6.0	1130	34400	--	48
		70-04-15	1800	15800	8.0	276	11800	40	50
		70-06-22	2115	3520	20.0	1330	12600	--	70
		70-07-16	1910	7210	23.0	815	15900	--	64
		70-11-16	0650	3520	10.0	154	1460	37	50
		70-11-21	1945	3130	7.0	223	1880	45	59
		70-12-24	1100	6750	3.0	148	2700	37	59
		71-01-06	1000	4830	1.0	115	1500	38	51
		71-02-09	1800	3680	.0	440	4380	39	56
		71-02-19	1700	3570	4.0	260	2510	35	53
		71-02-23	1630	9690	4.0	236	6180	26	37
		71-06-15	1700	2050	19.0	1110	6140	--	64
		71-08-04	1930	2740	20.0	773	5720	--	58
		73-05-28	1730	10200	16.5	427	11800	--	42
		74-03-31	1015	15100	4.0	526	21400	--	62
		76-04-01	1250	396	11.0	1140	1220	--	39
		76-06-02	0640	725	18.5	141	276	29	48
		77-04-05	1745	19500	--	1170	61600	--	42
		77-11-08	2000	5030	13.0	364	4940	--	45
		78-01-09	1710	14400	1.0	1380	53700	--	49
		79-01-03	1330	5520	4.0	126	1880	--	--
		79-02-26	1700	24500	2.0	441	29200	--	50
		79-09-06	1500	30300	--	368	30100	--	60
		81-02-24	1000	15800	--	543	23200	--	48
		83-12-14	0700	2250	--	76	462	--	93
		84-02-15	1600	26300	3.0	291	20700	--	78
		84-05-14	1630	1530	16.0	432	1780	--	59

Table 13.—Suspended sediment at selected sites in Frederick County, Md.—continued

SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM	DATE OF SAMPLE	STATION NUMBER
72	85	89	--	96	98	99	100	--	--	69-12-11	01643020
68	81	92	--	95	98	100	100	--	--	70-02-03	
63	79	89	--	94	97	99	100	--	--	70-02-10	
65	82	94	--	98	100	100	--	--	--	70-04-02	
69	82	91	--	94	98	100	--	--	--	70-04-15	
88	97	97	--	99	100	100	100	100	--	70-06-22	
81	93	98	--	99	100	100	100	--	--	70-07-16	
65	83	92	--	96	99	100	--	--	--	70-11-16	
83	94	97	--	99	100	--	--	--	--	70-11-21	
68	82	91	--	96	99	100	--	--	--	70-12-24	
68	84	94	--	96	98	99	100	--	--	71-01-06	
70	88	95	--	97	99	100	--	--	--	71-02-09	
72	87	96	--	99	100	--	--	--	--	71-02-19	
63	78	92	--	97	99	100	--	--	--	71-02-23	
83	94	94	--	99	100	--	--	--	--	71-06-15	
77	82	93	--	98	100	--	--	--	--	71-08-04	
58	73	80	--	88	90	91	93	98	100	73-05-28	
77	81	95	--	99	100	--	--	--	--	74-03-31	
54	69	78	--	88	90	92	95	99	100	76-04-01	
67	83	91	--	98	99	99	100	--	--	76-06-02	
56	71	79	--	97	97	99	100	--	--	77-04-05	
62	78	87	--	94	98	99	100	--	--	77-11-08	
66	82	93	--	94	96	97	98	99	100	78-01-09	
--	--	--	--	95	100	--	--	--	--	79-01-03	
64	80	89	--	97	99	99	100	--	--	79-02-26	
80	90	94	--	98	99	100	--	--	--	79-09-06	
66	79	89	--	95	99	100	--	--	--	81-02-24	
97	98	99	--	99	99	100	--	--	--	83-12-14	
91	97	99	--	99	99	100	--	--	--	84-02-15	
71	87	96	--	98	99	99	100	--	--	84-05-14	

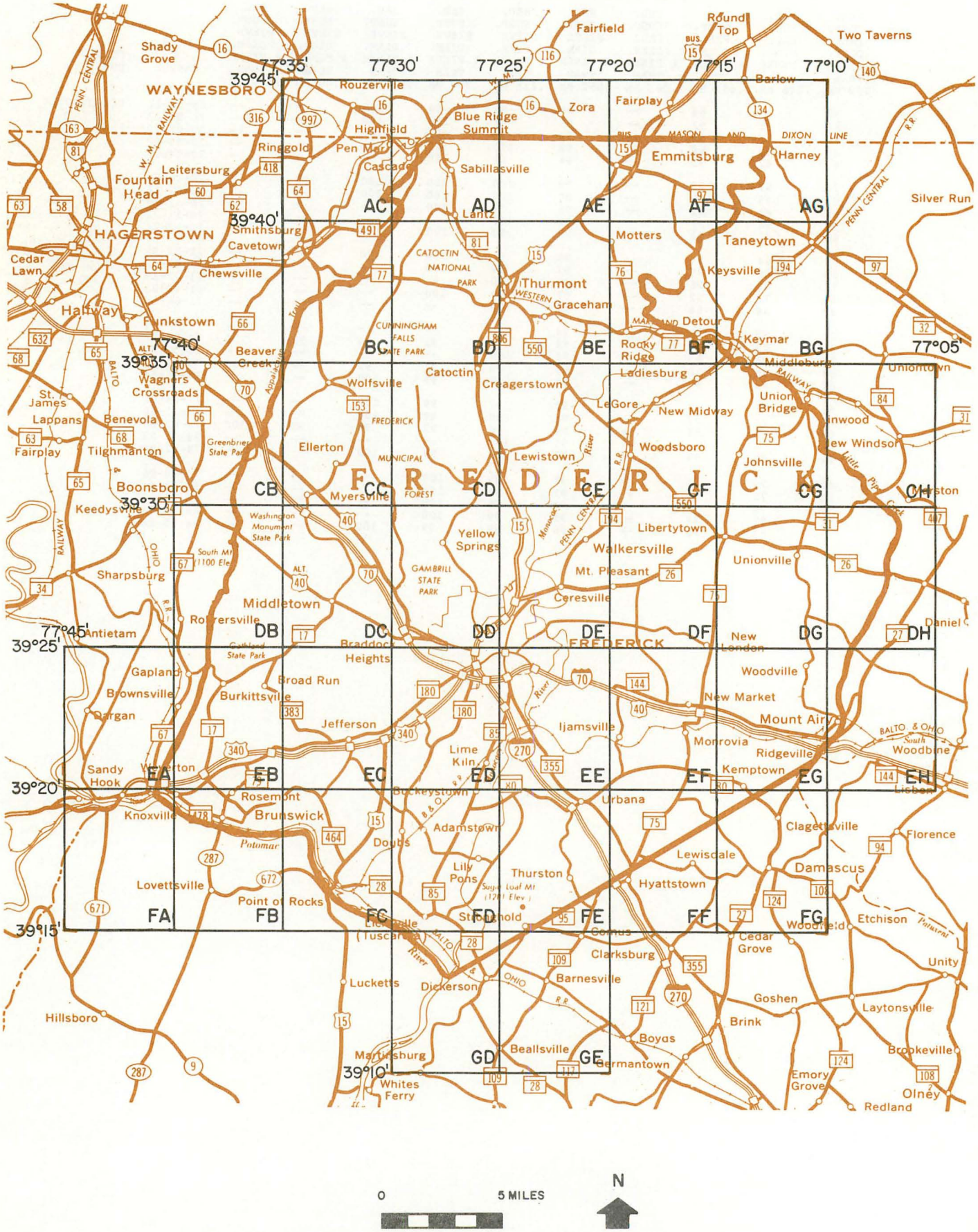
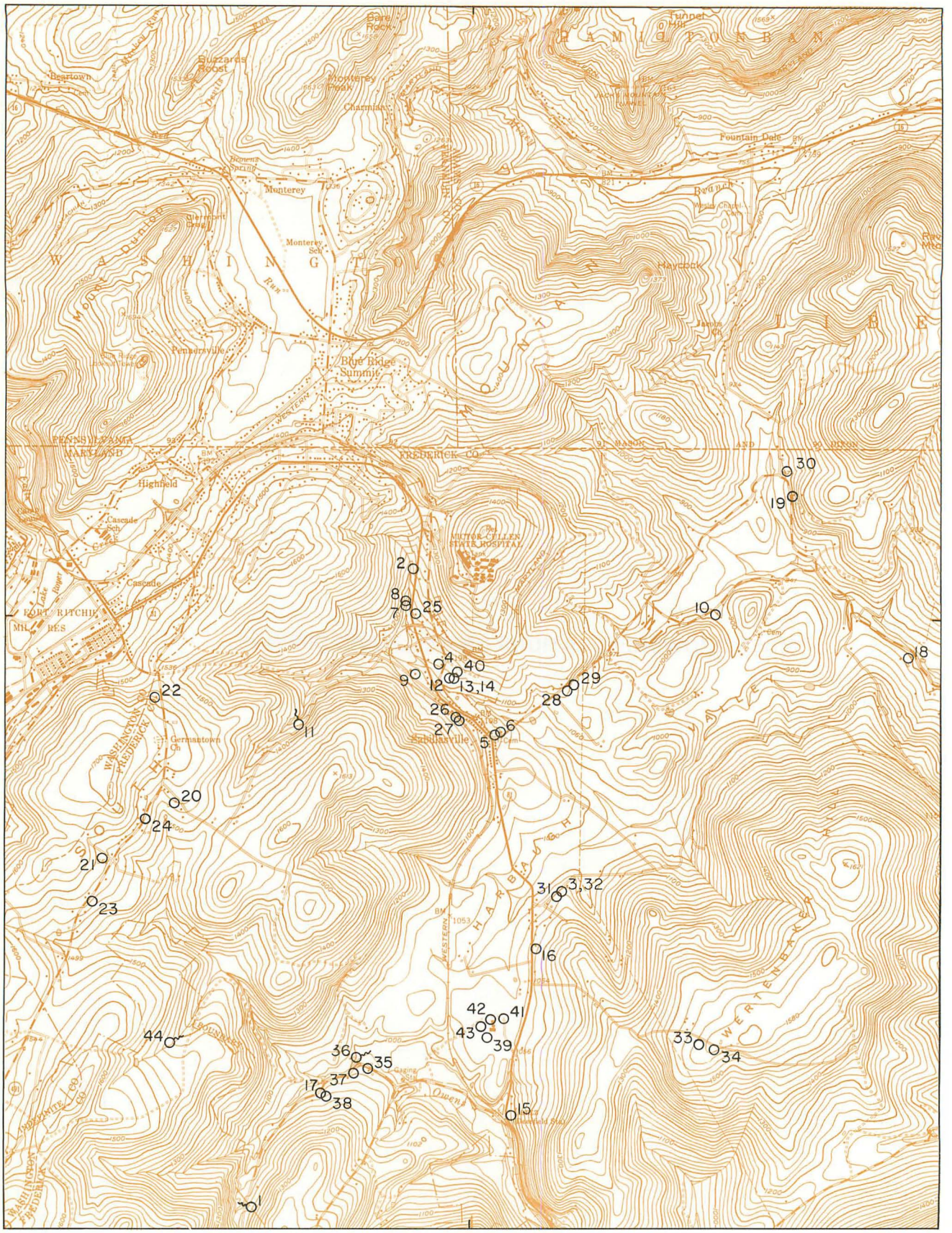


Figure 5.—Index to 5-minute quadrangles in Frederick County.

MAPS SHOWING LOCATIONS OF WELLS AND SPRINGS



AD

1 ½ 0 1 MILE

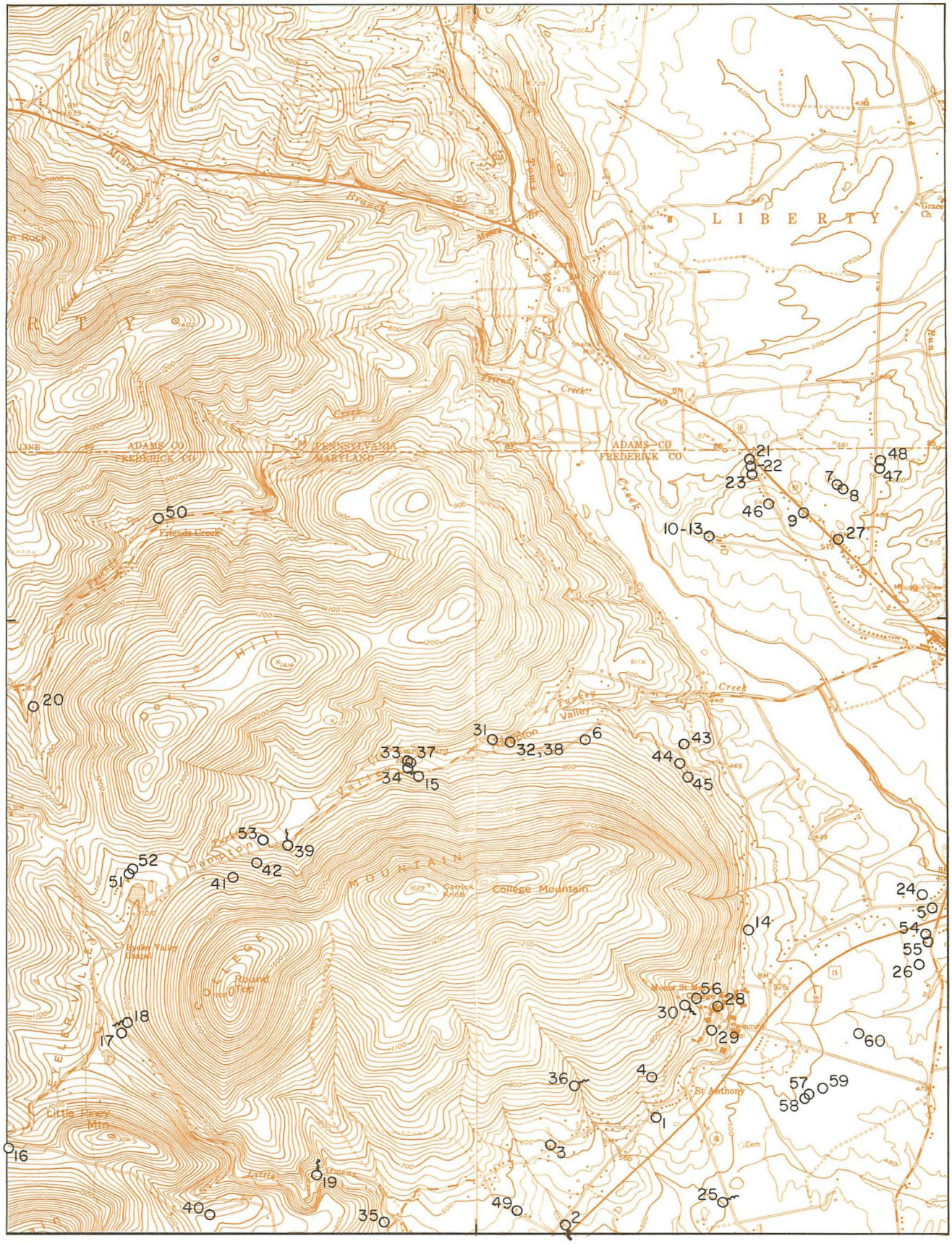
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

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

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

AF

1 ½ 0 1 MILE

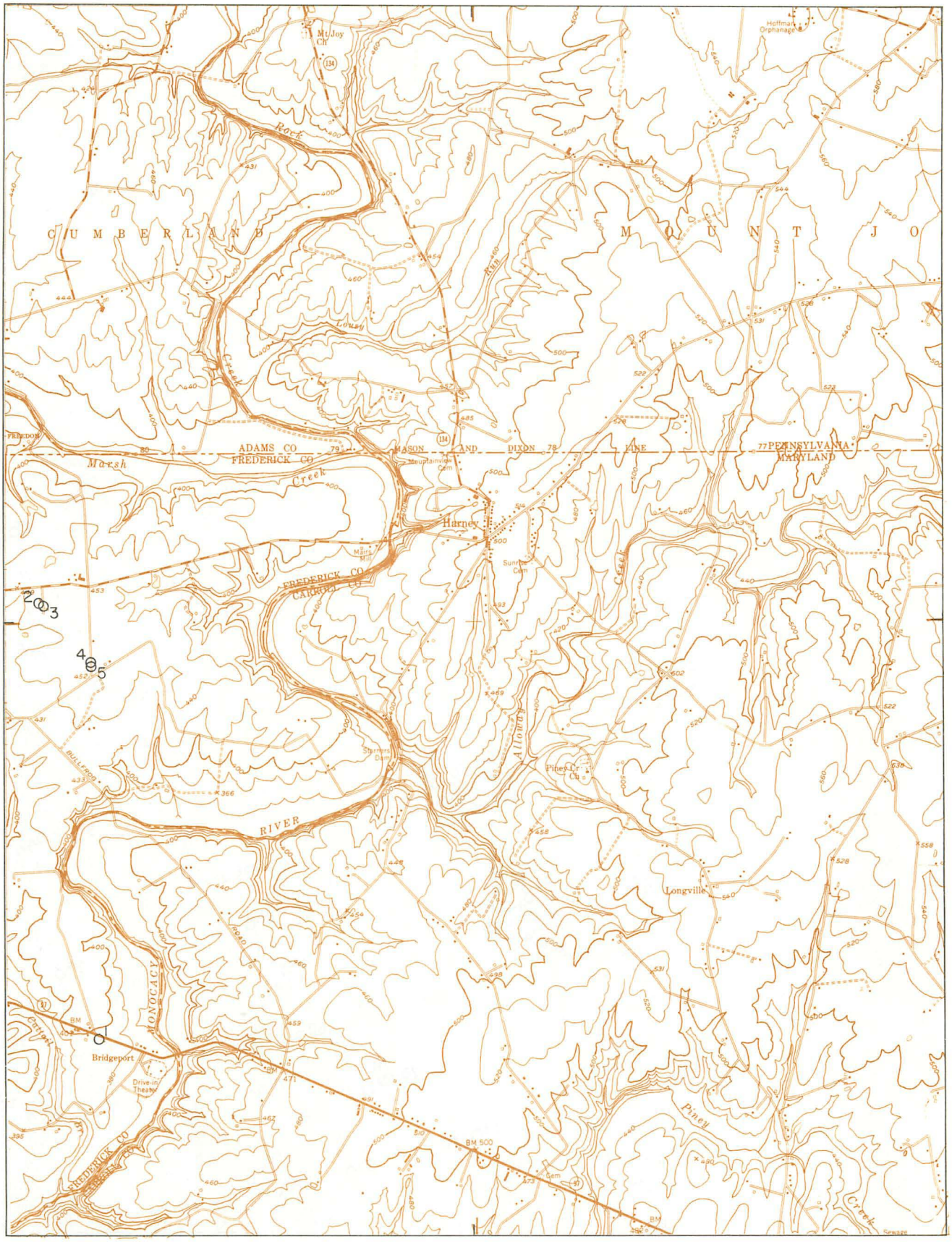
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



AG

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

BC

1 ½ 0 1 MILE

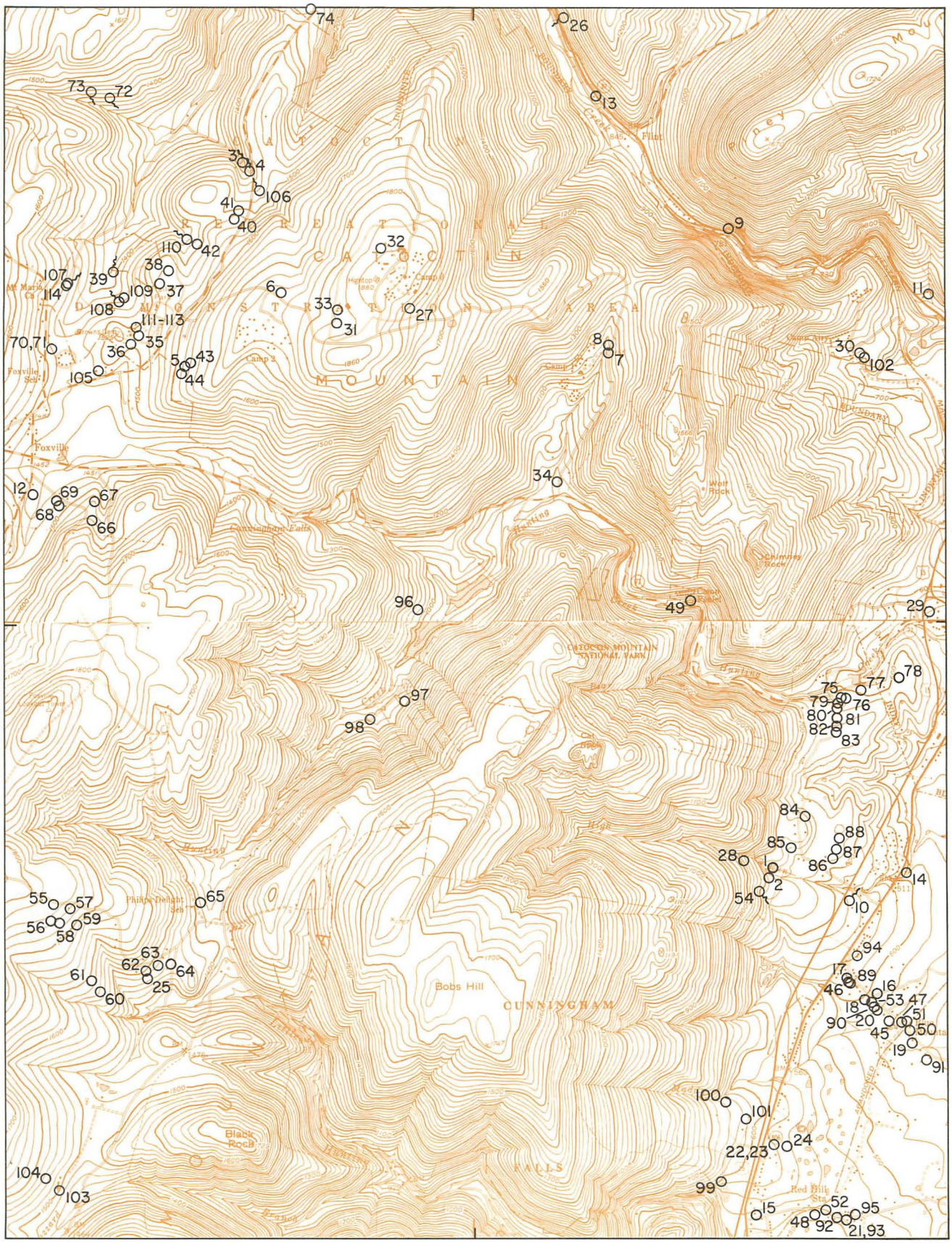
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

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

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

BE

1 ½ 0 1 MILE

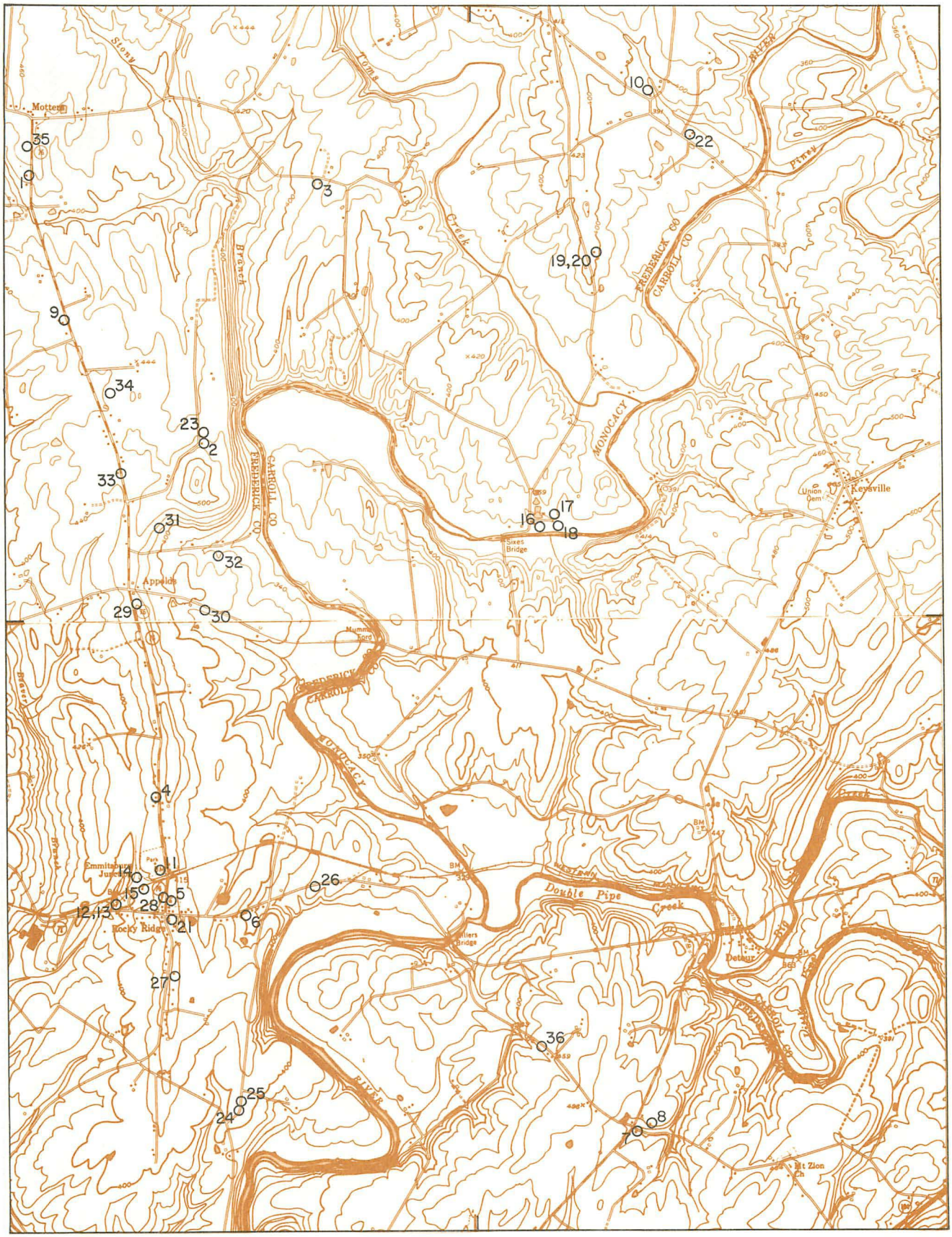
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

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

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

BG

1 ½ 0 1 MILE

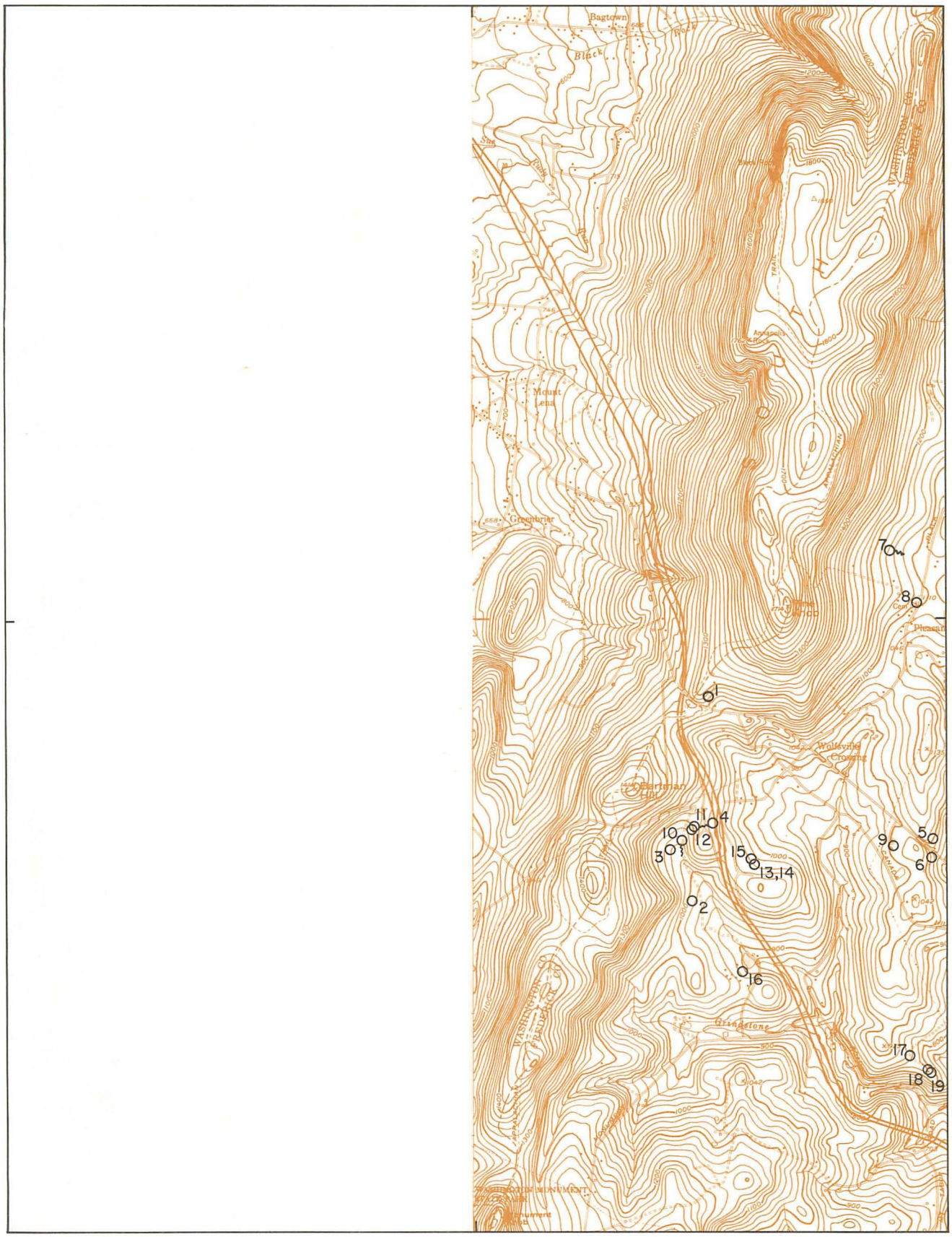
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



CB

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

CC

1 ½ 0 1 MILE

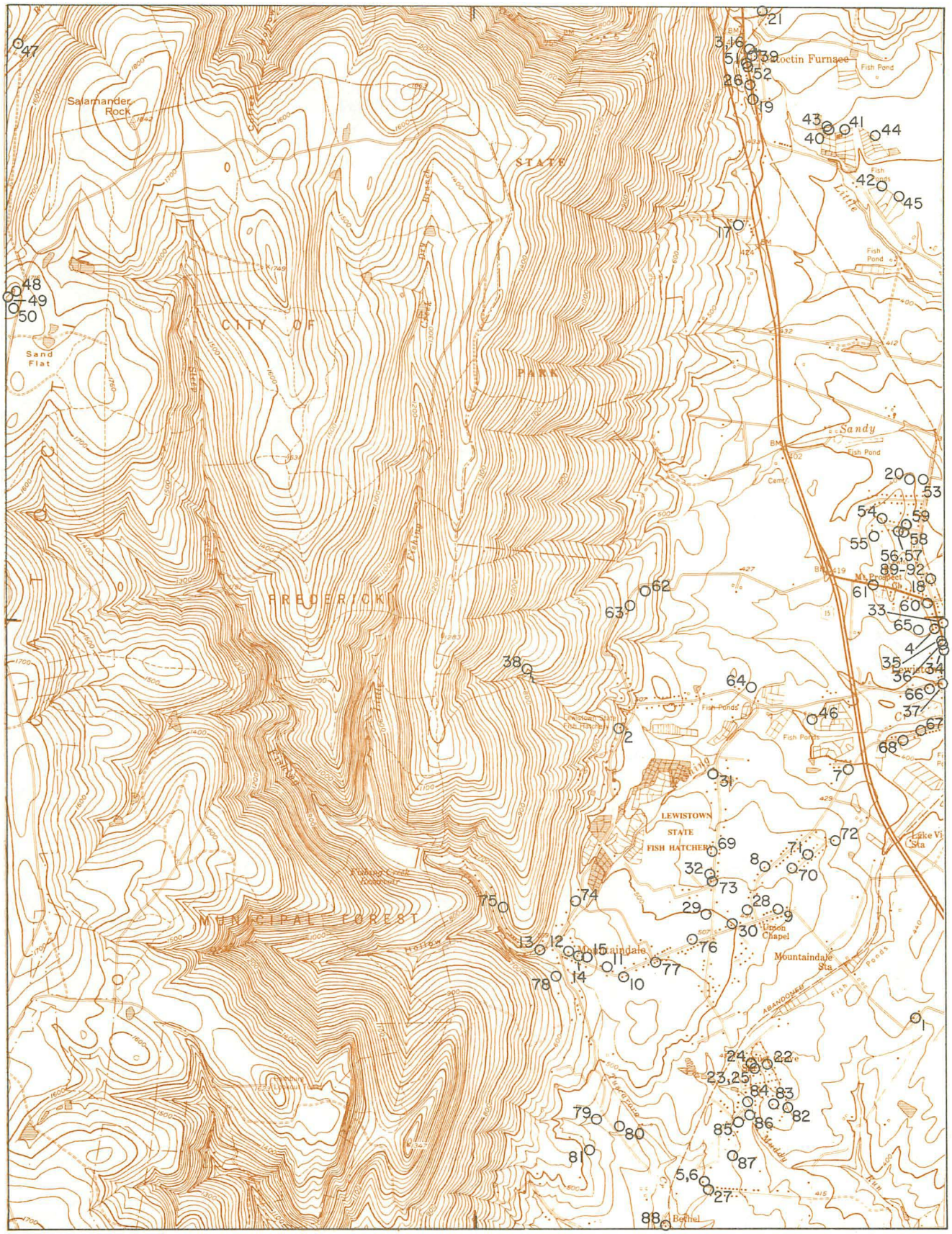
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



CD

1 ½ 0 1 MILE

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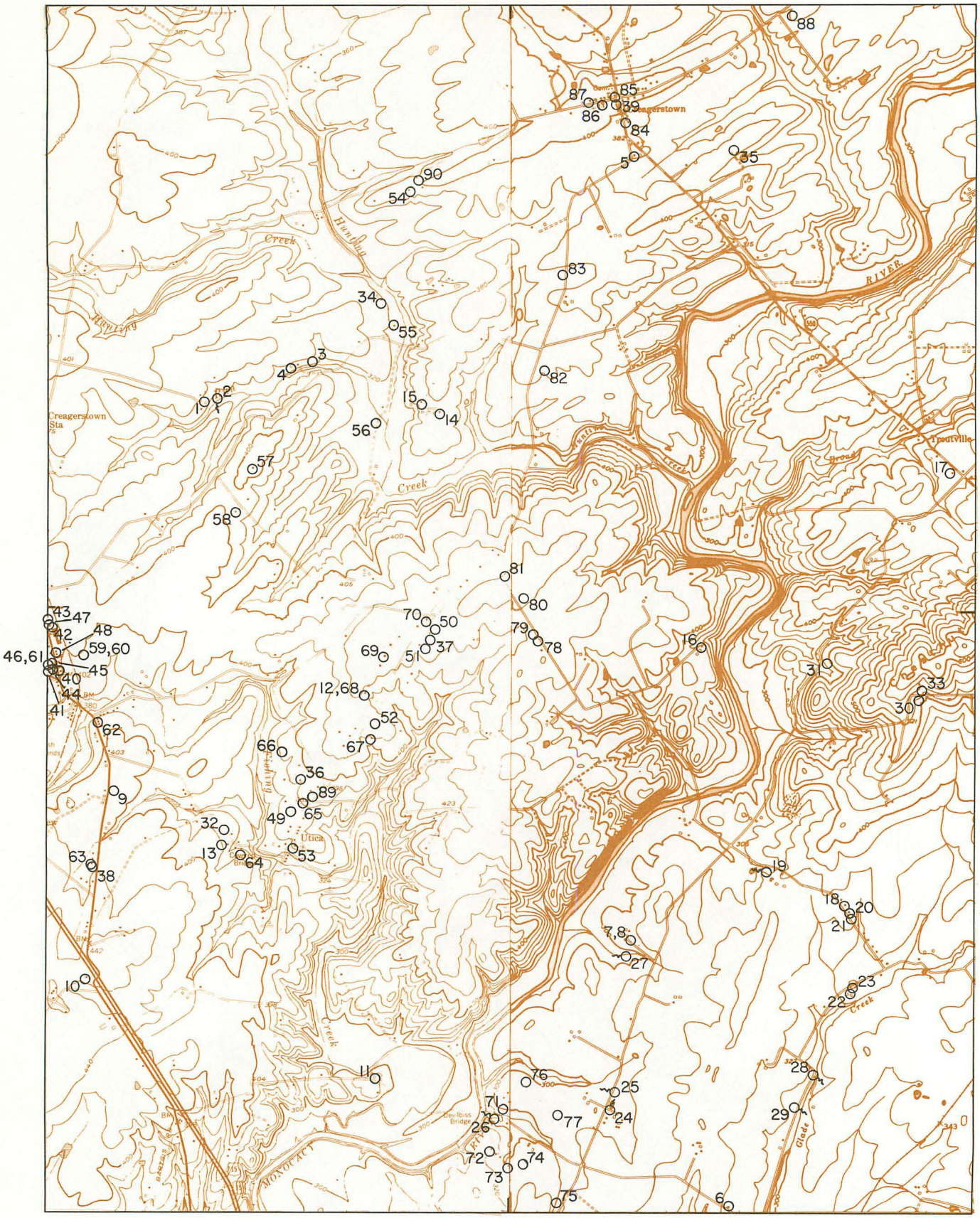
1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



CE

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

CF

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

CG

1 ½ 0 1 MILE

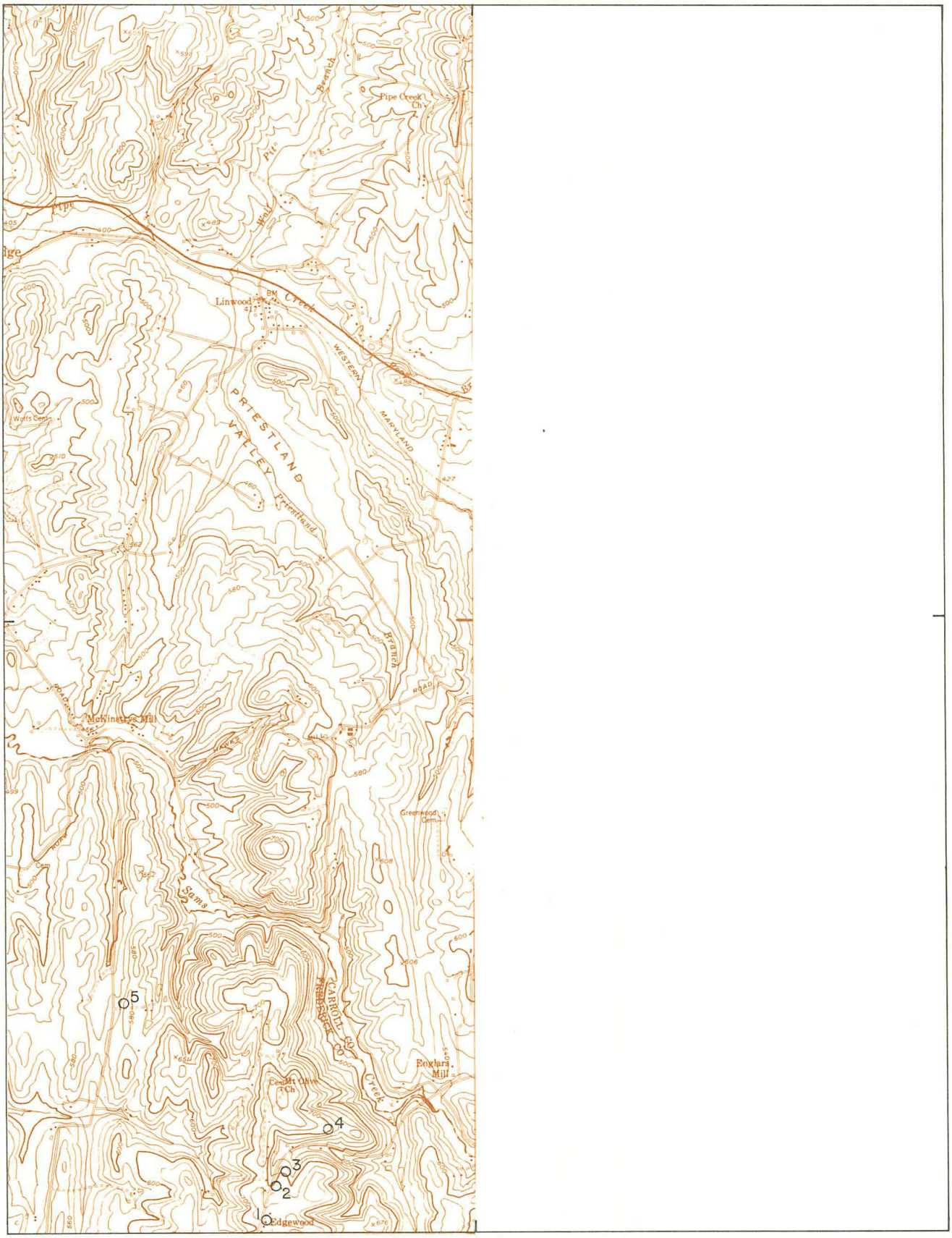
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



CH

1 ½ 0 1 MILE

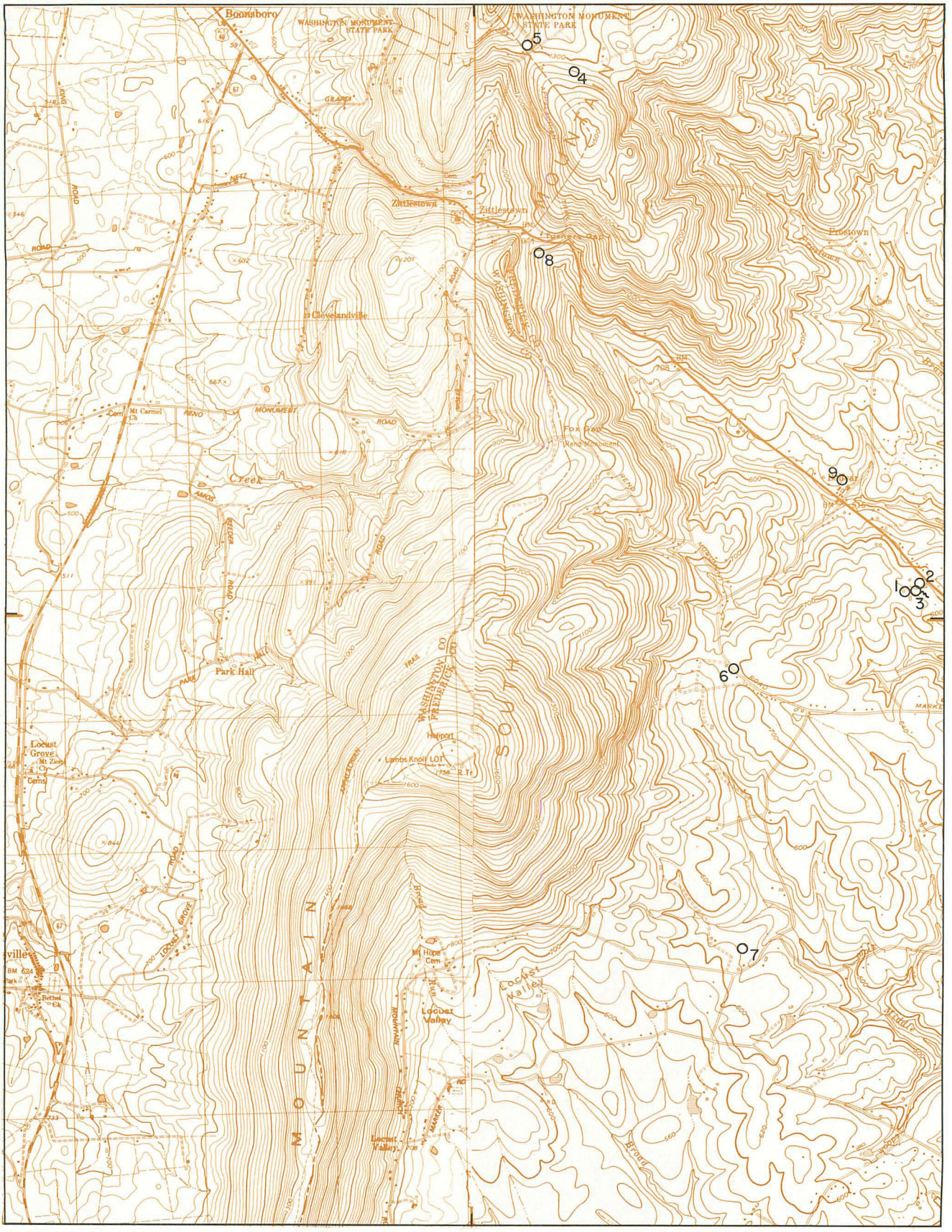
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



DB

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1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

DC

1 ½ 0 1 MILE

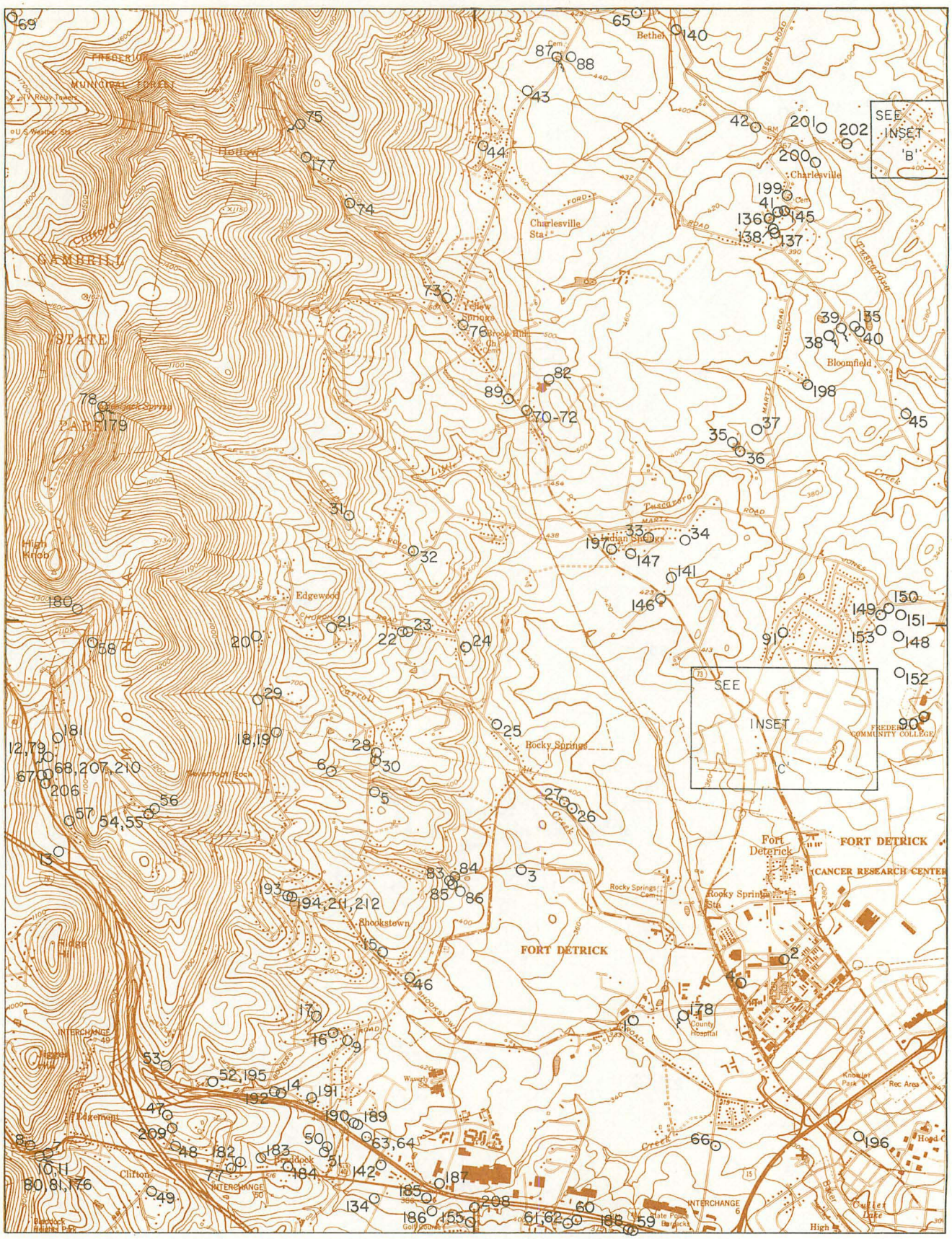
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



DD

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CONTOUR INTERVAL 20 FEET

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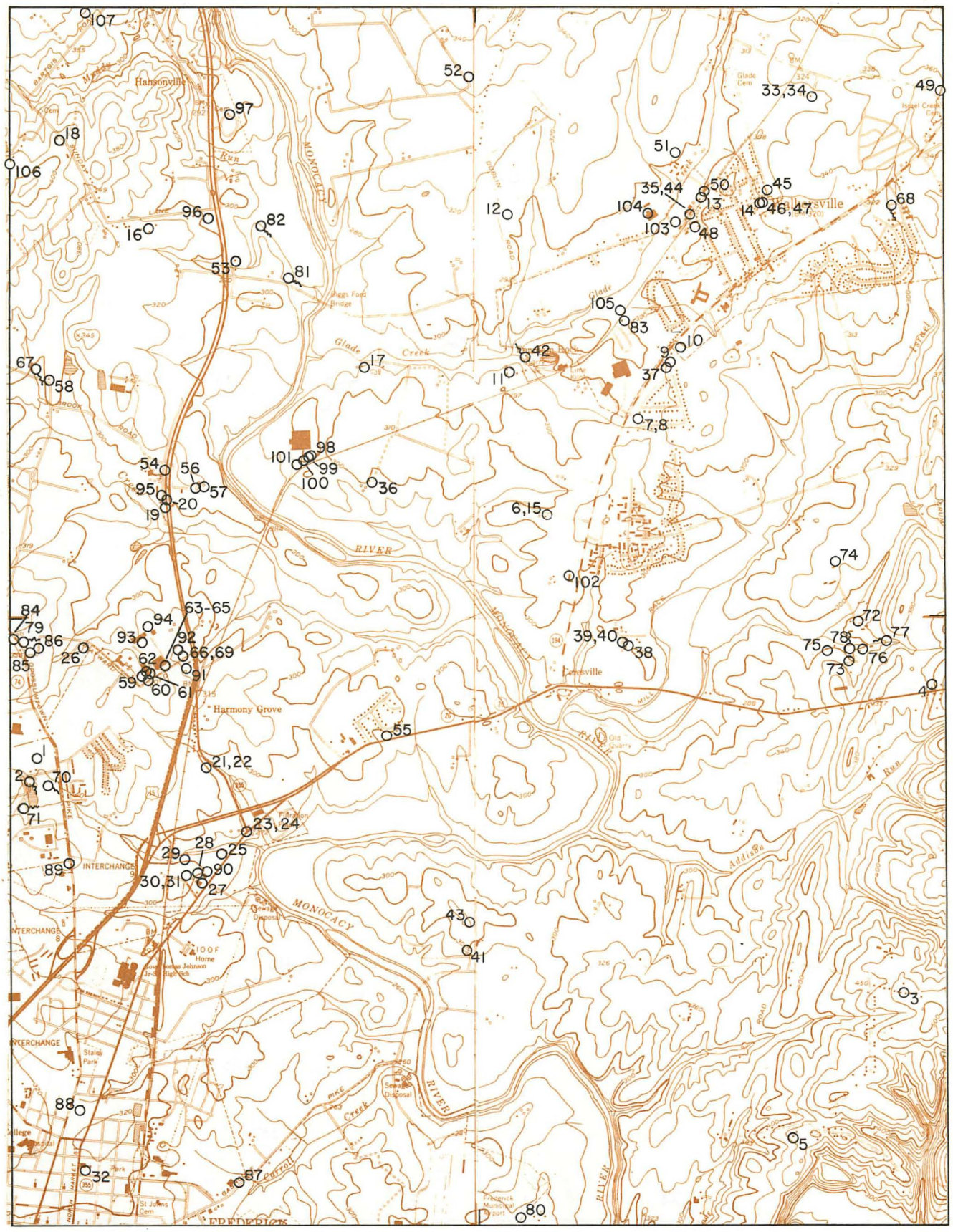


DE

1 ½ 0 1 MILE

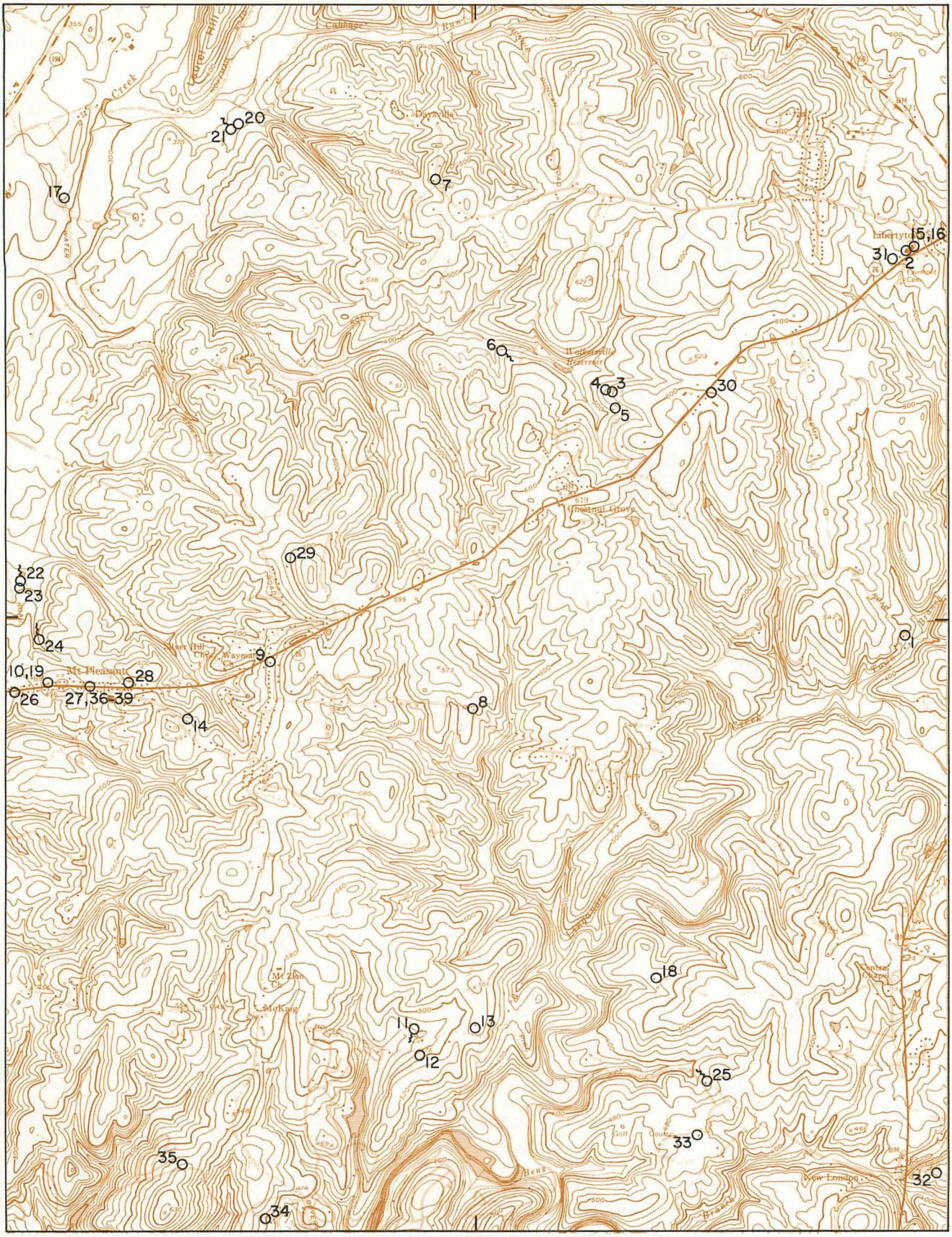
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



DF

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

DG

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

DH

1 ½ 0 1 MILE

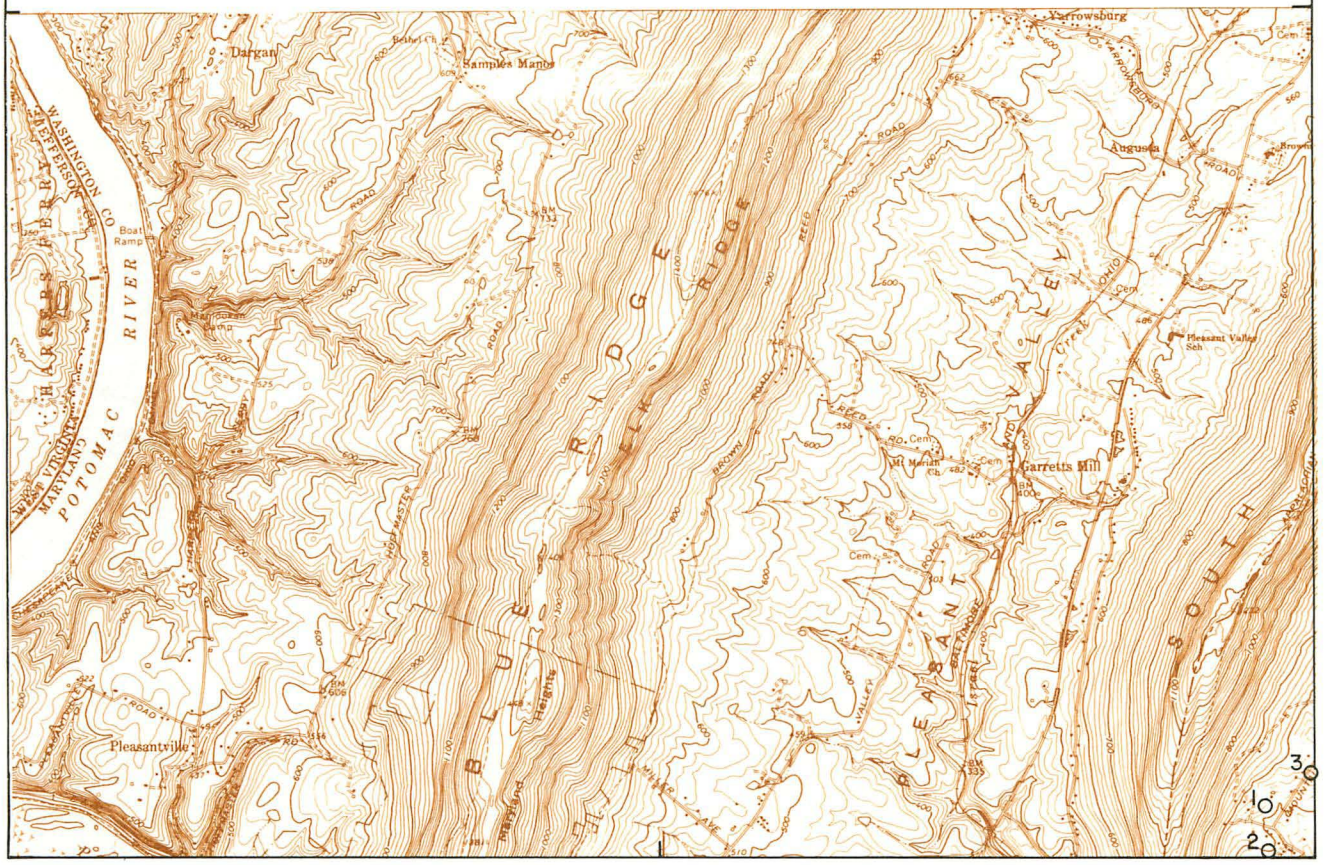
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



EA

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

EB

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

EC

1 ½ 0 1 MILE

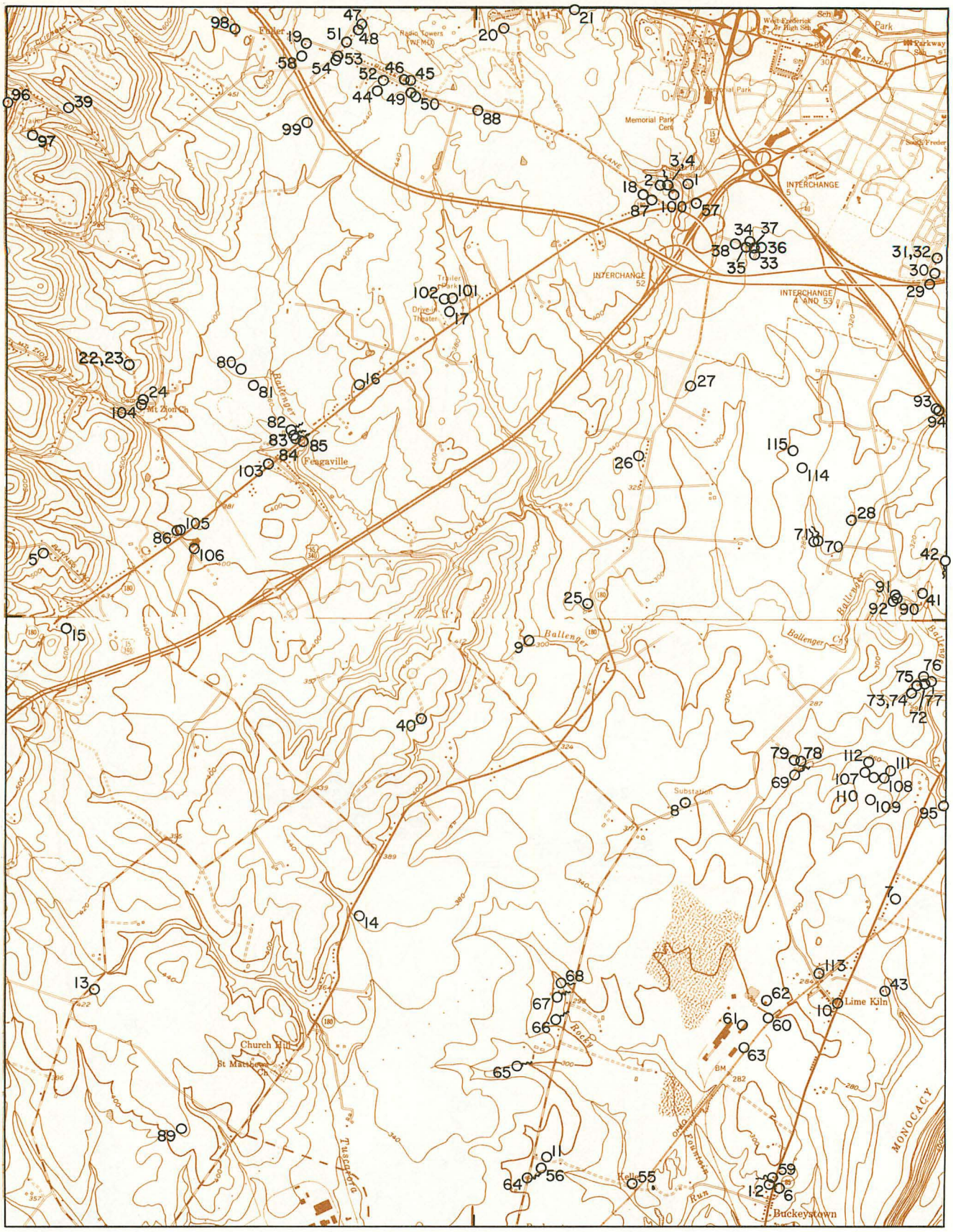
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



ED

1 ½ 0 1 MILE

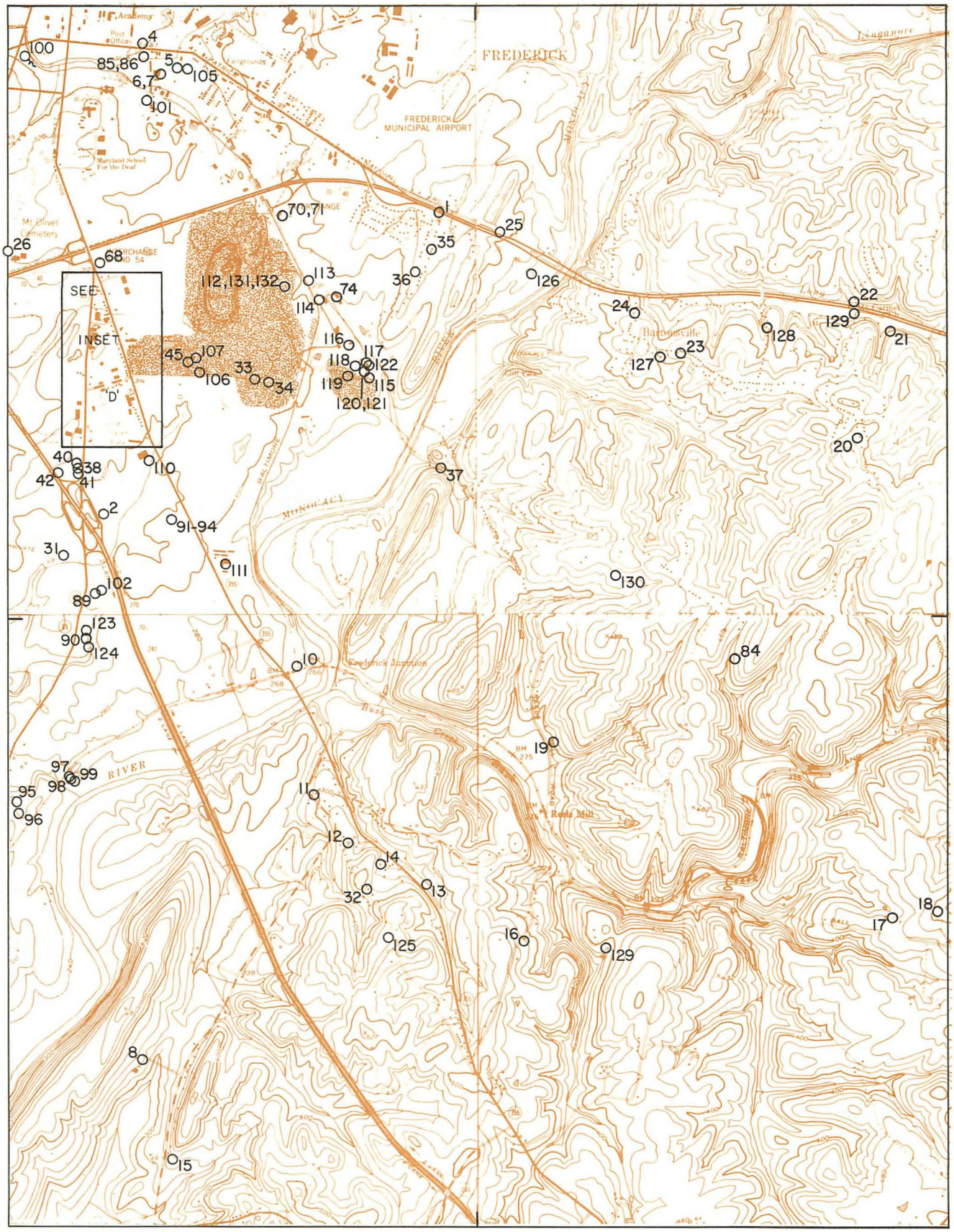
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



EE

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

EF

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

EG

1 ½ 0 1 MILE

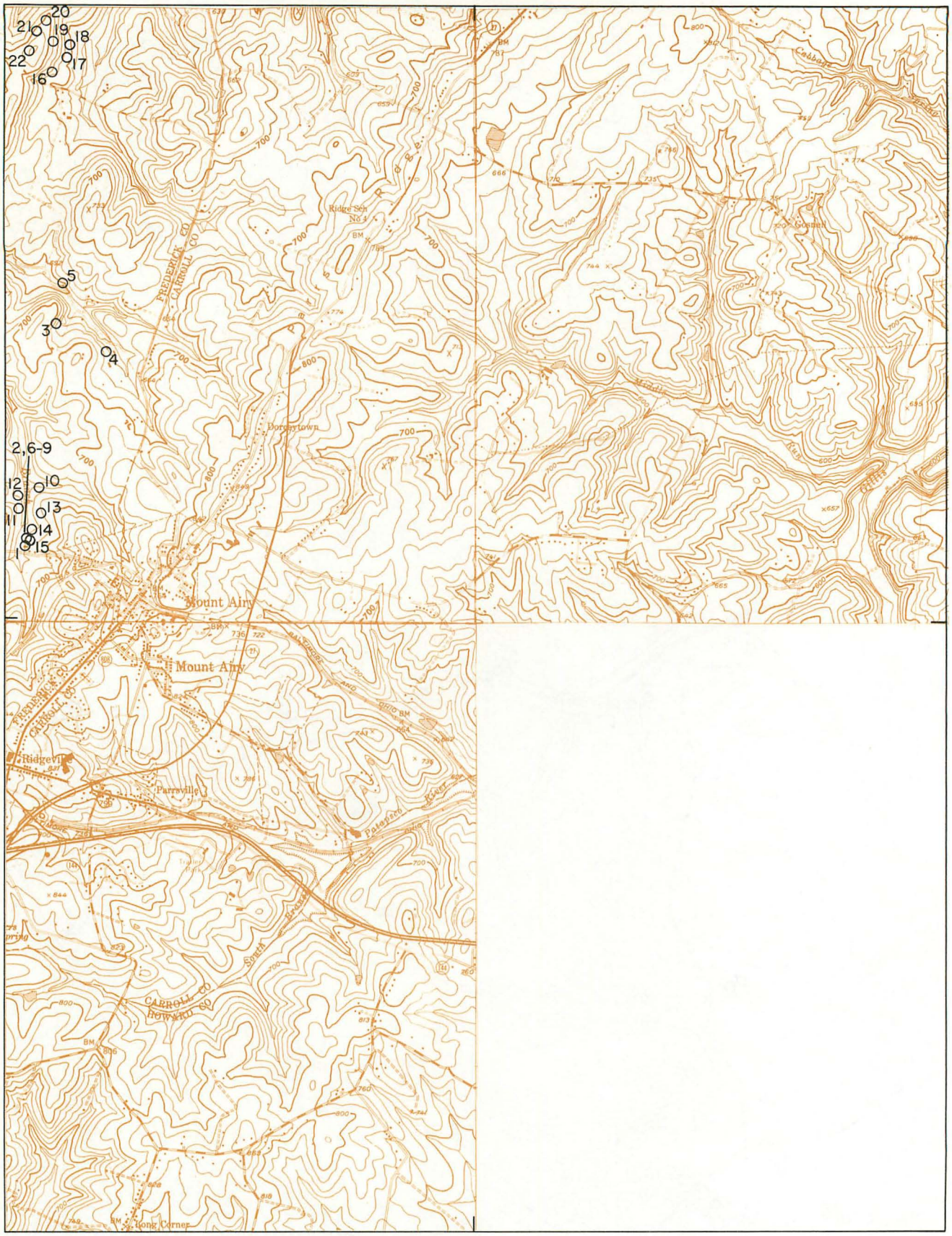
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



EH

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

FB

1 ½ 0 1 MILE

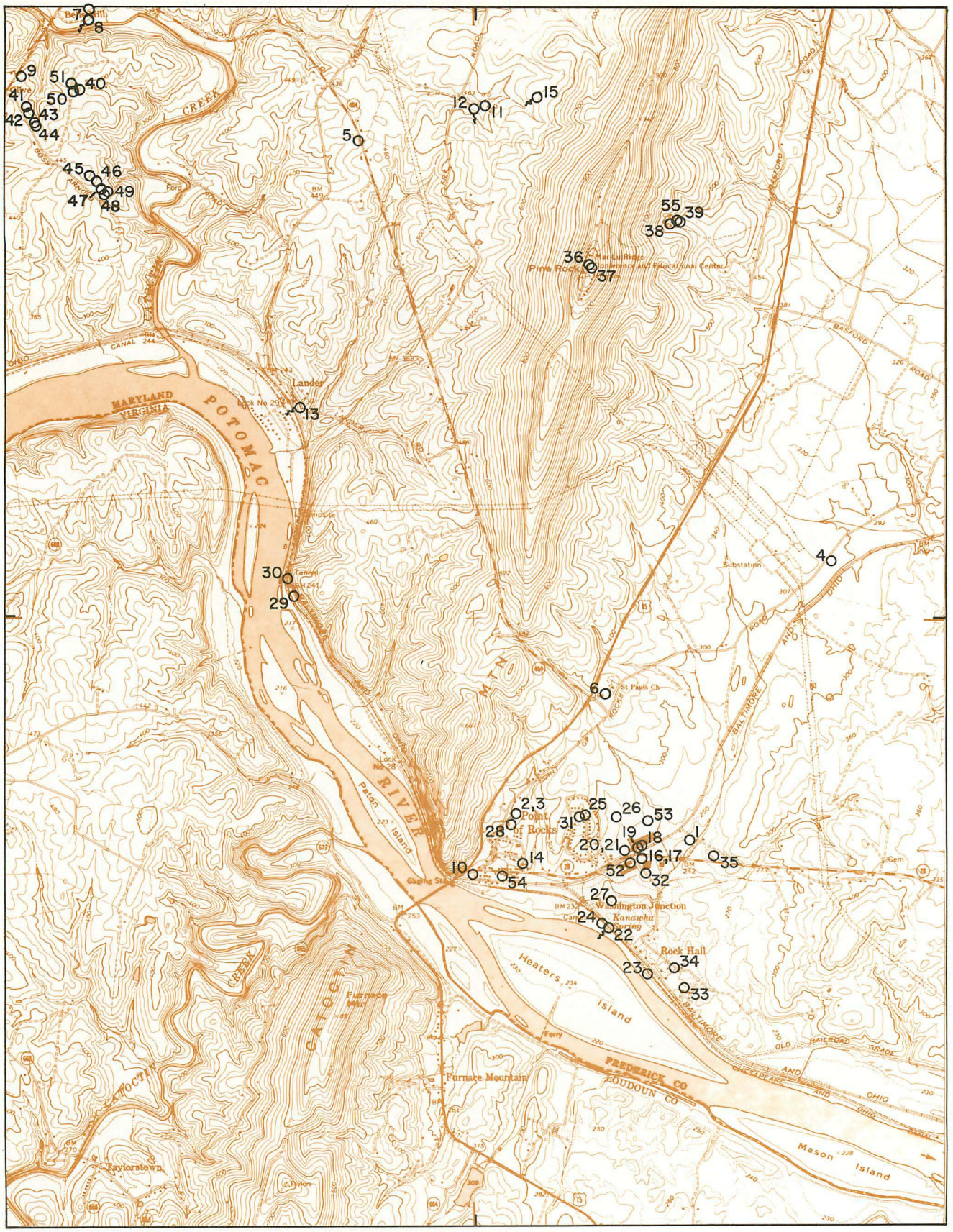
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



FC

1 ½ 0 1 MILE

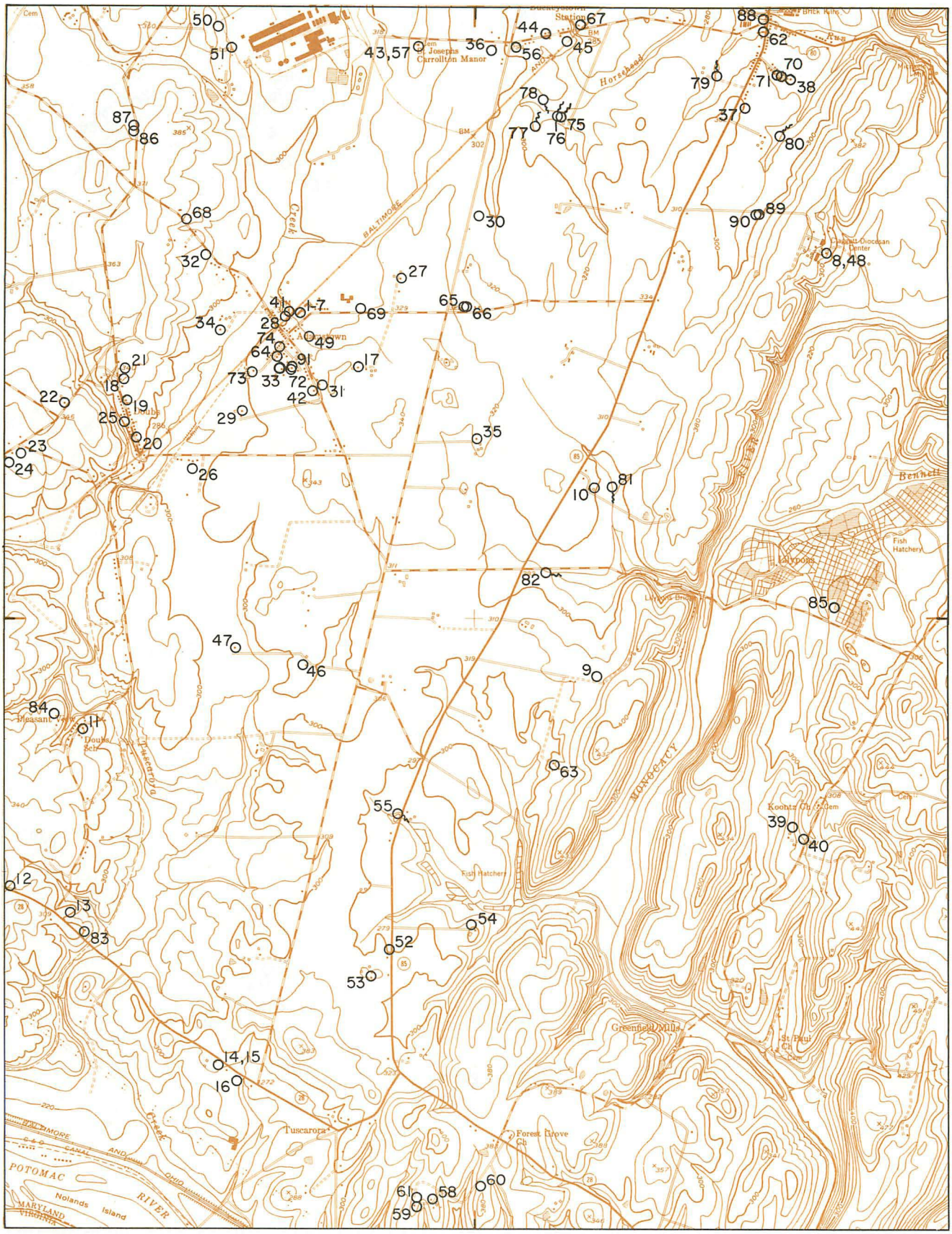
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



FD

1 ½ 0 1 MILE

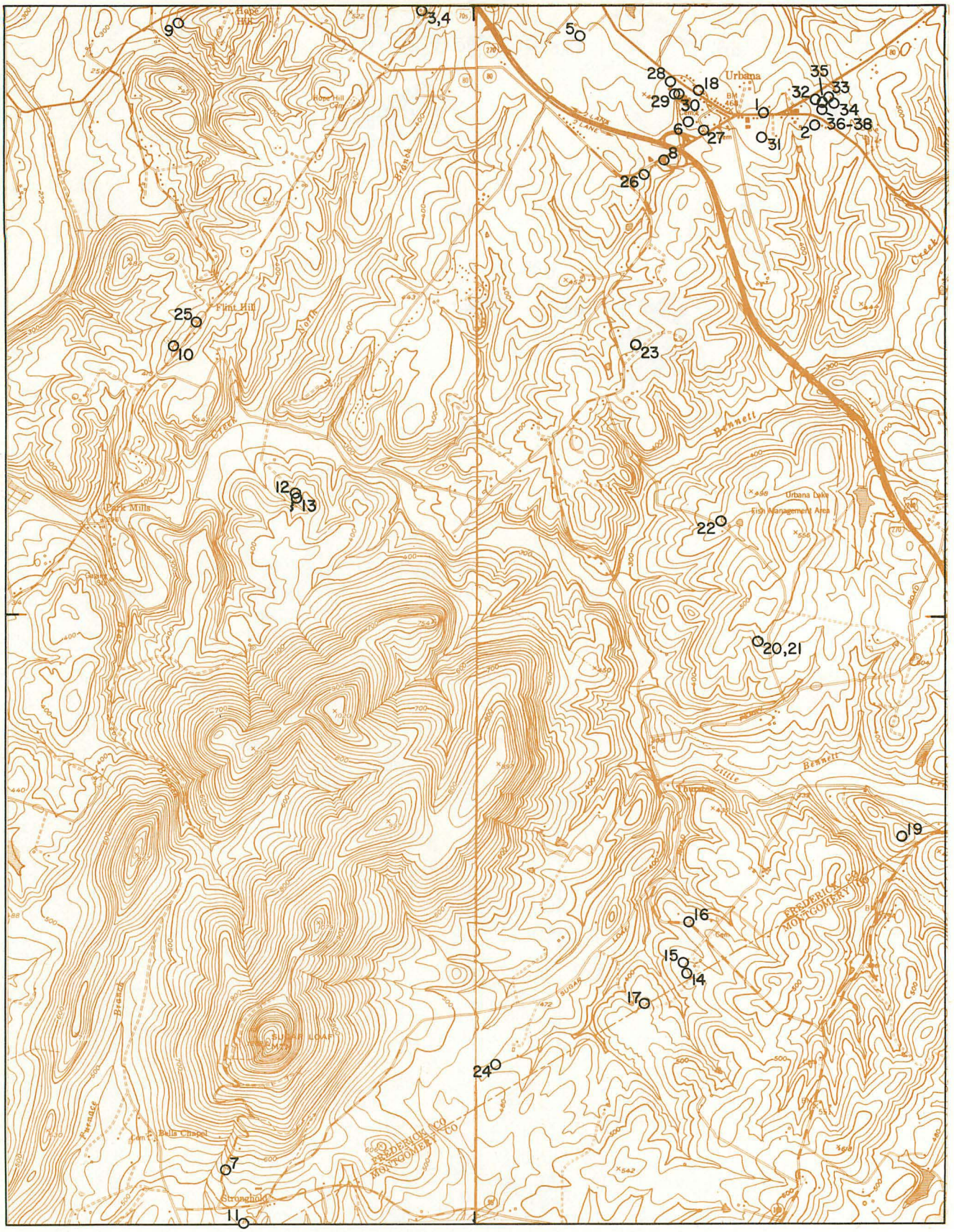
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



FE

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

FF

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929

FG

1 ½ 0 1 MILE

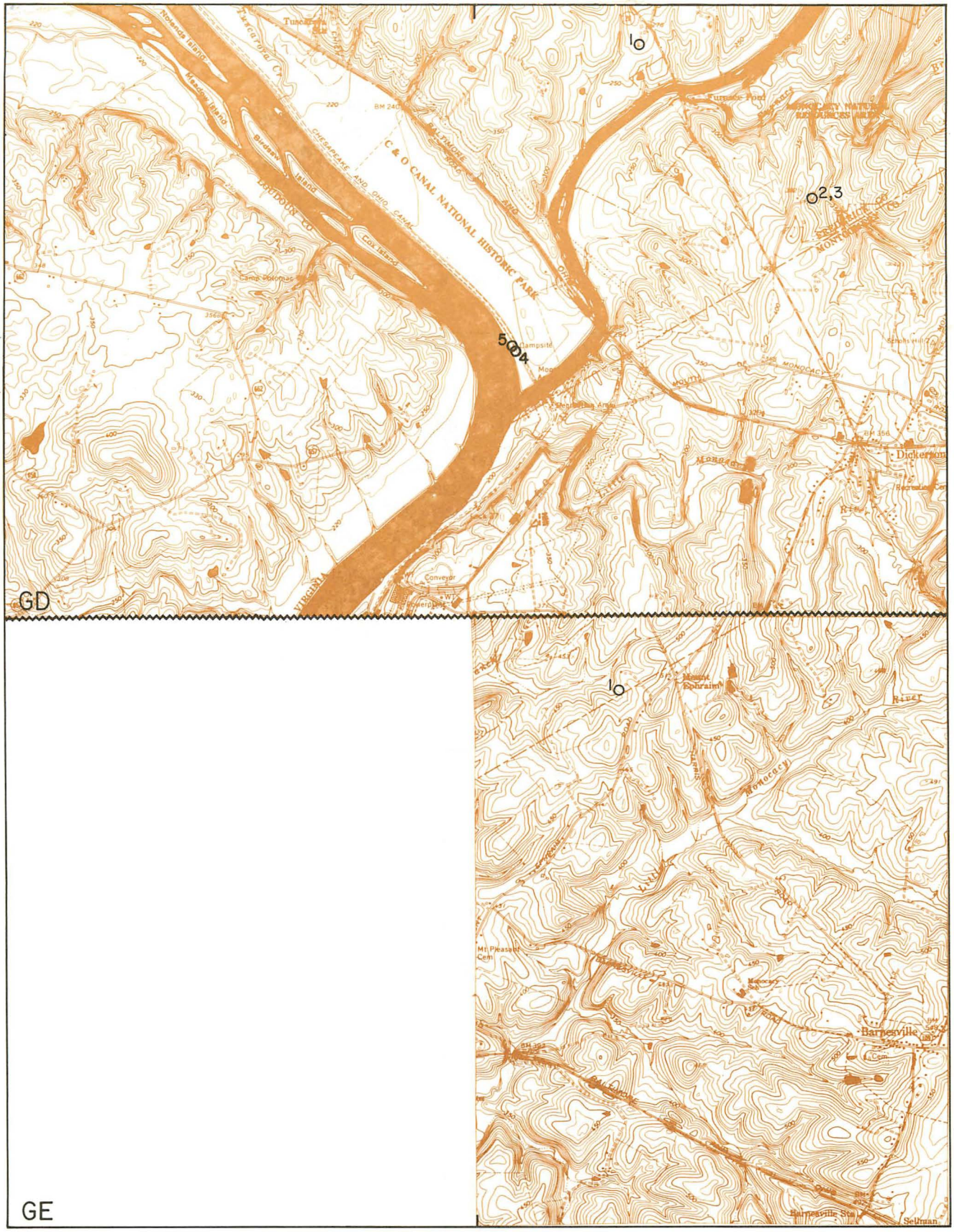
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

CONTOUR INTERVAL 20 FEET

DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



GD-GE

1 ½ 0 1 MILE

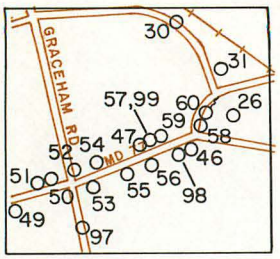
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

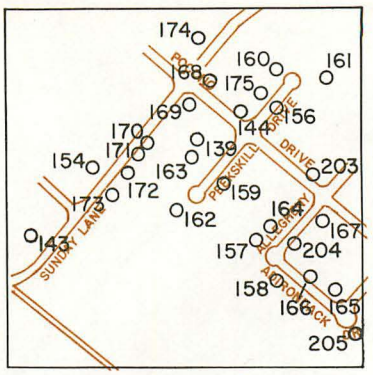
N

CONTOUR INTERVAL 20 FEET

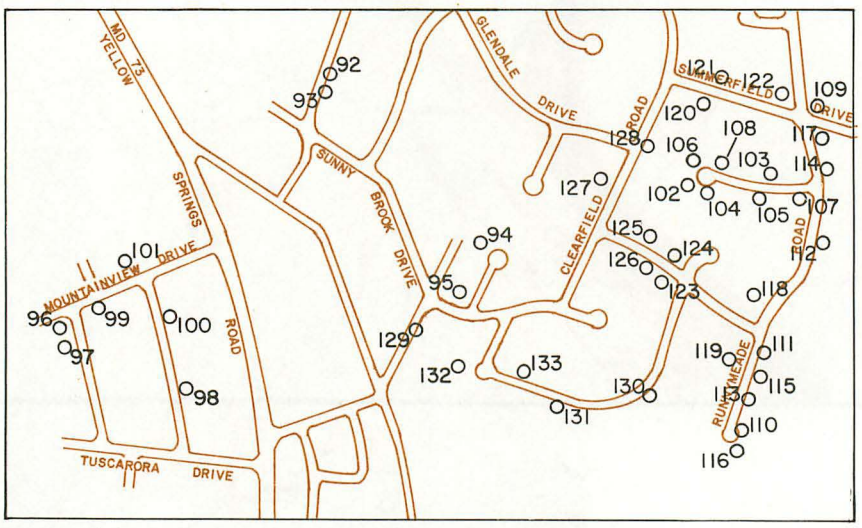
DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929



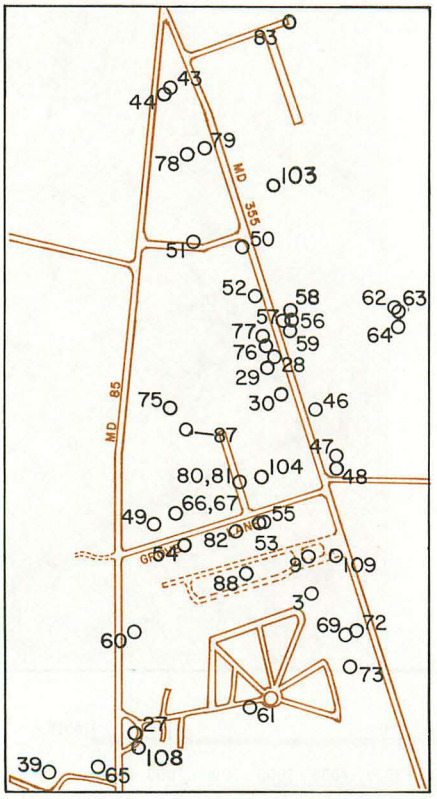
INSET 'A' QUAD BE



INSET 'B' QUAD DD



INSET 'C' QUAD DD



INSET 'D' QUAD EE

1000 0 1000 FEET

N

MARYLAND GEOLOGICAL SURVEY
711 W. 40th St., Suite 440
Baltimore, Maryland 21211

Basic Data Reports:

1. Records of wells and springs in Baltimore County, Maryland, by C. P. Laughlin, 1966, 406 p. . . . . $ 3.50*
2. Records of wells and springs, chemical analyses, and selected well logs in Charles County, Maryland, by T. H. Slaughter and C. P. Laughlin, 1966, 93 p. . . . . $ 4.00
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
4. Southern Maryland — Records of selected wells, water levels, and chemical analyses, by J. M. Weigle and W. E. Webb, 1970, 48 p. . . . . $ 3.50*
5. Deep wells of Maryland, by Jonathan Edwards, Jr., 1970, 162 p. . . . . $ 3.00
6. Worcester County ground-water information: well records, pumpage, chemical-quality data, and selected well logs, compiled by Richard C. Lucas, 1972, 90 p. . . . . $ 3.75
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
8. Anne Arundel County ground-water information: selected well records, chemical-quality data, pumpage, appropriation data, and selected well logs, compiled by R. C. Lucas, 1976, 149 p. . . . . $ 5.00
9. Interstitial water chemistry of Chesapeake Bay sediments, by O. P. Bricker, G. Matisoff, and G. R. Holdren, Jr., 1977, 67 p. . . . . $ 2.50
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. W. 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. 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
15. Ground-water and surface-water data for Frederick County, Maryland, compiled by J. R. Dine, M. D. Tompkins, and M. T. Duigon, 1985, 240 p. $14.25

*Available on microfiche only.