

HYDROLOGIC DATA: SOUTH BRANCH CASSELMAN RIVER, GARRETT COUNTY,
AND MARSH RUN, WASHINGTON COUNTY, MARYLAND

By John T. Hilleary

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MARYLAND GEOLOGICAL SURVEY



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CONVERSION FACTORS

The following table can be used to convert inch-pound units to the International System of units (SI).

<u>Multiply inch-pound units</u>	<u>By</u>	<u>To obtain SI units</u>
<u>Length</u>		
inch (in.)	25.4 0.0254	millimeter (mm) meter (m)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
<u>Area</u>		
square mile (mi ²)	2.590	square kilometer (km ²)
<u>Volume</u>		
gallon (gal)	3.785	liter (L)
<u>Flow</u>		
gallon per minute (gal/min)	0.06309	liter per second (L/s)
<u>Specific capacity</u>		
gallon per minute per foot [(gal/min)/ft]	0.2070	liter per second per meter [(L/s)/m]
<u>Logging speed</u>		
foot per minute (ft/min)	0.00508	meter per second (m/s)

HYDROLOGIC DATA:
SOUTH BRANCH CASSELMAN RIVER, GARRETT COUNTY, AND
MARSH RUN, WASHINGTON COUNTY, MARYLAND

Compiled by John T. Hilleary

ABSTRACT

This report is a compilation of well construction data, lithologic and geophysical logs, and water-level and water-quality data for selected wells and springs in the South Branch Casselman River and Marsh Run drainage basins, Garrett and Washington Counties, Maryland. The report contains, for the two areas combined, records of 202 wells and 57 springs; periodic water-level measurements and field determinations of specific conductance, pH, and water temperature for 33 wells and 7 springs; geophysical logs for 1 well and lithologic logs for 113 wells; and multi-year water-level data for 9 observation wells.

INTRODUCTION

This report is a compilation of well construction data, lithologic and geophysical logs, and water-level and water-quality data for selected wells and springs in the South Branch Casselman River and Marsh Run drainage basins, Garrett and Washington Counties, Md. (Locations of 5-minute quadrangles that include the drainage basins are shown in figure 1.) The report contains, for the two areas combined, records of 202 wells and 57 springs; periodic water-level measurements and field determinations of specific conductance, pH, and water temperature for 33 wells and 7 springs; geophysical logs for 1 well and lithologic logs for 113 wells; and multi-year water-level data for 9 observation wells.

The South Branch Casselman River study area is located in central Garrett County, and has an area of 3.2 mi² (pl. 1). The average basin altitude is about 2,700 ft above sea level; it is a rural area and all water demands are met by private wells or springs. Marsh Run has a drainage area of 18.9 mi² and is located in Washington County (pl. 2). The average basin altitude is about 500 ft, and individual wells or springs supply most domestic and commercial needs, while some areas of the basin are supplied by water from Hagerstown, Md.

The data were collected and compiled as part of a long-range cooperative program to evaluate the water resources of Maryland by the U.S. Geological Survey and the Maryland Geological Survey. The data tables and figures are presented in two parts. The first part contains data from the South Branch Casselman River basin and the second part contains data from the Marsh Run basin.

ACKNOWLEDGMENTS

The author wishes to acknowledge the well drillers, individual homeowners, and colleagues of the U.S. Geological Survey--Michael J. Smigaj, LeRoy L. Knobel, Richard E. Willey, and district surface-water personnel who have given their time and effort to the study. Thanks are due former U.S. Geological Survey hydrologist, Larry J. Nutter, who initiated the project in 1977.

AQUIFERS IN THE DRAINAGE BASINS

Aquifers supplying water to wells, springs, and streams are sedimentary, chiefly sandstone in the South Branch Casselman River drainage basin and limestone in the Marsh Run drainage basin (table 1). Water is present in and moves primarily through the rock fractures (joints and faults) that developed when rocks were stressed by movement of the Earth's crust. These openings may be enlarged by solution, particularly in limestone.

PREVIOUS REPORTS

Amsden, Overbeck, and Martin (1954) described the hydrology of Garrett County; Nutter, Smigaj, and Knobel (1980) reported on water-well records, chemical-quality data and ground-water use in Garrett County. Slaughter (1962) described the water resources of Allegany and Washington Counties, and Nutter (1973) described the hydrogeology of the carbonate rocks in the Frederick and Hagerstown valleys of Maryland.

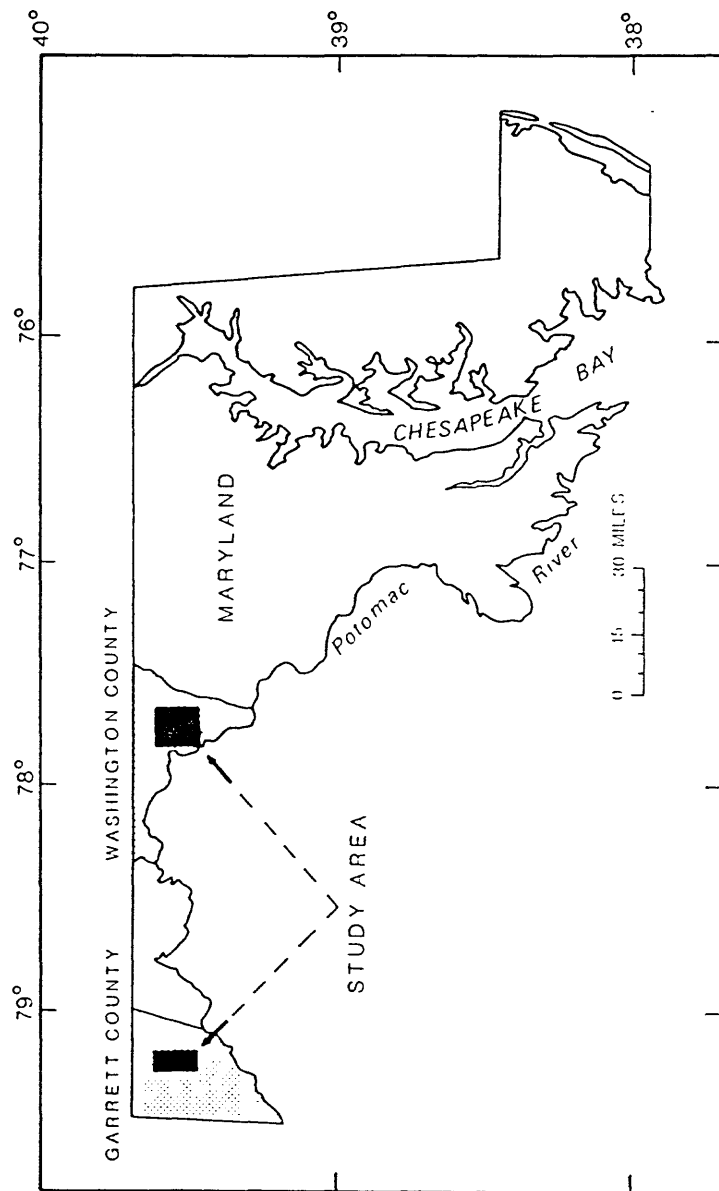


Figure 1.--Map showing locations of 5-minute quadrangles that include the South Branch Casselman River and Marsh Run drainage basins.

Table 1.--Aquifers in the South Branch Casselman River and Marsh Run drainage basins

Code ¹	System	Series	Formation/Group ²	Major rock types
South Branch Casselman River				
321CNMG	Pennsylvanian	Upper	Conemaugh	Sandstone, siltstone, coal
324ALGN		Middle	Allegheny	Sandstone, siltstone
324PSVL			Pottsville	Sandstone, siltstone, coal
331GRBR	Mississippian	Upper	Greenbrier	Sandstone, limestone, shale
Marsh Run				
364STPL	Ordovician	Middle	St. Paul Group	Limestone, dolomitic limestone
367BKMN		Lower	Beekmantown Group	Limestone, dolomite
367SNNG			Stonehenge	Limestone
367RCKR			Rockdale Run	Limestone, dolomite
371CCCG	Cambrian	Upper	Conococheague	Limestone, conglomerate

¹ Aquifer codes used in well and spring record tables.

² Stratigraphic nomenclature used in this report is that of the Maryland Geological Survey and does not necessarily follow usage of the U.S. Geological Survey.

WELL- AND SPRING-NUMBERING SYSTEM

Wells and springs in Maryland are identified and located using a system adopted by the Maryland Geological Survey. The first two letters of the identification number are county prefixes (GA for Garrett; WA for Washington). The second set of two letters designates one of the 5-minute quadrangles into which the county is divided; the first letter denotes a 5-minute segment of latitude and the second letter identifies a 5-minute segment of longitude. Wells and springs are sequentially numbered within each 5-minute quadrangle; thus, well GA BD 15 is the 15th well inventoried in the BD quadrangle in Garrett County.

WELL AND SPRING RECORDS

Records of 53 wells and 40 springs in the South Branch Casselman River area are contained in tables 2 and 3, respectively. Locations of these data sites are shown on plate 1. Periodic water-level measurements and field determinations of specific conductance, pH, and temperature made at 33 wells and 7 springs are shown in table 4. Water levels in observation well GA CD 28 are shown in table 5 and as a hydrograph in figure 2. Geophysical logs for observation well GA CD 28 are shown in figures 3 to 6. Lithologic logs for 18 wells are contained in table 6.

Records of 149 wells and 17 springs in the Marsh Run area are shown in tables 7 and 8. Locations are shown on plate 2. Water-level data for eight observation wells are shown in tables 9 to 16. Hydrographs for WA CH 106, WA CI 1, and WA CI 82 are shown in figures 7 to 9. Lithologic logs for 95 wells are reported in table 17.

STREAM-DISCHARGE RECORDS

A continuous record of stream discharge for the South Branch Casselman River near Bittinger, Md. (station 03077940), is available from October 1976 to November 1981 (U.S. Geological Survey, 1980, p. 306-310; 1981, p. 375). Continuous records of water temperature and specific conductance (November 1980 to September 1981) are contained in U.S. Geological Survey Water Resources Data for Maryland and Delaware, 1981, p. 377-379. Data on selected chemical concentrations in water and sediment are found in U.S. Geological Survey Water Resources Data for Maryland and Delaware, 1980, p. 311-312; 1981, p. 376.

Stream-discharge data for Marsh Run at Grimes, Md. (station 01617800), are available from October 1963 to the present. The data are published annually (U.S. Geological Survey Water Resources Data for Maryland and Delaware, 1970, p. 606-607; 1971, p. 88; 1972, p. 91; 1973, p. 86; 1974, p. 84; 1975, p. 102; 1976a, p. 674-676; 1976b, p. 197; 1977, p. 195; 1978, p. 168; 1979, p. 204; 1980, p. 213; 1981, p. 292; 1982, p. 206; 1983, p. 162).

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- Slaughter, T. H., and Darling, J. M., 1962, The water resources of Allegany and Washington Counties, Maryland Geological Survey Bulletin 24, 408 p.
- U.S. Geological Survey, 1971-84, Water resources data for Maryland and Delaware water years 1970-83: U.S. Geological Survey Water-Data Reports MD-DE-1970-83 (published annually).

¹/ The name of this agency was changed to the Maryland Geological Survey in June 1964.

SOUTH BRANCH CASSELMAN RIVER DRAINAGE BASIN

FIGURES 2, 3, 4, 5, 6

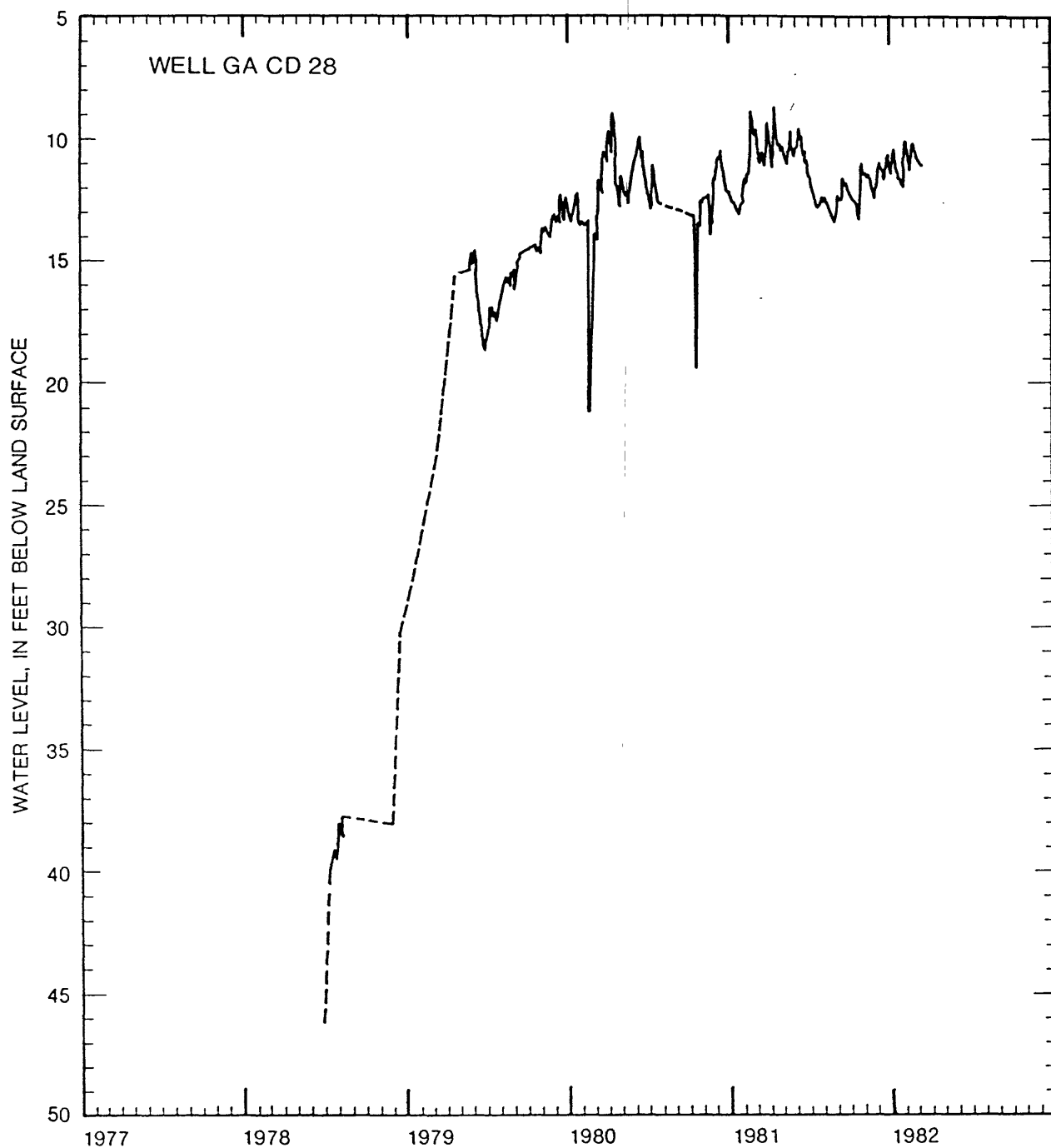


Figure 2.-- Daily mean water levels for observation well GA CD 28
June 30, 1978, to March 11, 1982.

OWNER: U.S. GEOLOGICAL SURVEY

DIAMETER OF HOLE: 6 INCHES

WELL NUMBER: GA CD 28

TIME CONSTANT: 4 SECONDS

PERMIT NUMBER: GA-73-1718

LOGGING SPEED: 50 FT/MIN UPHOLE

DRILLER: BRENNEMAN WELL DRILLING

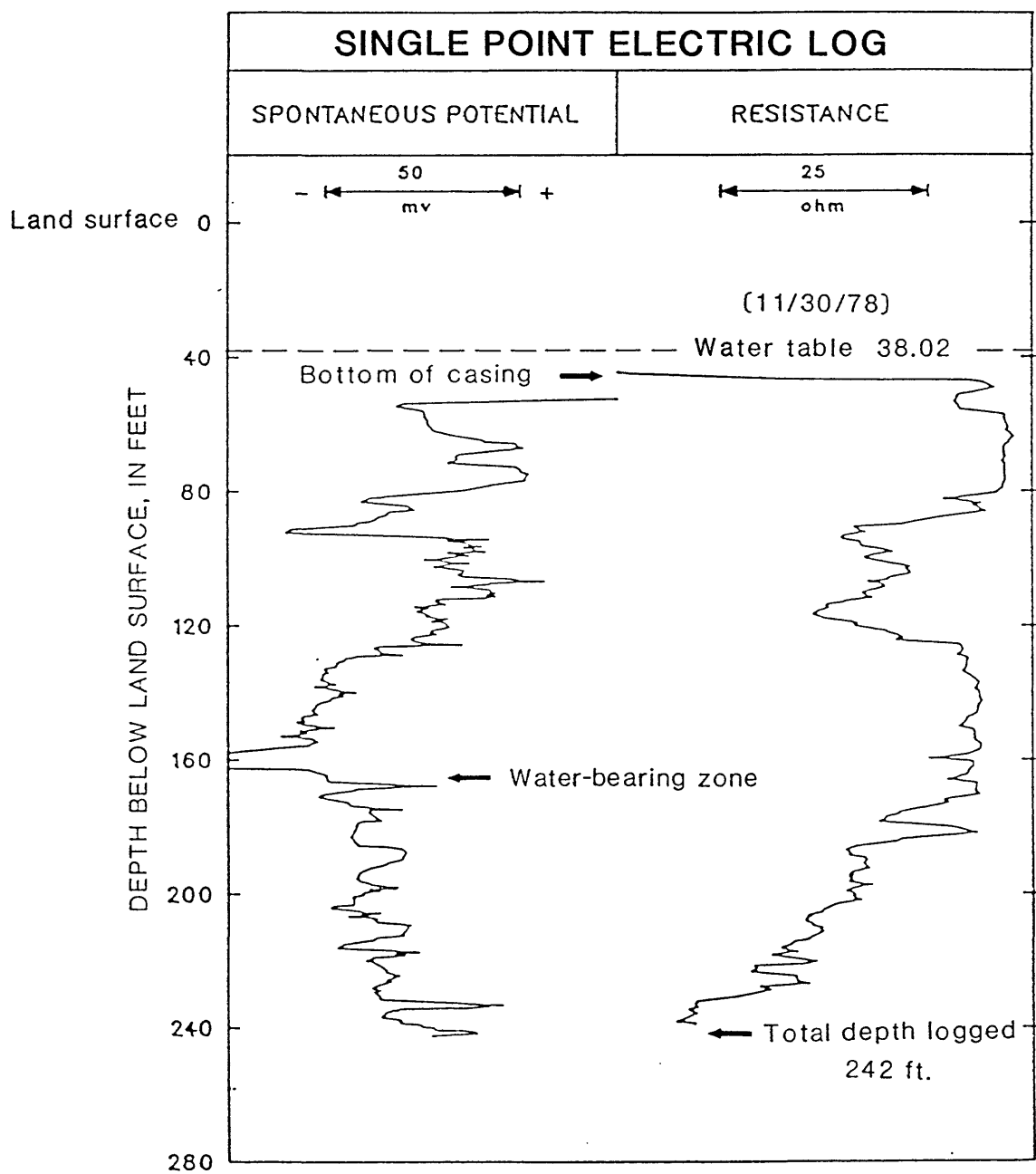


Figure 3.-- Geophysical log of observation well GA CD 28 :
Single-point electric.

OWNER: U.S. GEOLOGICAL SURVEY

DIAMETER OF HOLE: 6 INCHES

WELL NUMBER: GA CD 28

LOGGING SPEED: 25 FT/MIN UPHOLE

PERMIT NUMBER: GA-73-1718

DRILLER: BRENNEMAN WELL DRILLING

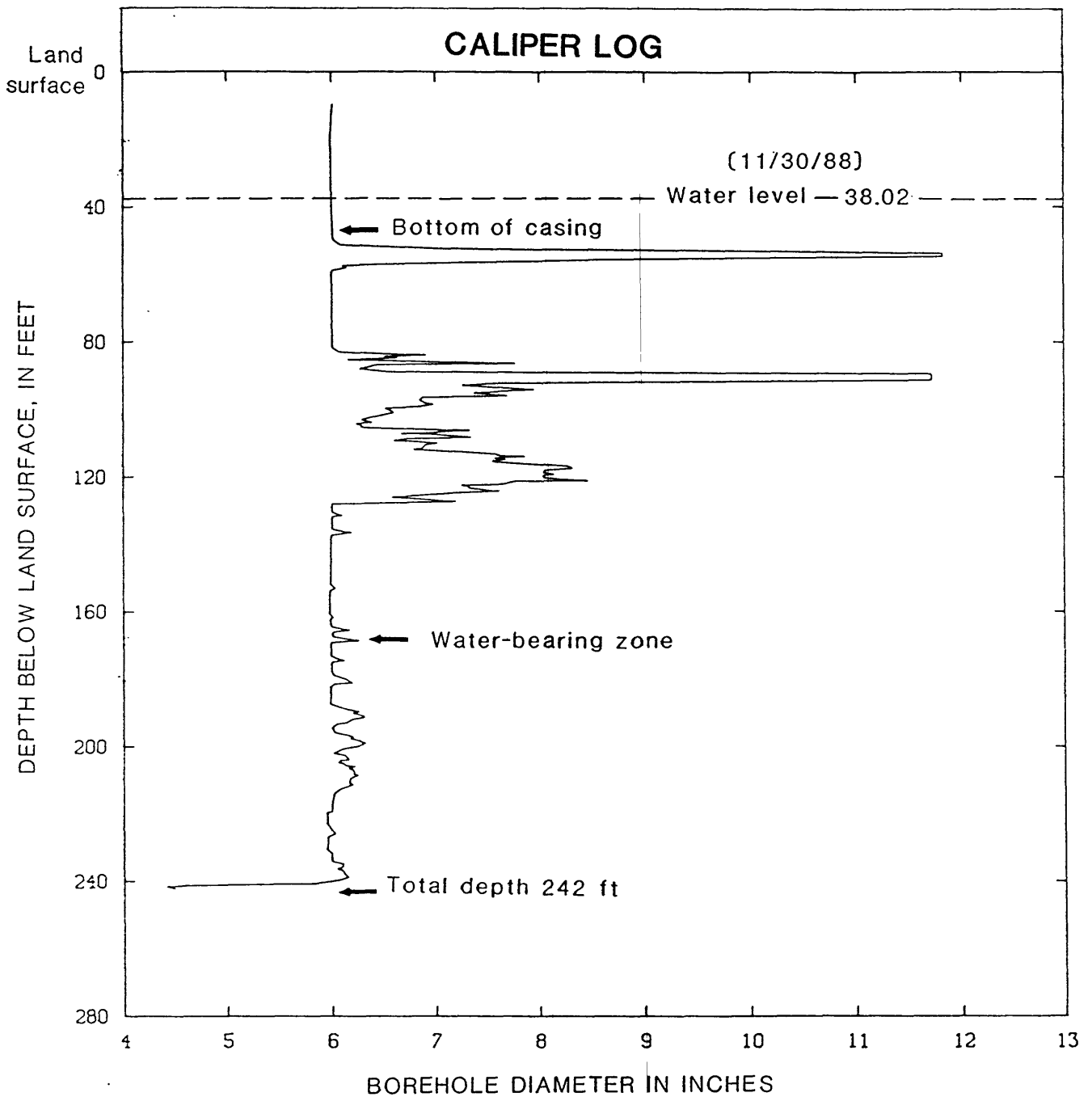


Figure 4.-- Geophysical log of observation well GA CD 28 :
Caliper.

OWNER: U.S. GEOLOGICAL SURVEY
WELL NUMBER: GA CD 28
PERMIT NUMBER: GA 73-1718
DRILLER: BRENNEMAN WELL DRILLING

DIAMETER OF HOLE: 6 INCHES
TIME CONSTANT: 4 SECONDS
LOGGING SPEED: 25 FT/MIN UPHOLE

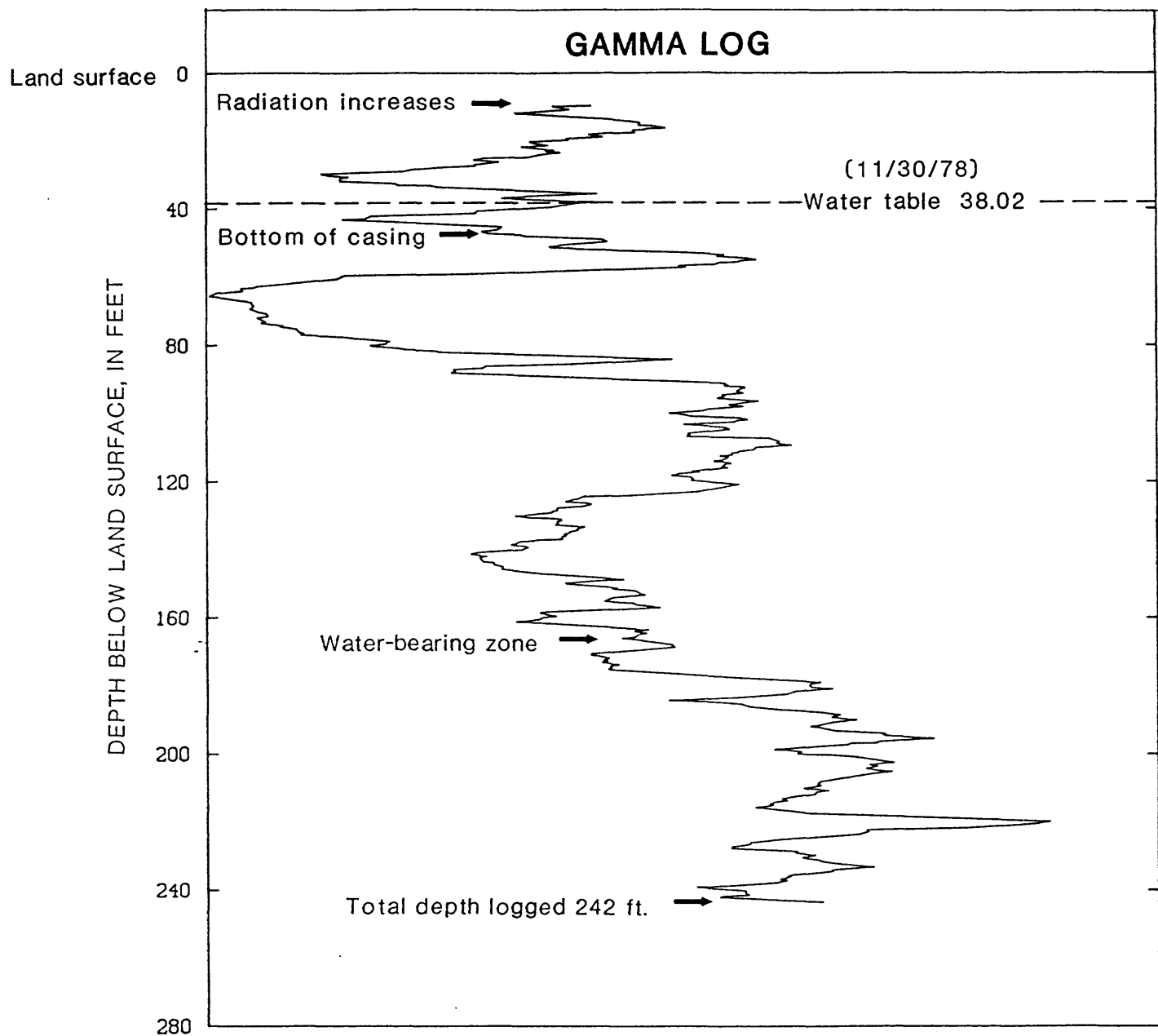


Figure 5.-- Geophysical log of observation well GA CD 28 :
Natural gamma ray

OWNER: U.S. GEOLOGICAL SURVEY
WELL NUMBER: GA CD 28
PERMIT NUMBER: GA-73-1718
DRILLER: BRENNEMAN WELL DRILLING

DIAMETER OF HOLE: 6 INCHES
TIME CONSTANT: 4 SECONDS
LOGGING SPEED: 50 FT/MIN UPHOLE

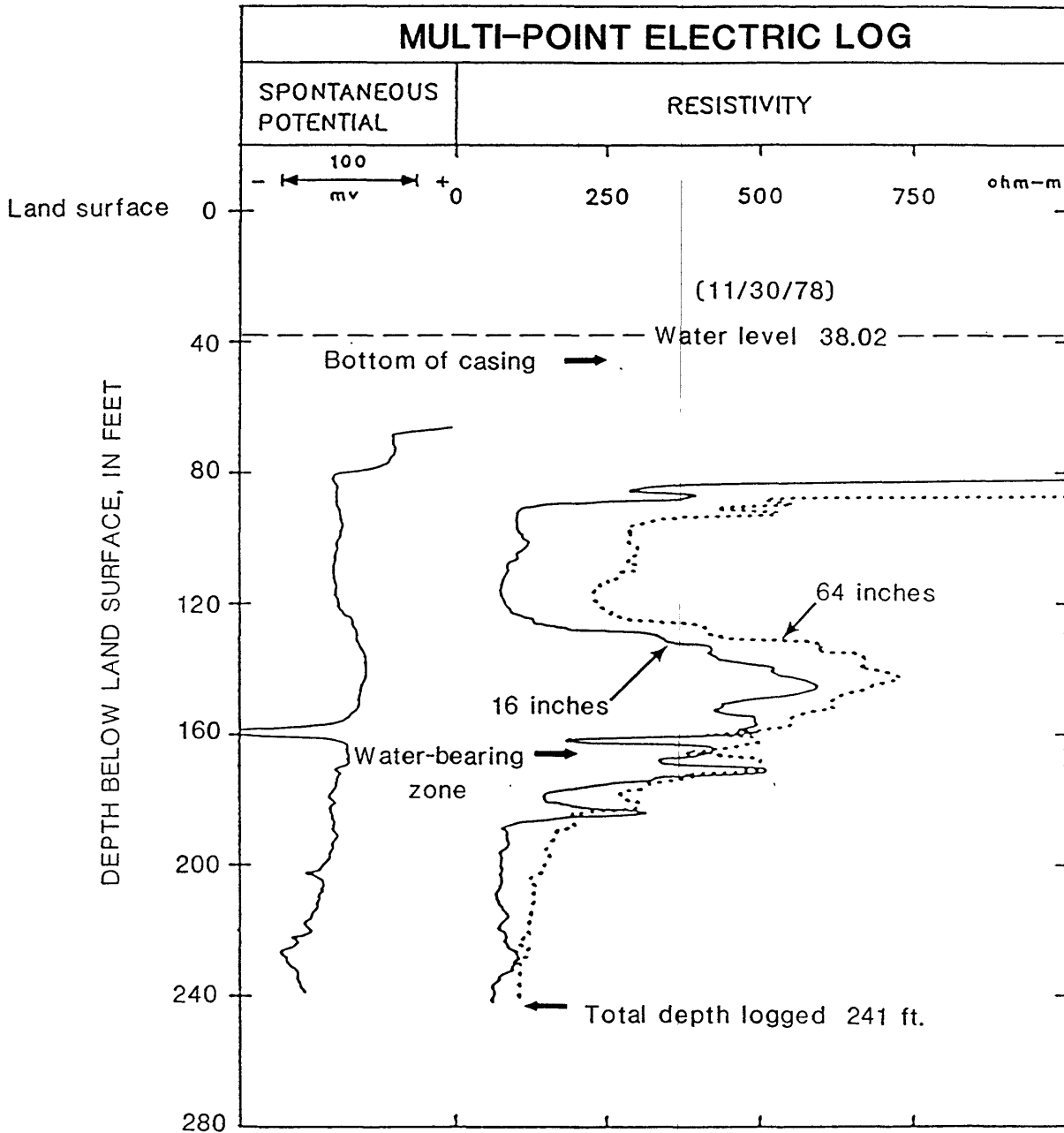


Figure 6.-- Geophysical log of observation well GA CD 28 :
Multi-point electric

SOUTH BRANCH CASSELMAN RIVER DRAINAGE BASIN

TABLES 2, 3, 4, 5, 6

Table 2.--Records of selected wells of the South Branch Casselman River drainage basin, Garrett County, Maryland

Local No.	State Permit No.	Owner	Contractor	Date completed	Use of site	Use of water	Altitude of land surface (feet)	Depth of well (feet)	Depth cased
GA BD 1	GA-00-5696	Clark, Hetrick	J. Tressler	04/18/1950	W	H	2,690	54	19
GA BD 11	GA-02-2223	Yoder, Irwin	R. Tressler	02/24/1956	W	H	2,670	101	-
GA BD 12	GA-65-0254	Emory, LeRoy	M. Tressler	06/19/1965	W	H	2,670	57	34.5
GA BD 13	GA-70-0055	MacDonald, Duncan	M. Tressler	10/23/1969	W	H	2,590	44	21
GA BD 14	GA-70-0137	Lowry, Fenton	M. Tressler	07/17/1970	W	H	2,595	80	28
GA BD 15	GA-05-1198	Bender, Harvey	C. Dilley	05/14/1963	W	H	2,690	61	23
GA BD 16	GA-02-6356	Yaste, Ira	M. Tressler	04/05/1957	W	H	2,690	85	44
GA BD 17	GA-73-0569	Sealing, Donald	M. Tressler	04/07/1974	W	H	2,665	176	21
GA BD 22	GA-69-0119	Schofield, Brian	M. Tressler	06/12/1969	W	H	2,670	120	22
GA BD 23	GA-70-0006	Beitzel, Olen	M. Tressler	07/31/1969	W	H	2,685	162	22
GA BD 24	GA 02-5923	Schneider, Vernon	J. Brenneman	02/11/1957	W	H	2,690	65	30
GA BD 25	GA-71-0153	Yoder, Paul	M. Tressler	05/06/1971	W	H	2,655	185	21
GA BD 26	GA-73-0260	Miller, Joe	M. Tressler	05/12/1973	W	H	2,620	63	21
GA BD 27	GA-73-0553	Brenneman, Elmer	C. Dilley	05/01/1974	W	H	2,710	55	21
GA BD 28	GA-73-0645	Erlem, Stacy	J. Brenneman	07/20/1974	W	H	2,520	278	77
GA BD 32	GA-73-0126	Smith, Melvin	M. Tressler	12/11/1972	W	H	2,700	110	21
GA BD 33	GA-73-0230	Rosenthal, David	M. Tressler	06/01/1973	W	H	2,545	84	21
GA BD 36	GA-01-2726	Bittenger, Calvin	J. Skippes	07/03/1953	W	H	2,695	82	20
GA BD 37	GA-02-4412	Kellison, Cecil	J. Tressler	09/25/1956	W	H	2,690	60	21
GA BD 50	GA-73-0937	Wheatly, Albert	M. Tressler	09/06/1975	W	H	2,530	83	21
GA BD 53	-	Geis, Ellen	-	-	W	H	2,700	-	-
GA BD 54	-	Brenneman, H.	-	-	U	U	2,570	-	-
GA BD 55	-	Beitzel, Clealand	-	-	W	S	2,670	-	-
GA BD 56	GA-73-0833	Bender, Lowell	C. Dilley	01/07/1975	W	H	2,610	70	24
GA BD 57	-	Nesline, Larry	-	-	W	H	2,680	-	-
GA BD 58	-	Brenneman, Russell	-	-	U	U	2,725	-	-
GA BD 59	-	Brenneman, Russell	-	-	W	H	2,735	-	-
GA BD 60	-	Snyder, Bruce	-	-	W	H	2,685	-	-
GA BD 61	-	Brenneman, Rick	-	-	W	H	2,685	-	-
GA BD 62	-	Bittinger Vol. Fire	-	-	W	F	2,650	-	-
GA BD 63	-	Yoder, Dan	-	-	W	H	2,610	-	-
GA BD 64	-	Buckle, Herbert	-	-	W	H	2,520	-	-
GA PD 65	-	Brenneman, Harvey	-	-	W	H	2,625	-	-
GA BD 66	-	Unknown	-	-	W	H	2,560	-	-
GA BD 67	-	Brenneman, Lee	-	-	W	H	2,680	-	-
GA CD 3	-	Hare, Nellie	A. Brenneman	00/00/1939	W	H	2,640	62.5	-
GA CD 4	-	U.S. Government	A. Brenneman	00/00/1937	W	P	2,720	240	-
GA CD 5	-	U.S. Government	A. Brenneman	00/00/1937	W	P	2,680	180	-
GA CD 6	-	U.S. Government	A. Brenneman	00/00/1937	W	P	2,660	160	-
GA CD 12	-	Buckle, Ralph	R. Tressler	00/00/1951	W	H	2,676	53	-
GA CD 13	GA-01-0352	Hare, Ken	J. Tressler	06/00/1952	W	H	2,640	57	21
GA CD 14	GA-01-6408	Buckle, Charles	J. Tressler	09/10/1954	W	H	2,610	103	23
GA CD 15	GA-73-0216	Beaver, Berldene	C. Dilley	04/16/1973	W	H	2,640	115	23
GA CD 23	GA-01-0352	Brenneman, Harley	J. Tressler	06/18/1952	W	H	2,600	57	21
GA CD 27	GA-73-0735	Butler, Maleta	J. Bradley	11/26/1974	W	H	2,585	180	148
GA CD 28	GA-73-1718	U.S. Geol. Survey	J. Brenneman	06/29/1978	T	U	2,810	258	48
GA CD 29	-	Hare, Nellie	-	-	W	H	2,710	-	-
GA CD 30	-	Maccrobie, Richard	-	-	W	H	2,690	-	-
GA CD 31	-	Gilpin, Joe	-	-	W	H	2,540	-	-
GA CD 32	-	Hare, Elroy	-	-	W	H	2,500	-	-
GA CD 33	-	Maryland State Forest	-	-	W	R	2,585	-	-
GA CD 34	-	Maryland State Forest	-	-	W	R	2,620	-	-
GA CD 35	GA-73-1543	Smearman, Henry	J. Brenneman	10/05/1977	W	H	2,590	198	149

1 Indicates date of water-level and/or discharge measurement.

2 Refer to table 1 for aquifer codes.

SITE USE CODEST Test
U Unused
W WithdrawalWATER USE CODESF Fire
H Domestic
P Public supply
R Recreation
S Stock supply
U UnusedFINISH CODE

X Open hole

Casing diam- eter (inches)	Finish	Water level (feet)	Draw- down (feet)	Discharge (gallons per minute)	Pumping period (hours)	Date measured ¹	Specific capacity [(gal/min)/ft]	Principal aquifer ²	Local No.
6	X	30	-	8.0	-	05/00/1950	-	321CNMG	GA BD 1
6	X	40	10	12	1.0	02/24/1956	1.2	321CNMG	GA BD 11
6	X	37	3	12	-	06/19/1965	4.0	321CNMG	GA BD 12
6	X	18	-	8	1.0	10/23/1969	-	321CNMG	GA BD 13
6	X	25	-	7.0	1.0	07/17/1970	-	321CNMG	GA BD 14
6	X	15	27	10	2.0	05/14/1963	.4	321CNMG	GA BD 15
6	X	20	10	24	-	04/05/1957	2.4	321CNMG	GA BD 16
6	X	70	-	6.0	1.0	04/07/1974	-	321CNMG	GA BD 17
6	X	80	-	30	1.0	06/12/1969	-	321CNMG	GA BD 22
6	X	62	-	4.0	1.0	07/31/1969	-	321CNMG	GA BD 23
6	X	19	-	5.0	-	02/11/1957	-	321CNMG	GA BD 24
6	X	7	-	4.0	2.0	05/06/1971	-	321CNMG	GA BD 25
6	X	18	-	8.0	1.0	05/12/1973	-	321CNMG	GA BD 26
6	X	30	25	5.0	1.0	05/01/1974	.2	321CNMG	GA BD 27
6	X	78	200	5.0	1.0	07/20/1974	.03	321CNMG	GA BD 28
6	X	75	-	20	1.0	12/11/1972	-	321CNMG	GA BD 32
6	X	24	-	6.0	1.0	06/01/1973	-	321CNMG	GA BD 33
6	X	20	60	8.0	1.0	07/03/1953	.1	321CNMG	GA BD 36
6	X	30	10	15	-	09/25/1956	1.5	321CNMG	GA BD 37
6	X	28	-	8.0	1.0	09/06/1975	-	321CNMG	GA BD 50
-	-	8.50	-	-	-	05/12/1981	-	321CNMG	GA BD 53
-	-	+ 0.60	-	-	-	05/12/1981	-	321CNMG	GA BD 54
-	-	15.90	-	-	-	05/12/1981	-	321CNMG	GA BD 55
6	X	40	20	5.0	1.0	01/07/1975	.3	321CNMG	GA BD 56
-	-	52.96	-	-	-	02/19/1981	-	321CNMG	GA BD 57
4	X	14.08	-	-	-	05/12/1981	-	321CNMG	GA BD 58
6	X	16.60	-	-	-	10/15/1980	-	321CNMG	GA BD 59
6	X	16.03	-	-	-	05/13/1980	-	321CNMG	GA BD 60
6	X	22.55	-	-	-	05/13/1980	-	321CNMG	GA BD 61
6	X	20.15	-	-	-	05/12/1981	-	321CNMG	GA BD 62
6	X	25.70	-	-	-	05/12/1981	-	321CNMG	GA BD 63
6	X	-	-	-	-	-	-	321CNMG	GA BD 64
6	X	5.20	-	-	-	05/12/1981	-	321CNMG	GA BD 65
6	X	68.80	-	-	-	05/12/1981	-	321CNMG	GA BD 66
6	X	34.16	-	-	-	05/12/1981	-	321CNMG	GA BD 67
6	X	23.36	-	-	-	05/12/1981	-	321CNMG	GA CD 3
6	-	-	-	-	-	-	-	321CNMG	GA CD 4
6	X	63	-	-	-	05/14/1980	-	321CNMG	GA CD 5
6	X	19.10	-	-	-	05/14/1980	-	321CNMG	GA CD 6
6	-	-	-	-	-	-	-	321CNMG	GA CD 12
6	X	22.60	32	20	-	05/14/1980	-	321CNMG	GA CD 13
6	X	25	45	12	-	09/10/1954	.3	321CNMG	GA CD 14
6	X	45	55	5.0	2.0	04/16/1973	.1	331GRBR	GA CD 15
6	X	8	32	20	-	06/18/1952	.6	324ALGN	GA CD 23
6	X	50	-	10	1.5	11/26/1974	-	331GRBR	GA CD 27
6	X	46.76	211	5.5	.5	06/30/1978	.03	324PSVL	GA CD 28
-	X	2.29	-	-	-	05/12/1981	-	321CNMG	GA CD 29
6	X	23.03	-	-	-	05/12/1981	-	321CNMG	GA CD 30
-	-	57.65	-	-	-	05/14/1980	-	321CNMG	GA CD 31
6	X	1.75	-	-	-	05/13/1981	-	321CNMG	GA CD 32
6	X	33.30	-	-	-	05/13/1981	-	321CNMG	GA CD 33
6	-	46.24	-	-	-	05/12/1981	-	321CNMG	GA CD 34
6	X	110	88	5	1.0	10/05/1977	< .1	321CNMG	GA CD 35

Table 3.--Records of selected springs of the South Branch Casselman River drainage basin,
Garrett County, Maryland

Local No.	Owner	Use of water	Altitude of land surface (feet)	Yield (gallon per minute)	Date discharge measured	Principal aquifer ¹
GA BD 5	Wassell, George	U	2,510	-	-	324ALGN
GA BD 38	Garrett County RDS	U	2,505	5.0 E	08/03/1977	321CNMG
GA BD 39	Buckle, Lawrence	H	2,660	20.0 E	08/04/1977	321CNMG
GA BD 40	Buckle, Lawrence	S	2,675	1.0 E	08/04/1977	321CNMG
GA BD 68	Brenneman, Stanley	U	2,518	.5 E	05/15/1980	321CNMG
GA BD 69	Beachy, Charles	U	2,600	.5	05/15/1980	321CNMG
GA BD 70	Beachy, Charles	U	2,600	.5 E	05/15/1980	321CNMG
GA BD 71	Faulkner, Joseph	U	2,530	3.0 E	05/15/1980	321CNMG
GA BD 72	Faulkner, Joseph	U	2,530	2.0 E	05/15/1980	321CNMG
GA BD 73	Faulkner, Joseph	U	2,520	2.0 E	05/17/1980	321CNMG
GA BD 74	Faulkner, Joseph	U	2,570	5.0 E	05/15/1980	321CNMG
GA BD 75	Buckle, Lawrence	U	2,618	1.0 E	05/15/1980	321CNMG
GA BD 76	Buckle, Lawrence	U	2,640	50.0 E	05/15/1980	321CNMG
GA BD 77	Orendorf, Bernard	H	2,580	5.0 E	05/14/1980	321CNMG
GA BD 78	Sealing, Don	U	2,600	2.0 E	05/15/1980	321CNMG
GA BD 79	Knox, C.	U	2,600	2.0 E	05/14/1980	321CNMG
GA BD 80	Erlem, Stacy	U	2,520	5.0 E	05/15/1980	321CNMG
GA BD 81	Warnick, Nellie	S	2,500	.5 E	05/12/1980	321CNMG
GA BD 82	Legeer, Christian	U	2,595	5.0 E	05/14/1980	321CNMG
GA BD 83	Buckle, Charles	U	2,520	3.0 E	05/12/1980	321CNMG
GA BD 84	Buckle, Etta	U	2,600	2.0 E	05/14/1980	321CNMG
GA BD 85	Beachy, Charles	H	2,670	3.0	05/14/1980	321CNMG
GA BD 86	Schofield, Brian	U	2,620	-	-	321CNMG
GA BD 87	Legeer, Christian	U	2,590	2.0 E	05/14/1980	321CNMG
GA CD 1	Bittinger, Harvey	H	2,460	3.0	08/08/1951	331GRBR
GA CD 7	Roadside	Z	2,590	25.0 E	08/10/1951	331GRBR
GA CD 8	Roadside	Z	2,500	4.0	08/10/1951	331GRBR
GA CD 36	Kitzmilller, Harlan	H	2,540	2.0 E	05/15/1980	321CNMG
GA CD 37	Maryland State RDS	U	2,500	1.0	05/12/1980	321CNMG
GA CD 38	Wilt, Kenneth	H	2,480	3.0 E	05/13/1980	321CNMG
GA CD 39	Maryland State Parks	U	2,790	1.0 E	05/14/1980	321CNMG
GA CD 40	University of Maryland	U	2,720	.5 E	05/15/1980	321CNMG
GA CD 41	Brenneman, Lee	H	2,580	3.0 E	05/13/1980	321CNMG
GA CD 42	Brenneman, Stanley	U	2,700	2.0 E	05/13/1980	321CNMG
GA CD 43	Smith, Robert	U	2,660	.5 E	05/15/1980	321CNMG
GA CD 44	Shawley, George	H	2,680	3.0 E	05/14/1980	321CNMG
GA CD 45	Maccrobie, Richard	H	2,680	2.0 E	05/14/1980	321CNMG
GA CD 46	Maccrobie, Richard	U	2,640	1.0 E	05/14/1980	321CNMG
GA CD 47	Maccrobie, Richard	U	2,640	1.0 E	05/14/1980	321CNMG
GA CD 48	Hare, Kenneth	U	2,690	1.0 E	05/14/1980	321CNMG

¹ Refer to table 1 for aquifer codes.

WATER USE CODES

H Domestic
S Stock supply
U Unused
Z Other

YIELD CODE

E Estimated

Table 4.--Records of periodic water levels and field measurements of specific conductance, pH, and temperature for wells and springs, South Branch Casselman River drainage basin, Garrett County, Maryland

Well or spring	Date	Specific conductance ($\mu\text{mhos/cm}$) ¹	pH	Water temperature ($^{\circ}\text{C}$)	Water level (feet below land surface)
GA BD 11	5/13/80	-	-	-	46.50
	10/14/80	260	7.3	10.5	47.30
	2/19/81	270	7.3	8.5	48.20
GA BD 12	5/13/80	-	-	-	26.00
	10/15/80	520	5.8	11	29.54
	2/19/81	460	5.6	13	25.75
	5/12/81	490	5.9	11	27.00
GA BD 13	5/13/80	-	-	-	5.70
	10/14/80	180	7.6	13.5	-
	2/19/81	205	7.3	8.5	-
	5/12/81	200	6.8	10	-
GA BD 14	5/13/80	-	-	-	23.40
	10/14/80	330	6.2	12	26.30
	2/19/81	370	6.3	6.5	24.03
	5/12/81	360	6.8	11	22.60
GA BD 15	5/14/80	-	-	-	1.79
	10/15/80	270	6.7	14	2.35
	2/19/81	230	7.8	9.5	0.45
	5/12/81	220	7.1	14	1.64
GA BD 23	5/13/80	-	-	-	18.70
GA BD 26	5/13/80	-	-	-	50.45
	10/15/80	241	6.5	12	20.20
	2/19/81	190	6.2	15	20.80
	5/12/81	240	6.5	14	19.50
GA BD 27	5/13/80	-	-	-	21.30
GA BD 28	5/13/80	-	-	-	82.05
	10/15/80	282	7.3	14	74.38
	2/19/81	-	-	-	77.20
	5/12/81	-	-	-	77.38
GA BD 32	5/13/80	-	-	-	47.70
	10/15/80	-	-	-	49.30
	2/19/81	-	-	-	44.25
	5/12/81	-	-	-	45.29

Table 4.--Records of periodic water levels and field measurements of specific conductance, pH, and temperature for wells and springs, South Branch Casselman River drainage basin, Garrett County, Maryland--Continued.

Well or spring	Date	Specific conductance ($\mu\text{mhos}/\text{cm}$) ¹	pH	Water temperature (°C)	Water level (feet below land surface)
GA BD 33	5/12/80	-	-	-	16.70
	10/14/80	-	-	-	22.16
	2/19/81	-	-	-	17.31
	5/12/81	-	-	-	17.28
GA BD 38	10/15/80	115	6.5	10.0	-
	2/19/81	141	7.0	6.0	-
	5/12/81	81	6.4	4.0	-
GA BD 39	10/14/80	81	6.2	12.0	-
	5/12/81	82	5.2	8.0	-
GA BD 50	5/12/80	-	-	-	12.59
	10/14/80	-	-	-	15.90
	2/19/81	-	-	-	11.94
	5/12/81	-	-	-	13.10
GA BD 53	5/15/80	-	-	-	10.65
	10/15/80	275	6.7	12	12.87
	2/19/81	-	-	-	6.78
	5/12/81	275	7.2	14	8.50
GA BD 54	8/13/80	-	-	-	0.10
	8/16/80	-	-	-	0.38
	10/14/80	-	-	-	1.90
	2/19/81	-	-	-	0.78
	5/12/81	-	-	-	0.60
GA BD 55	5/15/80	-	-	-	18.16
	10/15/80	390	6.7	12	23.30
	2/19/81	330	7.0	12	17.30
	5/12/81	250	6.1	11	15.90
GA BD 56	5/13/80	-	-	-	59.75
	10/15/80	-	-	-	49.65
	2/19/81	-	-	-	45.95
	5/12/81	255	6.7	14	64.85
GA BD 57	5/13/80	-	-	-	50.20
	10/15/80	215	7.6	12	51.10
	2/19/81	225	8.0	10	52.96

Table 4.--Records of periodic water levels and field measurements of specific conductance, pH, and temperature for wells and springs, South Branch Casselman River drainage basin, Garrett County, Maryland--Continued.

Well or spring	Date	Specific conductance ($\mu\text{mhos/cm}$) ¹	pH	Water temperature (°C)	Water level (feet below land surface)
GA BD 58	5/13/80	-	-	-	9.04
	10/15/80	-	-	-	15.33
	2/19/81	-	-	-	12.80
	5/12/81	-	-	-	14.08
GA BD 59	5/13/80	-	-	-	11.40
	10/15/80	142	6.4	10	16.60
GA BD 62	5/13/80	-	-	-	21.80
	10/14/80	-	-	-	21.05
	2/19/81	300	7.4	8.5	18.87
	5/12/81	152	6.7	12	20.15
GA BD 63	5/13/80	-	-	-	24.82
	10/15/80	144	6.4	11	26.77
	2/19/81	220	6.6	11	22.78
	5/12/81	150	6.2	10	25.70
GA BD 65	5/13/80	-	-	-	4.50
	10/14/80	34	6.1	13	8.68
	2/19/81	35	6.4	12	5.80
	5/12/81	35	5.7	12	5.20
GA BD 66	5/12/80	-	-	-	56.60
	10/14/80	-	-	-	46.20
	2/19/81	-	-	-	62.40
	5/12/81	-	-	-	68.80
GA BD 67	5/15/80	-	-	-	33.05
	10/15/80	393	7.5	13.5	37.70
	2/19/81	385	7.9	12	33.20
	5/12/81	500	7.1	13	34.16
GA BD 71	10/14/80	190	6.0	9.5	-
	2/19/81	88	7.0	7.5	-
	5/12/81	106	6.7	11	-
GA BD 83	10/15/80	270	6.8	10	-
	2/19/81	82	6.8	9	-
	5/12/81	135	5.9	8	-
GA CD 3	5/14/80	-	-	-	25.39
	10/15/80	120	6.8	13	26.00
	2/19/81	100	6.2	14	21.05
	5/12/81	110	6.5	14	23.36

Table 4.--Records of periodic water levels and field measurements of specific conductance, pH, and temperature for wells and springs, South Branch Casselman River drainage basin, Garrett County, Maryland--Continued.

Well or spring	Date	Specific conductance ¹ (μ mhos/cm)	pH	Water temperature (°C)	Water level (feet below land surface)
GA CD 7	10/14/80	120	6.4	9.5	-
	2/19/81	91	6.8	9.5	-
	5/12/81	116	5.8	9	-
GA CD 23	5/12/80	-	-	-	9.10
	10/14/80	185	6.6	11	6.64
	2/19/81	-	-	-	6.40
	5/12/81	155	6.7	10	18.20
GA CD 27	5/16/80	-	-	-	8.10
GA CD 29	5/14/80	-	-	-	0.60
	10/15/80	72	6.5	13	2.00
	2/19/81	61	7.4	8.0	0.95
	5/12/81	76	5.7	8.0	2.29
GA CD 30	5/14/80	-	-	-	22.48
	10/14/80	135	6.2	11.5	40.58
	2/19/81	153	6.4	11	29.49
	5/12/81	-	-	-	23.03
GA CD 32	5/14/80	-	-	-	1.36
	10/14/80	-	-	-	2.05
	2/19/81	-	-	-	2.05
	5/13/81	-	-	-	1.75
GA CD 33	5/13/80	-	-	-	49.90
	10/14/80	-	-	-	21.40
	2/19/81	-	-	-	17.60
	5/13/81	-	-	-	33.30
GA CD 34	5/13/80	-	-	-	76.60
	10/14/80	150	5.9	12	42.50
	2/19/81	165	6.6	7.0	37.00
	5/12/81	150	6.0	10	46.24
GA CD 35	5/14/80	-	-	-	92.17
GA CD 39	10/14/80	-	4.8	9	-
	2/19/81	-	5.4	3.5	-
	5/13/81	140	4.6	10	-
GA CD 43	10/14/80	72	5.9	8.3	-
	2/19/81	146	6.2	4.5	-
	5/13/81	118	6.2	11	-

¹ Specific conductance in micromhos per centimeter at 25°C.

Table 5.--Daily mean water levels for observation well GA CD 28, South Branch Casselman River drainage basin,
Garrett County, Maryland, June 30, 1978, to March 11, 1982

[Water level in feet below land surface.]

WATER YEAR 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											38.84	
2												
3											38.24	
4											38.10	
5												
6												
7												
8											38.69	
9											38.14	
10											37.73	
11												
12										41.03		
13										40.32		
14										39.95		
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26										39.06		
27										39.50		
28										39.47		
29												
30									46.19			
31										38.91		

Table 5.--Daily mean water levels for observation well GA CD 28, South Branch Casselman River drainage basin,
Garrett County, Maryland, June 30, 1978, to March 11, 1982--Continued

WATER YEAR 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	14.54	17.82	---	15.47
2	---	---	---	---	---	---	---	---	14.66	17.76	---	15.46
3	---	---	---	---	---	---	---	---	14.88	17.63	---	16.27
4	---	---	---	---	---	---	---	---	14.90	17.04	---	16.22
5	---	---	---	---	---	---	---	---	15.00	16.95	---	15.70
6	---	---	---	---	---	---	---	---	15.82	16.93	---	15.08
7	---	---	---	---	---	---	---	---	16.06	19.92	---	15.00
8	---	---	---	---	---	---	---	---	---	16.97	---	14.99
9	---	---	---	---	---	23.01	---	---	---	16.95	---	14.95
10	---	---	---	28.30	---	---	---	---	---	16.88	---	14.92
11	---	---	---	---	---	---	---	---	---	16.85	---	14.86
12	---	---	---	---	---	---	---	---	---	17.10	---	14.76
13	---	---	---	---	---	---	---	---	---	17.17	15.74	14.67
14	---	---	30.30	---	---	---	---	---	---	17.06	15.62	---
15	---	---	---	---	---	---	---	---	---	17.26	15.82	---
16	---	---	---	---	---	---	---	---	---	17.28	15.80	---
17	---	---	---	---	---	---	15.61	---	---	17.30	15.85	---
18	---	---	---	---	---	---	---	---	---	17.29	15.75	---
19	---	---	---	---	---	---	---	---	---	17.14	15.68	---
20	---	---	---	---	---	---	---	---	---	17.09	15.99	---
21	---	---	---	---	---	---	---	---	---	17.02	15.85	---
22	---	---	---	---	---	---	---	---	---	17.10	15.80	---
23	---	---	---	---	---	---	---	---	---	17.21	15.98	---
24	---	---	---	---	---	---	---	---	---	17.47	15.79	---
25	---	---	---	---	---	---	---	15.40	---	17.30	15.65	---
26	---	---	---	---	---	---	---	15.16	18.68	17.08	15.44	---
27	---	---	---	---	---	---	---	14.95	18.62	16.97	15.50	---
28	---	---	---	---	---	---	---	14.57	18.45	---	15.56	---
29	---	---	---	---	---	---	---	14.58	18.25	---	15.42	---
30	38.02	---	---	---	---	---	---	15.10	18.07	---	15.33	---
31	---	---	---	---	---	---	---	14.54	---	---	15.38	---

Table 5.--Daily mean water levels for observation well GA CD 28, South Branch Casselman River drainage basin, Garrett County, Maryland, June 30, 1978, to March 11, 1982--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.65	13.03	12.60	13.36	13.81	9.66	11.40	---	12.29		
2	---	14.09	13.05	---	13.36	13.78	9.66	11.39	---	12.38		
3	---	13.73	13.19	---	13.35	13.79	9.82	11.42	---	12.47		
4	---	13.60	13.23	---	13.34	13.78	9.92	11.50	---	12.49		
5	---	13.74	13.27	---	13.33	13.32	10.22	11.65	---	12.54		
6	---	13.55	13.19	---	13.33	13.12	10.35	11.76	---	12.78		
7	---	13.55	13.13	---	13.34	12.17	10.40	11.92	---	12.82		
8	---	13.55	13.18	---	13.41	12.20	10.55	12.05	---	11.22		
9	---	13.54	13.30	13.32	13.36	11.95	8.84	12.14	---	11.05		
10	---	13.58	13.32	13.34	---	11.63	8.85	12.22	---	11.04		
11	---	13.63	13.33	13.23	---	11.62	9.11	12.26	9.87	11.07		
12	---	13.72	13.34	13.02	---	11.73	9.48	12.33	9.93	11.20		
13	---	13.76	12.68	13.03	---	11.82	9.75	12.22	10.18	11.28		
14	---	13.78	12.52	13.02	13.52	11.90	9.90	12.24	10.45	---		
15	---	13.78	12.42	12.82	13.46	12.13	9.60	12.37	10.72	---		
16	---	13.83	12.38	12.78	13.34	12.12	11.76	12.47	10.48	---		
17	---	13.80	12.41	12.66	13.42	---	11.78	12.63	10.67	---		
18	---	13.82	12.55	12.48	13.44	---	11.85	12.29	10.83	---		
19	---	13.87	13.00	12.54	21.07	10.77	12.01	---	11.03	---		
20	---	13.88	13.12	12.38	20.20	10.70	12.16	---	11.17	---		
21	---	13.93	13.28	12.32	19.14	10.57	12.32	---	11.26	---		
22	---	13.93	13.33	12.21	16.95	10.60	12.41	---	11.41	---		
23	---	13.93	13.27	12.22	15.70	10.62	12.36	---	11.51	12.57		
24	14.33	13.95	12.82	12.29	14.59	10.57	12.47	---	11.65	---		
25	14.37	---	12.53	13.41	13.97	10.50	12.58	---	11.75	---		
26	14.47	---	12.42	13.41	13.83	10.65	12.72	---	11.85	---		
27	14.53	---	12.42	13.42	13.72	10.74	12.24	---	11.95	---		
28	14.44	---	12.39	13.43	13.74	10.86	12.08	---	12.02	---		
29	14.43	---	12.40	13.42	13.78	10.41	12.04	---	12.12	---		
30	14.47	13.01	12.42	13.44	---	10.27	11.52	---	12.18	---		
31	14.54	---	12.48	13.40	---	9.80	---	---	---	---		

Table 5.---Daily mean water levels for observation well GA CD 28, South Branch Casselman River drainage basin,
Garrett County, Maryland, June 30, 1978, to March 11, 1982--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.44	11.45	12.12	12.52	9.61	9.97	10.41	10.42	11.45	12.46	13.19
2	---	12.50	11.23	12.13	12.11	9.63	10.04	10.25	10.36	11.51	12.49	13.14
3	---	12.49	10.88	12.18	11.87	9.79	10.20	10.32	10.32	11.52	12.42	13.02
4	---	12.47	10.75	12.24	11.74	9.93	10.28	10.39	10.19	11.55	12.29	12.71
5	---	12.48	10.76	12.34	11.70	9.98	10.38	10.45	10.19	11.61	12.43	12.33
6	---	12.52	10.75	12.35	11.59	10.20	10.59	10.50	9.97	11.67	12.50	12.32
7	---	12.44	10.74	12.39	11.57	10.41	10.89	10.64	9.59	11.85	12.40	12.33
8	---	12.38	10.75	12.46	11.58	10.58	11.02	10.75	9.65	11.97	12.40	12.31
9	---	12.28	10.68	12.50	11.69	10.66	11.09	10.76	9.69	12.08	12.46	12.27
10	---	12.27	10.56	12.55	11.75	10.76	11.15	10.83	9.59	12.18	12.54	12.30
11	---	12.30	10.42	12.55	11.51	10.83	11.16	10.83	9.57	12.27	12.58	12.36
12	---	12.32	10.48	12.55	11.34	10.88	10.64	10.83	9.78	12.37	12.63	12.40
13	---	12.30	10.51	12.54	11.30	10.92	9.67	10.94	10.01	12.42	12.71	12.44
14	---	12.28	10.60	12.63	11.28	10.92	8.98	10.97	9.90	12.45	12.80	12.46
15	13.03	12.28	11.02	12.71	11.29	10.94	8.68	10.67	9.84	12.53	12.83	12.38
16	13.05	12.30	11.12	12.76	11.28	10.65	8.99	10.46	10.05	12.59	12.84	11.73
17	13.08	12.22	11.22	12.81	10.92	10.50	9.34	10.46	10.27	12.64	12.86	11.59
18	13.09	12.20	11.31	12.83	10.35	10.57	9.55	10.50	10.46	12.67	12.90	11.76
19	13.34	13.44	11.44	12.85	9.67	10.64	9.77	10.01	10.63	12.70	12.94	11.61
20	15.90	14.00	11.57	12.88	9.08	10.70	9.87	9.61	10.67	12.71	12.95	11.59
21	15.90	13.69	11.71	12.85	8.82	10.83	10.06	9.58	10.60	12.70	13.00	11.67
22	13.35	13.59	11.77	12.89	8.87	10.94	10.20	9.71	10.45	12.73	13.04	11.68
23	13.35	13.63	11.81	12.97	8.99	10.96	10.25	9.90	10.71	12.75	13.09	11.77
24	13.27	13.20	11.82	13.01	9.14	11.04	10.18	10.08	10.89	12.77	13.13	11.83
25	12.64	12.19	11.91	13.03	9.38	11.00	10.18	10.23	10.99	12.68	13.18	11.91
26	12.63	11.69	11.98	12.95	9.60	10.85	10.20	10.32	10.80	12.68	13.22	11.96
27	12.55	11.64	12.06	12.80	9.78	10.24	10.20	10.46	10.91	12.67	13.24	12.00
28	12.50	11.53	12.11	12.70	9.81	9.64	10.24	10.59	11.07	12.62	13.29	12.07
29	12.49	11.58	12.12	12.66	---	9.38	10.31	10.59	11.19	12.34	13.32	12.14
30	12.47	11.54	12.10	12.67	---	9.35	10.44	10.71	11.30	12.32	13.33	12.18
31	12.44	---	12.11	12.61	---	9.70	---	10.37	---	12.40	13.31	---

Table 5.--Daily mean water levels for observation well GA CD 28, South Branch Casselman River drainage basin, Garrett County, Maryland, June 30, 1978, to March 11, 1982--Continued

WATER YEAR 1982

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.19	11.11	11.99	11.24	11.31	10.72						
2	12.18	11.21	11.75	11.34	11.11	10.66						
3	12.25	11.29	11.55	11.41	10.80	10.73						
4	12.30	11.38	11.49	11.25	10.30	10.80						
5	12.32	11.46	11.45	10.98	10.11	10.82						
6	12.35	11.40	11.41	10.88	10.11	10.85						
7	12.35	11.41	11.38	10.60	10.22	10.85						
8	12.39	11.47	11.09	10.43	10.32	10.94						
9	12.44	11.51	10.98	10.34	10.34	10.99						
10	12.47	11.45	10.94	10.43	10.50	11.03						
11	12.51	11.43	10.98	10.57	10.70	11.06						
12	12.55	11.47	11.06	10.75	10.91	---						
13	12.59	11.51	11.10	10.81	11.00	---						
14	12.62	11.53	11.00	10.89	11.19	---						
15	12.63	11.52	11.03	11.03	11.28	---						
16	12.63	11.49	11.14	11.16	11.08	---						
17	12.67	11.56	11.23	11.30	10.55	---						
18	12.64	11.72	11.31	11.35	10.44	---						
19	12.69	11.78	11.43	11.41	10.38	---						
20	12.73	11.79	11.55	11.50	10.35	---						
21	12.93	11.91	11.61	11.57	10.11	---						
22	13.17	12.01	11.53	11.66	10.11	---						
23	13.15	12.08	11.05	11.59	10.14	---						
24	13.24	12.11	10.75	11.61	10.18	---						
25	13.22	12.28	10.65	11.71	10.32	---						
26	13.19	12.39	10.63	11.79	10.44	---						
27	12.47	12.25	10.64	11.86	10.53	---						
28	11.29	12.08	10.76	11.87	10.65	---						
29	10.93	12.07	10.94	11.95	---	---						
30	10.96	12.05	11.11	11.96	---	---						
31	11.02	---	11.19	11.82	---	---						

Table 6.--Lithologic logs of selected wells, South Branch Casselman River drainage basin, Garrett County, Maryland

Well No.	Depth (feet)	Description
GA BD 16	0- 1	Surface material
	1- 6	Rock, hard
	6- 10	Sand
	10- 14	Rock
	14- 17	Sand, clay
	17- 28	Sand rock
	28- 38	Clay, yellow
	38- 85	Shale, yellow
GA BD 17	0- 9	Soil, yellow, sandy
	9- 22	Sandstone, yellow
	22- 31	Shale, gray
	31- 47	Shale, yellow
	47-145	Shale, gray
	145-176	Not sampled
GA BD 22	0- 2	Top soil
	2- 9	Clay, yellow
	9- 11	Fireclay
	11- 19	Shale, gray
	19- 36	Sandstone, gray
	36- 72	Shale, gray
	72-101	Clay, gray
	101-120	Shale, gray, water-bearing
GA BD 23	0- 3	Top soil
	3- 19	Clay, yellow
	19- 71	Shale, gray
	71- 96	Clay, gray
	96-103	Shale, gray
	103-121	Sandstone, gray
	121-162	Shale, gray, water-bearing
GA BD 24	0- 7	Surface material
	7- 14	Shale, yellow
	14- 31	Rock, yellow
	31- 65	Rock, gray
GA BD 25	0- 8	Clay, yellow, sandy
	8- 13	Shale, yellow
	13- 14	Sandstone, gray
	14- 16	Shale, yellow
	16- 59	Sandstone, gray
	59- 84	Shale, gray, water-bearing
	84- 88	Shale, black
	88- 89	Coal
	89-101	Shale, dark gray
	101-176	Shale, gray
	176-185	Shale, brown, water-bearing

Table 6.--Lithologic logs of selected wells, South Branch Casselman
River drainage basin, Garrett County, Maryland--Continued

Well No.	Depth (feet)	Description
GA BD 26	0- 16	Clay, yellow, boulders
	16- 26	Shale, gray
	26- 39	Sandstone, gray
	39- 63	Shale, gray, water-bearing
GA BD 27	0- 3	Top soil
	3- 14	Shale, gray
	14- 38	Limestone, water-bearing
	38- 55	Shale, gray
GA BD 28	0- 3	Surface material
	3- 14	Shale, yellow
	14- 37	Rock, yellow
	37- 54	Shale, gray, soft
	54- 57	Shale, black
	57- 96	Shale, gray
	96-144	Shale, gray, soft
	144-169	Shale, red
	169-231	Shale, gray, water-bearing
GA BD 32	231-255	Rock, gray, water-bearing
	255-278	Shale, gray
	0- 2	Soil, brown
	2- 16	Clay, yellow
	16- 31	Sandstone, gray
GA BD 33	31- 32	Shale, red
	32-110	Shale, gray, water-bearing
	0- 6	Clay, brown
	6- 20	Sandstone, brown
	20- 29	Sandstone, gray
	29- 30	Coal
	30- 36	Shale, gray
	36- 44	Sandstone, gray
GA BD 36	44- 84	Shale, gray, water-bearing
	0- 1	Top soil
	1- 20	Clay, yellow, sandy
	20- 40	Sandstone
GA BD 37	40- 82	Shale, gray, water-bearing
	0- 10	Clay, yellow
	10- 25	Sandstone, yellow
	25- 30	Shale, yellow
	30- 60	Shale, gray

Table 6.--Lithologic logs of selected wells, South Branch Casselman River drainage basin, Garrett County, Maryland--Continued

Well No.	Depth (feet)	Description
GA BD 50	0- 9	Clay, yellow
	9- 14	Shale, yellow
	14- 23	Sandstone, gray
	23- 30	Sandstone, brown
	30- 33	Sandstone, yellow
	33- 35	Sandstone, gray
	35- 72	Sandstone, yellow
	72- 83	Rock, gray, water-bearing
GA BD 56	0- 3	Top soil
	3- 18	Sand, brown
	18- 49	Shale, blue, water-bearing
	49- 70	Shale, gray
GA CD 14	0- 5	Clay, yellow
	5- 15	Sand rock, yellow, soft
	15- 55	Sand rock, yellow, hard, water-bearing
	55- 93	Rock, brown, hard
	93-103	Shale, gray, red
GA CD 23	0- 5	Surface material
	5- 23	Sand rock, white, hard, water-bearing
	23- 30	Shale, yellow
	30- 43	Clay, dark
	43- 45	Coal
	45- 57	Shale, gray, water-bearing
GA CD 28	0- 12	Soil, brown, shale, brown, and siltstone, shale, gray to black, weathered fragments, sandstone, brown, fine-grained
	12- 31	Shale, medium gray, water at 28 feet
	31- 33	Sandstone, buff, medium to fine-grained, hard
	33- 36	Shale, medium gray
	36- 45	Clay, gray, soft
	45- 47	Clay, gray, soft, and shale, gray
	47- 48	Sandstone, light gray, friable, and shale, gray

Table 6.--Lithologic logs of selected wells, South Branch Casselman River drainage basin, Garrett County, Maryland--Continued

Well No.	Depth (feet)	Description
GA CD 28 (cont.)	48- 52	Sandstone, light gray, friable, micaceous
	52- 56	Clay, light gray
	56- 60	Shale, light gray, silty, and silt, white, friable, and clay and sand
	60- 77	Sandstone, white to light gray, silty and friable
	77- 82	Clay, gray, sandy with shale fragments
	82- 84	Shale, dark gray to black
	84- 85	Sandstone, gray, soft
	85- 86	Shale and clay, gray, thinly interbedded
	86- 87	Sandstone, gray, fine-grained
	87- 90	Sandstone, yellowish brown, fine- to medium-grained, hard
	90- 97	Shale and clay, gray, thinly interbedded
	97- 98	Shale, red
	98-105	Shale, gray
	105-117	Shale, red, damp
	117-126	Siltstone, red brown, very soft, damp
	126-130	Sandstone, gray, friable, fine-grained, damp
	130-135	Sandstone, gray, fine-grained, silty, dry
	135-138	Siltstone, yellowish green, sandy
	138-173	Sandstone, gray, fine-grained, silty
	173-177	Shale, green gray, sandy
	177-190	Shale, green
	190-218	Shale, red
	218-228	Shale, green and red
	228-238	Shale, red and green
	238-258	Shale, red

MARSH RUN DRAINAGE BASIN

FIGURES 7, 8, 9

and

TABLES 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

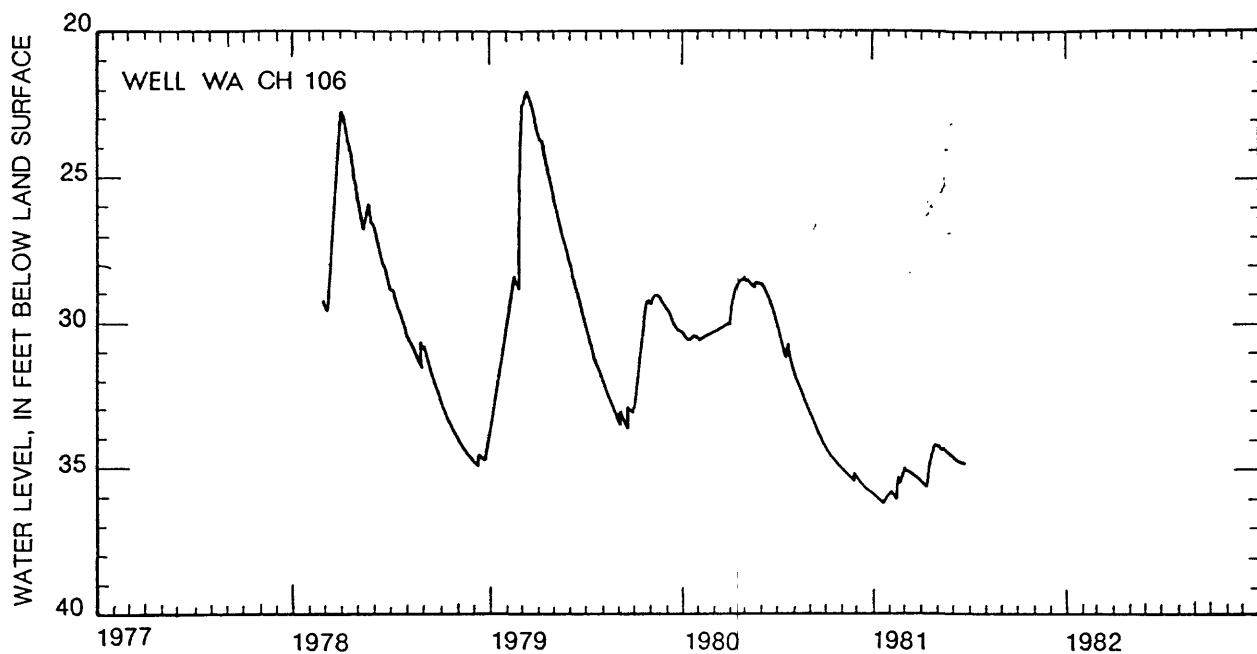


Figure 7. -- Daily low water levels for observation well
WA CH 106, February 27, 1978, to June 19, 1981.

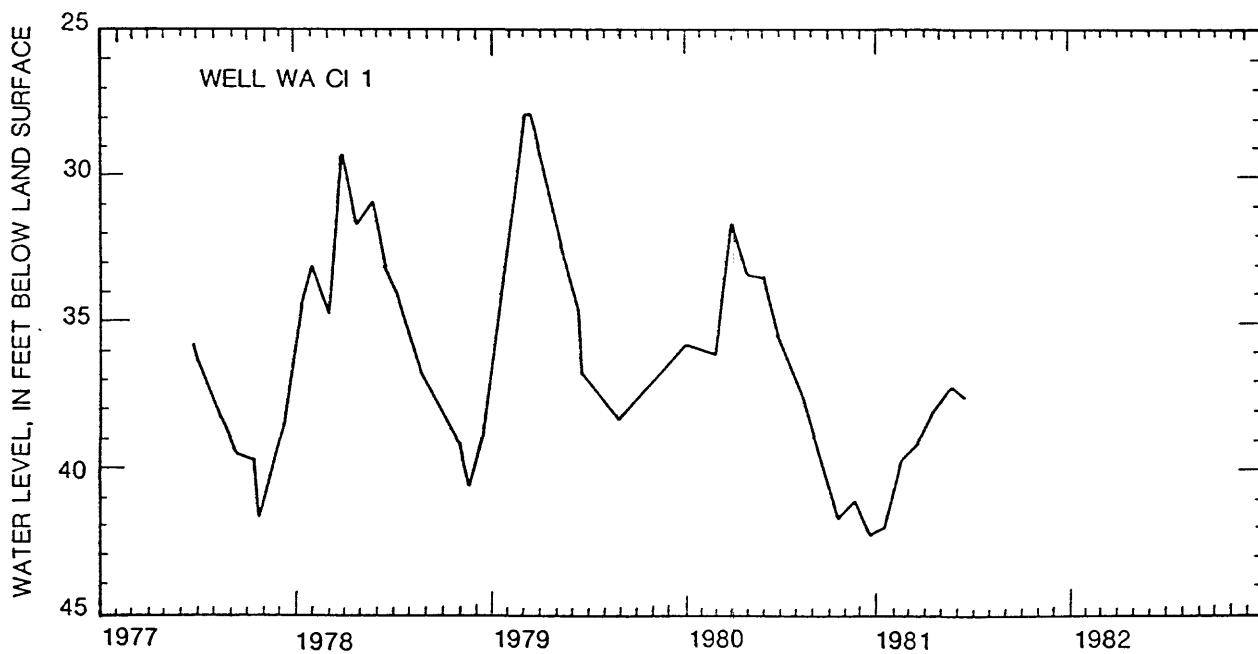


Figure 8. -- Periodic water levels for observation well WA CI 1,
June 21, 1977, to June 19, 1981.

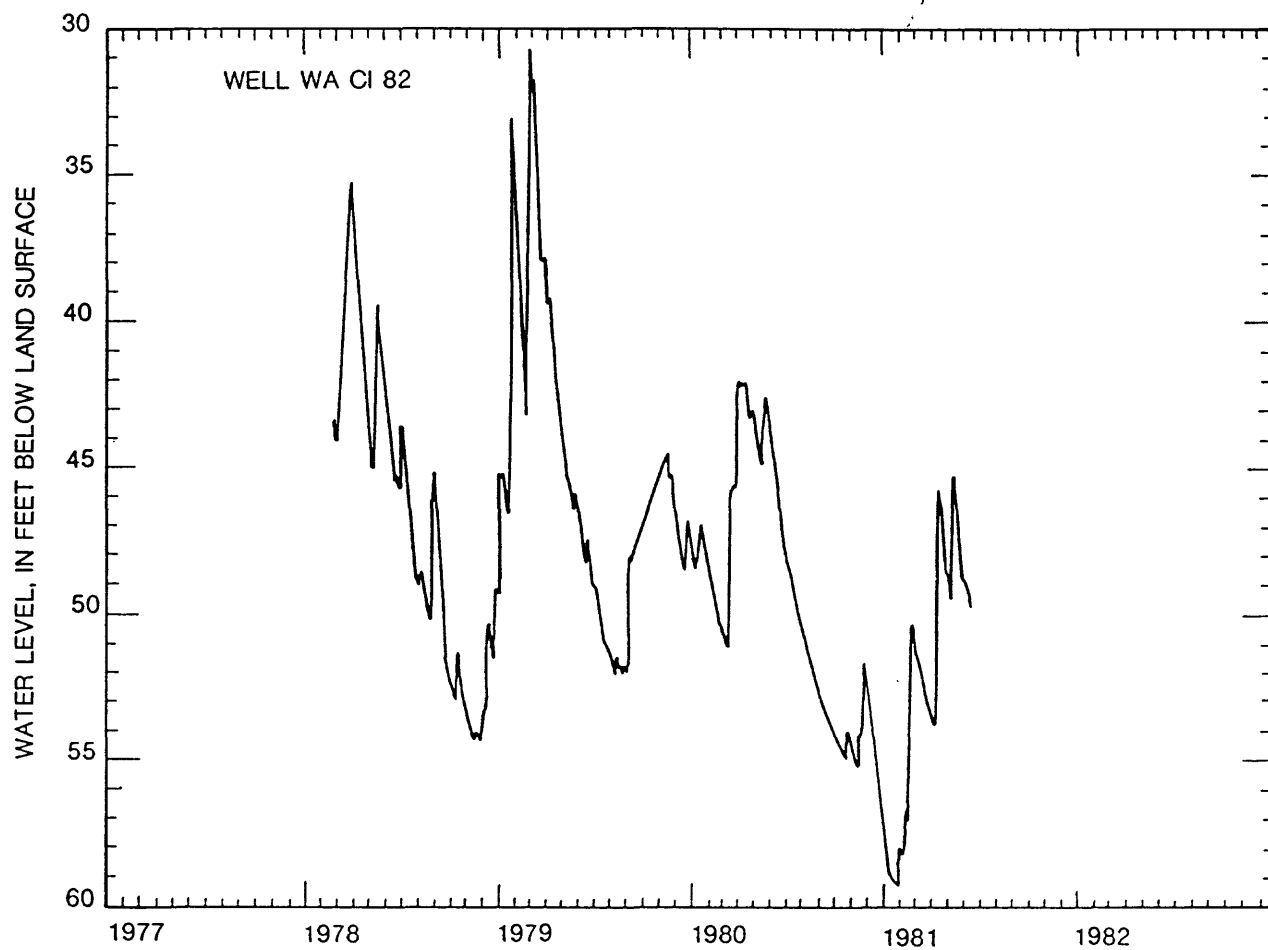


Figure 9.-- Daily mean water levels for observation well
WA CI 82, February 27, 1978, to June 19, 1981.

Table 7.--Records of selected wells of the Marsh Run drainage basin, Washington County, Maryland

Local No.	State Permit No.	Owner	Contractor	Date completed	Use of site	Use of water	Altitude of land surface (feet)	Depth of well (feet)	Depth cased
WA BH 4	-	CSX Corporation	-	-	U	U	580	32	-
WA BH 11	-	W.F. Pryor & Co., Inc.	-	-	U	U	545	50	-
WA BH 66	WA-65-0233	H.B. Mellott Estate	G E Harr & Sons	05/07/1965	W	H	550	63	20
WA BH 68	WA-69-0337	Miller, David	Hoffman	06/14/1969	W	H	520	140	22
WA BH 73	WA-73-0117	Keeley, John C.	Wm. Lamberson	10/19/1972	W	H	520	85	35
WA BH 74	WA-73-0029	Stevenson, Rodney	Wm. Lamberson	10/06/1972	W	H	590	125	75
WA BH 75	WA-73-0356	Brandenburg, Rowland	Wm. Lamberson	07/25/1973	W	H	580	145	55
WA BH 76	WA-73-0669	Goucker, Gary	Wm. Lamberson	06/17/1974	W	H	585	165	67
WA BH 77	WA-73-1230	Tritch, Michael	D. Woodward	10/23/1975	W	H	590	150	75
WA BH 78	WA-73-1281	Watson, Richard	Wm. Lamberson	03/12/1976	W	H	590	165	60
WA BH 79	WA-73-0668	Swartz, Jacob B.	Wm. Lamberson	06/20/1974	W	H	590	185	45
WA BH 80	WA-73-1127	Dalhmer, Charles H.	J. Shaff	08/18/1975	W	H	590	200	36
WA BH 81	WA-73-1204	Rath, Norris	Wm. Lamberson	09/22/1975	W	H	580	105	75
WA BH 82	WA-73-0026	Powers Distributing Co.	Wm. Lamberson	07/24/1972	W	H	495	385	21
WA BI 16	WA-00-6005	Southern States Coop	Hoffman	07/00/1950	W	C	520	175	20
WA BI 17	-	Md. State Highway Adm.	-	-	W	C, S	570	42.80	-
WA BI 18	-	CSX Corporation	-	-	Z	U	615	52	-
WA BI 61	WA-67-0092	Raice, Leon	J. Kohler	10/01/1966	O	U	550	380	22
WA BI 66	WA-70-0032	Grove, Earl	Wm. Lamberson	09/20/1969	Z	U	545	265	27
WA BI 67	WA-70-0032	Grove, Earl	Wm. Lamberson	09/23/1969	W	H	520	300	40
WA BI 68	WA-73-0066	Clem, Richard	Wm. Lamberson	09/15/1969	U	U	530	285	22
WA BI 69	WA-70-0221	Shoemaker, Donald L.	Wm. Lamberson	03/13/1970	W	H	485	85	24
WA BI 70	WA-69-0189	Peifer, Kenneth C.	C. Cromwell	02/15/1969	W	H	505	85	57
WA BI 76	WA-69-0061	United Parcel Service	Wm. Lamberson	08/26/1968	W	C	510	185	50
WA BI 77	WA-69-0200	Karper, Sharpe D.	Wm. Lamberson	03/25/1969	W	H	540	240	46
WA BI 79	WA-73-0836	Brining, Jack	Wm. Lamberson	12/19/1974	W	H	535	245	25
WA BI 80	WA-73-0370	Black, John	C. Cromwell	10/02/1973	W	H	525	150	21
WA BI 81	WA-73-0267	Hoover, Kenneth M.	D. Woodward	04/26/1973	W	H	530	150	25
WA CH 1	-	Vickers, E.E.	-	-	W	H	415	26	26
WA CH 5	WA-02-2374	Ferry, Mrs. John S.	Hoffman	03/00/1956	W	H	505	35	28
WA CH 10	WA-03-1944	Barkdoll, James	Hoffman	08/00/1958	W	H	530	165	17
WA CH 12	-	Myers, Clyde	-	00/00/1957	W	H	460	55	-
WA CH 15	-	McCubbin, H. W.	-	-	W	H	530	37	37
WA CH 18	-	Malone, J.G.	Hoffman	00/00/1954	W	H, S	445	138	15
WA CH 21	-	DeLauder, Ralph	-	-	W	H, S	415	18.10	-
WA CH 22	-	Ruffner, Peter	Pike	00/00/1950	W	H, S	400	80	1.5
WA CH 34	WA-03-2377	Saunders, Bruce	Hoffman	09/00/1958	W	H	525	55	22
WA CH 37	WA-02-4104	Kyler, Orville	Provard	07/31/1956	W	H	525	74	21
WA CH 38	WA-03-2403	Hess, Elston E.	Hoffman	10/00/1958	W	H, S	480	240	78
WA CH 39	WA-68-0152	St. James School	Hoffman	04/01/1968	W	T	500	185	25
WA CH 40	WA-68-0153	St. James School	Hoffman	04/02/1968	C	U	500	185	25
WA CH 41	-	Price Farms	-	-	U	U	440	35	35
WA CH 47	WA-69-0302	Deibert, Walter	E. Funk	05/28/1969	W	H, S	535	105	20
WA CH 48	WA-69-0171	May, Robert L.	C. Cromwell	12/17/1968	W	H	440	80	16
WA CH 49	WA-69-0243	Deneen, Ernest B.	J. Shaff	04/28/1969	W	H	470	125	20
WA CH 51	WA-70-0322	Fountain Rock School	Wm. Lamberson	07/07/1970	U	U	515	325	45
WA CH 52	WA-70-0094	Deneen, Ernest B.	Wm. Lamberson	09/10/1969	W	H	450	270	47
WA CH 53	WA-69-0083	Anderson, Glenn	Hoffman	09/25/1968	Z	U	495	250	-
WA CH 54	WA-69-0083	Anderson, Glenn	Hoffman	10/04/1968	W	H	490	165	20
WA CH 55	WA-00-0152	Ruffner, David	Wm. Lamberson	12/03/1969	W	H	430	200	65

¹ Indicates date of water level and/or discharge measurement.² Refer to table 1 for aquifer codes.SITE USE CODES

C Standby
O Observation
U Unused
W Withdrawal
Z Destroyed

WATER USE CODES

C Commercial
H Domestic
S Stock supply
T Institution
U Unused

FINISH CODES

W Walled
X Open hole

Casing diam- eter (inches)	Finish	Water level (feet)	Draw- down (feet)	Discharge (gallons per minute)	Pumping period (hours)	Date measured ¹	Specific capacity [(gal/min)/ft]	Principal aquifer ²	Local No.
6	X	22.9	-	-	-	12/18/1956	-	367RCKR	WA BH 4
-	X	-	-	-	-	-	-	367SNNG	WA BH 11
6	X	15	38	30	4.0	05/07/1965	0.8	371CCCG	WA BH 66
6	X	40	90	50	1.0	06/14/1969	.6	371CCCG	WA BH 68
6	X	20	60	30	1.0	10/19/1972	.5	371CCCG	WA BH 73
6	X	50	50	20	1.0	10/06/1972	.4	371CCCG	WA BH 74
6	X	50	85	20	1.0	07/25/1973	.2	371CCCG	WA BH 75
6	X	60	90	10	1.0	06/17/1974	.1	371CCCG	WA BH 76
6	X	55	65	10	2.0	10/23/1975	.2	371CCCG	WA BH 77
6	X	50	95	20	1.0	03/12/1976	.2	371CCCG	WA BH 78
6	X	45	120	10	1.0	06/20/1974	.1	371CCCG	WA BH 79
6	X	26	5	32	3.0	08/18/1975	6.4	371CCCG	WA BH 80
6	X	50	45	20	1.0	09/22/1975	.4	371CCCG	WA BH 81
6	X	25	340	1	1.0	07/24/1972	0	364STPL	WA BH 82
6	X	40	-	.5	1.0	07/00/1950	-	367SNNG	WA BI 16
48	W	30.84	-	-	-	12/18/1956	-	367SNNG	WA BI 17
6	X	-	-	-	-	-	-	371CCCG	WA BI 18
6	X	46	164	1	2.0	10/01/1966	0.1	367SNNG	WA BI 61
6	X	-	-	.3	-	09/20/1969	-	371CCCG	WA BI 66
6	X	50	135	2	1.0	09/23/1969	0.1	371CCCG	WA BI 67
6	X	60	60	0.5	1.0	09/15/1969	-	371CCCG	WA BI 68
6	X	40	30	10	1.0	03/13/1970	.3	371CCCG	WA BI 69
6	X	37	-	10	2.0	02/15/1969	-	367SNNG	WA BI 70
6	X	60	105	20	.5	08/26/1968	.2	367SNNG	WA BI 76
6	X	40	15	1	1.0	03/25/1969	<.1	367SNNG	WA BI 77
6	X	40	175	15	1.0	12/19/1974	<.1	367RCKR	WA BI 79
6	X	40	110	4	2.0	10/02/1973	<.1	371CCCG	WA BI 80
6	X	30	70	15	3.0	04/26/1973	.2	371CCCG	WA BI 81
48	W	14.45	-	5	-	05/10/1956	-	371CCCG	WA CH 1
6	X	20	10	15	1.5	03/00/1956	1.5	367SNNG	WA CH 5
6	X	45	110	2	-	00/00/1958	<.1	367SNNG	WA CH 10
6	X	-	-	15	-	12/02/1958	-	371CCCG	WA CH 12
36	-	33.15	-	-	-	12/04/1958	-	371CCCG	WA CH 15
6	X	30	-	2	-	12/05/1958	-	371CCCG	WA CH 18
48	W	12.22	-	-	-	12/10/1958	-	371CCCG	WA CH 21
6	X	-	-	-	-	00/00/1950	-	371CCCG	WA CH 22
6	X	30	20	12	.5	09/00/1958	.6	367RCKR	WA CH 34
6	X	30	10	20	3.0	07/31/1956	2.0	367SNNG	WA CH 37
6	X	110	120	1.5	1.0	10/00/1958	<.1	371CCCG	WA CH 38
6	X	30	116	50	.5	04/01/1968	.4	367SNNG	WA CH 39
6	X	30	116	50	.5	04/02/1968	.4	367SNNG	WA CH 40
50	W	23.85	-	-	-	04/09/1969	-	371CCCG	WA CH 41
6	X	58	42	5	1.0	05/28/1969	-	367RCKR	WA CH 47
6	X	40	-	8	2.0	12/17/1968	-	371CCCG	WA CH 48
6	X	22	8	15	4.0	04/28/1969	1.9	371CCCG	WA CH 49
6	X	31	149	25	5.0	08/18/1970	.2	371CCCG	WA CH 51
6	X	50	216	50	3.0	09/10/1969	.2	367SNNG	WA CH 52
6	X	-	-	-	-	09/25/1968	-	367RCKR	WA CH 53
6	X	60	90	20	.5	10/04/1968	.2	367RCKR	WA CH 54
6	X	100	80	60	1	12/03/1969	.8	371CCCG	WA CH 55

Table 7.--Records of selected wells of the Marsh Run drainage basin, Washington County, Maryland--Continued.

Local No.	State Permit No.	Owner	Contractor	Date completed	Use of site	Use of water	Altitude of land surface (feet)	Depth of well (feet)	Depth cased
WA CH 56	WA-70-0012	Semler, Richard	Wm. Lamberson	07/21/1969	Z	U	420	265	-
WA CH 57	WA-70-0012	Semler, Richard	Wm. Lamberson	07/23/1969	Z	U	420	305	-
WA CH 58	WA-70-0012	Semler, Richard	Wm. Lamberson	09/00/1969	Z	U	420	250	-
WA CH 59	WA-73-1357	Easterday, Russell E.	K. L. Teach	02/20/1976	W	H	525	300	82
WA CH 60	WA-73-0146	Kunze, Ernest	Wm. Lamberson	01/12/1973	W	H	465	85	60
WA CH 61	WA-73-0435	Metz, Jeffrey	Wm. Lamberson	10/12/1973	W	H	470	85	65
WA CH 62	WA-73-0308	Hancock, Vern	Wm. Lamberson	07/19/1973	W	H	465	125	65
WA CH 63	WA-73-0883	Resh	Wm. Lamberson	11/15/1974	W	H	475	265	70
WA CH 64	WA-73-0731	Miller	Wm. Lamberson	08/02/1974	W	H	470	245	69
WA CH 65	WA-73-0795	Bowers, James	Wm. Lamberson	08/14/1974	W	H	470	165	55
WA CH 66	WA-73-0732	Eyler, Curtis L.	Wm. Lamberson	07/30/1974	W	H	460	270	77
WA CH 67	WA-73-0890	Endrich, Richard	Wm. Lamberson	11/27/1974	W	H	465	245	75
WA CH 68	WA-73-1245	Hammond, Larry	Wm. Lamberson	12/17/1975	W	H	460	105	25
WA CH 69	WA-72-0144	Ford, Albert	Wm. Lamberson	12/14/1971	W	H	480	105	52
WA CH 70	WA-73-0657	Smith, Elmer	Wm. Lamberson	05/03/1974	W	H	480	105	70
WA CH 71	WA-73-1077	Clifford, Bruce	Wm. Lamberson	06/04/1975	W	H	480	125	50
WA CH 72	WA-73-0970	Crawford, Larry	Wm. Lamberson	12/30/1974	W	H	480	245	25
WA CH 73	WA-73-0676	Wise, Ronald	Wm. Lamberson	05/27/1974	W	H	470	105	55
WA CH 74	WA-73-0809	Fear, Edward	Wm. Lamberson	09/06/1974	W	H	460	285	50
WA CH 75	WA-73-0899	John R. Oliver Co.	Wm. Lamberson	12/31/1974	W	H	450	345	30
WA CH 76	WA-73-0734	Maris, Robert	Wm. Lamberson	08/21/1974	W	H	450	225	60
WA CH 77	WA-73-0796	Stottlemeyer, Bobbie	Wm. Lamberson	08/20/1974	W	H	460	285	70
WA CH 78	WA-73-0733	Miller	Wm. Lamberson	08/16/1974	W	H	450	145	20
WA CH 79	WA-73-0612	Moats, Victor	Wm. Lamberson	05/02/1974	W	H	440	125	30
WA CH 80	WA-73-0802	Zimowski, John	Wm. Lamberson	09/05/1974	W	H	450	85	55
WA CH 81	WA-73-0519	Lewis, Paul	C. Cromwell	04/18/1974	W	H	440	75	42
WA CH 82	WA-73-0525	Stottlemeyer, Richard	Wm. Lamberson	01/28/1974	W	H	490	365	80
WA CH 83	WA-73-1542	Price, Gary M.	J. Shaff	08/09/1976	W	H	480	300	60
WA CH 84	WA-73-0677	Chaney, Howard A.	Wm. Lamberson	06/14/1974	W	H	490	205	65
WA CH 85	WA-73-0122	Stotler, George	Wm. Lamberson	01/12/1973	W	H	440	205	20
WA CH 86	WA-73-0213	Turner, Luther	Wm. Lamberson	02/26/1973	W	H	470	65	60
WA CH 87	WA-73-0845	John R. Oliver Co.	Wm. Lamberson	09/20/1974	W	H	440	125	55
WA CH 88	WA-73-0846	John R. Oliver Co.	Wm. Lamberson	09/17/1974	T	U	480	165	22
WA CH 89	WA-73-0857	Ruffner, Paul	Wm. Lamberson	12/20/1974	W	H	400	85	55
WA CH 90	WA-73-0675	Campbell, Thomas	Wm. Lamberson	05/28/1974	W	H	485	185	23
WA CH 91	WA-73-1707	DeLauder, John	J. Shaff	04/04/1977	W	H	440	250	22
WA CH 92	WA-73-1708	DeLauder, John	J. Shaff	04/01/1977	W	H	440	150	22
WA CH 93	WA-73-1709	Turbin, William	J. Shaff	02/18/1977	W	H	450	150	42
WA CH 94	WA-73-1710	Silver, Richard	J. Shaff	02/18/1977	W	H	450	150	21
WA CH 95	WA-73-1202	Hose, James	J. Shaff	09/08/1975	W	H	480	375	22
WA CH 96	WA-73-0104	Bussard, Albert F.	C. Cromwell	10/06/1972	W	H	520	150	78
WA CH 97	WA-73-0105	Casavant, Joseph A.	J. Shaff	10/15/1972	W	H	520	250	41
WA CH 98	WA-73-1444	Mitchell, William	Wm. Lamberson	07/08/1976	W	H	530	110	80
WA CH 99	WA-73-1477	Welty, Larry	-	06/27/1976	W	H	530	105	50
WA CH 100	WA-73-0260	Bowers, Lloyd	C. Cromwell	08/09/1973	W	H	465	57	45
WA CH 101	WA-73-0226	Mills, Richard A.	C. Cromwell	03/07/1973	W	H	470	250	21
WA CH 102	WA-73-0282	Green, Charles	J. Shaff	05/15/1973	W	H	455	225	21
WA CH 103	WA-73-0679	Teach, Philip	J. Shaff	05/30/1974	W	H	510	250	21
WA CH 104	WA-73-0560	Nolley, Roy	J. Shaff	02/15/1974	W	H	455	150	25
WA CH 105	-	Dean, L.A.	-	-	O	U	420	14.70	14.7
WA CH 106	WA-73-2095	U.S. Geological Survey	Keyser-Garver	02/22/1978	O	U	520	69	42

¹ Indicates date of water level and/or discharge measurement.

² Refer to table 1 for aquifer codes.

SITE USE CODES

O Observation
T Test
W Withdrawal
Z Destroyed

WATER USE CODES

H Domestic
U Unused

FINISH CODE

W Walled
X Open hole

Casing diam- eter (inches)	Finish	Water level (feet)	Draw- down (feet)	Discharge (gallons per minute)	Pumping period (hours)	Date measured ¹	Specific capacity [(gal/min)/ft]	Principal aquifer ²	Local No.
6	X	-	-	0.5	-	07/21/1969	-	371CCCG	WA CH 56
6	X	-	-	.5	-	07/23/1969	-	371CCCG	WA CH 57
6	X	-	-	.5	-	09/00/1969	-	371CCCG	WA CH 58
6	X	35	215	8	1.0	02/20/1976	<0.1	371CCCG	WA CH 59
6	X	35	45	10	1.0	01/12/1973	.2	371CCCG	WA CH 60
6	X	30	45	25	1.0	10/12/1973	.6	371CCCG	WA CH 61
6	X	30	70	15	1.0	07/19/1975	.2	371CCCG	WA CH 62
6	X	65	180	40	1.0	11/15/1974	.2	371CCCG	WA CH 63
6	X	50	190	3	1.0	08/02/1974	<.1	371CCCG	WA CH 64
6	X	60	90	50	1.0	08/14/1974	.6	371CCCG	WA CH 65
6	X	30	235	20	1.0	07/30/1974	.1	371CCCG	WA CH 66
6	X	60	165	40	1.0	11/27/1974	.2	371CCCG	WA CH 67
6	X	35	40	20	1.0	12/17/1975	.5	371CCCG	WA CH 68
6	X	50	40	10	1.0	12/14/1971	.3	371CCCG	WA CH 69
6	X	60	40	30	1.0	05/03/1974	.8	371CCCG	WA CH 70
6	X	30	80	20	1.0	06/04/1975	.3	371CCCG	WA CH 71
6	X	60	165	16	1.0	12/30/1974	.1	371CCCG	WA CH 72
6	X	60	25	15	1.0	05/27/1974	.6	371CCCG	WA CH 73
6	X	55	205	20	1.0	09/06/1974	.1	371CCCG	WA CH 74
6	X	60	260	3	1.0	12/31/1974	<.1	371CCCG	WA CH 75
6	X	60	150	15	1.0	08/21/1974	.1	371CCCG	WA CH 76
6	X	60	210	20	1.0	08/20/1974	.1	371CCCG	WA CH 77
6	X	60	75	8	1.0	08/16/1974	.1	371CCCG	WA CH 78
6	X	45	70	25	4.0	05/02/1974	.4	371CCCG	WA CH 79
6	X	50	25	30	1.0	09/05/1974	1.2	371CCCG	WA CH 80
6	X	30	30	35	2.0	04/18/1974	1.2	371CCCG	WA CH 81
6	X	35	250	1	1.0	01/28/1974	<.1	371CCCG	WA CH 82
6	X	54	11	35	3.0	08/09/1976	3.2	371CCCG	WA CH 83
6	X	60	110	25	1.0	06/14/1974	.2	371CCCG	WA CH 84
6	X	60	120	6	1.0	01/12/1973	<.1	371CCCG	WA CH 85
6	X	25	35	25	1.0	02/26/1973	.7	371CCCG	WA CH 86
6	X	30	70	50	1.0	09/20/1974	.7	371CCCG	WA CH 87
6	X	30	120	50	1.0	09/17/1974	.4	371CCCG	WA CH 88
6	X	30	50	8	1.0	12/20/1974	.2	371CCCG	WA CH 89
6	X	50	110	12	1.0	05/28/1974	.1	371CCCG	WA CH 90
6	X	26	26	7	3.0	04/04/1977	.3	371CCCG	WA CH 91
6	X	26	47	5	3.0	04/01/1977	.1	371CCCG	WA CH 92
6	X	28	18	50	3.0	02/18/1977	2.8	371CCCG	WA CH 93
6	X	16	15	12	3.0	02/18/1977	.8	371CCCG	WA CH 94
6	X	68	138	15	3.0	09/09/1975	.1	371CCCG	WA CH 95
6	X	60	80	20	1.0	10/06/1972	.3	371CCCG	WA CH 96
6	X	63	117	7	3.0	10/15/1972	<.1	371CCCG	WA CH 97
6	X	50	55	20	1.0	07/08/1976	.4	371CCCG	WA CH 98
6	X	50	45	20	1.0	06/27/1976	.4	371CCCG	WA CH 99
6	X	12	38	20	2.0	08/09/1973	.5	371CCCG	WA CH 100
6	X	40	210	4	2.0	03/07/1973	<.1	371CCCG	WA CH 101
6	X	26	78	15	3.0	05/15/1973	.2	367SNNG	WA CH 102
6	X	16	128	8	3.0	05/30/1974	<.1	371CCCG	WA CH 103
6	X	16	32	15	3.0	02/15/1974	.5	371CCCG	WA CH 104
-	W	8.49	-	-	-	08/29/1977	-	371CCCG	WA CH 105
6	X	29.3	36	5	.5	02/22/1978	.1	371CCCG	WA CH 106

Table 7.--Records of selected wells of the Marsh Run drainage basin, Garrett County, Maryland--Continued.

Local No.	State Permit No.	Owner	Contractor	Date completed	Use of site	Use of water	Altitude of land surface (feet)	Depth of well (feet)	Depth cased
WA CI 1	-	Shumaker, Gilbert	-	-	W	H	470	65	-
WA CI 2	-	Pope, Leo	Pike	00/00/1931	W	H, S	450	180	-
WA CI 3	-	Pope, Leo	Pike	00/00/1915	W	H, S	450	80	-
WA CI 4	-	Bushong, E.K.	-	-	W	H	490	78	-
WA CI 5	-	St. Marks Church	-	00/00/1927	W	H	490	125	-
WA CI 6	WA-00-3374	Fairplay Rotary Club	J. Holland	11/19/1948	W	H	505	166	21
WA CI 14	-	Routzahn, C.	Hoffman	-	W	H, C	480	89	-
WA CI 16	WA-02-8860	Hutzell, R.	W W Teach	10/29/1957	W	H	480	130	25
WA CI 22	-	Shaffer, Charles E.	-	-	U	U	490	230	-
WA CI 23	-	Shaffer, Charles E.	-	-	W	H, S	490	65	-
WA CI 24	-	Shaffer, Charles E.	-	-	W	H, S	455	32.70	32.7
WA CI 34	WA-03-3768	Mahaney, Calvin	Hoffman	03/00/1959	W	H	480	65	26
WA CI 35	WA-02-2052	Stoter, George F.	Hoffman	08/00/1958	W	C	510	210	55
WA CI 36	-	Embry, Leonard	Pike	00/00/1954	W	H	510	83	17
WA CI 38	WA-03-4880	Miller, Floyd E.	Hoffman	06/00/1959	W	H, S	505	120	59
WA CI 40	WA-66-0262	Devils Backbone Park	Hoffman	03/26/1966	W	H	370	145	21
WA CI 41	WA-68-0084	Church, Manor	Hoffman	10/23/1967	W	H	440	270	20
WA CI 42	WA-68-0031	Dist. 12 Ruritan Club	Hoffman	08/09/1967	W	H	485	85	60
WA CI 48	WA-69-0281	Grove, Charles	Hoffman	05/23/1969	W	H	490	300	24
WA CI 49	WA-69-0024	Rees, Buckley G.	Hoffman	08/13/1968	W	H	510	285	32
WA CI 50	WA-69-0251	Culler, David E.	Hoffman	05/09/1969	W	H	440	215	24
WA CI 51	WA-69-0283	Burtner, Walden	Hoffman	05/28/1969	W	H, S	480	205	38
WA CI 52	WA-69-0252	Mellott, Lyle G.	Hoffman	05/07/1969	W	H	435	185	17
WA CI 56	WA-73-0335	Mose, Lewis	D. Woodward	09/04/1973	Z	U	485	75	20
WA CI 57	WA-73-0876	Mose, Lewis	D. Woodward	11/13/1974	W	H	485	215	60
WA CI 58	WA-73-0943	Huntzberry, Robert	Wm. Lamberson	11/18/1974	W	H	460	125	45
WA CI 59	WA-73-0590	Mong, George	D. Woodward	03/28/1974	W	H	500	70	34
WA CI 60	WA-73-0610	Kline, Donald	C. Cromwell	04/16/1974	W	H	505	150	21
WA CI 61	WA-73-1420	Line, George	J. Shaff	05/11/1976	W	H	480	150	21
WA CI 62	WA-73-1315	Stouffer, Stanley	Wm. Lamberson	12/24/1975	W	H	470	105	65
WA CI 63	WA-73-1322	Trolio, Peter	Wm. Lamberson	02/04/1976	W	H	470	105	40
WA CI 64	WA-73-0035	Fehlauer, Kenneth	Wm. Lamberson	10/02/1972	W	H	520	305	22
WA CI 65	WA-73-0190	Saufley, Harry	Wm. Lamberson	01/31/1973	W	H	520	405	25
WA CI 66	WA-73-0555	Chelmey, Donald	Wm. Lamberson	02/11/1974	W	H	490	325	40
WA CI 67	WA-73-1265	Timmons, William	C. Cromwell	11/06/1975	W	H	505	250	21
WA CI 68	WA-73-0803	Heller, Leonard	Wm. Lamberson	10/18/1974	W	H	490	225	25
WA CI 69	WA-73-0804	Moreland, Gail	Wm. Lamberson	09/27/1974	W	H	490	245	24
WA CI 70	WA-73-0708	Whittaker, Jesse	Wm. Lamberson	07/02/1974	W	H	505	205	23
WA CI 71	WA-73-0709	Mason, Francis	Wm. Lamberson	07/05/1974	W	H	505	185	47
WA CI 72	WA-72-0029	Woodring, Charles	Wm. Lamberson	08/03/1971	W	H	505	425	35
WA CI 73	WA-73-1698	Cronise, Carroll	J. Shaff	12/21/1976	W	H	480	100	44
WA CI 74	WA-73-1724	Snyder, Phillip	D. Woodward	02/09/1977	W	H	480	245	22
WA CI 75	WA-73-0574	Graves, Robert	Wm. Lamberson	02/28/1974	W	H	515	105	25
WA CI 76	WA-73-0586	Bailey, Hunter	D. Woodward	03/11/1974	W	H	505	200	20
WA CI 77	WA-73-1185	Hose, Robert F.	Wm. Lamberson	08/22/1975	W	H	475	85	25
WA CI 78	WA-73-0494	Younkins, Harold	D. Woodward	11/01/1973	W	H	500	150	20
WA CI 79	WA-73-0277	Wills, Elmer	Wm. Lamberson	05/25/1973	W	H	490	145	47
WA CI 82	WA-73-2101	U.S. Geological Survey	Keyser-Garver	02/24/1978	O	U	500	84	32

¹ Indicates date of water level and/or discharge measurement.² Refer to table 1 for aquifer codes.SITE USE CODES

O Observation
U Unused
W Withdrawal
Z Destroyed

WATER USE CODES

C Commercial
H Domestic
S Stock supply
T Institution
U Unused

FINISH CODE

X Open hole

WATER-LEVEL CODE

E Estimated

Casing diam- eter (inches)	Finish	Water level (feet)	Draw- down (feet)	Discharge (gallons per minute)	Pumping period (hours)	Date measured ¹	Specific capacity [(gal/m ³ h)/ft]	Principal aquifer ²	Local No.
6	X	35.69	-	-	-	06/21/1977	-	371CCCCG	WA CI 1
6	X	-	-	-	-	-	-	371CCCCG	WA CI 2
6	X	-	-	-	-	-	-	371CCCCG	WA CI 3
6	X	-	-	-	-	-	-	371CCCCG	WA CI 4
6	X	-	-	-	-	-	-	371CCCCG	WA CI 5
6	X	60	5	10	1.0	11/19/1948	2.0	371CCCCG	WA CI 6
6	X	-	-	-	-	-	-	371CCCCG	WA CI 14
6	X	80	5	6	1.0	10/29/1957	1.2	371CCCCG	WA CI 16
6	X	-	-	-	-	-	-	371CCCCG	WA CI 22
-	-	-	-	-	-	-	-	371CCCCG	WA CI 23
60	-	15.84	-	-	-	12/10/1958	-	371CCCCG	WA CI 24
6	X	35	15	20	1.0	03/00/1959	1.3	371CCCCG	WA CI 34
6	X	60	140	1	1.0	08/00/1958	< .1	371CCCCG	WA CI 35
6	X	25 E	-	-	-	00/00/1954	-	371CCCCG	WA CI 36
6	X	60	40	20	1.0	06/00/1959	.5	371CCCCG	WA CI 38
6	X	45	35	10	.75	03/26/1966	.3	371CCCCG	WA CI 40
6	X	20	246	50	.5	10/23/1967	.2	371CCCCG	WA CI 41
6	X	20	55	20	.5	08/09/1967	.4	371CCCCG	WA CI 42
6	X	78	107	1	1.0	05/23/1969	-	371CCCCG	WA CI 48
6	X	60	200	2	.5	08/13/1968	< .1	371CCCCG	WA CI 49
6	X	60	150	30	.5	05/09/1969	.2	371CCCCG	WA CI 50
6	X	60	65	5	.5	05/28/1969	< .1	371CCCCG	WA CI 51
6	X	60	115	15	.5	05/07/1969	.1	371CCCCG	WA CI 52
6	X	18	12	20	1.0	09/04/1973	1.7	371CCCCG	WA CI 56
6	X	20	140	8	2.0	11/13/1974	< .1	371CCCCG	WA CI 57
6	X	25	80	10	1.0	11/18/1974	.1	371CCCCG	WA CI 58
6	X	35	15	20	2.0	03/28/1974	1.3	371CCCCG	WA CI 59
6	X	35	105	30	1.0	04/16/1974	.3	371CCCCG	WA CI 60
6	X	26	25	8	3.0	05/11/1976	.3	371CCCCG	WA CI 61
6	X	30	65	10	1.0	12/24/1975	.2	371CCCCG	WA CI 62
6	X	35	55	20	1.0	02/04/1976	.4	371CCCCG	WA CI 63
6	X	35	255	50	1.0	10/02/1972	.2	371CCCCG	WA CI 64
6	X	40	330	2	1.0	01/31/1973	.006	371CCCCG	WA CI 65
6	X	35	235	2	1.0	02/11/1974	.009	371CCCCG	WA CI 66
6	X	25	220	3	3.0	11/06/1975	.01	371CCCCG	WA CI 67
6	X	30	170	8	1.0	10/18/1974	.05	371CCCCG	WA CI 68
6	X	40	180	13	1.0	09/27/1974	.7	371CCCCG	WA CI 69
6	X	45	130	12	1.0	07/02/1974	.9	371CCCCG	WA CI 70
6	X	40	120	12	1.0	07/05/1974	.1	371CCCCG	WA CI 71
6	X	40	375	1	1.0	08/03/1971	< .1	371CCCCG	WA CI 72
6	X	24	13	26	3.0	12/21/1976	2.0	371CCCCG	WA CI 73
6	X	42	58	20	1.0	02/09/1977	.3	371CCCCG	WA CI 74
6	X	40	50	15	1.0	02/28/1974	.3	367SNNG	WA CI 75
6	X	55	45	7	1.0	03/11/1974	.2	371CCCCG	WA CI 76
6	X	40	30	20	1.0	08/22/1975	.7	371CCCCG	WA CI 77
6	X	50	90	5	1.0	11/01/1973	.1	371CCCCG	WA CI 78
6	X	30	90	15	1.0	05/25/1973	.2	371CCCCG	WA CI 79
6	X	43.35	36.65	30	.5	02/24/1978	.8	371CCCCG	WA CI 82

Table 8.--Records of selected springs of the Marsh Run drainage basin, Washington County, Maryland

Local No.	Owner	Use of water	Altitude of land surface (feet)	Yield (gallon per minute)	Date discharge measured	Water temperature (° Celsius)	Principal aquifer ¹
WA BH 28	Shank, Samuel	H	535	125 E	12/04/1958	13	371CCCG
WA BH 29	Shank, Samuel	U	535	150 E	12/04/1958	13	371CCCG
WA BH 30	Shank, Samuel	U	535	100 E	12/04/1958	12	371CCCG
WA BH 31	Landis, John	H, S	535	63 E	12/04/1958	12	371CCCG
WA BH 32	Landis, John	U	545	35 E	12/04/1958	12	371CCCG
WA CH 2	St. James School	T	490	838	05/29/1958	12	371CCCG
WA CH 11	Myers, Clyde	U	430	300 E	12/02/1958	12	367SNNG
WA CH 16	Myers, Courtney	S	420	35 E	12/02/1958	13	367SNNG
WA CH 17	Malone, J.	S	425	40 E	12/05/1958	12	371CCCG
WA CH 19	Malone, J.	H	420	35 E	12/05/1958	12	371CCCG
WA CH 20	Houser, J.	H, S	430	125	12/05/1958	13	371CCCG
WA CI 17	Eakle, E.	H, S	445	63 E	12/05/1958	13	371CCCG
WA CI 18	Eakle, E.	S	440	25 E	12/05/1958	13	371CCCG
WA CI 19	Eakle, E.	S	430	40 E	12/05/1958	13	371CCCG
WA CI 20	Poffenberger, C.	H, S	440	85	01/01/1959	12	371CCCG
WA CI 81	Unknown	S	490	89.77	07/06/1977	-	367SNNG
WA CI 83	Beckley, Robert	U	460	148.11	07/06/1977	18	371CCCG

¹ Refer to table 1 for aquifer codes.

WATER USE CODES

H Domestic
S Stock supply
T Institution
U Unused
Z Other

YIELD CODE

E Estimated

Table 9.---Periodic water levels for observation well WA CH 1, Marsh Run drainage basin,
Washington County, Maryland, May 10, 1956, to December 15, 1982

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 10, 1956	14.45	JAN 07, 1966	20.39	DEC 03, 1971	11.43	AUG 22, 1977	17.62
JUL 14	17.84	APR 28	18.49	JAN 04, 1972	12.36	OCT 06	18.79
OCT 12	18.23	JUN 08	18.67	MAY 21	8.94	NOV 21	18.81
DEC 18	17.27	JUL 28	19.52	MAY 26	9.61	JAN 04, 1978	16.50
JAN 11, 1957	16.55	SEP 05	20.10	JUL 11	7.98	FEB 23	14.12
APR 08	16.06	OCT 18	19.54	18	8.99	APR 06	8.98
JUL 17	17.84	DEC 07	19.02	SEP 07	13.93	MAY 18	10.41
NOV 14	18.03	JAN 18, 1967	18.49	OCT 20	16.74	JUN 29	14.13
DEC 13	19.71	MAR 01	17.15	DEC 13	12.98	AUG 10	16.32
JAN 10, 1958	19.62	APR 20	15.17	JAN 14, 1973	11.42	SEP 18	17.85
FEB 03	16.56	JUN 06	17.35	MAR 01	9.96	OCT 30	18.79
MAR 11	15.70	JUL 26	17.76	APR 03	10.97	DEC 14	17.77
APR 10	10.69	JUL 17	17.07	MAY 02	8.50	JAN 03, 1979	15.70
MAY 14	11.19	AUG 23	17.34	JUN 13	8.36	MAR 13	7.05
JUL 23	16.07	OCT 03	17.70	AUG 03	14.17	MAY 08	12.42
SEP 24	18.13	NOV 07	17.13	SEP 17	16.06	JUN 28	15.70
JAN 09, 1959	19.29	DEC 15	14.75	OCT 25	16.29	AUG 09	17.65
APR 10	18.78	JAN 23, 1968	13.58	NOV 24	18.00	OCT 03	16.70
APR 30	18.54	FEB 20	13.87	JAN 07, 1974	11.47	NOV 20	14.19
JUN 02	18.90	MAR 05	14.98	FEB 07	10.77	DEC 19	15.73
12	19.37	APR 15	13.05	MAR 14	14.10	JAN 02, 1980	15.42
JUL 07	18.94	MAY 01	14.27	APR 18	10.14	25	14.92
AUG 04	19.38	JUL 28	15.50	MAY 23	13.45	FEB 29	16.68
26	19.65	JUL 05	16.15	JUL 11	16.69	APR 15	12.72
OCT 16	19.56	JUL 16	16.50	SEP 06	18.05	MAY 27	12.50
JAN 12, 1960	DRY	AUG 19	17.83	OCT 21	19.03	JUL 03	15.35
APR 15	16.55	OCT 02	18.22	NOV 15	18.95	AUG 14	17.47
JUL 01	17.38	NOV 21	18.42	JAN 02, 1975	17.84	OCT 10	18.65
JAN 13, 1961	20.05	JAN 08, 1969	19.03	MAR 29	16.50	NOV 10	18.95
APR 11	12.44	MAR 10	20.02	MAR 11	14.02	DEC 17	19.12
JUL 05	15.72	APR 21	18.83	APR 10	11.21	JAN 21, 1981	19.47
OCT 05	18.72	MAY 22	18.92	MAY 15	10.60	FEB 24	17.98
JAN 10, 1962	18.29	JUN 23	18.94	JUL 16	9.86	APR 07	18.70
APR 13	10.90	JUL 15	19.61	AUG 26	14.41	MAY 06	17.85
JUL 04	16.80	SEP 09	18.68	OCT 08	8.47	JUN 10	17.15
OCT 12	19.03	OCT 07	19.33	NOV 17	8.67	JUL 22	17.25
JAN 04, 1963	18.62	NOV 19	19.82	DEC 18	12.18	SEP 15	18.44
APR 11	15.34	DEC 16	18.72	30	9.73	OCT 05	18.78
JUL 01	18.06	FEB 12, 1970	15.91	FEB 04, 1976	9.73	NOV 20	18.69
OCT 01	19.39	MAR 17	16.96	MAR 11	13.01	JAN 05, 1982	17.33
25	19.98	MAY 05	10.92	MAY 11	13.50	FEB 17	15.76
NOV 06	20.07	JUN 17	14.83	JUN 15	16.63	MAR 22	12.30
JAN 09, 1964	17.39	JUL 30	13.28	JUL 20	17.47	MAY 11	14.60
APR 03	17.50	OCT 19	18.22	AUG 26	16.78	JUN 21	10.64
JUL 01	16.46	DEC 28	16.43	OCT 08	13.90	JUL 26	14.80
OCT 21	19.50	FEB 11, 1971	14.19	NOV 18	9.50	SEP 09	17.58
31	19.44	MAR 22	9.92	JAN 04, 1977	13.73	NOV 02	18.65
JAN 12, 1965	17.39	MAY 07	14.47	FEB 21	16.43	DEC 15	19.05
APR 09	16.93	JUN 03	15.06	APR 11	9.06		
JUN 30	18.42	AUG 05	15.03	MAY 27	14.02		
SEP 30	19.95	OCT 05	15.94	JUL 12	16.62		

Table 10.---Periodic water levels for observation well WA CH 87, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978, to June 19, 1981

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 27, 1978	24.69	DEC 14, 1978	33.60	FEB 22, 1980	27.41	NOV 20, 1980	35.74
MAR 30	19.64	MAR 01, 1979	18.26	APR 02	23.00	DEC 19	36.02
APR 25	21.77	MAR 16	19.55	MAY 02	23.13	JAN 16, 1981	36.79
MAY 25	20.44	APR 05	19.81	JUN 02	23.70	FEB 20	35.66
JUN 01	21.37	MAY 10	22.24	JUN 30	25.78	MAR 20	32.89
JUL 11	24.63	JUN 14	24.69	JUL 28	28.75	APR 17	30.57
JUL 28	26.39	JUL 18	28.23	AUG 15	30.25	MAY 20	29.00
OCT 27	33.18	AUG 30	31.38	SEP 19	32.79	JUN 19	30.10
NOV 21	34.40	JAN 04, 1980	25.92	OCT 20	34.50		

Table 11.---Periodic water levels for observation well WA CH 88, Marsh Run drainage basin,
Washington County, Maryland, March 6, 1978, to June 19, 1981

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 06, 1978	48.23	MAR 01, 1979	43.78	MAY 02, 1980	46.45	DEC 19, 1980	52.37
MAR 30	43.93	MAR 16	41.08	JUN 02	45.55	JAN 16, 1981	56.75
APR 25	44.75	APR 05	41.80	JUN 30	46.87	FEB 20	52.70
MAY 25	43.49	MAY 10	44.30	JUL 28	43.49	MAR 20	51.78
JUN 01	43.64	JUN 14	46.52	AUG 21	49.88	APR 17	51.30
JUL 11	45.87	JAN 04, 1980	48.28	SEP 19	50.70	MAY 20	50.35
JUL 28	51.47	MAR 04	48.70	OCT 20	51.60	JUN 19	50.42
NOV 21	51.34	APR 02	47.00	NOV 20	52.16		

Table 12.---Periodic water levels for observation well WA CH 105, Marsh Run drainage basin,
Washington County, Maryland, August 29, 1977, to June 19, 1981

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
AUG 29, 1977	8.49	JUN 01, 1978	4.73	APR 05, 1979	3.81	AUG 15, 1980	6.75
SEP 13	9.12	JUN 20	5.45	MAY 10	5.19	SEP 19	7.85
SEP 21	9.43	JUL 11	5.83	JUN 14	5.97	OCT 20	8.30
OCT 13	10.30	JUL 28	6.31	JUL 19	6.95	NOV 20	10.00
OCT 24	10.37	AUG 24	6.55	AUG 30	7.11	DEC 19	10.30
NOV 23	10.14	SEP 08	5.88	JAN 04, 1980	5.46	JAN 16, 1981	11.58
DEC 29	6.96	SEP 21	7.35	MAR 04	5.88	FEB 20	8.72
JAN 11, 1978	6.33	OCT 27	8.60	APR 02	3.80	MAR 20	8.78
MAR 29	2.40	NOV 21	9.48	MAY 02	4.65	APR 17	5.30
APR 25	4.75	DEC 14	8.18	JUN 02	5.09	MAY 20	7.11
MAY 25	4.29	MAR 16, 1979	3.44	JUL 28	6.40	JUN 19	7.74

Table 13.---Daily low water levels for observation well WA CH 106, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 27, 1978	29.27	MAY 27, 1978	26.54	JUL 05, 1978	28.92	AUG 18, 1978	31.14
MAR 06	29.66	28	26.58	06	28.98	19	31.18
29	23.20	29	26.61	07	29.05	20	31.24
31	22.78	JUN 01	26.75	08	29.10	21	31.28
APR 01	22.75	02	26.81	09	29.15	22	31.34
02	22.85	03	26.87	10	29.22	23	31.38
03	22.87	04	26.94	11	29.29	24	31.43
04	22.89	05	27.00	12	29.34	25	31.48
05	22.92	06	27.08	13	29.40	26	31.53
25	25.01	07	27.15	14	29.46	27	31.55
26	25.10	08	27.22	15	29.51	28	30.65
27	25.22	09	27.30	16	29.57	29	30.78
28	25.33	10	27.38	17	29.64	30	30.86
29	25.43	11	27.45	18	29.69	31	30.86
30	25.54	12	27.51	19	29.75	SEP 01	30.80
MAY 01	25.76	13	27.60	20	29.80	02	30.85
02	25.87	14	27.68	28	30.24	03	30.93
06	26.20	15	27.75	29	30.30	04	31.01
07	26.30	16	27.82	30	30.35	05	31.08
08	26.38	17	27.89	31	30.40	06	31.15
09	26.48	18	27.96	AUG 01	30.47	07	31.21
10	26.60	19	28.04	02	30.53	08	31.28
11	26.70	20	28.08	03	30.57	09	31.35
12	26.78	21	28.16	04	30.56	21	32.06
13	26.83	22	28.25	05	30.60	22	32.12
14	26.73	23	28.32	06	30.64	23	32.17
15	26.74	24	28.40	07	30.65	24	32.23
16	26.54	25	28.46	08	30.70	25	32.28
17	26.40	26	28.54	09	30.75	26	32.34
18	26.28	27	28.60	10	30.79	27	32.40
19	26.14	28	28.68	11	30.83	28	32.45
20	26.05	29	28.75	12	30.84	29	32.50
21	25.98	30	28.82	13	30.88	30	32.55
22	25.96	JUL 01	28.90	14	30.94	OCT 01	32.60
23	25.94	02	28.91	15	30.99	02	32.65
25	26.48	03	28.90	16	31.04	03	32.70
26	26.51	04	28.84	17	31.08	04	32.74

Table 13.--Daily low water levels for observation well WA CH 106, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1978	32.78	NOV 29, 1978	34.74	APR 14, 1979	24.14	SEP 18, 1979	33.61
06	32.83	30	34.74	15	24.22	19	33.64
07	32.87	DEC 01	34.76	16	24.32	20	33.66
08	32.92	02	34.79	17	24.40	21	33.25
09	32.97	03	34.80	18	24.48	22	32.94
10	33.01	04	34.80	19	24.56	23	32.95
11	33.05	05	34.82	20	24.65	24	32.96
12	33.11	06	34.84	21	24.74	25	32.98
13	33.12	07	34.86	22	24.82	26	32.99
14	33.17	08	34.87	23	24.90	27	33.00
15	33.22	09	34.84	24	24.99	28	33.02
16	33.26	10	34.60	25	25.07	29	33.04
17	33.30	11	34.60	26	25.15	OCT 24	29.25
18	33.35	12	34.60	27	25.24	25	29.25
19	33.38	13	34.60	28	25.32	26	29.26
20	33.40	14	34.61	29	25.40	27	29.27
21	33.42	15	34.62	30	25.49	28	29.27
22	33.44	16	34.64	MAY 01	25.57	29	29.30
23	33.46	17	34.65	02	25.66	30	29.32
24	33.48	18	34.66	03	25.75	31	29.34
25	33.50	19	34.67	04	25.84	NOV 01	29.35
26	33.52	20	34.68	05	25.94	02	29.35
27	33.54	21	34.68	06	26.04	03	29.20
28	33.56	22	34.70	07	26.13	04	29.19
29	33.58	23	34.75	08	26.23	05	29.17
30	33.60	24	34.78	09	26.32	06	29.14
31	33.62	25	34.80	10	26.34	07	29.10
NOV 01	33.64	26	34.82	11	31.31	08	29.09
02	33.66	27	34.84	12	31.36	09	29.06
03	33.68	28	34.86	13	31.41	10	29.04
04	33.70	29	34.88	14	31.46	11	29.05
05	33.72	30	34.90	15	31.51	12	29.05
06	33.74	31	34.92	16	31.56	13	29.04
07	33.76	DEC 01	34.94	17	31.61	14	29.05
08	33.78	02	34.96	18	31.66	15	29.05
09	33.80	03	34.98	19	31.71	16	29.07
10	33.82	04	35.00	20	31.76	17	29.08
11	33.84	05	35.02	21	31.81	18	29.10
12	33.86	06	35.04	22	31.86	19	29.13
13	33.88	07	35.06	23	31.91	20	29.15
14	33.90	08	35.08	24	31.96	21	29.18
15	33.92	09	35.10	25	32.01	22	29.20
16	33.94	10	35.12	26	32.06	23	29.24
17	33.96	11	35.14	27	32.11	24	29.27
18	33.98	12	35.16	28	32.16	25	29.28
19	34.00	13	35.18	29	32.21	26	29.28
20	34.02	14	35.20	30	32.26	27	29.30
21	34.04	15	35.22	31	32.31	28	29.34
22	34.06	16	35.24	NOV 01	32.36		
23	34.08	17	35.26	02	32.41		
24	34.10	18	35.28	03	32.46		
25	34.12	19	35.30	04	32.51		
26	34.14	20	35.32	05	32.56		
27	34.16	21	35.34	06	32.61		
28	34.18	22	35.36	07	32.66		
29	34.20	23	35.38	08	32.71		
30	34.22	24	35.40	09	32.76		
31	34.24	25	35.42	10	32.81		
NOV 01	34.26	26	35.44	11	32.86		
02	34.28	27	35.46	12	32.91		
03	34.30	28	35.48	13	32.96		
04	34.32	29	35.50	14	33.01		
05	34.34	30	35.52	15	33.06		
06	34.36	31	35.54	16	33.11		
07	34.38	DEC 01	35.56	17	33.16		
08	34.40	02	35.58	18	33.21		
09	34.42	03	35.60	19	33.26		
10	34.44	04	35.62	20	33.31		
11	34.46	05	35.64	21	33.36		
12	34.48	06	35.66	22	33.41		
13	34.50	07	35.68	23	33.46		
14	34.52	08	35.70	24	33.51		
15	34.54	09	35.72	25	33.56		
16	34.56	10	35.74	26	33.61		
17	34.58	11	35.76	27	33.66		
18	34.60	12	35.78	28	33.71		
19	34.62	13	35.80	29	33.76		
20	34.64	14	35.82	30	33.81		
21	34.66	15	35.84	31	33.86		
22	34.68	16	35.86	NOV 01	33.91		
23	34.70	17	35.88	02	33.96		
24	34.72	18	35.90	03	34.01		
25	34.74	19	35.92	04	34.06		
26	34.76	20	35.94	05	34.11		
27	34.78	21	35.96	06	34.16		
28	34.80	22	35.98	07	34.21		
29	34.82	23	36.00	08	34.26		
30	34.84	24	36.02	09	34.31		
31	34.86	25	36.04	10	34.36		
NOV 01	34.88	26	36.06	11	34.41		
02	34.90	27	36.08	12	34.46		
03	34.92	28	36.10	13	34.51		
04	34.94	29	36.12	14	34.56		
05	34.96	30	36.14	15	34.61		
06	34.98	31	36.16	16	34.66		
07	35.00	DEC 01	36.18	17	34.71		
08	35.02	02	36.20	18	34.76		
09	35.04	03	36.22	19	34.81		
10	35.06	04	36.24	20	34.86		
11	35.08	05	36.26	21	34.91		
12	35.10	06	36.28	22	34.96		
13	35.12	07	36.30	23	35.01		
14	35.14	08	36.32	24	35.06		
15	35.16	09	36.34	25	35.11		
16	35.18	10	36.36	26	35.16		
17	35.20	11	36.38	27	35.21		
18	35.22	12	36.40	28	35.26		
19	35.24	13	36.42	29	35.31		
20	35.26	14	36.44	30	35.36		
21	35.28	15	36.46	NOV 01	35.41		
22	35.30	16	36.48	02	35.46		
23	35.32	17	36.50	03	35.51		
24	35.34	18	36.52	04	35.56		
25	35.36	19	36.54	05	35.61		
26	35.38	20	36.56	06	35.66		
27	35.40	21	36.58	07	35.71		
28	35.42	22	36.60	08	35.76		
29	35.44	23	36.62	09	35.81		
30	35.46	24	36.64	10	35.86		
31	35.48	25	36.66	11	35.91		
NOV 01	35.50	26	36.68	12	35.96		
02	35.52	27	36.70	13	36.01		
03	35.54	28	36.72	14	36.06		
04	35.56	29	36.74	15	36.11		
05	35.58	30	36.76	16	36.16		
06	35.60	DEC 01	36.78	17	36.21		
07	35.62	02	36.80	18	36.26		
08	35.64	03	36.82	19	36.31		
09	35.66	04	36.84	20	36.36		
10	35.68	05	36.86	21	36.41		
11	35.70	06	36.88	22	36.46		
12	35.72	07	36.90	23	36.51		
13	35.74	08	36.92	24	36.56		
14	35.76	09	36.94	25	36.61		
15	35.78	10	36.96	26	36.66		
16	35.80	11	36.98	27	36.71		
17	35.82	12	37.00	28	36.76		
18	35.84	13	37.02	29	36.81		
19	35.86	14	37.04	30	36.86		
20	35.88	15	37.06	NOV 01	36.91		
21	35.90	16	37.08	02	36.96		
22	35.92	17	37.10	03	37.01		
23	35.94	18	37.12	04	37.06		
24	35.96	19	37.14	05	37.11		
25	35.98	20	37.16	06	37.16		
26	36.00	21	37.18	07	37.21		
27	36.02	22	37.20	08	37.26		
28	36.04	23	37.22	09	37.31		
29	36.06	24	37.24	10	37.36		
30	36.08	25	37.26	11	37.41		
31	36.10	26	37.28	12	37.46		
NOV 01	36.12	27	37.30	13	37.51		
02	36.14	28	37.32	14	37.56		
03	36.16	29	37.34	15	37.61		
04	36.18	30	37.36	16	37.66		
05	36.20	DEC 01	37.38	17	37.71		
06	36.22	02	37.40	18	37.76		
07	36.24	03	37.42	19	37.81		
08	36.26	04	37.44	20	37.86		
09	36.28	05	37.46	21	37.91		
10	36.30	06	37.48	22	37.96		
11	36.32	07	37.50	23	38.01		
12	36.34	08	37.52	24	38.06		
13	36.36	09	37.54	25	38.11		
14	36.38	10	37.56	26	38.16		
15	36.40	11	37.58	27	38.21		
16	36.42	12	37.60	28	38.26		
17	36.44	13	37.62	29	38.31		
18	36.46	14	37.64	30	38.36		
19	36.48	15	37.66	NOV 01	38.41		
20	36.50	16	37.68	02	38.46		
21	36.52	17	37.70	03	38.51		
22	36.54	18	37.72	04	38.56		
23	36.56	19	37.74	05	38.61		
24	36.58	20	37.76	06	38.66		
25	36.60	21	37.78	07	38.71		
26	36.62	22	37.80	08	38.76		
27	36.64	23	37.82	09	38.81		
28	36.66	24	37.84	10	38.86		
29	36.68	25	37.86	11			

Table 13.--Daily low water levels for observation well WA CH 106, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29, 1979	29.36	FEB 01, 1980	30.50	MAY 21, 1980	28.74	JUL 08, 1980	30.34
30	29.40	02	30.53	22	28.60	09	30.40
DEC 01	29.44	03	30.55	23	28.60	10	30.46
02	29.48	04	30.58	24	28.60	11	30.50
03	29.50	APR 02	29.97	25	28.61	12	30.59
04	29.53	03	29.87	26	28.64	13	30.65
05	29.55	04	29.70	27	28.65	14	30.71
06	29.58	05	29.53	28	28.66	15	30.76
07	29.62	06	29.48	29	28.67	16	30.82
08	29.68	07	29.29	30	28.70	17	30.88
09	29.72	08	29.18	31	28.72	18	30.94
10	29.75	09	29.08	JUN 01	28.74	19	31.00
11	29.80	10	28.98	02	28.74	20	31.05
12	29.83	11	28.92	03	28.68	21	31.10
13	29.87	12	28.87	04	28.71	22	30.70
14	29.92	13	28.83	05	28.75	23	30.70
15	29.95	14	28.80	06	28.78	24	30.84
16	29.98	15	28.70	07	28.80	25	30.94
17	30.04	16	28.66	08	28.81	26	31.00
18	30.08	17	28.65	09	28.80	27	31.10
19	30.13	18	28.63	10	28.84	28	31.16
20	30.18	19	28.59	11	28.88	29	31.23
21	30.22	20	28.56	12	28.94	30	31.29
22	30.25	21	28.54	13	28.96	31	31.35
JAN 04, 1980	30.34	22	28.52	14	29.00	AUG 01	31.40
05	30.36	23	28.51	15	29.05	02	31.46
06	30.39	24	28.50	16	29.08	03	31.51
07	30.42	25	28.50	17	29.13	04	31.58
08	30.46	26	28.51	18	29.20	15	32.14
09	30.50	27	28.51	19	29.24	16	32.20
10	30.52	28	28.49	20	29.29	17	32.25
11	30.55	29	28.45	21	29.35	18	32.31
12	30.58	30	28.47	22	29.40	19	32.36
13	30.60	MAY 01	28.47	23	29.46	20	32.41
14	30.61	02	28.55	24	29.52	21	32.47
19	30.54	03	28.54	25	29.57	22	32.51
20	30.54	04	28.54	26	29.64	23	32.55
21	30.52	05	28.54	27	29.70	24	32.60
22	30.50	06	28.53	28	29.75	25	32.65
23	30.47	07	28.55	29	29.80	26	32.70
24	30.46	08	28.55	30	29.89	27	32.75
25	30.45	09	28.57	JUL 01	29.95	28	32.80
26	30.45	10	28.59	02	30.00	SEP 19	33.77
27	30.45	11	28.60	03	30.05	20	33.80
28	30.45	12	28.62	04	30.12	21	33.85
29	30.46	13	28.63	05	30.17	22	33.88
30	30.48	14	28.66	06	30.22	23	33.91
31	30.49	15	28.70	07	30.30	24	33.95

Table 13.--Daily low water levels for observation well WA CH 106, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 25, 1980	33.99	DEC 01, 1980	35.34	FEB 07, 1981	35.83	APR 02, 1981	35.38
26	34.02	02	35.36	08	35.89	03	35.40
27	34.05	03	35.39	09	35.94	04	35.42
28	34.08	04	35.42	10	35.99	05	35.44
29	34.11	05	35.44	11	35.99	06	35.45
30	34.15	06	35.45	13	35.30	07	35.47
OCT 01	34.18	07	35.47	14	35.42	08	35.48
02	34.21	08	35.49	15	35.50	09	35.50
03	34.25	09	35.50	16	35.58	10	35.52
04	34.28	10	35.52	20	35.38	11	35.52
05	34.31	11	35.54	21	35.45	12	35.45
06	34.34	12	35.55	24	35.24	13	35.31
07	34.36	13	35.57	25	35.21	14	35.32
08	34.40	14	35.58	26	35.14	17	34.50
09	34.43	15	35.60	27	35.08	18	34.45
10	34.45	16	35.63	28	35.05	19	34.36
11	34.48	17	35.64	MAR 01	35.03	20	34.30
12	34.50	18	35.66	02	35.03	21	34.26
13	34.54	19	35.68	03	35.04	22	34.24
14	34.56	20	35.70	04	35.05	23	34.21
15	34.60	21	35.72	05	35.05	24	34.19
16	34.63	22	35.74	06	35.07	25	34.17
17	34.65	23	35.75	07	35.09	26	34.18
18	34.68	24	35.76	08	35.10	27	34.19
19	34.71	25	35.78	09	35.11	28	34.20
20	34.75	26	35.80	10	35.12	29	34.21
21	34.77	27	35.81	11	35.13	30	34.23
22	34.80	28	35.82	12	35.14	MAY 01	34.24
23	34.82	29	35.84	13	35.15	02	34.22
24	34.85	30	35.85	14	35.16	03	34.25
25	34.85	31	35.86	15	35.17	04	34.26
26	34.82	JAN 01, 1981	35.87	16	35.18	05	34.28
27	34.85	02	35.89	17	35.19	06	34.30
28	34.88	03	35.90	18	35.20	07	34.33
29	34.90	04	35.92	19	35.21	08	34.35
30	34.94	05	35.93	20	35.22	09	34.37
31	34.95	06	35.94	21	35.24	10	34.38
NOV 20	35.34	07	35.95	22	35.25	11	34.40
21	35.36	08	35.96	23	35.26	12	34.30
22	35.38	09	35.98	24	35.27	13	34.32
23	35.42	10	35.99	25	35.29	14	34.33
24	35.42	11	36.00	26	35.30	15	34.34
25	35.12	12	36.01	27	35.32	16	34.36
26	35.18	13	36.02	28	35.34	17	34.38
27	35.22	14	36.04	29	35.35	18	34.39
28	35.25	15	36.06	30	35.35	20	34.43
29	35.28	16	36.13	31	35.36	21	34.44
30	35.32	FEB 06	35.75	APR 01	35.37	22	34.46

Table 13.--Daily low water levels for observation well WA CH 106, Marsh Run drainage basin, Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 23, 1981	34.48	MAY 31, 1981	34.60	JUN 08, 1981	34.68	JUN 17, 1981	34.78
24	34.50	JUN 01	34.62	09	34.70	18	34.79
25	34.51	02	34.64	10	34.70	19	34.77
26	34.53	03	34.64	12	34.73		
27	34.54	04	34.64	13	34.74		
28	34.55	05	34.63	14	34.75		
29	34.56	06	34.65	15	34.76		
30	34.58	07	34.66	16	34.77		

Table 14.--Periodic water levels for observation well WA CI 1, Marsh Run drainage basin, Washington County, Maryland, June 21, 1977, to June 19, 1981

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 21, 1977	35.69	FEB 01, 1978	33.04	DEC 14, 1978	38.85	JUN 30, 1980	35.53
JUN 23	35.82	MAR 06	34.82	MAR 01, 1979	27.89	JUL 28	36.84
JUL 07	36.53	MAR 29	29.29	MAR 16	27.87	AUG 15	37.60
JUL 27	37.31	APR 25	31.78	APR 05	29.29	SEP 19	39.59
AUG 02	37.56	MAY 25	30.81	MAY 10	32.35	OCT 20	41.75
AUG 29	38.64	JUN 20	33.20	JUN 14	34.57	NOV 20	41.14
SEP 13	39.46	JUL 11	34.15	JUN 19	36.68	DEC 19	42.27
SEP 21	39.54	JUL 28	35.32	AUG 30	38.33	JAN 16, 1981	41.97
OCT 13	39.67	AUG 24	36.82	JAN 04, 1980	35.75	FEB 20	39.71
OCT 24	41.94	SEP 08	37.34	MAR 04	36.17	MAR 20	39.05
NOV 23	39.86	SEP 21	37.82	APR 02	31.56	APR 17	38.02
DEC 12	38.38	OCT 27	38.95	MAY 02	33.39	MAY 20	37.16
DEC 29	36.09	NOV 21	40.67	JUN 02	33.49	JUN 19	37.57
JAN 11, 1978	34.63						

Table 15.--Periodic water levels for observation well WA CI 6, Marsh Run drainage basin, Washington County, Maryland, June 21, 1977, to March 6, 1978

[Water level in feet below land surface.]

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUN 21, 1977	58.57	AUG 02, 1977	60.70	OCT 13, 1977	64.67	DEC 29, 1977	50.85
JUN 24	59.20	AUG 10	62.60	OCT 24	62.39	JAN 11, 1978	48.21
JUL 07	60.30	AUG 29	60.70	NOV 23	59.20	FEB 01	50.00
JUL 27	57.75	SEP 21	60.00	DEC 12	54.19	MAR 06	53.46

Table 16.--Daily mean water levels for observation well WA CI 82, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981

[Water level in feet below land surface.]

WATER YEAR 1978

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	---	---	43.18	41.95	45.72	48.89	45.13
2					---	---	---	43.39	42.17	45.72	48.96	45.14
3					---	---	---	43.60	42.37	44.77	49.05	45.19
4					---	---	---	43.79	42.58	43.69	48.82	---
5					---	---	---	43.98	42.78	43.58	48.70	---
6					---	44.20	---	44.17	42.99	43.63	48.69	---
7					---	---	---	44.35	43.19	43.77	48.66	---
8					---	---	---	44.53	43.38	43.95	48.56	---
9					---	---	---	44.69	43.57	44.17	48.58	---
10					---	---	---	44.83	43.77	44.40	48.70	---
11					---	---	---	44.99	43.95	44.64	48.85	---
12					---	---	---	45.14	44.13	44.89	49.00	---
13					---	---	---	45.15	44.30	45.13	49.14	---
14					---	---	---	43.32	44.49	45.37	49.28	---
15					---	---	---	42.22	44.68	45.61	49.41	---
16					---	---	---	40.94	44.85	45.86	49.53	---
17					---	---	---	40.02	45.01	46.10	49.66	---
18					---	---	---	39.63	45.12	46.34	49.79	---
19					---	---	---	39.44	45.23	46.56	49.91	---
20					---	---	---	39.43	45.37	46.79	50.04	---
21					---	---	---	39.53	45.47	47.02	50.15	---
22					---	---	---	39.72	45.22	47.24	50.22	51.36
23					---	---	---	39.92	45.27	47.43	50.24	51.47
24					---	---	---	40.12	45.36	47.63	50.25	51.57
25					---	---	41.92	40.33	45.50	47.84	50.25	51.68
26					---	---	42.09	40.56	45.64	48.02	50.25	51.78
27					43.35	---	42.31	40.80	45.71	48.18	49.77	51.88
28					---	---	42.53	41.04	45.72	48.34	46.09	51.97
29					---	35.00	42.75	41.26	45.72	48.49	46.21	52.07
30					---	.21	42.96	41.49	45.72	48.64	46.21	52.16
31					---	---	---	41.72	---	48.79	46.21	---

Table 16.—Daily mean water levels for observation well WA CI 82, Marsh Run drainage basin, Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

WATER YEAR 1979

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.25	53.24	53.92	49.46	36.54	30.59	38.82	43.50	46.40	48.82	51.27	51.80
2	52.33	53.31	53.82	47.77	37.01	30.96	39.07	43.65	46.54	48.90	51.33	51.82
3	52.41	53.39	53.80	45.78	37.42	31.38	39.33	43.80	46.69	48.99	51.40	51.88
4	52.48	53.47	53.69	45.29	37.80	31.80	39.50	44.00	46.82	49.08	51.48	51.95
5	52.57	53.55	53.45	45.21	38.18	32.00	39.30	44.15	46.89	49.09	51.55	51.98
6	52.64	53.62	53.33	45.23	38.56	31.69	39.05	44.25	47.00	49.07	51.62	49.11
7	52.71	53.69	53.29	45.32	38.89	31.70	39.21	44.40	47.14	49.12	51.70	48.48
8	52.78	53.77	53.28	45.28	39.26	31.96	39.40	44.60	47.29	49.20	51.78	48.06
9	52.86	53.84	52.26	45.22	39.63	32.32	39.55	44.75	47.43	49.29	51.86	47.99
10	52.93	53.92	50.79	45.20	39.97	32.66	39.70	44.85	47.57	49.39	51.93	48.08
11	52.99	53.98	50.35	45.29	40.31	32.90	39.90	45.00	47.69	49.50	52.01	48.24
12	53.05	54.05	50.25	45.40	40.61	33.16	40.00	45.16	47.81	49.61	52.03	---
13	52.83	54.11	50.25	45.52	40.94	33.45	40.20	45.31	47.94	49.71	51.69	---
14	51.24	54.17	50.35	45.65	41.27	33.73	40.35	45.40	48.06	49.82	51.48	---
15	51.51	54.23	50.47	45.82	41.58	34.11	40.50	45.45	48.17	49.93	51.43	---
16	51.52	54.28	50.62	45.97	41.83	34.88	40.70	45.53	48.28	50.04	51.46	---
17	51.60	54.28	50.77	46.10	42.10	35.62	40.90	45.62	48.15	50.15	51.51	---
18	51.70	54.19	50.93	46.29	42.40	35.94	41.10	45.72	47.64	50.24	51.59	---
19	51.81	54.08	51.09	46.53	42.66	36.28	41.30	45.85	47.48	50.36	51.67	---
20	51.94	54.06	51.23	46.73	42.94	36.62	41.50	45.99	47.43	50.46	51.77	---
21	52.08	54.09	51.36	42.57	43.19	36.97	41.70	46.13	47.48	50.53	51.85	---
22	52.20	54.15	51.46	39.16	43.20	37.30	41.95	46.27	47.58	50.61	51.82	---
23	52.32	54.21	51.57	39.22	42.88	37.60	42.10	46.42	47.71	50.69	51.79	---
24	52.44	54.27	51.61	36.94	39.97	37.85	42.30	46.44	47.87	50.78	51.80	---
25	52.57	54.32	49.59	33.00	35.66	37.75	42.45	46.19	48.04	50.87	51.81	---
26	52.69	54.37	49.20	33.52	31.82	37.63	42.65	45.99	48.19	50.94	51.86	---
27	52.80	54.42	49.05	34.07	30.81	37.74	42.80	45.90	48.33	51.00	51.92	---
28	52.90	54.37	49.07	34.56	30.56	37.93	43.00	45.93	48.47	51.05	51.99	---
29	53.00	54.27	49.15	35.09	---	38.13	43.15	46.03	48.59	51.11	52.05	---
30	53.09	54.11	49.27	35.60	---	38.35	43.30	46.14	48.71	51.16	51.96	---
31	53.17	---	49.39	36.07	---	38.57	---	46.27	---	51.22	51.84	---

Table 16.---Daily mean water levels for observation well WA CI 82, Marsh Run drainage basin,
Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

WATER YEAR 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			45.50	47.08	47.60	50.35	43.39	43.05	43.58			52.41
2			45.63	47.19	47.70	50.42	42.66	43.04	43.75			52.48
3			45.77	47.32	47.80	50.49	42.29	43.09	43.92			52.55
4			45.88	47.45	47.90	50.57	42.09	43.16	44.07			52.61
5			46.01	47.60	48.00	50.63	42.04	43.25	44.20			52.67
6			46.14	47.75	48.10	50.69	42.09	43.35	44.34			52.72
7			46.29	47.90	48.20	50.74	42.16	43.48	44.50			52.78
8			46.45	48.00	48.30	50.79	42.25	43.61	44.64			52.83
9			46.64	48.10	48.40	50.85	42.25	43.75	44.70			52.89
10			46.80	48.20	48.45	50.91	42.11	43.89	44.75			52.94
11			46.96	48.35	48.60	50.97	42.08	44.03	44.80			52.99
12			47.11	48.38	48.70	51.04	42.10	44.17	44.89			53.03
13			47.25	48.40	48.80	51.11	42.16	44.30	45.00			53.08
14			47.36	48.40	48.95	51.16	42.22	44.41	45.12			53.13
15			47.47	48.15	49.02	51.21	42.15	44.53	45.26		51.26	53.18
16			47.58	47.90	49.10	51.03	42.09	44.67	45.40		51.30	53.24
17			47.72	47.75	49.20	50.58	42.11	44.81	45.44		51.36	53.29
18			47.85	47.65	49.30	49.98	42.13	44.91	45.51		51.42	53.36
19			47.96	47.50	49.40	49.58	42.20	44.88	45.63		51.48	53.42
20			48.08	47.30	49.45	49.35	42.29	44.90	45.77		51.54	53.48
21	44.69		48.20	47.15	49.55	48.67	42.41	44.31	45.94		51.61	53.53
22	44.80		48.30	47.05	49.70	46.78	42.54	43.33	46.10		51.67	53.59
23	44.95		48.41	47.00	49.83	46.06	42.67	42.82	46.26		51.75	53.64
24	45.12		48.52	47.00	49.90	45.75	42.82	42.62	46.42		51.83	53.70
25	45.28		48.08	47.05	49.97	45.64	42.98	42.57	46.59		51.92	53.76
26	45.40		47.33	47.10	50.04	45.63	43.14	42.65	46.76		51.99	53.80
27	45.34		46.97	47.18	50.11	45.65	43.28	42.77	46.97		52.07	53.84
28	45.26		46.86	47.23	50.19	45.70	43.32	42.92	47.16		52.14	53.89
29	45.30		46.85	47.35	50.27	45.31	43.18	43.08	47.33		52.20	53.93
30	45.40		46.88	47.42	---	44.55	43.06	43.25	47.45		52.27	53.97
31	---		46.97	47.50	---	44.13	---	43.41	---		52.34	---

Table 16.--Daily mean water levels for observation well WA CI 82, Marsh Run drainage basin, Washington County, Maryland, February 27, 1978 to June 19, 1981--Continued

WATER YEAR 1981

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.02	54.16	51.84	---	59.28	50.59	53.30	48.47	48.40			
2	54.07	54.24	51.97	---	59.04	50.71	53.35	48.54	48.56			
3	54.12	54.32	52.13	---	58.40	50.87	53.39	48.55	48.71			
4	54.16	54.39	52.28	---	58.15	51.02	53.44	48.62	48.85			
5	54.21	54.48	52.41	---	58.07	51.14	53.49	48.72	48.87			
6	54.25	54.56	52.55	---	58.05	51.27	53.55	48.85	48.80			
7	54.29	54.64	52.70	---	58.05	51.33	53.62	49.02	48.83			
8	54.34	54.73	52.84	---	58.08	51.39	53.67	49.18	48.91			
9	54.38	54.80	52.98	---	58.15	51.44	53.73	49.32	49.00			
10	54.43	54.87	53.12	---	58.21	51.49	53.80	49.45	49.11			
11	54.47	54.93	53.24	---	57.38	51.56	53.85	49.51	49.12			
12	54.52	54.99	53.36	---	56.85	51.64	53.74	46.28	49.15			
13	54.57	55.04	53.48	---	56.74	51.71	52.19	45.64	49.22			
14	54.61	55.08	53.63	---	56.71	51.82	49.02	45.32	49.30			
15	54.65	55.13	53.77	---	56.74	51.91	46.60	45.21	49.39			
16	54.70	55.17	53.90	58.89	56.81	51.99	46.10	45.22	49.48			
17	54.74	55.22	54.04	58.91	56.91	52.07	45.82	45.33	49.59			
18	54.77	55.01	54.16	58.94	57.01	52.16	45.75	45.45	49.70			
19	54.80	54.50	54.26	58.97	57.11	52.24	45.85	45.60	49.77			
20	54.84	54.27	---	58.99	54.38	52.33	45.99	45.78	---			
21	54.87	54.17	---	59.02	52.22	52.43	46.20	45.97	---			
22	54.91	54.15	---	59.04	51.86	52.54	46.41	46.17	---			
23	54.95	54.18	---	59.07	51.57	52.62	46.62	46.40	---			
24	54.99	53.91	---	59.09	50.89	52.70	46.86	46.67	---			
25	54.98	52.57	---	59.12	50.55	52.79	47.15	46.94	---			
26	54.62	51.94	---	59.14	50.45	52.87	47.42	47.18	---			
27	54.31	51.70	---	59.16	50.45	52.94	47.65	47.41	---			
28	54.14	51.61	---	59.18	50.49	53.03	47.87	47.63	---			
29	54.08	51.63	---	59.21	---	53.10	48.06	47.85	---			
30	54.07	51.73	---	59.24	---	53.16	48.28	48.04	---			
31	54.10	---	---	59.26	---	53.24	---	48.22	---			

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland

Well No.	Depth (feet)	Description
WA BH 66	0- 1	Earth
	1- 13	Clay, yellow
	13- 33	Shale
	33- 63	Limestone
WA BH 73	0- 20	Clay, yellow
	20- 30	Limestone, broken, and clay
	30- 80	Limestone, gray
	80- 85	Limestone, broken, and water
WA BH 74	0- 35	Clay, yellow
	35- 70	Limestone, broken
	70-100	Limestone, gray
	100-110	Slate, brown, water-bearing
	110-125	Limestone, gray
WA BH 75	0- 40	Clay, yellow
	40- 50	Limestone, broken, and clay
	50-135	Limestone, gray
	135-140	Slate, brown, water-bearing
	140-145	Limestone, gray
WA BH 76	0- 30	Clay, yellow
	30- 35	Limestone, broken
	35- 58	Limestone, gray
	58- 64	Clay, yellow
	64-150	Limestone, gray
	150-155	Slate, brown, water-bearing
	155-165	Limestone, gray
WA BH 77	0- 27	Clay
	27- 35	Limestone, light gray
	35- 45	Limestone, fractured
	45- 60	Limestone, light gray
	60- 72	Opening
	72- 76	Limestone, light gray, water-bearing
	76-130	Limestone, light gray, water-bearing
	130-150	Limestone, light gray
WA BH 78	0- 15	Clay, yellow
	15- 35	Limestone, broken, and clay
	35- 50	Limestone, gray
	50- 55	Limestone, broken, and clay
	55-115	Limestone, gray
	115-120	Slate, brown, water-bearing
	120-145	Limestone, gray
	145-150	Slate, brown, water-bearing
	150-165	Limestone, black

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA BH 79	0- 13	Clay, yellow
	13- 40	Limestone, rotten
	40- 60	Limestone, gray
	60-165	Limestone, black
	165-170	Slate, brown, water-bearing
	170-185	Limestone, gray
WA BH 80	0- 24	Clay, red
	24-200	Limestone
WA BH 81	0- 35	Clay, yellow
	35- 50	Limestone, broken, and clay
	50- 60	Limestone, gray
	60- 70	Limestone, broken, and clay
	70- 80	Limestone, gray
	80- 85	Slate, brown, water-bearing
	85- 95	Limestone, gray
	95-100	Slate, brown, water-bearing
WA BI 61	100-105	Limestone, gray
	0- 20	Clay
	20-140	Limestone
	140-146	Limestone, water-bearing
	146-280	Limestone
	280-305	Limestone, water-bearing
WA BI 67	305-380	Limestone
	0- 20	Clay, yellow
	20- 33	Limestone, gray
	33- 37	Clay, yellow
	37-185	Limestone, gray
	185-186	Slate, yellow, water-bearing
WA BI 68	186-300	Limestone, gray
	0- 5	Clay, yellow
WA BI 69	5-285	Limestone, gray
	0- 15	Clay, yellow
WA BI 77	15- 70	Limestone, gray
	- 75	Slate, brown, water-bearing
	75- 85	Limestone, gray
	0- 4	Clay, yellow
WA BI 77	4- 15	Limestone, gray
	15- 40	Limestone, broken
	40- 55	Limestone, gray
	55- 60	Slate, yellow, water-bearing
	60-240	Limestone, black

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington, County, Maryland--Continued

Well No.	Depth (feet)	Description
WA BI 78	0- 16	Dirt
	16-150	Limestone, gray, water-bearing
WA BI 79	0- 10	Clay, yellow
	10- 20	Limestone, broken
	20-215	Limestone, gray
	215-220	Slate, brown, water-bearing
	220-245	Limestone, gray
WA CH 5	0- 28	Clay, rock, split
	28- 34	Rock, solid, water at 34 ft
WA CH 10	0- 17	Clay, rock, shattered
	17-155	Rock, water at about 155 ft
WA CH 39	0- 6	Clay, yellow
	6- 20	Limestone, broken
	20- 75	Limestone, gray
	75- 76	Slate, brown
	76-145	Limestone, gray
	145-146	Slate, brown, water-bearing
	146-185	Limestone, gray
WA CH 40	0- 6	Clay, yellow
	6- 20	Limestone, broken
	20- 75	Limestone, gray
	75- 76	Slate, brown
	76-145	Limestone, gray
	145-146	Slate, brown, water-bearing
	146-185	Limestone, gray
WA CH 48	0- 11	Clay
	11- 80	Limestone, and boulders
	70	Water
WA CH 51	0- 10	Clay, yellow
	10- 30	Limestone, broken
	30- 37	Clay, yellow
	37-310	Limestone, gray
	310-315	Limestone, broken, water-bearing
	315-325	Limestone, gray
WA CH 52	0- 20	Clay, yellow
	20- 44	Mud and rocks
	44-266	Limestone, gray
	266-270	Mud, water-bearing

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 55	0- 20	Clay, yellow
	20- 28	Limestone, gray
	28- 40	Clay, yellow
	40- 60	Limestone, broken
	60-180	Limestone, gray
	180-185	Mud, water-bearing
	185-200	Limestone, gray
WA CH 57	0- 4	Clay, yellow
	4-305	Limestone, gray, dry
WA CH 59	0- 80	Limestone, gray, soft
	80-275	Limestone, gray
	275	Water-bearing
	275-300	Limestone, gray
WA CH 60	0- 20	Clay, yellow
	20- 40	Limestone, gray
	40- 55	Limestone, broken, and clay
	55- 80	Limestone, gray
	80- 85	Limestone, broken, water-bearing
WA CH 61	0- 4	Clay, yellow
	4- 60	Limestone, broken, and clay
	60- 75	Limestone, gray
	75- 80	Slate, brown, water-bearing
	80- 85	Limestone, gray
WA CH 62	0- 20	Clay, yellow
	20- 60	Limestone, broken, and clay
	60-100	Limestone, gray
	100-105	Slate, brown, water-bearing
	105-125	Limestone, gray
WA CH 63	0- 20	Clay, yellow
	20- 30	Limestone, broken, and clay
	30- 45	Limestone, gray
	45- 65	Limestone, broken, and clay
	65-220	Limestone, gray
	220-225	Slate, brown, water-bearing
	225-245	Limestone, black
	245-250	Slate, brown, water-bearing
WA CH 64	250-265	Limestone, gray
	0- 35	Clay, yellow
	35- 65	Limestone, broken
	65-145	Limestone, gray
	145-240	Limestone, black
	240-245	Slate, brown, water-bearing

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 65	0- 40	Clay, yellow
	40- 50	Limestone, broken, and clay
	50-150	Limestone, gray
	150-160	Slate, brown, water-bearing
	160-165	Limestone, gray
WA CH 66	0- 45	Clay, yellow
	45- 75	Limestone, broken, and clay
	75-180	Limestone, gray
	180-260	Limestone, black
	260-270	Slate, brown, water-bearing
WA CH 67	0- 5	Clay, yellow
	5- 40	Limestone, broken, and clay
	40- 55	Limestone, gray
	55- 70	Limestone, broken, and clay
	70-225	Limestone, gray
	225-235	Slate, brown, water-bearing
	235-245	Limestone, gray
WA CH 68	0- 5	Clay, yellow
	5- 15	Limestone, broken, and clay
	15- 75	Limestone, gray
	75- 85	Slate, brown, water-bearing
	85-105	Limestone, gray
WA CH 69	0- 25	Clay, yellow
	25- 50	Limestone, broken, and clay
	50- 70	Limestone, gray
	70- 75	Slate, brown, water-bearing
	75- 85	Limestone, gray, water-bearing
	85- 90	Slate, brown
	90-105	Limestone, gray
WA CH 70	0- 30	Clay, yellow
	30- 60	Limestone, broken, and clay
	60- 95	Limestone, gray
	95-105	Limestone, broken, water-bearing
WA CH 71	0- 45	Clay, yellow
	45-110	Limestone, gray
	110-115	Slate, brown, water-bearing
	115-125	Limestone, gray
WA CH 72	0- 15	Clay, yellow
	15-110	Limestone, gray
	110-160	Limestone, black
	160-165	Slate, brown, water-bearing
	165-225	Limestone, black
	225-230	Slate, brown, water-bearing
	230-245	Limestone, gray

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 73	0- 30	Clay, yellow
	30- 50	Limestone, broken
	50- 85	Limestone, gray
	85- 95	Slate, brown, water-bearing
	95-105	Limestone, gray
WA CH 74	0- 20	Clay, yellow
	20- 45	Limestone, broken
	45-260	Limestone, gray
	260-270	Slate, brown, water-bearing
	270-285	Limestone, gray
WA CH 75	0- 20	Clay, yellow
	20-145	Limestone, gray
	145-265	Limestone, black
	265-270	Slate, brown, water-bearing
	270-320	Limestone, gray
	320-325	Slate, brown, water-bearing
	325-345	Limestone, gray
WA CH 76	0- 25	Clay, yellow
	25- 65	Limestone, broken, and clay
	65-160	Limestone, gray
	160-165	Slate, brown, water-bearing
	165-210	Limestone, gray
	210-215	Slate, brown, water-bearing
	215-225	Limestone, black
WA CH 77	0- 10	Clay, yellow
	10- 20	Limestone, broken
	20- 50	Limestone, gray
	50- 65	Limestone, broken
	65-240	Limestone, gray
	240-245	Slate, brown, water-bearing
	245-270	Limestone, gray
	270-280	Slate, brown, water-bearing
	280-285	Limestone, gray
WA CH 78	0- 10	Clay, yellow
	10- 15	Limestone, broken
	15- 40	Limestone, gray
	40- 60	Limestone, broken
	60-120	Limestone, gray
	120-125	Slate, brown, water-bearing
	125-135	Limestone, gray
	135-145	Slate, brown, water-bearing

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 79	0- 20	Clay, yellow
	20- 25	Limestone, broken, and clay
	25-115	Limestone, gray
	115-120	Slate, brown, water-bearing
	120-125	Limestone, gray
WA CH 80	0- 20	Clay, yellow
	20- 52	Limestone, broken
	52- 75	Limestone, gray
	75- 85	Slate, brown, water-bearing
WA CH 82	0- 4	Clay, yellow
	4- 15	Limestone, broken
	15- 70	Limestone, gray
	70- 75	Opening
	75-285	Limestone, gray
	285-290	Slate, brown, water-bearing
	290-365	Limestone, black
WA CH 84	0- 3	Clay, yellow
	3- 60	Limestone, broken, and clay
	60-170	Limestone, gray
	170-180	Slate, brown, water-bearing
	180-205	Limestone, black
WA CH 86	0- 35	Clay, yellow
	35- 57	Limestone, broken, and clay
	57- 62	Limestone, gray
	62- 65	Limestone, broken, water-bearing
WA CH 87	0- 30	Clay, yellow
	30- 50	Limestone, broken
	50- 95	Limestone, gray
	95-105	Slate, brown, water-bearing
	105-125	Limestone, gray
WA CH 88	0- 10	Clay, yellow
	10-150	Limestone, gray
	150-160	Slate, brown, water-bearing
	160-165	Limestone, gray
WA CH 89	0- 15	Clay, yellow
	15- 50	Limestone, broken, and clay
	50- 75	Limestone, gray
	75- 85	Slate, brown, water-bearing

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 90	0- 15	Clay, yellow
	15- 20	Limestone, broken
	20- 65	Limestone, gray
	65-160	Limestone, black
	160-165	Slate, brown, water-bearing
	165-185	Limestone, gray
WA CH 92	0- 16	Clay, yellow
	16-150	Limestone
WA CH 93	0- 31	Clay, yellow
	31-150	Limestone
WA CH 94	0- 9	Clay, yellow
	9-150	Limestone
WA CH 95	0- 14	Clay, yellow
	14-375	Limestone
WA CH 96	0- 65	Clay, water-bearing
	65-150	Limestone, blue
WA CH 97	0- 38	Clay, red
	38-250	Limestone, blue
WA CH 98	0- 5	Clay, yellow
	5- 45	Limestone, broken, and clay
	45- 55	Limestone, gray
	55- 75	Limestone, broken, and clay
	75-105	Limestone, gray
	105-110	Slate, brown, water-bearing
WA CH 99	0- 5	Clay, yellow
	5- 45	Limetone, broken, and clay
	45- 95	Limestone, gray
	95-105	Slate, brown, water-bearing
WA CH 100	0- 35	Clay, water-bearing
	35- 57	Limestone
WA CH 102	0- 15	Clay, yellow
	15-225	Limestone, blue
WA CH 103	0- 22	Clay, red
	22-250	Limestone
WA CH 104	0- 24	Clay, red
	24-150	Limestone

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CH 106	0- 30	Overburden
	30- 69	Limestone, water-bearing
WA CI 6	0- 17	Clay, boulders
	17- 50	Limestone, solid
	50- 52	Seams, open, clay
	52-160	Limestone, solid
	160-166	Limestone, seams, water-bearing
WA CI 42	0- 20	Clay, yellow
	20- 30	Limestone
	30- 35	Clay
	35- 45	Limestone
	45- 55	Clay, yellow
	55- 85	Limestone
	75	Water
WA CI 49	0- 15	Clay, yellow
	15- 28	Limestone, broken
	28-285	Limestone, gray
	260	Water
WA CI 56	0- 10	Dirt
	10- 75	Limestone, gray, water-bearing
WA CI 57	0- 20	Dirt
	20- 60	Rock, fractured
	60-185	Limestone, gray, water-bearing
	185-215	Limestone, gray
WA CI 58	0- 65	Clay
	65-105	Limestone, gray
	105-110	Slate, brown, water-bearing
	110-125	Limestone, gray
WA CI 59	0- 33	Dirt
	33- 70	Limestone, gray, water-bearing
WA CI 60	0- 9	Clay, water-bearing
	9-150	Limestone
WA CI 61	0- 4	Clay, yellow
	4-150	Limestone

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington, County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CI 62	0- 10	Clay, yellow
	10- 25	Limestone, black
	25- 40	Limestone, broken, and clay
	40- 50	Limestone, gray
	50- 60	Limestone, broken, and clay
	60- 95	Limestone, gray
	95-105	Slate, brown, water-bearing
WA CI 63	0- 15	Clay, yellow
	15- 35	Limestone, broken, and clay
	35- 90	Slate, brown
	90- 95	Slate, brown, water-bearing
	95-105	Limestone, gray
WA CI 64	0- 4	Clay, yellow
	4- 15	Limestone, broken
	15-250	Limestone, gray
	250-290	Limestone, black
	290-295	Slate, brown, water-bearing
	295-305	Limestone, gray
WA CI 65	0- 5	Clay, yellow
	5-250	Limestone, gray
	250-370	Limestone, black
	370-375	Slate, brown, water-bearing
	375-405	Limestone, black
WA CI 66	0- 10	Clay, yellow
	10- 15	Limestone, broken, and clay
	15- 30	Limestone, gray
	30- 35	Limestone, broken
	35-180	Limestone, gray
	180-270	Limestone, black
	270-275	Slate, brown, water-bearing
	275-325	Limestone, gray
WA CI 67	0- 2	Clay
	2-250	Limestone, water-bearing
WA CI 68	0- 10	Clay, yellow
	10-160	Limestone, gray
	160-165	Slate, brown, water-bearing
	165-200	Limestone, gray
	200-205	Slate, brown, water-bearing
	205-225	Limestone, black

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CI 69	0- 1	Clay, yellow
	1-160	Limestone, gray
	160-220	Limestone, black
	220-225	Slate, brown, water-bearing
	225-245	Limestone, black
WA CI 70	0- 9	Clay, yellow
	9- 70	Limestone, gray
	70-175	Limestone, black
	175-185	Slate, brown, water-bearing
	185-205	Limestone, gray
WA CI 71	0- 20	Clay, yellow
	20- 35	Limestone, broken
	35- 45	Clay, yellow
	45-160	Limestone, gray
	160-165	Slate, brown, water-bearing
	165-185	Limestone, gray
WA CI 72	0- 12	Clay, yellow
	12- 30	Limestone, broken, and clay
	30-150	Limestone, gray
	150-275	Limestone, black
	275-276	Slate, brown, water-bearing
	276-425	Limestone, gray
WA CI 73	0- 32	Clay, yellow
	32-100	Limestone
WA CI 74	0- 10	Clay, yellow
	10- 20	Limestone, broken, and clay
	20-210	Limestone, gray, water-bearing
	210-215	Limestone, brown
	215-245	Limestone, gray
WA CI 75	0- 15	Clay, yellow
	15- 20	Limestone, broken
	20- 90	Limestone, gray
	90- 95	Slate, brown, water-bearing
	95-105	Limestone, black
WA CI 76	0- 14	Dirt
	14-200	Limestone, water-bearing

Table 17.--Lithologic logs of selected wells, Marsh Run drainage basin, Washington County, Maryland--Continued

Well No.	Depth (feet)	Description
WA CI 77	0- 4	Clay, yellow
	4- 20	Limestone, broken, and clay
	20- 70	Limestone, gray
	70- 85	Slate, brown, water-bearing
	75- 85	Limestone, gray
WA CI 78	0- 10	Dirt
	10-150	Limestone, water-bearing
WA CI 79	0- 20	Clay, yellow
	20- 45	Limestone, broken, and clay
	45-120	Limestone, gray
	120-125	Slate, brown, water-bearing
	125-145	Limestone, gray