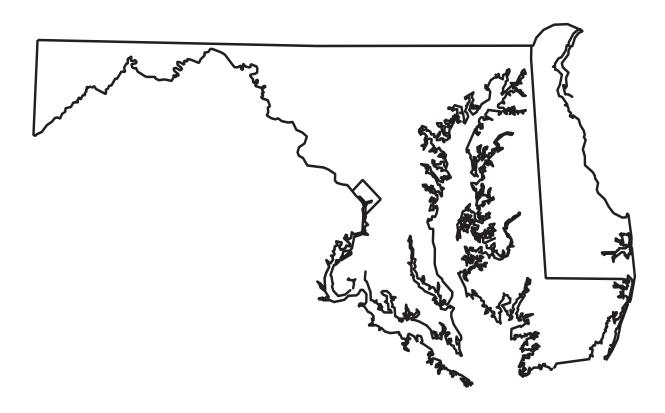


Prepared in cooperation with the States of Maryland and Delaware, Washington, D.C. and with other agencies

# Water Resources Data Maryland, Delaware, and Washington, D.C. Water Year 2005

Volume 2 Ground-Water Data



Water-Data Report MD-DE-DC-05-2

# **Calendar for Water Year 2005**

2004

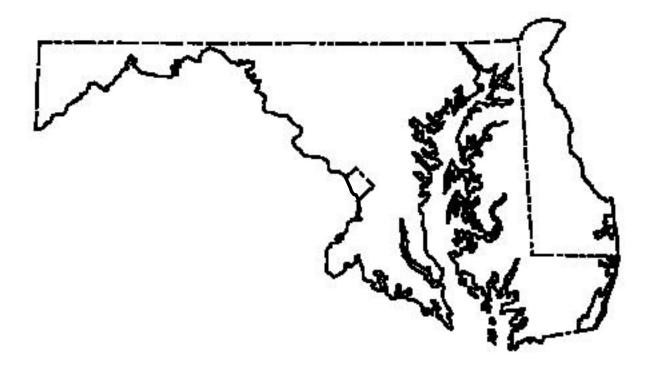
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# Water Resources Data Maryland, Delaware, and Washington, D.C. Water Year 2005

# **Volume 2. Ground-Water Data**

By Stephen E. Curtin, Deborah A. Bringman and Elizabeth H. Marchand

Water-Data Report MD-DE-DC-05-2



Prepared in cooperation with the States of Maryland and Delaware, Washington, D.C. and with other agencies





U.S. Department of the Interior U.S. Geological Survey

### **U.S. Department of the Interior**

Dirk Kempthorne, Secretary

### **U.S. Geological Survey**

P. Patrick Leahy, Acting Director

2006

U.S. Geological Survey 8987 Yellow Brick Road Baltimore, MD 21237 410-238-4200

Information about the USGS, MD-DE-DC Water Science Center is available on the Internet at http://md.water.usgs.gov/usgs/

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Additional earth science information is available by accessing the USGS home page at http://www.usgs.gov/

#### PREFACE

This volume of the annual hydrologic data report for Maryland, Delaware, and Washington, D.C. is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These streamflow, ground-water-level, and water-quality records provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Maryland, Delaware, and Washington, D.C. are contained in two volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

This report (Volume 2) is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey, Maryland Geological Survey (MGS), and Delaware Geological Survey (DGS), who collected, compiled, analyzed, verified, and organized the data, and who reviewed, typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Valerie M. Gaine provided technical and editorial reviews for the Introduction section of this report. Richard W. Saffer provided invaluable assistance and editing support for this volume. Andrew E. LaMotte produced figures 6 through 8, using a Geographic Information System mapping program.

This report was prepared under the general supervision of James M. Gerhart, Director, MD-DE-DC Water Science Center, and Catherine L. Hill, Regional Hydrologist, Northeast Region, and in cooperation with the States of Maryland and Delaware, Washington, D.C., and other agencies.

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Page

### GROUND-WATER SPRING DISCHARGE

MARYLAND: CECIL COUNTY Spring 393459076045001 Local number CE Cc 40...... FREDRICK COUNTY Spring 392552077262201 Local number FR Dd 178...... 25 Spring 391846077370501 Local number FR Fb 12...... 26 WASHINGTON COUNTY Spring 392836077442701 Local number WA Di 103...... 27 GROUND-WATER LEVELS DELAWARE: KENT COUNTY Well 390607075331501 Local number Jd42-03..... SUSSEX COUNTY Well 384504075242602 Local number Nf51-02...... 32 Well 384504075242601 Local number Nf51-03..... Well 384504075242603 Local number Nf51-04..... 34 Well 384418075231102 Local number Of12-03..... 35 Well 384418075231103 Local number Of12-04...... Well 384418075231101 Local number Of12-05...... 37 Well 384433075234901 Local number Of12-06..... 38 Well 384435075234901 Local number Of12-07..... 39 Well 384436075234801 Local number Of12-09..... 40 Well 384437075234501 Local number Of12-10..... 41 Well 384437075234502 Local number Of12-11..... 42 Well 384438075234802 Local number Of12-12..... 43 Well 384438075234803 Local number Of12-14..... 46 Well 384441075233702 Local number Of12-15.... 47 Well 384441075233701 Local number Of12-16..... 48 Well 384444075234101 Local number Of12-18.... 49 Well 384444075234102 Local number Of12-19.... 50 Well 384401075224903 Local number Of13-01..... 51 Well 384402075225002 Local number Of13-02..... 52 Well 384401075224901 Local number Of13-03.......53-54 Well 384403075224701 Local number Of13-04..... 55 Well 384404075225001 Local number Of13-05..... Well 384405075224701 Local number Of13-06...... 57 Well 384405075224601 Local number Of13-07...... 58 Well 384406075224603 Local number Of13-09..... Well 384406075224602 Local number Of13-10..... Well 384406075224401 Local number Of13-11...... Well 384343075230402 Local number Of22-02..... Well 384343075230403 Local number Of22-03..... Well 384343075230301 Local number Of22-05..... Well 384343075230201 Local number Of22-06..... Well 384343075230101 Local number Of22-07..... Well 384344075230301 Local number Of22-08...... Well 384344075230102 Local number Of22-09..... Well 384341075230003 Local number Of22-10..... 73 Well 384338075222303 Local number Of23-01..... 76 Well 384333075222902 Local number Of23-02..... Well 384341075223803 Local number Of23-04..... Well 384341075223802 Local number Of23-06..... 83 Well 384345075225101 Local number Of23-11......84-85 Well 384345075225102 Local number Of23-12..... 86 Well 384345075225103 Local number Of23-13..... 87 Well 383730075213501 Local number Pf24-02...... 88

Well 383730075213502 Local number Pf24-03.....

Page

MARYLAND:				
ALLEGANY COUNTY				
Well 394024078273401				
	Local	number	AL Ca	2091-9
ANNE ARUNDEL COUNTY				
				11
				90
				102
				108
				10998-9
				91
Well 390821076365401	Local	number	AA Bd	152
Well 390922076371001	Local	number	AA Bd	156
Well 390737076374402	Local	number	AA Bd	159
Well 390945076285601	Local	number	AA Bf	3
Well 390303076463201	Local	number	AA Cb	1
Well 390423076432001	Local	number	AA Cc	40
Well 390010076415703	Local	number	AA Cc	89
				102111-12
				115
				116
				117
				135
				137
				117
				99
				137
			_	23
			_	24
				25
				128
				203
				45
Well 385406076383902	Local	number	AA Ed	65
Well 384644076331201	Local	number	AA Fe	92
Well 384644076331202	Local	number	AA Fe	93
BALTIMORE CITY				
Well 391617076322001	Local	number	2S5E-	1
				5
	Local	number	3S5E-	46
BALTIMORE COUNTY				
				21
				444
				18
				161
				170
				183
				189
				198
				217
Well 392407076344501	Local	number	BA Ee	229
Well 391607076312901	Local	number	BA Fe	19 14
Well 391356076293501	Local	number	BA Gf	11
CALVERT COUNTY				
Well 384028076354201				10
Well 384458076375501				23
Well 384333076394701				27
Well 384333076394702				28
Well 383940076314801				18
Well 383934076320201				55
Well 383934076320001				56
Well 383605076344601 Well 383239076354201				57
Well 383216076354201				65
Well 383244076351401				96
Well 383050076305501				35
Well 382527076280801				32
Well 382527076280801 Well 382528076280701				42
Well 382733076290101				49
Well 382549076260101				52
Well 382343076302901				13
Well 382408076260401				51
Well 382407076260301				54
Well 382155076254502				70
Well 382236076255401	Local	number	CA Fd	85176-1

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MARYLAND-Continued						. 5 .
CALVERT COUNTY-Continued			~3			150
Well 382318076242401 Well 381952076270901					6	178 179
Well 381956076275301					61	
CAROLINE COUNTY	посит	Hamber	CII	ou	01	101
Well 390227075470201	Local	number	CO	Вd	53	182
Well 385217075490601	Local	number	CO	Dd	47	183
CARROLL COUNTY						
Well 394008077005601	Local	number	CL	Ad	47	184
Well 392259077052401	Local	number	CL	Ec	75	185
CECIL COUNTY	T		an.	ъ.		106
Well 393637075535002					74	186
Well 393537075492001 Well 393432075593602					82 52	187 188
Well 393241075500201					55	189
Well 393026075523101					56	190
Well 392403075521801					29	191
CHARLES COUNTY						
Well 383633077083001	Local	${\tt number}$	CH	Вс	24	192
Well 383645077062401					75	193
Well 383644077055501					77	194
Well 383809077053401 Well 383709077061002					78	195
Well 383709077061002 Well 383553077032401					81 52	196 197
Well 383819076555501					43	198
Well 383706076575601					57	199
Well 383706076575604					60	200
Well 383640076545901	Local	number	CH	Вf	133	201
Well 383728076531701	local	${\tt number}$	CH	Вf	134	202
					146	203
					151	204
Well 383637076545803						205
					158	206
Well 383746076482901 Well 383706076475401				_	12	207
Well 383422077114601				_	7	210
Well 383455077074401					31	211
Well 383441077063901					34	212
Well 383251076583901	Local	number	СН	Ce	56	213
Well 383250076584001	Local	${\tt number}$	CH	Ce	57	214
Well 383254076481401	Local	number	CH	Сg	24	-216
Well 382654077152501					18	217
Well 382654077152701					20	218
Well 382659077152401					21	219
Well 382607077002601 Well 382927076552301					33 45	220 221
Well 382327076332301 Well 382154076574801					70	
Well 382240076582801					78	224
DORCHESTER COUNTY						
Well 383708075503801	Local	number	DO	Вg	59	225
Well 383408076042402	Local	${\tt number}$	DO	Се	15	226
Well 383256076035301					85	227
Well 382800076180701					17	228
					19	229
	Local	number	DO	υh	27	230
FREDERICK COUNTY Well 393733077274801	I.ocal	numher	סק	Вd	96231-	-232
Well 393/330//2/4801 Well 392517077190401					35	
GARRETT COUNTY			- 10			
Well 392439079231801	Local	number	GA	Eb	78	235
Well 391512079270901	Local	number	GΑ	Fa	28	236
Well 391512079270902					29	237
Well 391539079254601					31	238
Well 391539079254602						239
Well 391539079254603					33	240
Well 391539079254604					34	241
Well 391501079260001 Well 391530079244401					38	242 243
Well 391530079244401 Well 391530079244403					24	243
Well 391530079244403					25	244
Well 391530079244404 Well 391513079243602					27	246
Well 391513079243605					30	247
Well 391715079223102					36	248
Well 391715079223103					37	249
Well 391715079223104					38	250
Well 391420079264901	Local	number	GΑ	Ga	16	251

GROUND-WATER LEVELS-Continued							
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HARFORD		T 1		117	D 4	21	252
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						198	254
	392455076192103						255
HOWARD (							
Well	391910076565701	Local	number	НО	Вd	1	256
Well	391445076555101	Local	number	НО	Cd	79	257
KENT COL	<del></del>	_					
						20	258
						185         151	259 260
						152	261
						153	262
						154	263
Well	391702076003901	Local	number	KE	Вd	155	264
Well	391702076003801	Local	number	KE	Вd	156	265
Well	391702076003701	Local	number	KE	Вd	157	266
						158	267
						159	268
						160	269
						161	270
						162	271 272
						164	272
						165	274
						166	275
						167	276
						168	277
						169	278
Well	391704076003402	Local	number	KE	Вd	170	279
Well	391659076001701	Local	number	KE	Вd	171	280
Well	391659076001702	Local	number	KE	Вd	172	281
						173	282
						174	283
						175	284
						176	285
						177	286
						178	287 288
						180	289
						181	290
						182	291
						183	292
						184	293
Well	391703076003201	Local	number	KE	Вd	185	294
Well	391653076003701	Local	number	KE	Вd	186	295
						187	296
						188	297
						189	298
						190	299
						191	300 301
						218	302
						219	303
	391815075472101					33	304
	391815075472102				_	34	305
Well	391400076101401	Local	number	KE	Cb	36	306
	391124076101001					97	307
						100	308
	391432076015501					44	309
	390837076140401	Local	number	KE	Db	40	310
	ERY COUNTY	T 1			α1.		211
	391142077280601 391314077224201					26 14	311 312
	390434076573002					20	313
	GEORGES COUNTY	LUUUI	-14				
	390151076561501	Local	number	PG	Вс	16	314
	385130076465501					21	315
Well	384131076533301	Local	number	PG	Fd	41	316
Well	384309076511401	Local	number	PG	Fd	62	317
	384453076482101					30	318
	383250076405303					32	319
	383348076411301					40320	
	383348076411302					41322	
	383348076411303					42	
well	383250076405304	посат	number	РĠ	ΗI	44	345

			GR	DUND-WATER LEVELS-Continued	I
MARYLAND-Continued					
QUEEN ANNES COUNTY					
Well 391203076024301	Local	number	OA B	e 15	326
Well 391203076024302					327
Well 391203076024303			-		328
Well 391203076024303					329
				•	
Well 390201076182701					330
Well 390201076182703					331
Well 390023076174301	Local	number	QA D	34	332
Well 390119076191001	Local	number	QA D	35	333
Well 390023076174302	Local	number	QA D	37	334
Well 390251076034401	Local	number	OA D	e 27	335
Well 385718076205501	Local	number	OA E	a 27	336
Well 385718076211501					337
Well 385718076211502					338
Well 385757076200101					339
Well 385757076200102					340
				a 81	341
				o 110	342
Well 385751076171601	Local	number	QA E	o 111	343
Well 385751076171602	Local	number	QA E	112	344
Well 385748076172001	Local	number	QA E	o 113	345
Well 385843076155302	Local	number	OA E	o 155	346
				o 156	347
				157	348
Well 385756076105301					349
Well 385756076105301 Well 385534075573601					349
Well 385429076120201	Local	number	QA F	7	351
ST. MARYS COUNTY					
Well 382838076470102	Local	number	SM B	22	352
Well 382605076430201	Local	number	SM B	39	353
Well 381616076364701	Local	number	SM D	d 46	354
Well 381616076364702	Local	number	SM D	1 49	355
Well 381626076393401	Local	number	SM D		356
Well 381841076284401					357
Well 381527076283101					
Well 381527076283101 Well 381548076272102					
Well 381213076222801					
Well 380834076303401					
Well 380724076251901	Local	number	SM F	£ 36	362
Well 380711076222201	Local	number	SM F	g 45	363
SOMERSET COUNTY					
Well 381156075412501	Local	number	SO B	e 42	364
Well 380616075380701	Local	number	SO C	£ 2	365
TALBOT COUNTY					
Well 385242075593101	Local	number	та в	F 73	366
Well 384923076100601					367
Well 384707076133202					
					368
Well 384643076043801	Local	number	TA C	e 7	369
WASHINGTON COUNTY					
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Well 393851077343001	Local	number	WA B	ς 25	371
Well 393402077434201	Local	number	WA C	i 82	2-373
WICOMICO COUNTY					
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Well 382635075030601					379
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Well 382635075030603					1-382
Well 382022075072401	Local	number	WO B	J 1	383
Well 382359075094501	Local	number	WO B	g 15	384
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Well 382358075094502					386
Well 382325075063301					
Well 382325075063302					
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Well 382038075065901					
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Well 382443075033501					
Well 382215075041901					
Well 382215075041902					397
Well 382215075041903	Local	number	WO B	n 89398	3-399
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Photo by C.J. Strain

Well FR Df 35 Lake Linganore

# WATER RESOURCES DATA - MARYLAND, DELAWARE, AND WASHINGTON, D.C., WATER YEAR 2005 VOLUME 2. GROUND-WATER DATA

#### INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey, in cooperation with State and local agencies, obtains a large amount of data pertaining to the water resources of Maryland, Delaware, and Washington, D.C. each water year. These data, accumulated during many water years, constitute a valuable data base that can be used to develop an improved understanding of the water resources of the States and Washington, D.C. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in the report series entitled "Water Resources Data - Maryland, Delaware, and Washington, D.C."

This series of Water Resources Data reports for Maryland, Delaware, and Washington, D.C. began with the 1961 water year report that only contained data relating to the quantity of surface water. For the 1964 water year, a similar report was published, and it contained data relating to surface water, and ground-water quality. Beginning with the 1975 water year, the report was changed to one volume, containing data on surface-water quantity, surface- and ground-water quality, and ground-water levels. For the 1989 water year, the report format was changed to two volumes. Both volumes contained data on quantities of surface water, surface-water and ground-water quality, and ground-water levels. Volume 1 contained data on the Atlantic Slope Basins (Delaware River through Patuxent River Basins) and Volume 2 contained data on the Monongahela and Potomac River Basins. Since the 1991 water year, Volume 1 has contained data on the quantity of surface water and surface-water quality, and Volume 2 has contained ground-water levels and ground-water quality data.

This report is Volume 2 of the Water Resources Data report series, water year 2005, and includes records of water levels and water quality of ground-water wells and springs. It contains discharge data records for 4 springs, water levels at 352 observation wells, and water-quality analyses for 118 wells. The locations of ground-water level wells are shown in figures 6 and 7. The locations of ground-water quality sites are shown in figure 8. These data represent the part of the National Water Data System collected by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Maryland, Delaware, and Washington, D.C.

Prior to the introduction of this series and for several water years concurrent with it, water resources data for Maryland, Delaware, and Washington, D.C. were published in U.S. Geological Survey Water-Supply Papers. Data on water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." These Water Supply Papers may be found in the libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey Branch of Information Services, Box 25286, Federal Center, Denver, CO 80225.

Water Resources Data reports are published annually by the U.S. Geological Survey for all states. These official Survey reports have an identification number consisting of the two-letter state abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water Resources Data Report MD-DE-DC-05-2." For archiving and general distribution, the reports for the 1971-74 water years also are identified as Water Resources Data reports. These Water Resources Data reports are for sale in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices for ordering specific reports, may be obtained from the Water Science Center Director at the address given on the bottom of the title page or by telephone at (410)238-4200.

### COOPERATION

The U.S. Geological Survey and Maryland State agencies have had cooperative agreements for the collection of water-resource records from 1896 to 1909 and since 1924. Similar cooperative agreements have existed between the Survey and Delaware State agencies since 1943. Organizations that assisted with funding or services for the preparation of this report through cooperative agreements with the U.S. Geological Survey or through the Maryland Geological Survey and Delaware Geological Survey are:

Maryland Geological Survey, Emery T. Cleaves, Director

Delaware Geological Survey, John H. Talley, Director and State Geologist

Delaware Department of Transportation, Nathan Hayward III, Secretary

Delaware Department of Natural Resources and Environmental Control, John A. Hughes, Secretary of Natural Resources and Environmental Control

District of Columbia Department of Health, Environmental Health Administration, Bureau of Environmental Quality, Water Quality Division

Maryland Department of the Environment, Kendl P. Philbrick, Secretary

Maryland Department of Natural Resources, Power Plant Assessment Program, Peter Dunbar, Director Anne Arundel County Department of Public Works, Water Operations, Matthew Mirenzi, Regional Manager

Anne Arundel County Land Use and Environmental Office, Betty Dixon, Land Use Officer
Maryland-National Capital Park and Planning Commission, Nazin Baig, Environmental Planning
Coordinator

Calvert County Department of Public Works, Dan Williams, Bureau Chief
Charles County Department of Planning and Growth Management, Roy E. Hancock, Director
Interstate Commission on the Potomac River Basin, Joseph Hoffman, Executive Director
Town of Ocean City, Maryland Water Department, Ronald Ellis, Superintendent
U.S. Environmental Protection Agency, National Risk Management Laboratory, Subsurface
Protection and Remediation Division, Stephen G. Schmelling, Acting Director

Organizations and projects that provided data included in this report are acknowledged in the Site Instrumentation and Remarks description in the Ground-Water Levels section.

### SUMMARY OF GROUND-WATER HYDROLOGIC CONDITIONS

This report presents spring discharges, well water levels and water-quality analyses from ground-water studies in Maryland, Delaware, and Washington, D.C. The following ground-water hydrologic summary for the 2005 water year includes data collected from the Maryland, Delaware, and Washington, D.C. cooperative water-level monitoring networks.

Ground-water use in Maryland and Delaware continues to increase with population growth, especially with more people living in rural areas. Growth areas in Southern Maryland, and the northern parts of the Delmarva Peninsula of both Maryland and Delaware are causing water users to withdraw ground water from deeper aquifers. As ground-water users' demands increase, water-level data can provide critical information on how to properly evaluate, plan, and manage this natural resource. Water-table monitoring wells can alert users during periods of drought and the information they provide can assist with implementing water-use conservation measures. Confined aquifers, mostly used in the Coastal Plain, provide large quantities of water for municipalities, industry, irrigation, and individual dwellings. Water-level monitoring wells provide the means to track ground-water withdrawal effects on Coastal Plain aquifers, and data on how best to manage water use.

The 2005 water year had lower than normal precipitation across Maryland, Delaware, and Washington, D.C., unlike the previous 2 water years. Precipitation totals reported by the National Oceanic and Atmospheric Administration (NOAA) ranged from approximately 40 inches in Maryland to about 42 inches in Delaware. The average annual precipitation in the Maryland, Delaware, and Washington, D.C. area as observed by NOAA from 1903 through 2004 is about 43 inches. Monitoring water levels in water-table observation wells gives an overview of how groundwater levels responded to precipitation across the region during the 2005 water year. Monthly water levels at four key water-table observation wells are shown in figure 1. These graphs show the long-term average, minimum, maximum, and 2005 water year monthly water-level observations.

In general, during the 2005 water year, monthly water levels were mostly at or below the long-term average (fig. 1). Generally, the monthly water levels started out above the long-term average in late fall or early winter. Below normal precipitation caused water levels to drop below the long-term levels during the summer in most of these key observation wells.

In Southern Maryland and the northern area of the Delmarva Peninsula, where the confined Coastal Plain aquifers are the main source for municipal water supplies, long-term water levels continued to decline as shown in observation well CA Gd 6 (fig. 2). Additional ground-water withdrawal from irrigation wells may increase the drawdown of water levels on the Delmarva Peninsula.

### Ground-Water Levels and Spring Discharge

The Maryland, Delaware, and Washington, D.C. area is divided into several physiographic provinces that control ground-water movement through geologic processes related to geomorphology, lithology, and structure. Depending on the amount of ground-water movement through fracture and joint systems and sediments, wells can supply small individual households or larger water users, such as communities, towns, industry, and agriculture. Moving from west to east, the five physiographic provinces in the region are the Appalachian Plateau, the Valley and Ridge, the Blue Ridge, the Piedmont, and the Coastal Plain. Ground-water level conditions for water year 2005 are summarized below by physiographic province.

Appalachian Plateau. --Ground-water level trends closely paralleled precipitation events in water-table well GA Eb 78, in Garrett County, Maryland (fig. 1). The ground-water levels in this well for the 2005 water year started at or above average through December and fell below average in February and April. Due to spring recharge and increased precipitation, water levels rose above the average in March and were also above average levels from May through August. The water levels then dropped to below average values in September due to very low precipitation during that month.

Valley and Ridge. --Water-table levels were at or above average through May, then dropped below the average level for the remainder of the 2005 water year in Collection of Basic Records (CBR) well WA Be 2 (figs. 1 and 3). Another well in Washington County, WA Bk 25 showed a similar pattern with higher water levels during late winter to early summer. Spring WA Di 103 showed a fairly constant flow through May, then dropped continually during the remainder of the 2005 water year due to low precipitation.

Blue Ridge. --The water levels as recorded by water-table well FR Bd 96 showed water levels were high at the start of the water year and decreased during the spring and throughout the remainder of water year 2005. Spring FR Fb 12 showed a decrease in flow starting in June and stayed low throughout the rest of the water year.

Piedmont. --Water-table levels in the Piedmont Physiographic Province as indicated by well MO Eh 20 (fig. 1) were either slightly above or slightly below the long-term average throughout the entire water year.

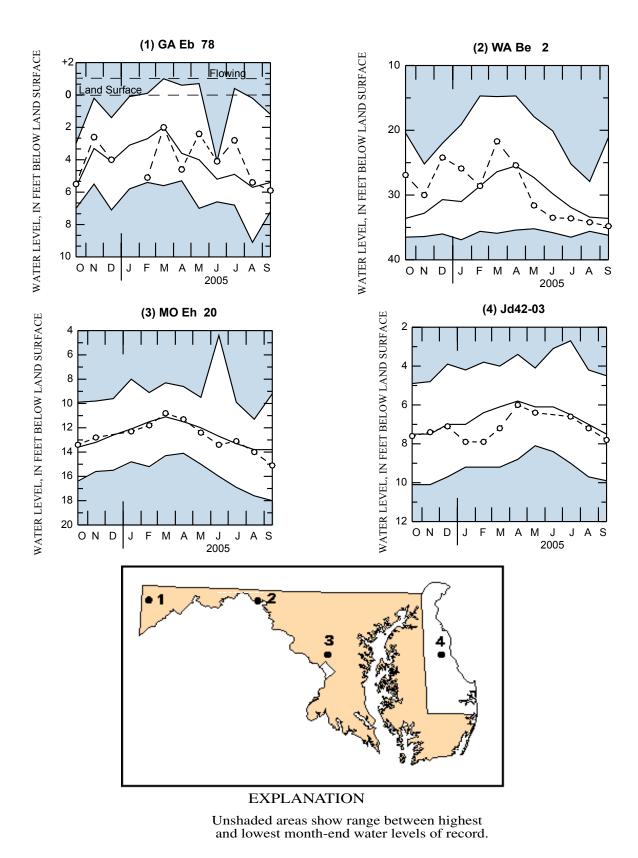
Triassic - Culpeper Basin.--Monitoring wells in the Triassic Basin include two wells in the Culpeper Basin in northwestern Montgomery County, Maryland. These wells are in confined aquifers that yield large volumes of water and are used as municipal sources. Water levels in the Dickerson well (MO Cb 26) located in southeastern Montgomery County, Maryland were above land surface for the entire 2005 water year.

Coastal Plain. -- Water levels in water-table monitoring well Jd 42-03 were at the long-term average through December, fell below the average from January through March, then crept up to just below the average for the remainder of the 2005 water year (fig. 1). In general, most of the water-table levels in Maryland and Delaware were lower than levels from the previous year and in many cases below the long-term average during water year 2005.

Confined aquifers on the western shore of the Chesapeake Bay lie close to their surface-recharge zones in the area near the contact with the Piedmont Physiographic Province. These aquifers receive most of their ground-water recharge from this outcrop belt. This area is heavily populated because of its close proximity to the Baltimore-Washington and Annapolis metropolitan areas. These areas rely exclusively on ground-water supplies, except for the Greater Baltimore area, which is supplied by surface-water reservoirs, and the northwestern part of Prince Georges County, where the Washington Suburban Sanitary Commission supplies surface water from the Potomac and Patuxent Rivers. Water-level monitoring wells in Anne Arundel County, Maryland recorded increases in water levels from the previous water year in all but a couple of wells in the Patuxent aquifer throughout the County. Ground-water level declines continue to occur in the Magothy aquifer near Annapolis, and the Aquia aquifer in southern Anna Arundel County. Water levels in the Aquia aquifer in Calvert County continued to decline (CA Db 47), with Aquia monitoring well Ca Gd 6 (fig. 2) showing increased water levels in the spring, higher than water levels recorded in recent years, then declining throughout the remainder of water year 2005. The Magothy, Upper Patapsco, and Lower Patapsco ground-water levels declined in the southeastern part of Prince Georges County. In St. Marys County, Maryland, water-levels declined with few exceptions in the Piney Point, Aquia, and Upper Patapsco aquifers.

### Water Quality -- Saltwater Intrusion Monitoring Projects

Kent Island Ground-Water Monitoring Project.--This project is a continuation of ground-water level and chloride monitoring that was started in 1983, to observe chloride changes through ground-water use in the Aquia aquifer on Kent Island, Queen Annes County, Maryland due to saltwater intrusion from Chesapeake Bay. A total of 17 Aquia aquifer monitoring wells are currently in operation along with monitoring wells in the deeper confining aquifers. Chloride and bromide water-quality analyses are collected yearly from the water-level monitoring wells and approximately 25 domestic wells. Chloride and water-level monitoring may help Water Resource Managers be more effective in managing this natural resource.



- - - 2005 Water Year— Average

Figure 1.--Monthly ground-water levels at key observation wells.

Ocean City Ground-Water Monitoring Project.--Saltwater intrusion in ground-water supplies for Ocean City is a water-quality concern. Ocean City is a major Atlantic Coast summer beach resort where the population can increase to over 300,000 during the summer months, in contrast to the 10,000 permanent residents year round. Ocean City exclusively dominates the southern part of the barrier island of Fenwick Island in Maryland. The main water-producing aquifers in this region are the Ocean City and Manokin aquifers, with the Pocomoke aquifer limited to individual domestic wells mostly on the mainland. There are 24 water-level monitoring wells, including 6 that are equipped with digital water-level recorders. Chloride and bromide samples are collected at the end of the summer tourist season so that the highest possible concentrations from six monitoring wells and six water-supply wells can be evaluated. The saltwater/freshwater interface is expected to have migrated its farthest distance east due to the increased summer ground-water use.

### SPECIAL GROUND-WATER NETWORKS AND PROGRAMS

The ground-water Collection of Basic Records (CBR) wells include the National Climatic Response Network (CRN) provides a framework for collecting and disseminating ground-water level data characterizing climatic variability. The network fills a unique National need and can be used for local, regional, and National investigations of ground-water response to droughts and other climatic effects. The five Maryland and Delaware CBR water-table observation wells period-of-record hydrographs are shown in figure 3.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program designed to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in more than 50 river basins and aquifer systems that represent a wide range of environmental settings nationwide and account for a large percentage of the Nation's water use. A wide array of chemical constituents are being measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision-making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and National interest.

The NAWQA programs in the Maryland, Delaware, and Washington, D.C. Water Science Center consist of the Potomac River Basin and Delmarva Peninsula study units of the U.S. Geological Survey National Water-Quality Assessment (NAWQA) program. These two programs were combined into a single project, the Potomac-Delmarva Peninsula (PODL) study in 2001. The NAWQA program emphasizes an understanding of the processes governing water quality, trends in water quality, and the relation of these trends to ecological conditions. The goals will be achieved through integrated assessments of hydrology, geology, and biology. The new project began in 2001 amd will complete its current cycle in 2007. During the study period, and afterwards, specific surface-water and ground-water sites will be monitored continuously for analysis of water-quality trends.

### EXPLANATION OF THE RECORDS

The ground-water levels and quality-of-ground-water records published in this report are for the 2004 water year that began October 1, 2004 and ended September 30, 2005. A calendar of the water year is provided on the inside of the front cover. The records contain ground-water-level data and water-quality data for ground-water. The locations of the ground-water sites where the data were collected are shown in figures 6, 7, and 8. The following sections of text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### Station Identification Numbers

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

WATER LEVEL, IN FEET BELOW LAND SURFACE

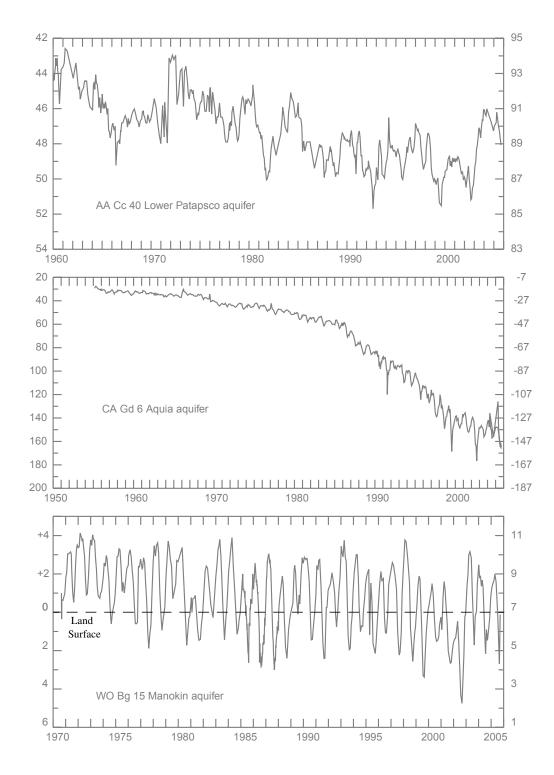


Figure 2. -- Periodic ground-water levels in selected observation wells in confined Coastal Plain aquifers in Maryland.

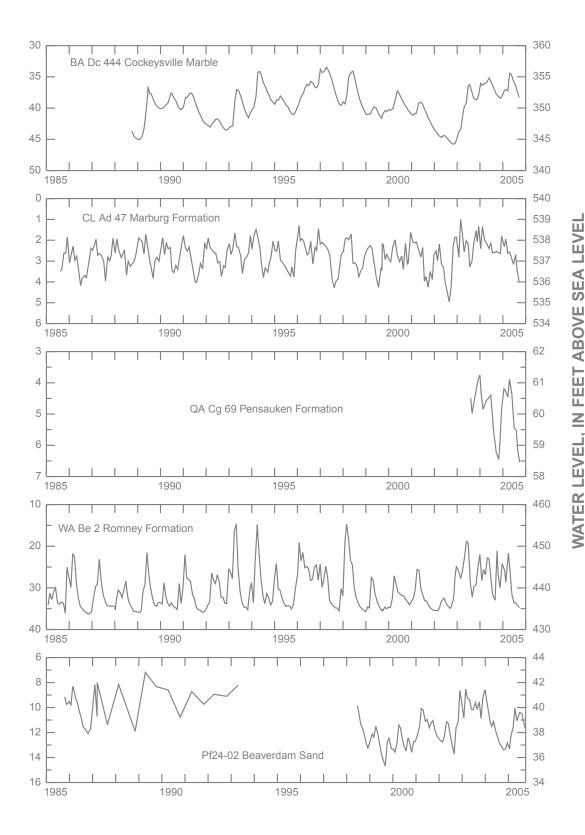


Figure 3. - Periodic ground-water levels for Collection of Basic Record (CBR) network wells in Maryland and Delaware.

### Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells (or springs) or other sites within a 1-second grid. This site-identification number, once assigned, is a unique number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description as the correct latitude and longitude coordinates. (See fig. 4 below.)

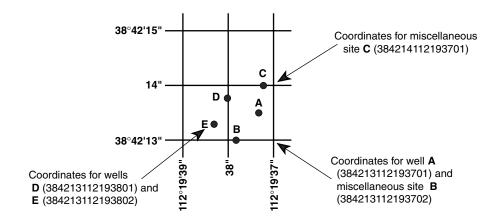


Figure 4. System for numbering wells and miscellaneous sites (latitude and longitude).

### Well-Naming System

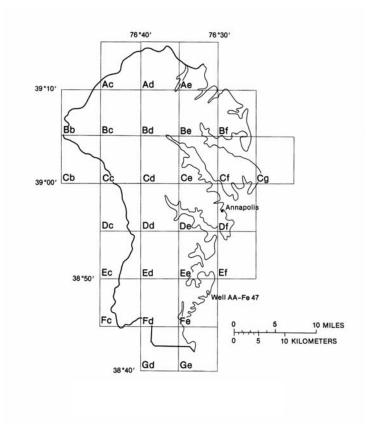
### Maryland

Wells in Maryland are also identified on the basis of a second numbering system established by the Maryland Geological Survey. The first two letters of the well number are the county prefix (for example, AL for Allegany). The second part of the well number consists of two letters that designate a 5-minute quadrangle within the county; the first letter (a capital letter) denotes a 5-minute segment of latitude from north to south, and the second letter (lower case) denotes a 5-minute segment of longitude from west to east. The wells are numbered sequentially within each 5-minute quadrangle. For example, well AL Ah 1 is the first well inventoried within the Ah 5-minute quadrangle in Allegany County. Baltimore City well numbers are based on 1-mile grids, with reference to the Washington Monument as the center. Thus, well 7S4E-1 is in the grid cell 7 miles south and 4 miles east of the Washington Monument, and is the first well inventoried in that grid cell.

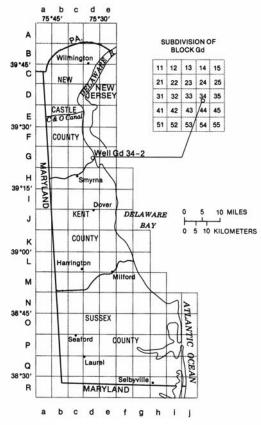
### Delaware

Delaware wells are identified by a numbering system instituted by the Delaware Geological Survey. The State is divided into 5-minute quadrangles of latitude and longitude. The quadrangles are lettered north to south with capital letters and west to east with lower case letters. Each 5-minute quadrangle is further divided into 25 1-minute blocks, which are numbered in sequence from north to south (fig. 5). The identity of a well is established by prefixing the sequence number with an upper and lower case letter followed by two numbers to designate the 5-minute and 1-minute blocks, respectively, in which the well is located. For example, well number Cb41-03 is the third well to be inventoried in the 1-minute block 41 that has coordinate "Cb41".

# ANNE ARUNDEL COUNTY, MARYLAND (Example, AA Fe 47)



## DELAWARE (Example Gd 34-2)



### WELL PREFIXES OF MARYLAND COUNTIES

Allegany	AL	Howard	НО
Anne Arundel	AA	Kent	KE
Baltimore	BA	Montgomery	MO
Calvert	CA	Prince Georges	PG
Caroline	CO	Queen Annes	QA
Carroll	CL	St. Marys	SM
Cecil	CE	Somerset	SO
Charles	CH	Talbot	TA
Dorchester	DO	Washington	WA
Frederick	FR	Wicomico	WI
Harford	HA	Worcester	WO
Garrett	GA		

### WASHINGTON, D.C.

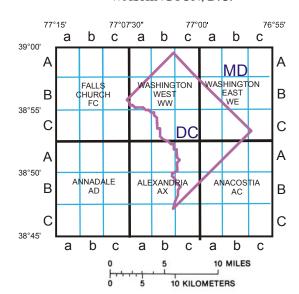


Figure 5. -- Well naming system used in Maryland, Delaware, and Washington, D.C.

### Washington, D.C.

Ground-water studies by the U.S. Geological Survey apply a numbering system using the six 7 1/2-minute quadrangle maps that cover parts of Washington, D.C. Each quadrangle is divided into nine rectangles by lines drawn at the 2 1/2-minute intervals. The rectangles are lettered A, B, and C from top to bottom, and a, b, and c from west to east. An upper case single or double letter is designated for the quadrangle name as follows:

FC	 Falls Churc	ch	AN	 Annandale
WW	 Washington	West	ΑX	 Alexandria
WE	 Washington	East	AC	 Anacostia

The wells and springs are numbered sequentially in each quadrangle. Well WW-Cc 12 is the twelfth well inventoried in the southeastern most rectangle designated as Cc, in the Washington West Quadrangle.

### Records of Ground-Water Levels

Water-level data and spring discharges from the Maryland and Delaware Ground-Water-Level Monitoring Networks, and observation wells from ground-water projects are reported. These data are intended to provide historical water-level information for ground-water management, and identify ground-water conditions in project areas. The observation-well networks were established to observe ground-water level fluctuations through time and to identify areas of man-induced and natural climatic stress on the ground-water-flow system. The locations of the State network spring and observation wells in Maryland and Delaware are shown on Figure 6. The locations of project wells are shown on Figure 7.

### Data Collection and Computation

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

The water-level data tables and hydrographs are presented in alphabetical order by counties. The primary identification number is the State well number that appears in the upper left hand corner. The secondary identification number is the 15-digit site identification number (see Latitude-Longitude System section on page 8).

Water levels are measured manually by steel tape or by an electric tape (meter) approximately every 4 to 6 weeks; some wells are equipped with continuous digital water-level recorders to observe daily fluctuations. The water levels are referenced to the nearest hundredth of a foot below land-surface datum (1sd) and/or above sea level. Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum and the height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels for wells equipped with graphic or digital recorders report the daily maximum and minimum values.

### Data Presentation

A description of each observation well precedes the water-level tables and hydrographs. The following information is given in the description:

SPRING or WELL NUMBER.--(See Well-Numbering System section on page 8.)

SITE ID.--A 15-digit number: the first 6 digits are the latitude, the next 7 digits are the longitude, and the last 2 digits refer to the sequence number for identifying one or more wells at a particular latitude and longitude. The site ID is the best location at the time of inventory. The actual latitude and longitude may be slightly different as a result of more up-to-date knowledge of location. The site ID is basically used as an identification number and not an exact location. (See Latitude-Longitude System section on page 8.)

PERMIT NUMBER.--The permit number is the State permit number required for drilling wells in Maryland and Delaware. Upon completion of the well, the driller must submit a completion report which documents specific data on the construction of the well. This document also reports the pumpage results in terms of pumping period, yield as gallons per minute, and drawdown.

LOCATION.--The location is the latitude and longitude in the appropriate designation of degrees, minutes, and seconds. The hydrologic unit is a code for the river basin where the well is located (U.S. Geological Survey, Hydrologic Unit Map-1974 States of Maryland and Delaware). A brief local description of the location is also given along with the well-owner's name.

AQUIFER.--The aquifer is the geologic formation from which the well receives its water supply. Each aquifer is identified by its geologic age and the U.S. Geological Survey Ground Water Site Inventory (GWSI) data-base aquifer code.

WELL CHARACTERISTICS.--This describes the type of well, the physical characteristics of the well, and includes a summary of the known construction information.

INSTRUMENTATION.--This provides information on the frequency of measurement of well water levels
and the water-level equipment or spring discharge equipment used.

 ${\tt DATUM.--}$ This lists the altitude of land surface above sea level at the well to the nearest 10 feet as determined from a 7 1/2-minute quadrangle topographic map, or to the nearest hundredth or tenth of a foot as determined from surveying. The measuring point (MP) is the distance above or below the land surface at the point at which the water-level measurements are made.

REMARKS.--This section gives important miscellaneous data relevant to the spring or well site.

PERIOD OF RECORD.--The period of record lists the beginning and ending month and year of water-level record or "current year" if the records are to be continued into the following year.

**EXTREMES FOR PERIOD OF RECORD.**--This entry identifies the highest and lowest water levels during the period of record, either as land-surface datum or sea level, and the dates of their occurrence.

### Spring Discharge Tables

A table of discharge in gallons per minute follows the station description for each spring. The data appears in a table format showing date and discharge. The discharge measurements are measured volumetrically or by use of a flow meter as indicated in the INSTRUMENTATION section.

### Water-Level Tables

A table of water levels follows the station description for each well. Water levels are reported in either of the following table formats:

**Hand-held measurements.**--If the data are collected by hand-held measurements, the data appear in a table format of date and water level with the datum in reference to land surface or sea level. These values are reported to the nearest hundredth of a foot

Recorder.--Water levels are presented in a two-page 6-month format by water year with columns for daily maximums and minimums. These data are reported in reference to either land surface or sea level datum. The daily maximum column referenced to land-surface data represents the lowest daily water level recorded. The daily minimum column referenced to land surface data represents the highest water level recorded. For data referenced to sea level, the daily maximum column represents the highest daily water level recorded. The daily minimum column represents the lowest daily water level recorded. Missing data are represented by dashes in the table.

### Hydrographs

The hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, a 5-year hydrograph is shown starting October 1, 1999 through September 30, 2004. Hydrographs are either referenced to land surface or sea level datum. Each measurement is indicated by a circle and connected with a dashed line to indicate the trend from one measurement to the next. The trend line should be interpreted as a general direction of water-level movement. Actual water levels may deviate from this line. The trend line is usually not drawn if the measurements are greater than 60 days apart. Recorder data are graphed as a continuous line using the lowest water level recorded for each day. Missing data are indicated by a blank space. Missing data may result from recorder malfunctions, battery or clock failures, and/or mechanical problems related to the response of water-level movement in a well. Spring hydrographs are a graphic display of total volumetric flow at the time of measurement in gallons per minute.

### Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, are sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate or chloride concentrations. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes. The locations of water-quality wells in Maryland and Delaware are shown in Figure 8.

### Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of ground-water studies in specific areas. Consequently, a number of chemical analyses are presented for some Counties, but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality. This can be attained only by considering records for this year in context with similar records obtained for these and other springs and wells in earlier years.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of groundwater samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; 10 and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from http;//water.usgs.gov/pubs/twri/.

### Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by a well or spring number (Well Number). The prime identification number for wells or springs sampled is the 15-digit (Site ID) number derived from the latitude-longitude locations. The site ID includes a two-digit sequence number for use at locations having multiple sites. Under the heading Station Type, wells are identified by the abbreviation GW for ground water and SP for springs. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

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

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blank.
М	Presence of material verified but not quantified.

### WATER-QUALITY CONTROL DATA

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected are described in the following section. Procedures have been established for the storage of water-quality-control data within the U.S. Geological Survey. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

### Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analyses of interest. Any measured value for an analyte (a specific component measured in a chemical analysis) found in a blank sample that was absent in the blank solution, is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected are:

Field Blank - a blank solution that is subjected to all aspects of sample collection, field-processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is processed through the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank -a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

 $\hbox{Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample. } \\$ 

### Reference Samples

A reference sample is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to insure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

### Replicate Samples

Replicate samples are a set of environmental samples collected in a manner so that the samples are considered to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected are:

Concurrent sample - a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

### Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample - a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample - a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

### ACCESS TO USGS DATA

The U.S. Geological Survey (USGS) is the principal Federal water-data agency and, as such, collects and disseminates much of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Information System (NWIS) an updated version of the former National Water Data Storage and Retrieval System (WATSTORE) provides an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and for release of the data to the public. The computer network system in Baltimore is the main data storage facility for Maryland, Delaware, and Washington, D.C. water data. The following data bases can be accessed for ground-water data:

Ground-Water Site Inventory data base (GWSI) - Contains inventory data for 30,557 ground-water wells, 810 springs, and 2,382 surface water sites. The ground-water data includes site location, geohydrologic characteristics, well construction and manually measured water-level data or spring improvements and discharges, along with other pertinent ground-water information.

Automated Data Processing System (ADAPS) - Contains daily values for 299 observation well water-levels and 726 streamflow stages, along with water temperature, specific conductance, and dissolved oxygen for surface water stations equipped with water-quality monitors.

Quality Water Data base (QWDATA) - Contains analyses of water samples which include environmental and quality control samples that describe the chemical, physical, biological, and radiochemical characteristics of both ground-water sites (4,718 sites, 11,109 analyses), and surface-water stations (958 sites, 39,770 analyses).

State Water Use Data System (SWUDS) - Contains water user consumption information for 2,248 Maryland, and 519 Delaware ground-water use appropriations, and 773 Maryland surface water use appropriations with monthly and daily water use totals.

Some water-quality and ground-water data also are available through the world wide web (WWW). These data may be accessed at:

http://md.water.usgs.gov/

Specific ground-water real-time and near real-time water-level observation well data and hydrographs can be accessed on the Maryland, Delaware and Washington, D.C., Water Science Center world wide web (WWW) page at:

http://md.water.usgs.gov/groundwater/web\_wells/current/water\_table/counties/

http://md.water.usgs.gov/groundwater/web wells/current/confined/counties/

In addition, data can be provided in various machine-readable formats, such as CD. Information about the availability of specific types of data or products, and user charges, can be obtained from the Water Science Center (See address on bottom of the title page).

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

<u>Acid neutralizing capacity (ANC)</u> is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

**Alkalinity** is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

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

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

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

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

<u>Biochemical oxygen demand (BOD)</u> is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

 ${\tt \underline{Biomass}}$  is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

<u>Clostridium perfringens (C. perfringens)</u> is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

<u>Coliphages</u> are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

 $\underline{\textbf{Color unit}} \text{ is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion.}$  Color is expressed in units of the platinum-cobalt scale.

<u>Confined aquifer</u> is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well. (See also "Aquifer")

<u>Continuous-record station</u> is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

<u>Daily-record station</u> is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

<u>Data logger</u> is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from on site data loggers for entry into office data systems.

<u>Datum</u> is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

<u>Dissolved</u> refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

<u>Dissolved oxygen (DO)</u> is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

<u>Dissolved-solids concentration</u> in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) can be converted to carbonate concentration by multiplying by 0.60.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE/EIA method and subsequent transfer to EIA medium. Enterococci include Streptococcus feacalis, Streptococcus feacium, Streptococcus avium, and their variants. (See also "Bacteria")

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. E. coli are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

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

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35  $^{\circ}$ C plus or minus 1.0  $^{\circ}$ C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semi-volatile organic compounds that are extractable from water in methylene chloride.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

<u>Hydrologic benchmark station</u> is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

<u>Hydrologic unit</u> is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV-a term that is no longer used.)

 $\underline{\textbf{Land-surface datum (lsd)}} \text{ is a datum plane that is approximately at land surface at each ground-water monitoring spring or well.}$ 

<u>Lipid</u> is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

 $\underline{\textbf{Measuring point}} \hspace{0.1in} \textbf{(MP)} \hspace{0.1in} \text{is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain water level.}$ 

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

 $\underline{\text{Methylene blue active substances (MBAS)}} \text{ are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.}$ 

<u>Micrograms per gram  $(UG/G, \mu g/g)$ </u> is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG,  $\mu$ g/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter  $(UG/L, \mu g/L)$  is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

<u>Microsiemens per centimeter (US/CM,  $\mu$ S/cm)</u> is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

 $\underline{\textbf{Milligrams per liter} \ (\textbf{MG/L}, \ \textbf{mg/L})} \ \text{is a unit for expressing the concentration of chemical constituents} \\ \text{in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.}$ 

<u>Most probable number (MPN)</u> is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88 (See "North American Vertical Datum of 1988")

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

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

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter  $(\mathfrak{m}^2)$ , acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

 $\underline{\text{Organism count/volume}}$  refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter  $(\mathbf{mL})$  or liter  $(\mathbf{L})$ . Numbers of planktonic organisms can be expressed in these terms.

<u>Organochlorine compounds</u> are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

<u>Parameter Code</u> is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

<u>Partial-record station</u> is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

<u>Particle size</u> is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine the fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

<u>Particle-size classification</u>, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024- 0.0	04 Sedimentation
Silt	0.004 - 0.0	62 Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

<u>Percent composition or percent of total</u> is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

<u>Periphyton</u> is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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

**pH** of water is the negative logarithm of the hydrogen-ion activity. Solutions at 25 °C with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth (1 x  $10^{-12}$ ) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7 x  $10^{10}$  radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

<u>Polychlorinated biphenyls (PCBs)</u> are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

<u>Polychlorinated naphthalenes (PCNs)</u> are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

<u>Primary productivity</u> is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

<u>Replicate samples</u> are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

<u>Sea level</u>, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside front cover) for identification of the datum used in this report.

<u>Sodium adsorption ratio (SAR)</u> is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

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

<u>Stable isotope ratio</u> (part per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

<u>Suspended</u> (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

<u>Suspended, total</u> is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom: Animal
Phylum: Arthropoda
Class: Insecta
Order: Ephemeroptera
Family: Ephemeridae
Genus: Hexagenia
Species: Hexagenia limbata

<u>Time-weighted average</u> is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

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

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

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

<u>Volatile organic compounds (VOCs)</u> are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

 $\underline{\textbf{Water table}} \text{ is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.}$ 

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS Water Resources Discipline reports is the 12-month period starting October 1, and ending September 30 of the following year. Thus, the "2005The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. water year" begins October 1, 2004 and ends September 30, 2005.

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

 ${\underline{\tt WSP}}$  is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

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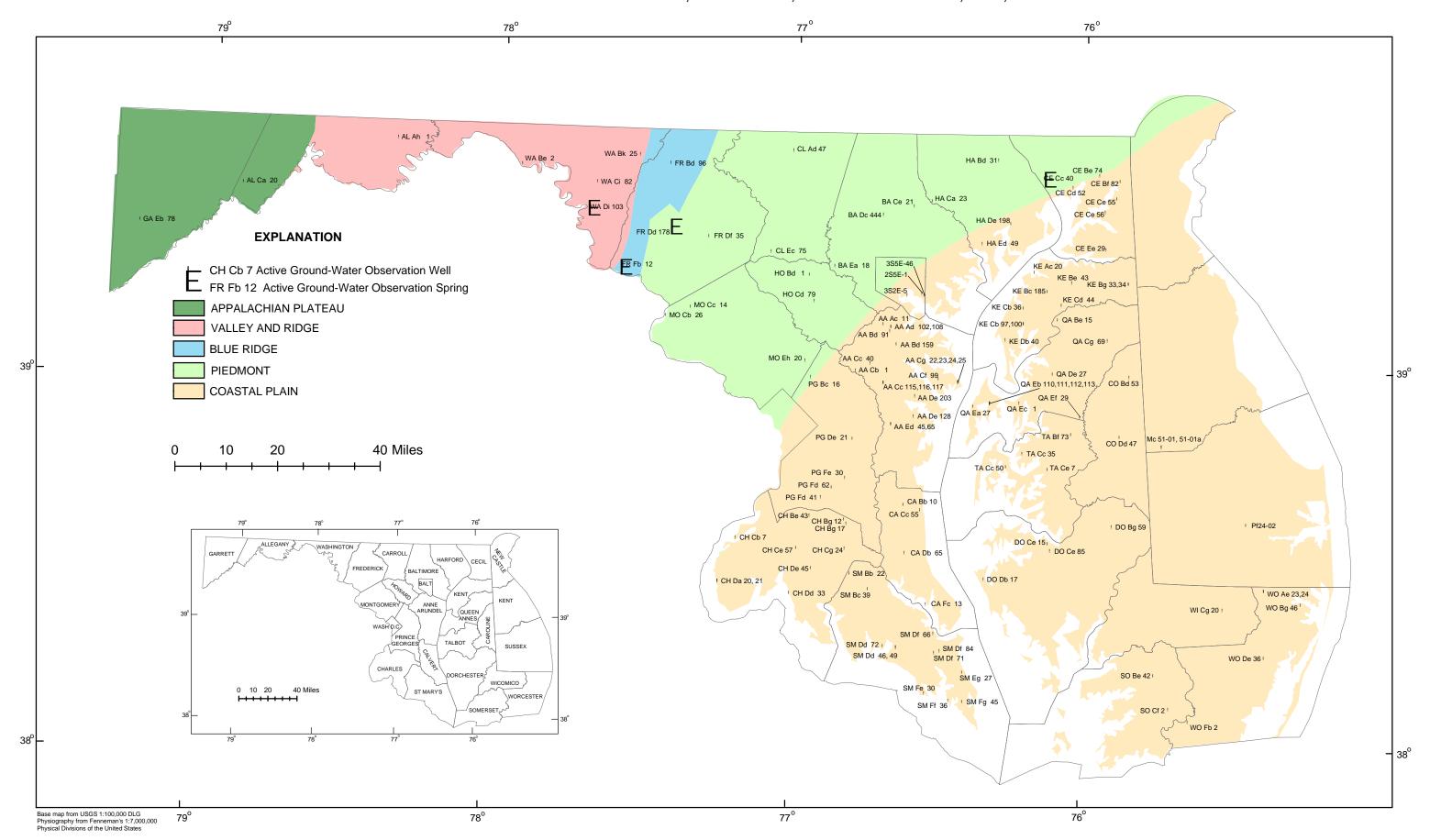


Figure 6. Map of Maryland, Delaware, and Washington D.C. showing location of ground-water network observation wells and springs.

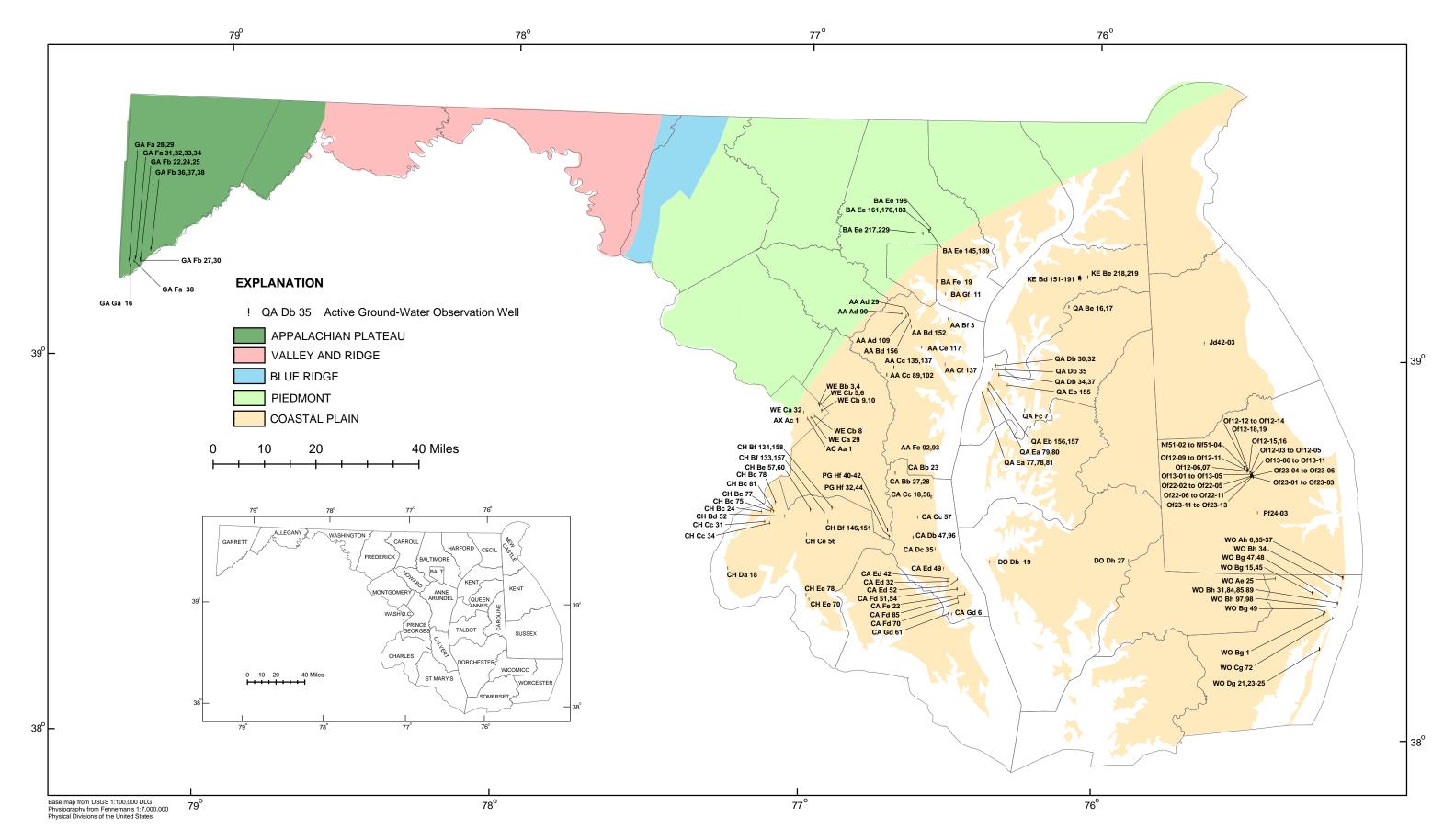


Figure 7. Map of Maryland, Delaware, and Washington D.C. showing location of ground-water project observation wells.

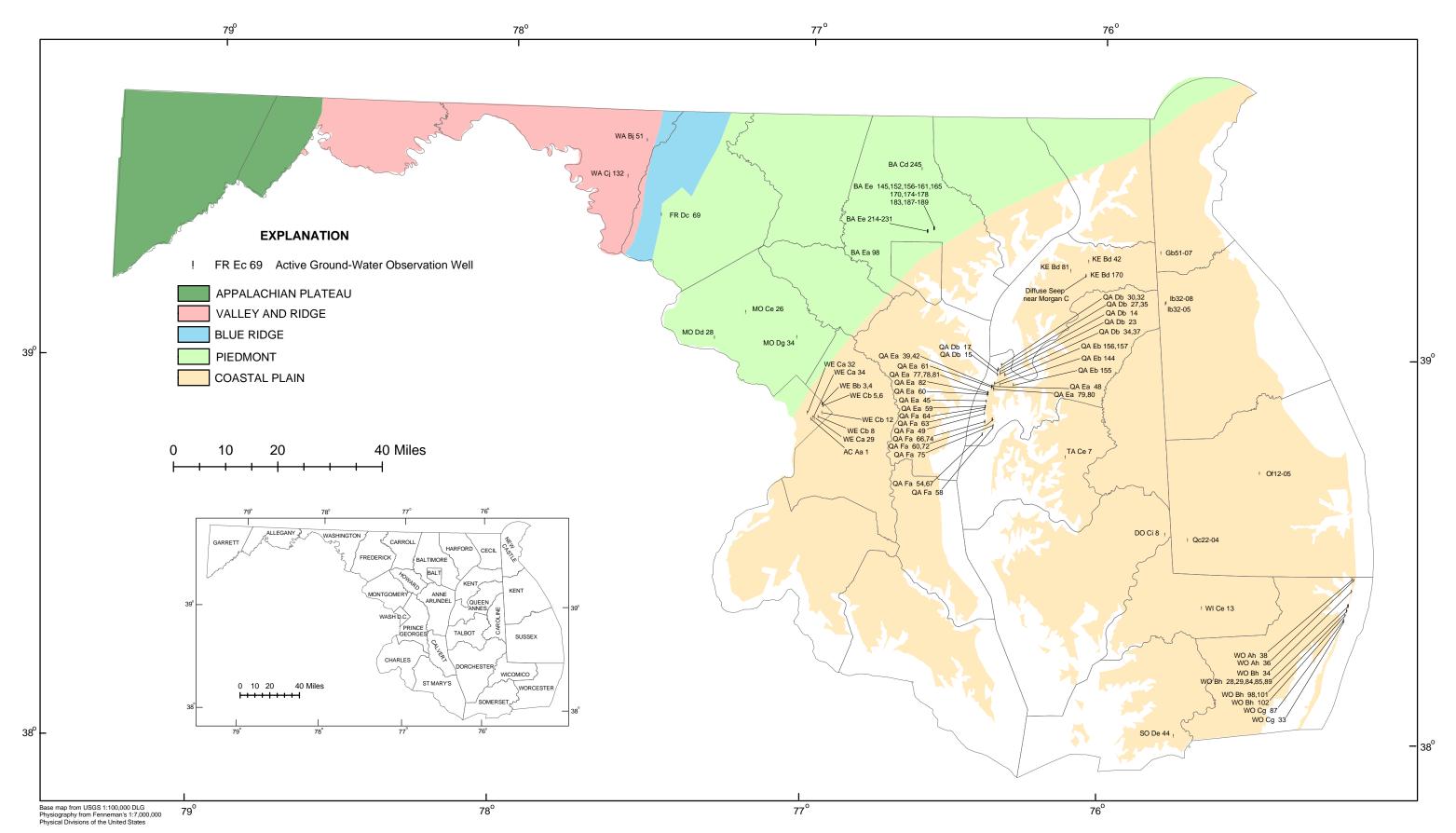


Figure 8. Map of Maryland, Delaware, and Washington D.C. showing location of ground-water-quality observation wells.

### CECIL COUNTY

SPRING NUMBER.--CE Cc 40. SITE ID.--393459076045001.

LOCATION.--Lat 39°34'59", long 76°04'50", Hydrologic Unit 02050306, 0.1 mi north of intersection of Cokesbury and St. Marks Church Roads, 0.8 mi northeast of Perryman. Owner: Private Residence.

AQUIFER .-- James Run Formation, Frenchtown Member of Paleozoic age. Aquifer code: 300JMSR.

SPRING IMPROVEMENTS .-- 2 in. outflow pipe.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map.

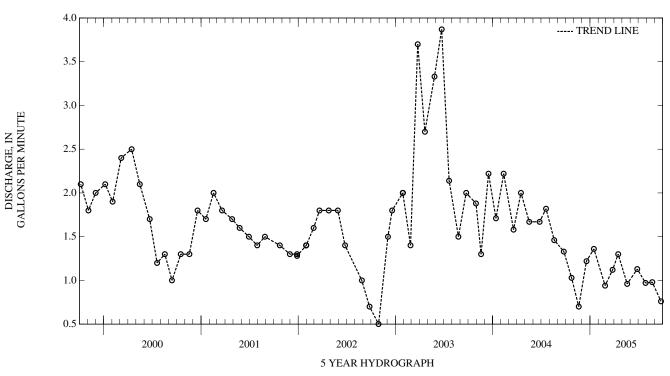
REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are available

PERIOD OF RECORD.--June 1958 to November 1977, April 1981, August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured 22.5 gal/min, March 2, 1961; minimum discharge measured, 0.1 gal/min, November 3, 1958.

### DISCHARGE, IN GALLONS PER MINUTE

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 23, 2004 NOV 19 DEC 18	1.0 .7 1.2	JAN15,2005 FEB 26 MAR 26	1.4 0.9 1.1	APR16,2005 MAY 20 JUN 27	1.3 1.0 1.1	JUL28,2005 AUG 22 SEP 24	1.0 1.0 0.8
	HIGHEST LOWEST	1.4 JAN 15, 2005 0.7 NOV 19, 2004					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### FREDERICK COUNTY

SPRING NUMBER.--FR Dd 178. SITE ID.--392552077262201.

LOCATION.--Lat 39°25'52", long 77°26'22", Hydrologic Unit 02070009, at Frederick County Agricultural Extension Service (formerly Montview State Hospital). Owner: Frederick County.

AQUIFER.--Frederick Limestone of Lower Cambrian age. Aquifer code: 377FDCK.

SPRING IMPROVEMENTS .-- Springhouse with discharge pipe.

INSTRUMENTATION.--Monthly current meter discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

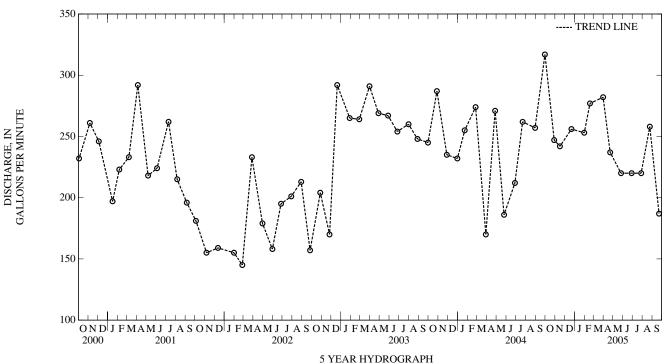
REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are

PERIOD OF RECORD.--April 1981, February 1989, September 1989, April 1991, and March 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 904 gal/min, May 6, 1993; minimum discharge measured, 145 gal/min, February 26, 2002.

### DISCHARGE, IN GALLONS PER MINUTE

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 29, 2004 NOV 16 DEC 22	247 242 256	JAN31,2005 FEB 18 MAR 31	253 277 282	APR22,2005 MAY 26 JUN 28	237 220 220	JUL28,2005 AUG 24 SEP 22	220 258 187
	HIGHEST LOWEST	282 MAR 31, 200 187 SEP 22, 2005					



### FREDERICK COUNTY—Continued

SPRING NUMBER.--FR Fb 12. SITE ID.--391846077370501.

LOCATION.--Lat 39°18'46", long 77°37'05", Hydrologic Unit 02070008, at Brunswick, off Park Ave., 300 ft north of intersection with Potomac St. Owner: Town of Brunswick.

AQUIFER.--Precambrian Erathem of Precambrian age. Aquifer code: 400PCMB.

SPRING IMPROVEMENTS .-- 2 in. outflow pipe.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

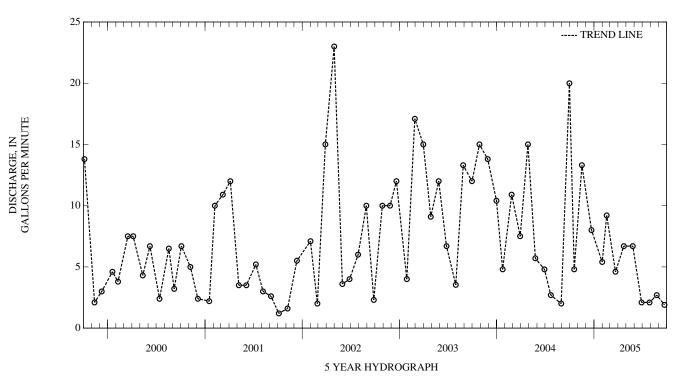
REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are available

PERIOD OF RECORD.--January 1960 to April 1964, March 1965, August 1967, December 1968, July 1972, and April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 36.0 gal/min, April 30, 1964; minimum discharge measured, 0.5 gal/min, August 12, 1999.

### DISCHARGE, IN GALLONS PER MINUTE

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 18, 2004 NOV 16 DEC 22	4.8 13.3 8.0	JAN31,2005 FEB 17 MAR 22	5.4 9.2 4.6	APR22,2005 MAY 26 JUN 28	6.7 6.7 2.1	JUL28,2005 AUG 24 SEP 22	2.1 2.7 1.9
	HIGHEST	13.3 NOV 16, 2004	1				



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### WASHINGTON COUNTY

SPRING NUMBER.--WA Di 103. SITE ID.--392836077442701.

LOCATION.--Lat 39°28'36", long 77°44'27", Hydrologic Unit 02070004, 0.2 mi southeast of Smoketown Road and Mummas Lane, 1.0 mi north of Sharpsburg. Owner: National Park Service, Antietam National Battlefield.

AQUIFER.--Conococheague Limestone of Upper Cambrian age. Aquifer code: 371CCCG.

SPRING IMPROVEMENTS .-- Springhouse with cement trough.

INSTRUMENTATION.--Monthly volumetric discharge measurements by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 475 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Maryland Ground-Water Spring Discharge Monitoring Network, and Water Quality Network observation spring. Temperature readings are

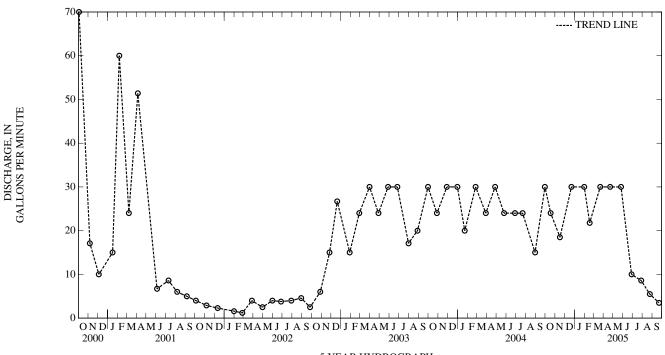
PERIOD OF RECORD.--May 1969, April 1987, and January 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 95.0 gal/min, May 14, 1998; minimum discharge measured, 0.3 gal/min, October 4, 1991 and November 7, 1991.

#### DISCHARGE, IN GALLONS PER MINUTE

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 18, 2004	24.0	JAN31,2005	30.0	APR22,2005	30.0	JUL28,2005	8.6
NOV 16	18.5	FEB 17	21.8	MAY 26	30.0	AUG 24	5.5
DEC 22	30.0	MAR 22	30.0	JUN 28	10.0	SEP 22	3.5

 $\begin{array}{lll} \mbox{HIGHEST} & 30.0 & \mbox{DEC 22, 2004, JAN 31, MAR 22, APR 22, MAY 26, 2005} \\ \mbox{LOWEST} & 3.5 & \mbox{SEP 22, 2005} \end{array}$ 



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET BELOW LAND SURFACE

### KENT COUNTY

WELL NUMBER.--Jd42-03. SITE ID.--390607075331501. PERMIT NUMBER.--10230.

LOCATION.--Lat 39°06'07", long 75°33'15", Hydrologic Unit 02040207, l mi south of Camden. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth ll ft; casing diameter 1.25 in., to 8.5 ft; well point from 8.5 to ll ft.

INSTRUMENTATION.--Monthly water level measurements with electric or chalked steel tape by Delaware Geological Survey or U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS .-- Delaware Water-Level Monitoring Network observation well.

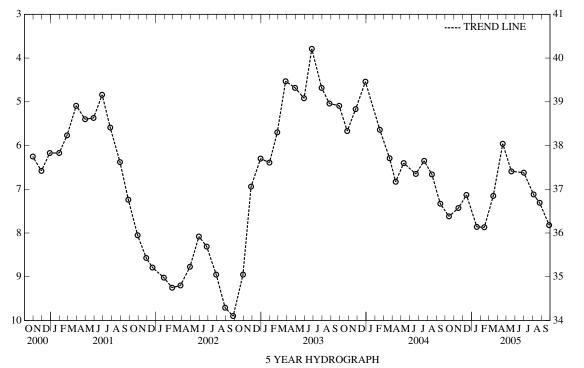
PERIOD OF RECORD.--October 1950 to December 1961, August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft below land surface, July 18, 1975; lowest measured, 10.10 ft below land surface, November 28, 1986.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004 NOV 16 DEC 14	7.62 7.43 7.13	JAN 19, 2005 FEB 14 MAR 17	7.86 7.87 7.15	APR 19, 2005 MAY 19 JUL 01	5.96 6.59 6.62	AUG 04, 2005 25 SEP 27	7.12 7.31 7.82
	HIGHES	ST 5.96 APR 19, 2	005				

HIGHEST 5.96 APR 19, 2005 LOWEST 7.87 FEB 14, 2005



WATER LEVEL, IN FEET NGVD 1929

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### KENT COUNTY—Continued

WELL NUMBER.--Mc5l-01. SITE ID.--385041075395601.

LOCATION.--Lat 38°50'4l", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi northeast of Adamsville. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18.1 ft; casing diameter 2 in., to 16.1 ft; well point from 16.1 to 18.1 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60 minute recorder interval from October 1999 to July 2001.

DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

REMARKS .-- Delaware Water-level Monitoring Network observation well.

PERIOD OF RECORD.--September 1958 to current year.

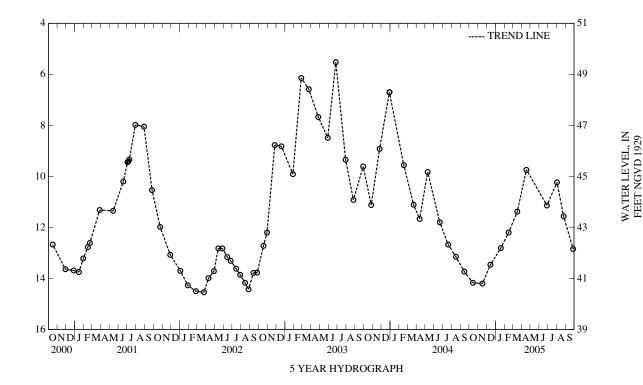
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.28 ft below land surface, May 31, 1984; lowest measured, 16.29 ft below land surface, January 19, 1988.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004 NOV 16 DEC 14	14.17 14.20 13.46	JAN 19, 2005 FEB 15 MAR 17	12.81 12.20 11.38	APR 18, 2005 JUN 28 AUG 02	9.74 11.14 10.23	AUG 25, 2005 SEP 27	11.56 12.85
	HIGHE	ST 9.74 APR 18, 2	005				

HIGHEST 9.74 APR 18, 2005 LOWEST 14.20 NOV 16, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### KENT COUNTY—Continued

WELL NUMBER.--Mc51-01a. SITE ID.--385041075395602. PERMIT NUMBER.--178923.

LOCATION.--Lat 38°50'41", long 75°39'56", Hydrologic Unit 02060008, 1.3 mi northeast of Adamsville. Owner: Delaware Department of Transportation.

AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18.2 ft; casing diameter 2 in., to 15 ft; well point from 15 to 19 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape or chalked steel tape by U.S. Geological Survey personnel. Well equipped with water-level telemetry recorder from July 2001 to current year.

DATUM.--Elevation of land surface is 56 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 3.75 ft above land surface.

REMARKS.--Deleware Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- July 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.65 ft below land surface, March 9, 2003 (recorder); lowest measured, 15.57 ft below land surface, March 18-21, 2002 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

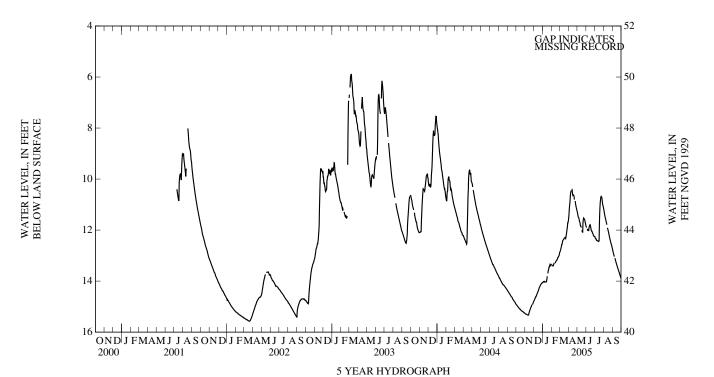
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004 NOV 16 DEC 14	15.09 15.16 14.43	JAN 19, 2005 FEB 15 MAR 17	13.65 13.23 12.28	APR 18, 2005 MAY 26 JUN 28	10.60 11.54 12.23	AUG 02, 2005 25 SEP 27	11.16 12.43 13.75
		ST 10.60 APR 18, 2 ST 15.16 NOV 16, 2					

MIN DAY MIN MIN MIN MIN MAX MIN MAX MAX MAX MAX MAX **FEBRUARY** MARCH OCTOBER NOVEMBER **DECEMBER JANUARY** 14.91 14.90 15.27 14.79 14.76 14.05 14.05 13.36 13.35 12.88 15.26 12.85 14.93 15.28 13.36 12.85 12.83 14.91 15.27 14.77 14.74 14.05 14.04 13.36 3 14.94 14.93 15.29 15.28 14.74 14.72 12.79 14.04 14.02 12.83 14.95 14.94 15.29 15.27 14.72 14.02 13.36 13.35 12.79 12.74 14.69 14.02 5 14.97 14.95 15.30 15.28 14.67 14.02 14.01 13.39 13.36 12.70 14.69 12.74 14.99 14.01 12.64 6 14.97 15.30 14.67 14.65 14.00 13.39 12.70 15.30 13.41 15.31 15.32 15.00 14.99 13.40 15.30 14.65 14.61 14.03 14.00 13.35 12.64 12.56 12.52 8 15.02 15.00 15.31 14.61 14.61 14.03 14.01 13.35 13.32 12.57 9 15.32 13.29 12.52 15.03 15.02 15.32 14.61 14.57 14.54 14.04 14.03 13.32 12.57 10 15.05 12.52 15.03 15.33 15.32 14.57 14.03 14.02 13.29 13.28 12.46 11 15.06 15.05 15.33 15.33 14.54 14.52 14.03 14.03 13.28 13.28 12.46 12.40 12 15.07 15.06 15.33 15.33 14.52 14.48 14.03 14.03 12.40 12.38 13 15.09 15.07 15.33 15.29 14.48 14.46 14.03 14.02 13.28 13.27 12.39 12.38 15.29 15.24 13.97 12.38 14 15.09 15.09 14.46 14.44 14.03 13.28 13.24 12.36 15 15.11 15.09 15.24 15.20 14.44 14.41 13.97 13.89 13.25 13.23 12.36 12.35 16 15.12 15.11 15.20 15.15 14.41 14.37 13.89 13.81 13.23 13.20 12.35 12.32 15.13 15.12 15.15 15.12 14.37 14.34 13.81 13.76 13.20 13.19 12.32 12.30 17 12.30 12.30 14.34 14.29 12.30 15.15 15.13 15.12 15.09 13.19 13.18 18 13.70 13.61 12.30 15.16 15.09 15.07 14.29 14.26 19 15.15 13.18 13.17 12.30 20 15.17 15.07 15.03 14.26 14.24 12.27 15.16 13.61 13.56 13.17 13.13 21 22 15.03 13.56 13.54 12.29 15.17 15.17 15.01 14.24 14.22 13.13 13.09 12.27 15.18 15.17 15.01 14.98 14.22 14.19 13.54 13.45 13.09 13.08 12.32 12.29 23 15.19 15.18 14.98 14.96 14.19 14.16 13.45 13.44 13.08 13.07 12.29 12.18 24 25 15.20 15.19 14.96 14.92 14.17 14.14 13.45 13.42 13.07 13.03 12.18 12.12 15.20 15.20 14.92 14.91 14.14 14.13 13.42 13.37 13.03 13.02 12.12 12.03 26 15.21 15.20 14.13 14.10 13.37 13.35 13.02 12.99 12.03 11.96 27 15.23 14.92 12.99 12.95 15.21 14.89 14.11 14.10 13.40 13.36 11.96 11.86 28 15.24 15.23 12.95 14.89 14.86 14.10 14.08 13.40 13.40 12.88 11.86 11.71 29 15.24 15.24 14.86 14.82 14.08 14.07 13.40 13.34 11.71 11.71 30 15.25 15.24 14.82 14.79 14.07 14.07 13.34 13.32 11.71 11.65 ------31 15.26 15.25 13.35 14.07 14.05 13.33 11.65 11.56 MONTH 15.26 14.90 15.33 14.79 14.79 14.05 14.05 13.32 13.41 12.88 12.88 11.56

KENT COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	AY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	11.56 11.46 11.26 11.11 10.99	11.46 11.26 11.11 10.99 10.85	11.29 11.33 11.40 11.46 11.50	11.21 11.29 11.33 11.40 11.46	11.87 11.89 11.89  11.95	11.82 11.87 11.88  11.92	12.25 12.29 12.32 12.34 12.34	12.24 12.25 12.29 12.32 12.33	11.16 11.23 11.30 11.37 11.45	11.12 11.16 11.23 11.30 11.37	12.77 12.82 12.87 12.93 12.98	12.72 12.77 12.82 12.87 12.93
6 7 8 9 10	10.85 10.69 10.55 10.50 10.45	10.69 10.55 10.50 10.45 10.41	11.51 11.54 11.61 11.65 11.69	11.49 11.49 11.54 11.61 11.65	12.00 11.99 12.00 12.02 12.02	11.95 11.96 11.99 12.00 11.91	12.36 12.40 12.40 12.41 12.42	12.34 12.36 12.37 12.39 12.41	11.50 11.55 11.60 11.63 11.68	11.44 11.50 11.55 11.60 11.63	13.02 13.04  13.10 13.16	12.98 13.02  13.07 13.10
11 12 13 14 15	10.42 10.41 10.50 10.60	10.38 10.37 10.41 10.50	11.73 11.82 11.85 11.85 11.90	11.69 11.73 11.82 11.83 11.85	11.91 11.86 11.83 11.79 11.79	11.86 11.83 11.79 11.79 11.78	12.42 12.43 12.44 12.45 12.44	12.42 12.42 12.43 12.44 12.42	11.74 11.79  11.91 11.97	11.68 11.74  11.85 11.91	13.20 13.23 13.27 13.31 13.35	13.16 13.20 13.23 13.27 13.31
16 17 18 19 20	10.64 10.62 10.62 10.65 10.67	10.60 10.56 10.56 10.62 10.65	12.01 12.05 12.08 12.08	11.97 12.01 12.05 11.73	11.84 11.90 11.96 12.02 12.04	11.79 11.84 11.90 11.96 12.02	12.42 11.77 11.35 11.09 10.91	11.77 11.35 11.09 10.91 10.80	12.01 12.05 12.11 12.15 12.19	11.97 12.01 12.05 12.11 12.15	13.38 13.43 13.47 13.50 13.53	13.35 13.38 13.43 13.47 13.50
21 22 23 24 25	10.79 10.80  10.86 10.98	10.66 10.74  10.74 10.86	11.73 11.59 11.53 11.55 11.55	11.59 11.53 11.51 11.51 11.55	12.04 12.08 12.10 12.13 12.16	12.03 12.03 12.08 12.10 12.13	10.80 10.70 10.68 10.70 10.71	10.70 10.67 10.66 10.68 10.67	12.25 12.31 12.37 12.43 12.48	12.19 12.25 12.31 12.37 12.43	13.57 13.60 13.65 13.68 13.71	13.53 13.57 13.60 13.65 13.68
26 27 28 29 30 31	11.02 11.07 11.14 11.19 11.21	10.98 11.00 11.07 11.14 11.17	11.57 11.62 11.65 11.69 11.76 11.82	11.55 11.57 11.62 11.65 11.69 11.76	12.20 12.22 12.24 12.25 12.25	12.16 12.20 12.22 12.24 12.24	10.76 10.87 10.97 11.01 11.08 11.12	10.71 10.76 10.86 10.97 11.01 11.08	12.51 12.55 12.59 12.64 12.66 12.72	12.48 12.51 12.55 12.59 12.64 12.66	13.73 13.79 13.81 13.85 13.89	13.71 13.73 13.79 13.81 13.85
MONTH YEAR	11.56 15.33	10.37 10.37	12.08	11.21	12.25	11.78	12.45	10.66	12.72	11.12	13.89	12.72

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### SUSSEX COUNTY

WELL NUMBER.--Nf51-02. SITE ID.--384504075242602. PERMIT NUMBER.--95733.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 53 ft; casing diameter 2 in., to 50 ft; screen diameter 2 in., from 50 to 53 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.91 ft above land surface.

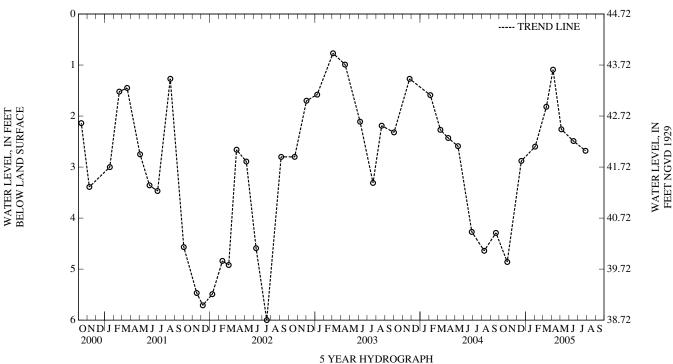
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land surface, February 25, 1998; lowest measured, 7.38 ft below land surface, September 30, 1993.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.86 2.88	FEB 03, 2005 MAR 14	2.60 1.82	APR 06, 2005 MAY 05	1.09 2.26	JUN 16, 2005 JUL 28	2.49 2.68
	HIGHES LOWES	T 1.09 APR 06, 2 T 4.86 OCT 29, 20					



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WATER LEVEL, IN FEET NGVD 1929

### SUSSEX COUNTY---Continued

WELL NUMBER.--Nf51-03. SITE ID.--384504075242601. PERMIT NUMBER.--95750.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

 $WELL\ CHARACTERISTICS. --Drilled,\ observation,\ water-table\ well,\ depth\ 18\ ft;\ casing\ diameter\ 2\ in.,\ to\ 15\ ft;\ screen\ diameter\ 2\ in.,\ from\ 15\ to\ 18\ ft.$ 

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.23 ft above land surface.

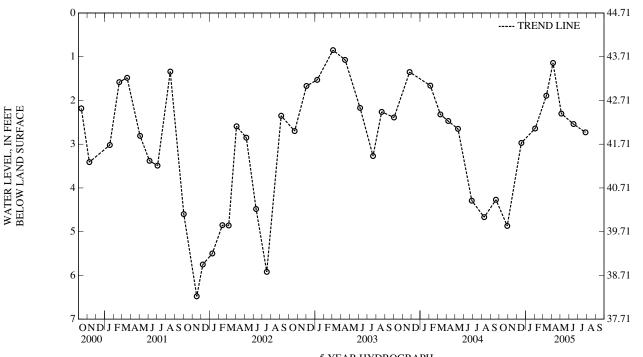
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, February 25, 1998; lowest measured, 6.72 ft below land surface, December 4, 1998.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.87 2.97	FEB 03, 2005 MAR 14	2.64 1.89	APR 06, 2005 MAY 05	1.14 2.30	JUN 16, 2005 JUL 28	2.54 2.73
	HIGHES LOWES	ST 1.14 APR 06, 2 T 4.87 OCT 29, 20					



5 YEAR HYDROGRAPH

WELL NUMBER.--Nf51-04. SITE ID.--384504075242603. PERMIT NUMBER.--95747.

LOCATION.--Lat 38°45'04", long 75°24'26", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., from 77 to 80 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.52 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.30 ft above land surface.

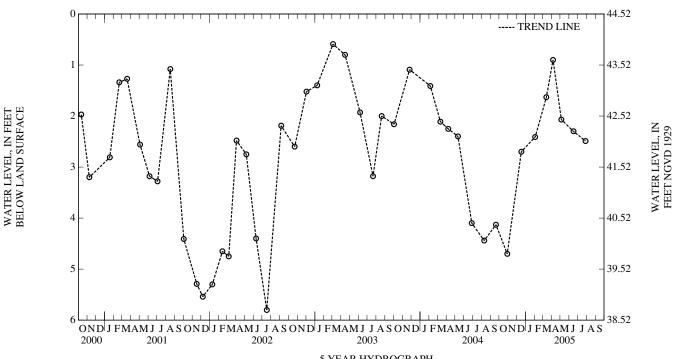
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.06 ft below land surface, February 25, 1998; lowest measured, 6.53 ft below land surface, October 26, 1993.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.70 2.70	FEB 03, 2005 MAR 14	2.41 1.63	APR 06, 2005 MAY 05	.90 2.07	JUN 16, 2005 JUL 28	2.30 2.49
	HIGHES LOWES	ST .90 APR 06, 20 T 4.70 OCT 29, 20					



5 YEAR HYDROGRAPH

WELL NUMBER.--Of12-03. SITE ID.--384418075231102. PERMIT NUMBER.--97464.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., from 32 to 35 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 49.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.36 ft above land surface.

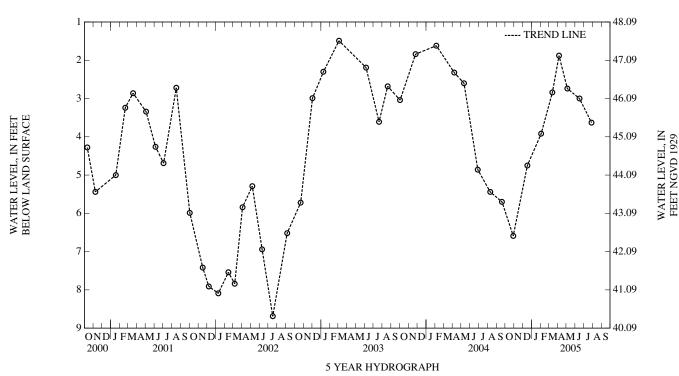
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.42 ft below land surface, February 25, 1998; lowest measured, 9.34 ft below land surface, October 19, 1995.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	6.59 4.75	FEB 03, 2005 MAR 14	3.92 2.84	APR 06, 2005 MAY 05	1.88 2.74	JUN 16, 2005 JUL 28	3.00 3.63
	HIGHES LOWES	T 1.88 APR 06, 2 T 6.59 OCT 29, 20					



WELL NUMBER.--Of12-04. SITE ID.--384418075231103. PERMIT NUMBER.--97467.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

 $WELL\ CHARACTERISTICS. -Drilled,\ observation,\ water-table\ well,\ depth\ 77\ ft;\ casing\ diameter\ 2\ in.,\ to\ 74\ ft;\ screen\ diameter\ 2\ in.,\ from\ 74\ to\ 77\ ft.$ 

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.32 ft above land surface.

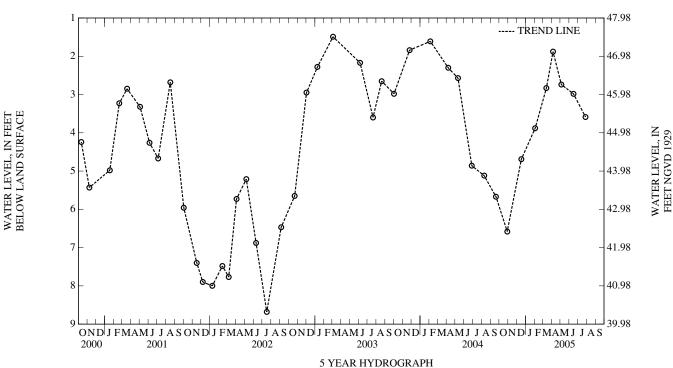
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.46 ft below land surface, April 4, 1994, and February 25, 1998; lowest measured, 9.28 ft below land surface, October 19, 1995.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	6.58 4.69	FEB 03, 2005 MAR 14	3.88 2.83	APR 06, 2005 MAY 05	1.88 2.74	JUN 16, 2005 JUL 28	2.98 3.59
		T 1.88 APR 06, 2 T 6.58 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

### SUSSEX COUNTY---Continued

WELL NUMBER.--Of12-05. SITE ID.--384418075231101. PERMIT NUMBER.--97471.

LOCATION.--Lat 38°44'18", long 75°23'11", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

 $WELL\ CHARACTERISTICS. --Drilled,\ observation,\ water-table\ well,\ depth\ 13\ ft;\ casing\ diameter\ 2\ in.,\ to\ 10\ ft;\ screen\ diameter\ 2\ in.,\ from\ 10\ to\ 13\ ft.$ 

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 49.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.4 ft above land surface.

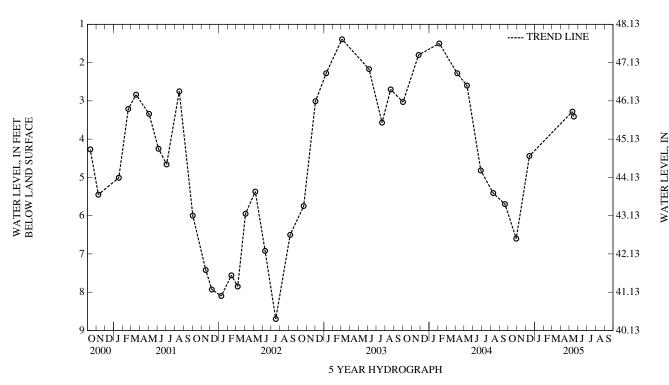
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to May 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.29 ft below land surface, February 25, 1998; lowest measured, 9.37 ft below land surface, October. 19, 1995.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004	6.60	DEC 14, 2004	4.44	MAY 12, 2005	3.28	MAY 17, 2005	3.41
		3.28 MAY 12, 2					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of12-06. SITE ID.--384433075234901. PERMIT NUMBER.--97472.

LOCATION.--Lat 38°44'33", long 75°23'49", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

 $WELL\ CHARACTERISTICS.-Drilled,\ observation,\ water-table\ well,\ depth\ 16\ ft;\ casing\ diameter\ 2\ in.,\ to\ 13\ ft;\ screen\ diameter\ 2\ in.,\ from\ 13\ to\ 16\ ft.$ 

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.50 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.24 ft above land surface.

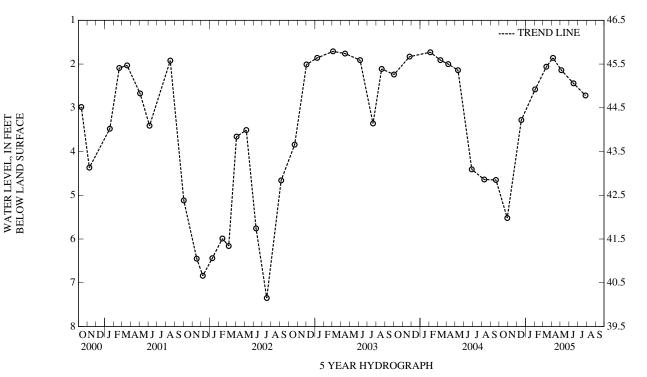
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.62 ft below land surface, February 5, 1998; lowest measured, 8.07 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.52 3.28	FEB 03, 2005 MAR 14	2.58 2.06	APR 06, 2005 MAY 05	1.86 2.14	JUN 16, 2005 JUL 28	2.44 2.72
	HIGHES	T 1.86 APR 06, 2					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

### SUSSEX COUNTY---Continued

WELL NUMBER.--Of12-07. SITE ID.--384435075234901. PERMIT NUMBER.--95736.

LOCATION.--Lat 38°44'35", long 75°23'49", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.13 ft above National Geodedic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.27 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

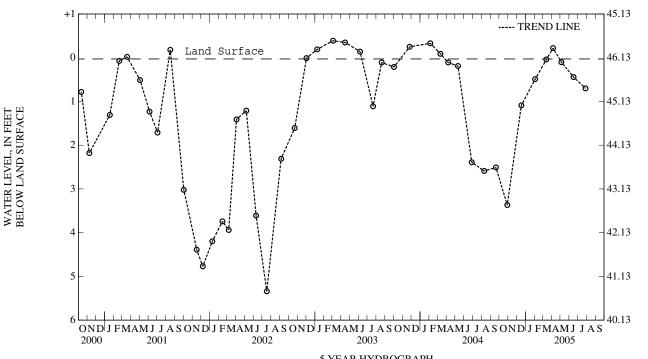
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.48 ft above land surface, February 25, 1998; lowest measured, 6.72 ft below land surface, October 19, 1995.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	3.37 1.09	FEB 03, 2005 MAR 14	.49 .04	APR 06, 2005 MAY 05	+.22 .10	JUN 16, 2005 JUL 28	.44 .70
	HIGHES	ST +.22 APR 06, 2	005				

LOWEST 3.37 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--Of12-09. SITE ID.--384436075234801. PERMIT NUMBER.--95751.

LOCATION.--Lat 38°44'36", long 75°23'48", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 13 ft; casing diameter 2 in., to 10 ft; screen diameter 2 in., from 10 to 13 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.13 ft above National Geodetic Verical Datum of 1929. Measuring point: Top of metal sleeve, 2.34 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

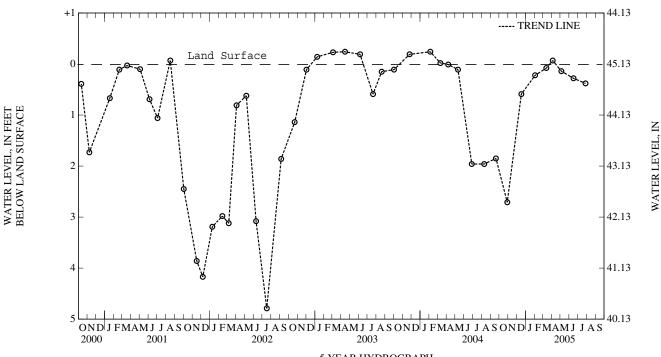
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft above land surface, April 4, 1994; lowest measured, 5.45 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	2.71 .59	FEB 03, 2005 MAR 14	.22 .08	APR 05, 2005 MAY 05	+.07 .14	JUN 16, 2005 JUL 28	.28 .38
	HIGHE	ST ±07 APR 05 2	005				

LOWEST 2.71 OCT 29, 2004



5 YEAR HYDROGRAPH

FEET NGVD 1929

WELL NUMBER.--Of12-10. SITE ID.--384437075234501. PERMIT NUMBER.--95735.

LOCATION.--Lat 38°44'37", long 75°23'45", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., from 12 to 15 ft.

INSTRUMENTATION.--Monthly water-=level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.31 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

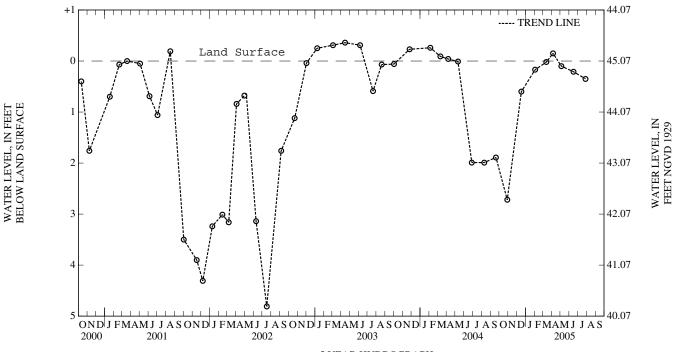
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft above land surface, December 3, 1996; lowest measured, 5.46 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	2.72 .60	FEB 03, 2005 MAR 14	.17 .02	APR 06, 2005 MAY 05	+.15 .10	JUN 16, 2005 JUL 28	.21 .35
	HIGHE	ST ± 15 ADD 06 2	005				

HIGHEST +.15 APR 06, 2005 LOWEST 2.72 OCT 29, 2004



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET BELOW LAND SURFACE

### SUSSEX COUNTY---Continued

WELL NUMBER.--Of12-11. SITE ID.--384437075234502. PERMIT NUMBER.--95748.

LOCATION.--Lat 38°44'37", long 75°23'45", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 73 ft; casing diameter 2 in., to 70 ft; screen diameter 2 in., from 70 to 73 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.07 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

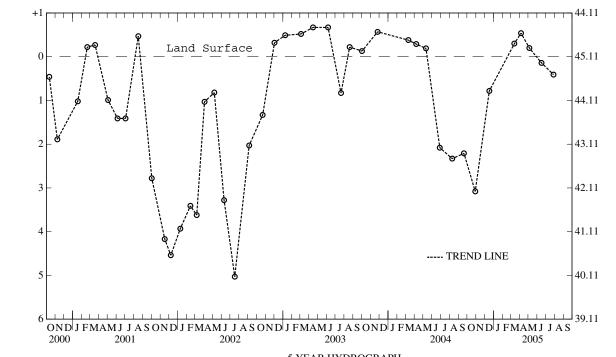
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.78 ft above land surface, February 25, 1998; lowest measured, 5.80 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	3.08 .78	MAR 14, 2005 APR 06	+.30 +.54	MAY 05, 2005 JUN 16	+.20 .14	JUL 28, 2005	.41

+.54 APR 06, 2005 LOWEST 3.08 OCT 29, 2004



WATER LEVEL, IN FEET NGVD 1929

5 YEAR HYDROGRAPH

WELL NUMBER.--Of12-12. SITE ID.--384438075234802. PERMIT NUMBER.--97465.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 59 ft; casing diameter 2 in., to 56 ft; screen diameter 2 in., from 56 to 59 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.5 ft above land surface.

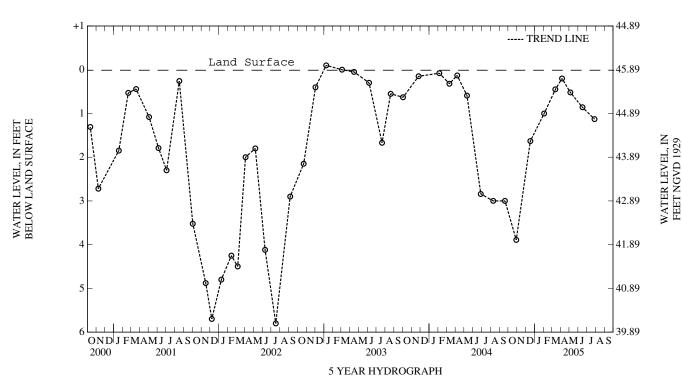
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.10 ft above land surface, January 8, 2003; lowest measured, 6.50 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	3.89 1.63	FEB 03, 2005 MAR 14	1.00 .45	APR 06, 2005 MAY 05	.20 .52	JUN 16, 2005 JUL 28	.86 1.13
	HIGHES LOWES						



M

#### SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-13. SITE ID.--384438075234801. PERMIT NUMBER.--07473.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 17 ft; casing diameter 2 in., to 14 ft; screen diameter 2 in., from 14 to 17 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 46.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.58 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

DATE

OCT 29, 2004 DEC 17 WATER

LEVEL

4.22

1.99

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.06 ft below land surface, March 3, 1994 (recorder); lowest measured, 7.38 ft below land surface, September 1, 2002 (recorder).

WATER

LEVEL

79

.57

DATE

MAR 14, 2005

APR 07

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE

MAY 05, 2005

JUN 16

WATER

LEVEL

89

1.23

WATER

LEVEL

1.49

4.05

DATE

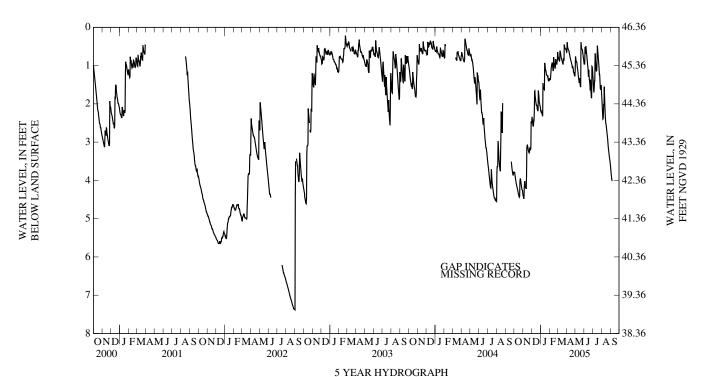
JUL 28, 2005

SEP 07

	DLC 17		1.77	TI IC O7		,	3014 10	1.23	51	21 07	7.03	
			HIGHEST LOWEST 4	.57 APR 0 1.22 OCT 2	7, 2005 9, 2004							
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1 2 3 4 5	3.79 3.80 3.80 3.85 3.94	3.78 3.79 3.79 3.80 3.85	4.40 4.41 4.47 4.47 4.18	4.35 4.40 4.40 4.18 4.09	2.47 2.34 2.41 2.48 2.57	2.33 2.33 2.33 2.41 2.48	2.18 2.20 2.19 2.24 2.24	2.08 2.18 2.18 2.18 2.21	1.34 1.37 1.36 1.36 1.22	1.34 1.34 1.34 1.19 1.11	0.65 0.74 0.78 0.81 0.85	0.63 0.65 0.73 0.78 0.81
6 7 8 9 10	3.98 4.03 4.07 4.10 4.16	3.94 3.98 4.03 4.07 4.10	4.09 4.02 4.12 4.18 4.20	4.00 4.01 4.02 4.12 4.18	2.58 2.58 2.42 2.43 2.19	2.57 2.28 2.28 2.19 1.63	2.21 2.31 2.31 1.46 1.56	2.12 2.18 1.41 1.43 1.46	1.15 1.05 0.99 0.94 0.92	1.05 0.97 0.94 0.89 0.87	0.86 0.88 0.87 0.61 0.64	0.83 0.86 0.46 0.55 0.61
11 12 13 14 15	4.18 4.21 4.25 4.29 4.31	4.16 4.18 4.21 4.25 4.28	4.20 4.22 3.86 3.14 3.09	4.19 3.86 3.14 3.09 3.07	1.67 1.66 1.79 1.90 1.94	1.64 1.63 1.65 1.79 1.90	1.59 1.59 1.62 1.63 0.93	1.56 1.57 1.59 0.83 0.86	0.99 1.04 1.13 1.13 0.78	0.92 0.99 1.04 0.73 0.73	0.66 0.73 0.78 0.81 0.85	0.64 0.66 0.73 0.74 0.81
16 17 18 19 20	4.37 4.40 4.42 4.44 4.42	4.31 4.37 4.40 4.42 4.03	3.08 3.12 3.15 3.21 3.24	3.07 3.07 3.12 3.15 3.21	1.97 2.04 2.04 2.04 2.13	1.94 1.95 2.01 2.02 2.02	0.97 1.06 1.13 1.13 1.17	0.93 0.97 1.06 1.10 1.11	0.88 0.94 1.00 1.04 1.08	0.78 0.88 0.94 1.00 1.03	0.86 0.89 0.94 0.96 0.96	0.85 0.86 0.89 0.94 0.71
21 22 23 24 25	4.03 3.96 3.96 4.02 4.08	3.96 3.95 3.96 3.96 4.02	3.27 3.28 3.25 3.15 3.15	3.24 3.25 3.15 3.05 3.05	2.16 2.18 2.18 1.65 1.74	2.11 2.16 1.65 1.64 1.65	1.24 1.24 1.25 1.27 1.29	1.17 1.09 1.08 1.22 1.24	1.03 0.83 0.91 0.92 0.95	0.80 0.79 0.83 0.88 0.90	0.81 0.86 0.86 0.45 0.49	0.71 0.81 0.26 0.32 0.45
26 27 28 29 30 31	4.13 4.19 4.24 4.25 4.26 4.35	4.08 4.13 4.19 4.24 4.25 4.26	3.20 3.20 3.13 2.46 2.49	3.15 3.13 2.46 2.45 2.45	1.81 1.94 1.97 2.01 2.07 2.08	1.74 1.81 1.94 1.93 2.01 2.06	1.28 1.36 1.40 1.40 1.39 1.34	1.24 1.27 1.36 1.39 1.27 1.29	0.96 0.90 0.86 	0.86 0.86 0.63 	0.54 0.56 0.56 0.56 0.58 0.61	0.49 0.54 0.39 0.45 0.56 0.58
MONTH	4.44	3.78	4.47	2.45	2.58	1.63	2.31	0.83	1.37	0.63	0.96	0.26

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2	0.65 0.64	0.61 0.23	1.10 0.76	0.58 0.67	0.96 0.96	0.90 0.96	1.23 1.34	1.09 1.23	1.79 1.93	1.62 1.78	3.67 3.74	3.60 3.67
3 4	0.39 0.48	0.26 0.39	0.82 0.87	0.76 0.82	0.96 0.52	0.41 0.43	1.51 1.62	1.34 1.51	2.10 2.24	1.93 2.10	3.84 3.92	3.74 3.84
5	0.53	0.48	0.91	0.87	0.60	0.52	1.70	1.58	2.40	2.24	3.98	3.92
6 7	0.56 0.58	0.53 0.56	0.91 0.93	0.87 0.86	0.69 0.49	0.48 0.36	1.58 1.40	1.17 1.32	2.39 2.24	2.04 1.82	4.02	3.98
8	0.59	0.55	1.03	0.93	0.58	0.49	1.40	0.49	2.00	1.82		
9 10	0.61 0.65	0.57 0.61	1.08 1.13	1.03 1.08	0.66 0.72	0.58 0.66	0.68 0.81	0.54 0.68	2.02 1.55	1.50 1.48		
11	0.70	0.65	1.20	1.13	0.80	0.72	0.93	0.81	1.82	1.55		
12	0.70	0.03	1.30	1.13	0.88	0.72	1.05	0.81	2.05	1.82		
13	0.77	0.72	1.33	1.30	0.94	0.87	1.14	1.04	2.25	2.05		
14 15	0.81 0.85	0.77 0.81	1.39 1.45	1.33 1.33	1.06 1.19	0.94 1.05	1.14 1.11	1.09 0.73	2.40 2.51	2.25 2.40		
16	0.87	0.85	1.33	1.13	1.29	0.94	0.78	0.41	2.53	2.48		
17	0.89	0.87	1.40	1.27	1.11	0.94	0.48	0.41	2.60	2.40		
18 19	0.93 0.97	0.89 0.93	1.49 1.55	1.40 1.49	1.28 1.35	1.11 1.28	0.59 0.68	0.47 0.59	2.69 2.71	2.60 2.69		
20	0.99	0.97	1.55	0.20	1.41	1.35	0.79	0.68	2.78	2.71		
21	1.06	0.99	0.39	0.26	1.53	1.41	0.88	0.78	2.87	2.77		
22 23	1.06 1.04	1.03 1.00	0.48 0.54	0.39 0.48	1.65 1.37	1.23 1.22	0.97 1.11	0.88 0.97	2.98 3.06	2.87 2.98		
24	1.07	1.00	0.57	0.54	1.56	1.37	1.24	1.10	3.15	3.06		
25	1.16	1.07	0.58	0.53	1.72	1.56	1.24	1.09	3.23	3.15		
26	1.19	1.16	0.59	0.53	1.84	1.72	1.40	1.24	3.29	3.23		
27 28	1.19 1.25	1.08 1.16	0.65 0.71	0.59 0.65	1.84 1.02	$0.88 \\ 0.89$	1.59 1.62	1.38 1.44	3.33 3.41	3.29 3.33		
29	1.27	1.25	0.77	0.71	1.03	0.90	1.62	1.47	3.48	3.41		
30 31	1.27	1.05	0.84 0.90	0.77 0.84	1.09	0.94	1.51	1.45	3.51	3.48 3.50		
							1.62	1.51	3.60			
MONTH	1.27	0.23	1.55	0.20	1.84	0.36	1.70	0.41	3.60	1.48	4.02	3.60
YEAR	4.47	0.20										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of12-14. SITE ID.--384438075234803. PERMIT NUMBER.--97468.

LOCATION.--Lat 38°44'38", long 75°23'48", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., from 77 to 80 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.94 ft above National Geodetic Veritical Datum of 1929. Measuring point: Top of metal sleeve, 2.56 ft above land surface.

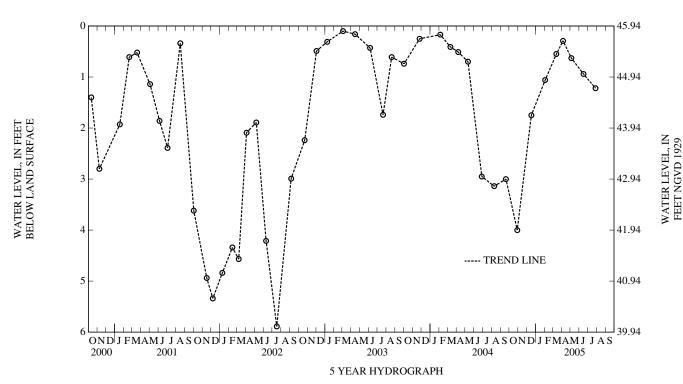
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land surface, Feruary 26, 1998; lowest measured, 7.25 ft below land surface, August 24, 1999.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.00 1.75	FEB 03, 2005 MAR 14	1.06 .55	APR 06, 2005 MAY 05	.29 .63	JUN 16, 2005 JUL 28	.94 1.22
	HIGHES LOWES						



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

### SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-15. SITE ID.--384441075233702. PERMIT NUMBER.--95737.

LOCATION.--Lat 38°44'41", long 75°23'37", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 82 ft; casing diameter 2 in., to 79 ft; screen diameter 2 in., from 79 to 82 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.72 ft above National Geodetic Veritical Datum of 1929. Measuring point: Top of metal sleeve, 2.59 ft above land surface.

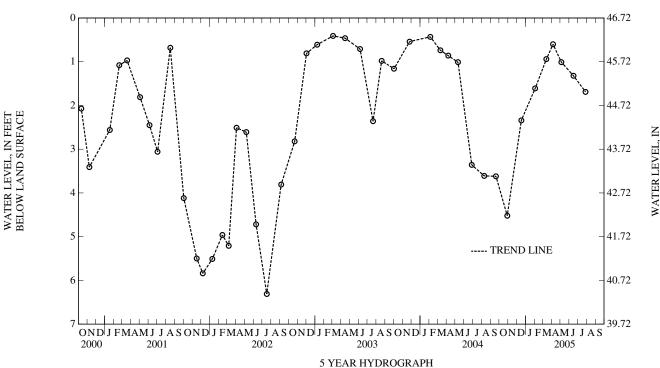
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.41 ft below land surface, March 4, 2003; lowest measured, 8.10 ft below land surface, December 4, 1998.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.52 2.34	FEB 03, 2005 MAR 14	1.61 .94	APR 06, 2005 MAY 05	.60 1.01	JUN 16, 2005 JUL 28	1.32 1.69
	HIGHES LOWES						



WELL NUMBER.--Of12-16. SITE ID.--384441075233701. PERMIT NUMBER.--95738.

LOCATION.--Lat 38°44'41", long 75°23'37", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.46 ft above land surface.

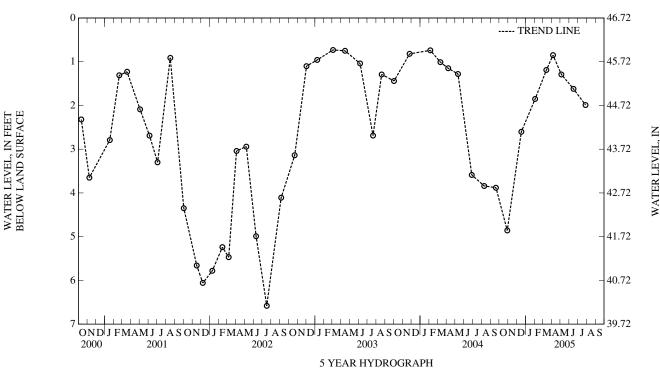
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft below land surface, April 4, 1994; lowest measured, 7.28 ft below land surface, October 19, 1995 and December 4, 1998.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.86 2.60	FEB 03, 2005 MAR 14	1.85 1.19	APR 06, 2005 MAY 05	.85 1.29	JUN 16, 2005 JUL 28	1.62 1.99
	HIGHES LOWES	ST .85 APR 06, 20 T 4.86 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

FEET NGVD 1929

### SUSSEX COUNTY—Continued

WELL NUMBER.--Of12-18. SITE ID.--384444075234101. PERMIT NUMBER.--95752.

LOCATION.--Lat 38°44'44", long 75°23'41", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., from 12 to 15 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.39 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

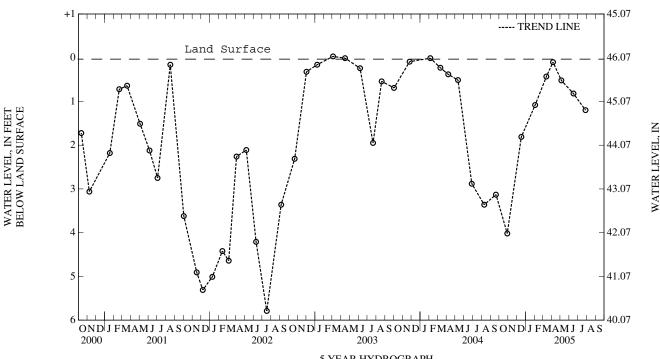
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft above land surface, March 4, 2003; lowest measured, 6.71 ft below land surface, October 19, 1995.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.02 1.81	FEB 03, 2005 MAR 14	1.08 .43	APR 06, 2005 MAY 05	.10 .52	JUN 16, 2005 JUL 28	.82 1.20
	HIGHES	T .10 APR 06, 20	005				

LOWEST 4.02 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--Of12-19. SITE ID.--384444075234102. PERMIT NUMBER.--95749.

LOCATION.--Lat 38°44'44", long 75°23'41", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 79 ft; casing diameter 2 in., to 76 ft; screen diameter 2 in., from 76 to 79 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45.96 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of metal sleeve, 2.62 ft above land surface.

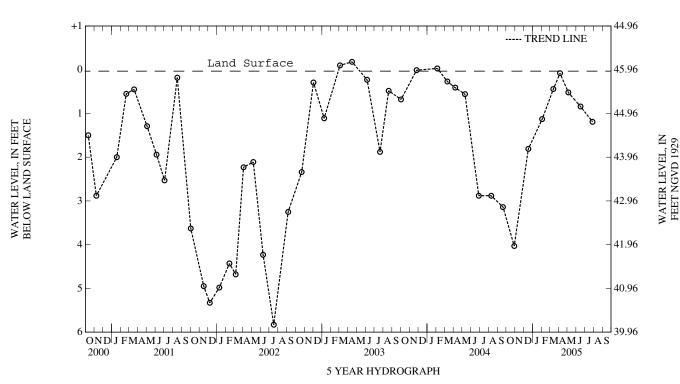
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft above land surface, April 15, 2003; lowest measured, 6.55 ft below land surface, October 19, 1995.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.03 1.81	FEB 03, 2005 MAR 14	1.13 .44	APR 06, 2005 MAY 05	.08 .52	JUN 16, 2005 JUL 28	.84 1.19
	HIGHES LOWES						



WELL NUMBER.--Of13-01. SITE ID.--384401075224903. PERMIT NUMBER.--95778.

LOCATION.--Lat 38°44'02", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 103 ft; casing diameter 2 in., to 100 ft; screen diameter 2 in., from 100 to 103 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.29 ft above land surface.

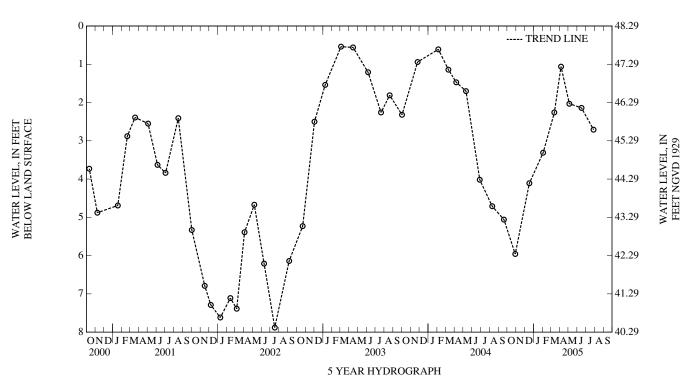
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.10 ft below land surface, April 18, 1994; lowest measured, 8.44 ft below land surface, October 19, 1995.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.96 4.11	FEB 03, 2005 MAR 14	3.31 2.26	APR 06, 2005 MAY 05	1.06 2.03	JUN 16, 2005 JUL 28	2.14 2.71
	HIGHES LOWES	ST 1.06 APR 06, 2 T 5.96 OCT 29, 20					



WELL NUMBER.--Of13-02. SITE ID.--384402075225002. PERMIT NUMBER.--95787.

LOCATION.--Lat 38°44'02", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 52 ft; casing diameter 2 in., to 49 ft; screen diameter 2 in., from 49 to 52 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.33 ft above land surface.

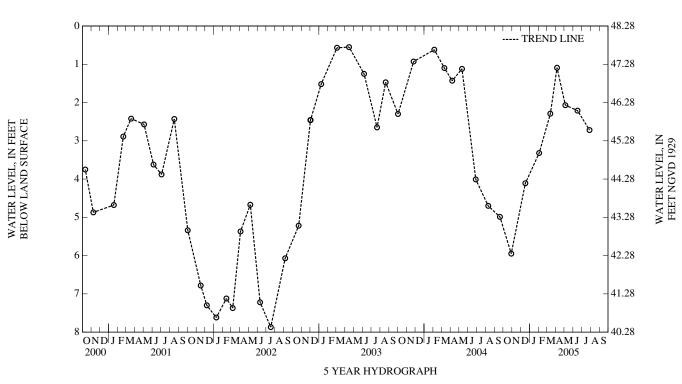
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.12 ft below land surface, March 22, 1994; lowest measured, 8.45 ft below land surface, December 4, 1998.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.95 4.11	FEB 03, 2005 MAR 14	3.32 2.29	APR 06, 2005 MAY 05	1.09 2.07	JUN 16, 2005 JUL 28	2.21 2.72
	HIGHES LOWES	T 1.09 APR 06, 2 T 5.95 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### GROUND-WATER LEVELS IN DELAWARE---Continued

#### SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-03. SITE ID.--384401075224901. PERMIT NUMBER.--95801.

 $LOCATION. -- Lat~38^{\circ}44'01", long~75^{\circ}22'49", Hydrologic~Unit~02060008, near~Redden~State~Forest.~Owner:~Delaware~Department~of~Transportation.$ 

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code:121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 2 in., to 17 ft; screen diameter 2 in., from 17 to 20 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 48.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.28 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, April 18, 1994; lowest measured, 9.28 ft below land surface, September 1, 2002 (recorder).

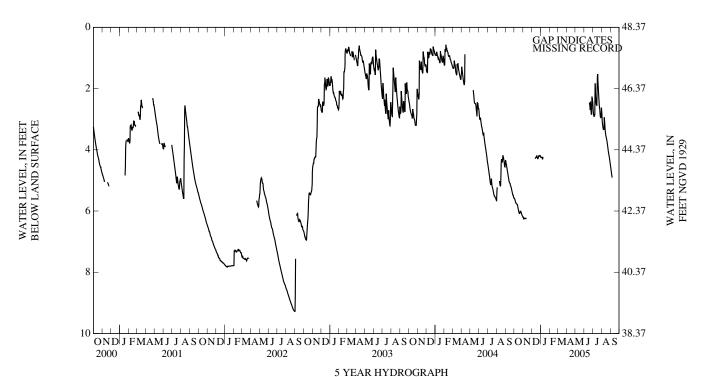
### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	6.13 4.23 3.43	MAR 14, 2005 APR 07 MAY 05	2.43 1.26 2.18	JUN 16, 2005 JUL 28 SEP 07	2.30 2.82 4.95
	HIGHEST LOWEST	T 1.26 APR 07, 2 6.13 OCT 29, 20			

DAY	MAX	MIN	MAX	MIN								
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1	5.59	5.57	6.21	6.18			4.24	4.20				
2	5.59	5.59	6.21	6.20			4.25	4.24				
3	5.62	5.59	6.26	6.20			4.24	4.24				
4	5.63	5.62	6.26	6.24			4.25	4.24				
5	5.69	5.63	6.25	6.24			4.25	4.24				
6	5.71	5.69	6.24	6.23			4.25	4.24				
7	5.74	5.71	6.23	6.23			4.30	4.25				
8	5.75	5.74	6.24	6.23			4.30	4.23				
9	5.77	5.75	6.24	6.23			4.23	4.23				
10	5.77	5.77	6.25	6.24								
11	5.78	5.77	6.25	6.24								
12	5.79	5.78	6.24	6.24								
13	5.82	5.79	6.24	6.03	4.29	4.25						
14	5.89	5.82			4.26	4.25						
15	5.92	5.89			4.26	4.25						
16	5.99	5.92			4.25	4.23						
17	6.03	5.99			4.23	4.20						
18	6.04	6.03			4.20	4.19						
19	6.08	6.04			4.20	4.19						
20	6.08	6.06			4.26	4.19						
21	6.06	6.00			4.26	4.26						
22	6.01	6.00			4.29	4.26						
23	6.01	6.00			4.29	4.24						
24	6.01	6.00			4.24	4.19						
25	6.04	6.01			4.20	4.19						
26	6.07	6.04			4.20	4.16						
27	6.10	6.07			4.19	4.16						
28	6.12	6.10			4.21	4.19						
29	6.16	6.12			4.21	4.18						
30	6.17	6.16			4.21	4.19						
31	6.18	6.16			4.20	4.20						
MONTH	6.18	5.57	6.26	6.03	4.29	4.16	4.30	4.20				

					SUSSEA	COUNTI	Continucu					
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JU:	NE	JUI	LY	AUG	UST	SEPTE	MBER
1							2.51	2.36	2.78	2.62	4.55	4.47
2							2.64	2.51	2.93	2.78	4.62	4.55
3							2.79	2.64	3.07	2.93	4.70	4.62
4							2.86	2.79	3.17	3.07	4.77	4.70
5							2.91	2.86	3.28	3.17	4.85	4.77
6							2.91	2.67	3.32	3.26	4.91	4.85
7							2.86	2.78	3.35	3.20	4.91	4.65
8							2.86	1.59	3.32	3.22		
9							1.83	1.59	3.34	2.94		
10							2.07	1.83	2.94	2.90		
11							2.26	2.07	3.07	2.92		
12							2.41	2.26	3.23	3.07		
13							2.51	2.40	3.36	3.23		
14							2.51	2.50	3.45	3.36		
15							2.56	1.97	3.54	3.45		
16							2.02	1.60	3.55	3.54		
17							1.61	1.31	3.61	3.53		
18							1.53	1.31	3.68	3.61		
19					2.46	2.37	1.76	1.53	3.70	3.68		
20					2.51	2.45	1.99	1.76	3.75	3.70		
21					2.57	2.51	2.16	1.99	3.82	3.75		
22					2.70	2.32	2.30	2.16	3.92	3.82		
23					2.43	2.31	2.47	2.30	3.98	3.92		
24					2.61	2.43	2.61	2.47	4.06	3.98		
25					2.75	2.61	2.66	2.55	4.13	4.06		
26					2.84	2.75	2.78	2.66	4.18	4.13		
27					2.84	2.14	2.91	2.78	4.22	4.18		
28					2.26	2.14	2.94	2.80	4.29	4.22		
29					2.29	2.21	2.95	2.94	4.35	4.29		
30					2.36	2.22	2.94	2.50	4.38	4.35		
31							2.62	2.52	4.47	4.38		
MONTH					2.84	2.14	2.95	1.31	4.47	2.62	4.91	4.47
YEAR	6.26	1.31										

# Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

### SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-04. SITE ID.--384403075224701. PERMIT NUMBER.--95779.

LOCATION.--Lat 38°44'03", long 75°22'47", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.75 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.41 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

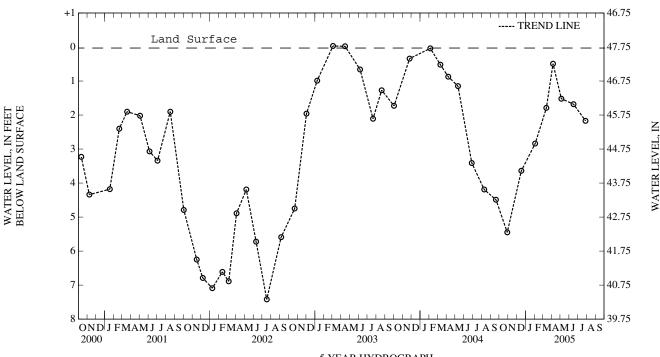
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, April 18, 1994; lowest measured, 7.98 ft below land surface, October 19, 1995.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.45 3.64	FEB 03, 2005 MAR 14	2.84 1.79	APR 06, 2005 MAY 05	.49 1.52	JUN 16, 2005 JUL 28	1.68 2.17
	HIGHES	ST .49 APR 06, 20	005				

LOWEST 5.45 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--Of13-05. SITE ID.--384404075225001. PERMIT NUMBER.--95802.

LOCATION.--Lat 38°44'04", long 75°22'50", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.26 ft above land surface.

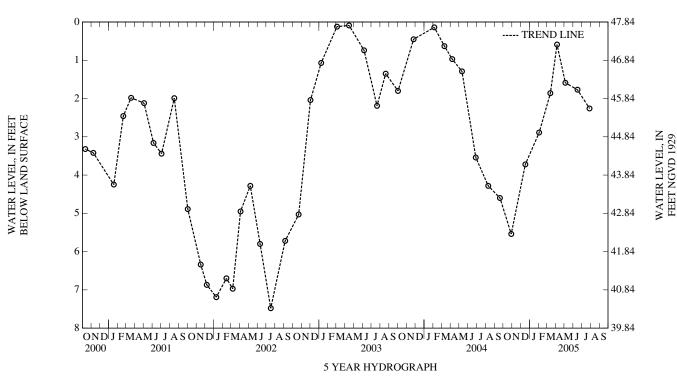
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.38 ft above land surface, April 18, 1994; lowest measured, 8.04 ft below land surface, October 19, 1995.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.54 3.72	FEB 03, 2005 MAR 14	2.89 1.86	APR 06, 2005 MAY 05	.59 1.59	JUN 16, 2005 JUL 28	1.77 2.26
	HIGHES LOWES	ST .59 APR 06, 20 ST 5.54 OCT 29, 20					



## SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-06. SITE ID.--384405075224701. PERMIT NUMBER.--95780.

LOCATION.--Lat 38°44'05", long 75°22'47", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.22 ft above land surface.

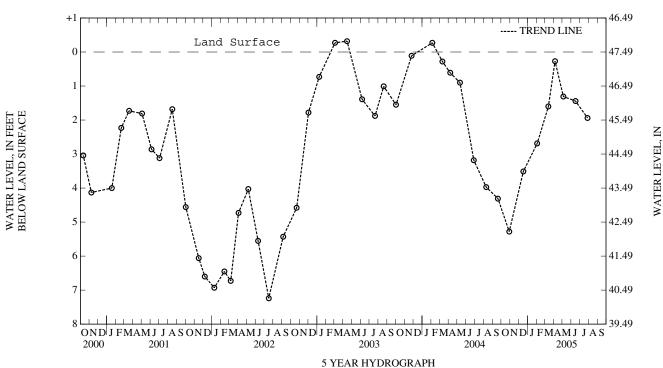
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.76 ft above land surface, April 18, 1994; lowest measured, 7.82 ft below land surface, October 19, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.28 3.51	FEB 03, 2005 MAR 14	2.69 1.60	APR 06, 2005 MAY 05	.27 1.31	JUN 16, 2005 JUL 28	1.44 1.94
	HIGHES LOWES	ST .27 APR 06, 20 T 5.28 OCT 29, 20					



WELL NUMBER.--Of13-07. SITE ID.--384405075224601. PERMIT NUMBER.--95781.

LOCATION.--Lat 38°44'05", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

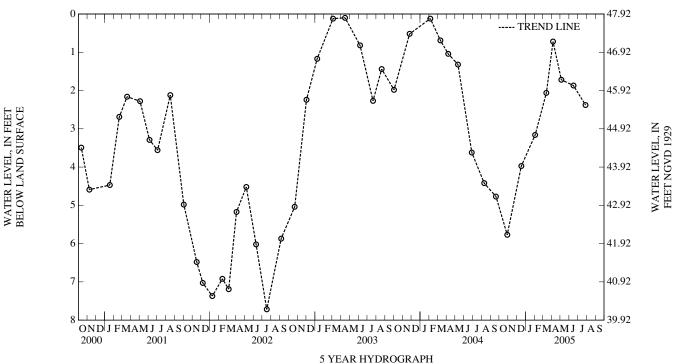
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.37 ft above land surface, April 18, 1994; lowest measured, 9.21 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.77 3.97	FEB 03, 2005 MAR 14	3.16 2.06	APR 06, 2005 MAY 05	.72 1.72	JUN 16, 2005 JUL 28	1.87 2.38
		ST .72 APR 06, 20 ST 5.77 OCT 29, 20					



WELL NUMBER.--Of13-08. SITE ID.--384406075224601. PERMIT NUMBER.--97463.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 48.91 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.63 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.40 ft below land surface, March 3, 1994 (recorder); lowest measured, 10.05 ft below land surface, August 31, 2002 (recorder).

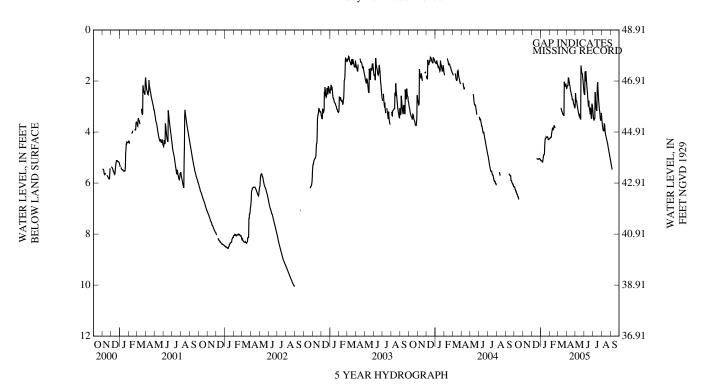
## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	6.77 5.06 4.22	MAR 14, 2005 APR 07 MAY 05	3.10 1.81 2.77	JUN 16, 2005 JUL 28 SEP 07	2.91 3.40 5.51
		T 1.81 APR 07, 2 Γ 6.77 OCT 29, 20			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBRU	UARY	MAR	RCH
1	6.14	6.14					5.10	5.06	4.26	4.25		
2	6.16	6.14					5.13	5.10	4.25	4.24		
3	6.17	6.16					5.13	5.11	4.24	4.21		
4	6.23	6.17					5.13	5.10	4.21	4.21		
5	6.24	6.23					5.13	5.13	4.21	4.20		
6	6.30	6.24					5.13	5.11	4.20	4.20		
7	6.30	6.30					5.18	5.12	4.20	4.05		
8	6.36	6.30					5.18	5.08	4.05	4.00		
9	6.36	6.36					5.08	5.02	4.00	3.92		
10	6.41	6.36					5.02	4.90	3.92	3.85		
11	6.44	6.41					4.90	4.90	3.85	3.85		
12	6.44	6.44					4.90	4.89	3.86	3.85		
13	6.50	6.44					4.89	4.88	3.91	3.86	3.05	2.97
14	6.54	6.50					4.88	4.57	3.91	3.87	3.11	3.05
15	6.54	6.54					4.57	4.35	3.87	3.76	3.18	3.11
16	6.59	6.54					4.35	4.26	3.76	3.75	3.19	3.18
17	6.63	6.59					4.26	4.26	3.75	3.75	3.22	3.19
18	6.64	6.63			5.06	5.05	4.26	4.25	3.77	3.75	3.28	3.22
19					5.05	5.05	4.25	4.18	3.80	3.77	3.30	3.28
20					5.05	5.05	4.19	4.18	3.84	3.80	3.29	3.29
21					5.05	5.04	4.21	4.19			3.33	3.29
22					5.07	5.04	4.21	4.15			3.35	3.33
23					5.07	5.06	4.21	4.15			3.35	2.02
24					5.06	5.05	4.21	4.18			2.03	2.02
25					5.05	5.05	4.19	4.18			2.08	2.03
26					5.05	5.04	4.21	4.18			2.16	2.08
27					5.04	5.04	4.29	4.21			2.20	2.16
28					5.04	5.04	4.30	4.29			2.20	1.97
29					5.04	5.03	4.30	4.27			2.10	1.97
30					5.08	5.03	4.27	4.25			2.18	2.10
31					5.08	5.06	4.26	4.25			2.23	2.18
MONTH	6.64	6.14			5.08	5.03	5.18	4.15	4.26	3.75	3.35	1.97

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	Υ	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	2.29 2.28 2.19 2.19 2.17	2.23 2.19 2.19 2.17 2.17	2.95 2.47 2.63 2.74 2.79	2.29 2.35 2.47 2.63 2.74	2.50 2.53 2.53 1.63 1.83	2.39 2.50 1.49 1.49 1.63	3.15 3.26 3.40 3.47 3.53	2.99 3.15 3.26 3.40 3.47	3.43 3.57 3.69 3.78 3.88	3.25 3.43 3.57 3.69 3.78	5.13 5.21 5.29 5.36 5.41	5.06 5.13 5.21 5.29 5.36
6 7 8 9 10	2.17 1.88 1.88 1.95 2.02	1.82 1.81 1.83 1.86 1.95	2.79 2.84 2.97 3.05 3.10	2.79 2.78 2.84 2.97 3.05	2.01 1.61 1.82 2.00 2.13	1.61 1.38 1.60 1.82 2.00	3.53 3.47 3.47 2.43 2.68	3.33 3.40 2.14 2.16 2.43	3.93 3.95 3.95 3.95 3.66	3.88 3.87 3.86 3.66 3.56	5.47   	5.41   
11 12 13 14 15	2.12 2.14 2.22 2.33 2.41	2.02 2.12 2.14 2.22 2.33	3.16 3.25 3.27 3.31 3.37	3.10 3.16 3.25 3.27 3.31	2.29 2.43 2.57 2.73 2.86	2.13 2.29 2.43 2.57 2.73	2.88 2.99 3.12 3.14 3.17	2.68 2.88 2.99 3.12 2.54	3.71 3.86 3.98 4.07 4.14	3.57 3.71 3.86 3.98 4.07	  	
16 17 18 19 20	2.43 2.47 2.53 2.60 2.65	2.41 2.43 2.47 2.53 2.60	3.34 3.40 3.45 3.49 3.49	3.23 3.31 3.40 3.45 1.23	3.00 2.77 2.98 3.08 3.13	2.55 2.55 2.77 2.98 3.08	2.58 2.13 2.05 2.30 2.53	2.10 1.74 1.78 2.05 2.30	4.17 4.23 4.29 4.33 4.37	4.14 4.17 4.23 4.29 4.33	   	  
21 22 23 24 25	2.74 2.74 2.73 2.78 2.88	2.65 2.73 2.73 2.73 2.78	1.39 1.51 1.61 1.68 1.70	1.23 1.39 1.51 1.61 1.63	3.20 3.31 3.04 3.22 3.35	3.13 2.98 2.95 3.04 3.22	2.69 2.85 3.00 3.14 3.18	2.53 2.69 2.84 3.00 3.12	4.43 4.51 4.57 4.65 4.71	4.37 4.43 4.51 4.57 4.65	  	  
26 27 28 29 30 31	2.91 2.93 3.00 3.05 3.05	2.88 2.90 2.93 3.00 2.93	1.73 1.88 1.97 2.12 2.26 2.39	1.63 1.73 1.88 1.97 2.12 2.26	3.46 3.46 2.89 2.92 2.99	3.35 2.79 2.79 2.84 2.85	3.31 3.47 3.53 3.54 3.53 3.25	3.18 3.31 3.39 3.53 3.14 3.15	4.78 4.83 4.88 4.95 4.99 5.06	4.71 4.78 4.83 4.88 4.95 4.99	   	   
MONTH YEAR	3.05 6.64	1.81 1.23	3.49	1.23	3.46	1.38	3.54	1.74	5.06	3.25	5.47	5.06

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-09. SITE ID.--384406075224603. PERMIT NUMBER.--97469.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 77 ft; screen diameter 2 in., from 77 to 80 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.30 ft above land surface.

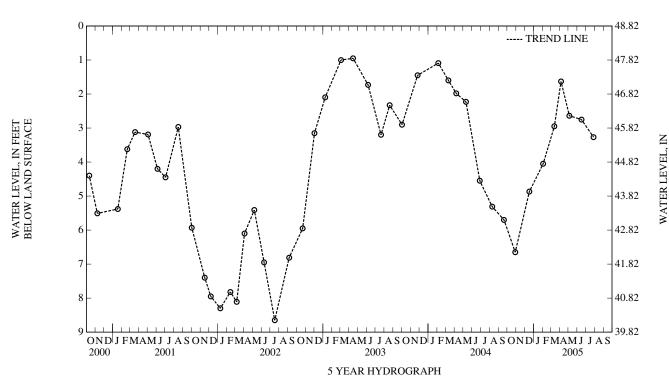
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.60 ft below land surface, April 18, 1994; lowest measured, 9.53 ft below land surface, October 26, 1993.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	6.65 4.87	FEB 03, 2005 MAR 14	4.05 2.95	APR 06, 2005 MAY 05	1.63 2.64	JUN 16, 2005 JUL 28	2.75 3.27
	HIGHES LOWES	ST 1.63 APR 06, 2 T 6.65 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of13-10. SITE ID.--384406075224602. PERMIT NUMBER.--95789.

LOCATION.--Lat 38°44'06", long 75°22'46", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 48 ft; casing diameter 2 in., to 45 ft; screen diameter 2 in., from 43 to 45 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.86 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.43 ft above land surface.

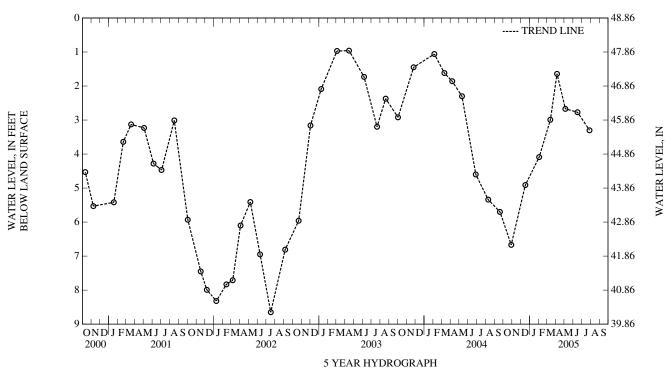
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.59 ft below land surface, April 18, 1994; lowest measured, 9.24 ft below land surface, October 19, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	6.67 4.91	FEB 03, 2005 MAR 14	4.09 2.99	APR 06, 2005 MAY 05	1.64 2.67	JUN 16, 2005 JUL 28	2.77 3.30
	HIGHES LOWES	ST 1.64 APR 06, 2 T 6.67 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

## SUSSEX COUNTY—Continued

WELL NUMBER.--Of13-11. SITE ID.--384406075224401. PERMIT NUMBER.--95788.

LOCATION.--Lat 38°44'06", long 75°22'44", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.67 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.12 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

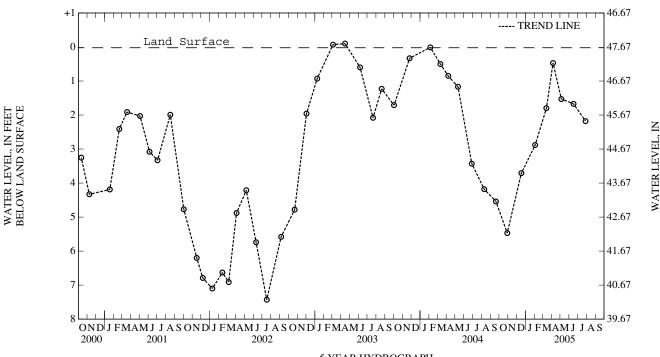
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.56 ft above land surface, April 18, 1994; lowest measured, 7.98 ft below land surface, October 19, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.47 3.71	FEB 03, 2005 MAR 14	2.88 1.80	APR 06, 2005 MAY 05	.47 1.53	JUN 16, 2005 JUL 28	1.67 2.18
	HIGHES	ST .47 APR 06, 20	005				

LOWEST 5.47 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--Of22-02. SITE ID.--384343075230402. PERMIT NUMBER.--95785.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 56 ft; casing diameter 2 in., to 53 ft; screen diameter 2 in., from 53 to 56 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.18 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

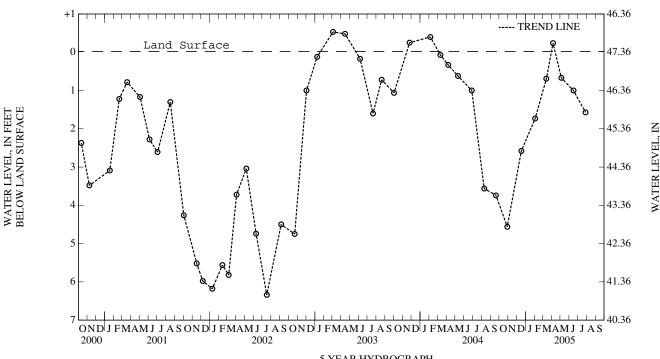
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.60 ft above land surface, March 22, 1994; lowest measured, 7.07 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004	4.56	FEB 03, 2005	1.73	APR 06, 2005	+.24	JUN 16, 2005	1.00
DEC 17	2.58	MAR 14	.69	MAY 05	.67	JUL 28	1.57

HIGHEST +.24 APR 06, 2005 LOWEST 4.56 OCT 29, 2004



5 YEAR HYDROGRAPH

FEET NGVD 1929

## SUSSEX COUNTY—Continued

WELL NUMBER.--Of22-03. SITE ID.--384343075230403. PERMIT NUMBER.--95798.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 2 in., to 96 ft; screen diameter 2 in., from 96 to 99 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.41 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

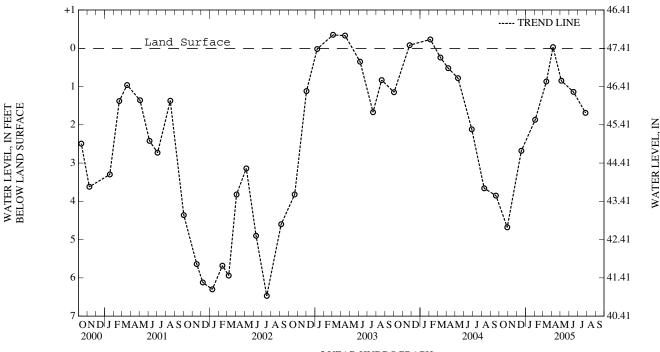
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.47 ft above land surface, March 22, 1994; lowest measured, 7.19 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004	4.68	FEB 03, 2005	1.87	APR 06, 2005	+.03	JUN 16, 2005	1.14
DEC 17	2.68	MAR 14	.87	MAY 05	.85	JUL 28	1.69

HIGHEST +.03 APR 06, 2005 LOWEST 4.68 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--Of22-04. SITE ID.--384343075230401. PERMIT NUMBER.--95800.

LOCATION.--Lat 38°43'43", long 75°23'04", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., from 12 to 15 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 47.62 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.68 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.75 ft above land surface, March 3, 1994 (recorder); lowest measured, 7.72 ft below land surface, December 4, 1998.

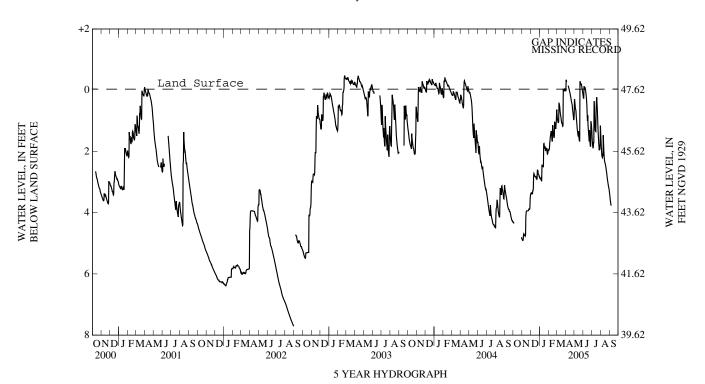
## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	4.77 2.81 1.92	MAR 14, 2005 APR 07 MAY 05	.73 +.23 .54	JUN 16, 2005 JUL 28 SEP 07	.87 1.68 3.80
		ST +.23 APR 07, 2 T 4.77 OCT 29, 20			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	4.32 4.33 4.33 4.35	4.29 4.32 4.33 4.33	4.87 4.88 4.91 4.91 4.86	4.85 4.87 4.88 4.86 4.73	3.39 3.36 3.35 3.35 3.39	3.36 3.32 3.31 3.34 3.34	2.86 2.88 2.87 2.90 2.90	2.79 2.86 2.84 2.84 2.88	1.95 1.96 1.93 1.91 1.73	1.92 1.93 1.90 1.71 1.59	0.63 0.75 0.88 0.94 1.01	0.58 0.60 0.75 0.88 0.93
6 7 8 9	  	  	4.73 4.69 4.71 4.74 4.75	4.69 4.67 4.67 4.71 4.74	3.39 3.38 3.28 3.28 3.21	3.37 3.26 3.26 3.21 2.79	2.88 2.96 2.96 2.43 2.46	2.82 2.87 2.43 2.41 2.40	1.64 1.52 1.45 1.39 1.33	1.51 1.43 1.39 1.32 1.28	1.05 1.07 1.02 0.41 0.46	0.97 1.01 0.29 0.34 0.41
11 12 13 14 15	  	   	4.74 4.76 4.71 4.13 4.01	4.74 4.71 4.13 4.01 3.95	2.79 2.72 2.74 2.79 2.81	2.72 2.68 2.68 2.74 2.78	2.49 2.49 2.50 2.50 1.75	2.46 2.47 2.47 1.73 1.73	1.44 1.53 1.66 1.66 1.14	1.33 1.44 1.53 1.12 1.11	0.48 0.58 0.69 0.78 0.82	0.45 0.48 0.58 0.69 0.78
16 17 18 19 20	  	  	3.95 3.94 3.94 3.94 3.94	3.94 3.93 3.93 3.93 3.93	2.81 2.83 2.83 2.82 2.88	2.78 2.77 2.80 2.79 2.81	1.74 1.81 1.88 1.87 1.86	1.68 1.72 1.81 1.78 1.78	1.23 1.32 1.45 1.52 1.56	1.10 1.23 1.32 1.45 1.50	0.91 0.97 1.03 1.08 1.08	0.82 0.91 0.97 1.03 1.00
21 22 23 24 25	  	  	3.94 3.94 3.93 3.90 3.88	3.93 3.93 3.90 3.86 3.83	2.89 2.91 2.90 2.62 2.61	2.86 2.89 2.62 2.56 2.57	1.97 1.97 1.88 1.92 1.93	1.86 1.67 1.66 1.85 1.87	1.50 1.03 1.17 1.18 1.23	1.00 0.98 1.02 1.13 1.13	1.13 1.18 1.17 -0.02 -0.01	1.02 1.13 -0.05 -0.05 -0.02
26 27 28 29 30 31	   4.80 4.85	  4.80 4.80	3.89 3.89 3.85 3.54 3.44	3.88 3.85 3.54 3.44 3.39	2.63 2.74 2.75 2.76 2.81 2.81	2.58 2.63 2.70 2.70 2.76 2.79	1.92 2.05 2.09 2.08 2.01 1.94	1.88 1.92 2.05 2.01 1.86 1.87	1.26 1.11 0.99 	1.04 0.99 0.63 	0.01 0.02 0.02 -0.06 -0.02 0.00	-0.01 0.01 -0.12 -0.11 -0.06 -0.02
MONTH	4.85	4.29	4.91	3.39	3.39	2.56	2.96	1.66	1.96	0.63	1.18	-0.12

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	0.02 0.02 -0.34 -0.29 -0.27	0.00 -0.38 -0.38 -0.34 -0.29	0.76 0.29 0.38 0.48 0.60	0.20 0.24 0.29 0.38 0.48	0.21 0.26 0.26 -0.13 -0.08	0.12 0.21 -0.14 -0.14 -0.13	1.35 1.52 1.70 1.81 1.88	1.15 1.35 1.52 1.70 1.80	1.43 1.64 1.85 2.01 2.14	1.16 1.43 1.64 1.85 2.01	3.40 3.48 3.56 3.65 3.71	3.31 3.40 3.48 3.56 3.65
6 7 8 9 10	  -0.15	   -0.19	0.63 0.67 0.84 0.98 1.08	0.56 0.55 0.67 0.84 0.98	-0.01 -0.09 -0.08 -0.01 0.05	-0.09 -0.19 -0.15 -0.08 -0.01	1.88 1.71 1.71 0.36 0.59	1.33 1.60 0.20 0.20 0.36	2.18 2.20 2.12 2.14 1.47	2.11 1.85 1.89 1.38 1.37	3.77   	3.71   
11 12 13 14 15	-0.11 -0.08 -0.05 0.00 0.05	-0.15 -0.11 -0.08 -0.05 0.00	1.19 1.34 1.39 1.44 1.51	1.08 1.19 1.34 1.38 1.23	0.13 0.23 0.34 0.51 0.78	0.05 0.13 0.23 0.34 0.51	0.88 1.15 1.32 1.34 1.35	0.59 0.88 1.15 1.18 0.49	1.78 2.00 2.17 2.28 2.35	1.47 1.78 2.00 2.16 2.28	  	  
16 17 18 19 20	0.08 0.12 0.18 0.23 0.28	0.05 0.08 0.12 0.18 0.23	1.34 1.52 1.59 1.66 1.66	1.04 1.34 1.52 1.59 -0.33	1.00 0.82 1.14 1.30 1.41	0.48 0.51 0.82 1.14 1.30	0.67 0.38 0.23 0.37 0.58	0.34 0.13 0.13 0.23 0.37	2.37 2.41 2.49 2.51 2.57	2.32 2.21 2.41 2.49 2.51	  	  
21 22 23 24 25	0.36 0.39 0.42 0.48 0.61	0.28 0.36 0.36 0.36 0.48	-0.30 -0.26 -0.22 -0.20 -0.18	-0.33 -0.30 -0.26 -0.22 -0.22	1.55 1.67 1.30 1.57 1.74	1.41 0.99 1.00 1.30 1.57	0.86 1.13 1.39 1.61 1.64	0.58 0.86 1.13 1.39 1.39	2.64 2.75 2.81 2.89 2.97	2.57 2.64 2.75 2.81 2.89	  	  
26 27 28 29 30 31	0.69 0.74 0.88 0.96 0.96	0.61 0.60 0.74 0.88 0.68	-0.19 -0.12 -0.08 -0.01 0.05 0.12	-0.22 -0.19 -0.12 -0.08 -0.01 0.05	1.83 1.83 1.01 1.06 1.15	1.74 0.64 0.71 0.77 0.88	1.80 1.96 1.89 1.90 1.75 1.16	1.63 1.59 1.59 1.75 0.81 0.94	3.02 3.07 3.14 3.20 3.23 3.31	2.97 3.02 3.07 3.14 3.20 3.23	   	   
MONTH	0.96	-0.38	1.66	-0.33	1.83	-0.19	1.96	0.13	3.31	1.16	3.77	3.31
YEAR	4.91	-0.38										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of22-05. SITE ID.--384343075230301. PERMIT NUMBER.--95786.

LOCATION.--Lat 38°43'43", long 75°23'03", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.29 ft above land surface.

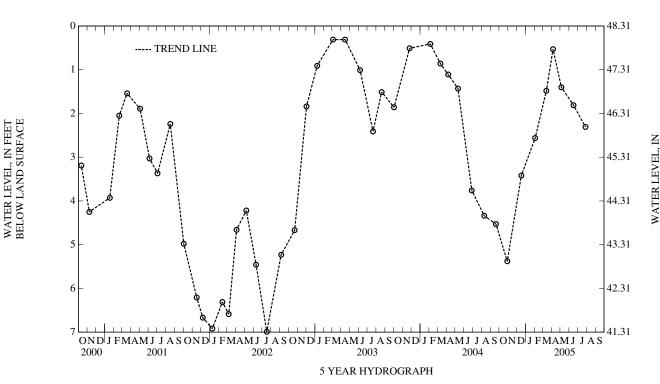
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.24 ft below land surface, February 25, 1998; lowest measured, 7.72 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.38 3.42	FEB 03, 2005 MAR 14	2.56 1.48	APR 06, 2005 MAY 05	.53 1.40	JUN 16, 2005 JUL 28	1.81 2.31
	HIGHES LOWES	ST .53 APR 06, 20 T 5.38 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

WELL NUMBER.--Of22-06. SITE ID.--384343075230201. PERMIT NUMBER.--95797.

LOCATION.--Lat 38°43'43", long 75°23'02", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.46 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.32 ft above land surface.

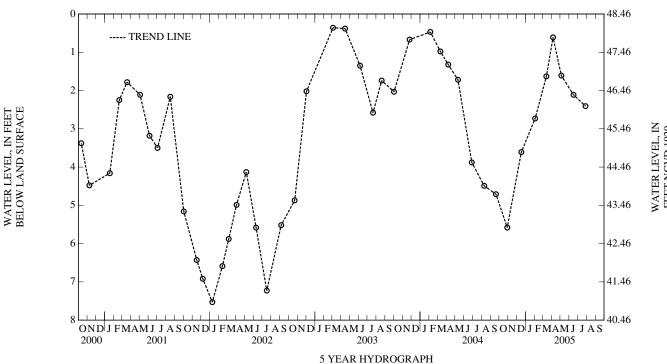
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft. below land surface, March 22, 1994; lowest measured, 8.00 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.58 3.61	FEB 03, 2005 MAR 14	2.73 1.63	APR 06, 2005 MAY 05	.61 1.61	JUN 16, 2005 JUL 28	2.11 2.41
	HIGHES LOWES	ST .61 APR 06, 20 ST 5.58 OCT 29, 20					



3 TEAR II DROGRAITI

WELL NUMBER.--Of22-07. SITE ID.--384343075230101. PERMIT NUMBER.--95796.

LOCATION.--Lat 38°43'43", long 75°23'01", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.13 ft above land surface.

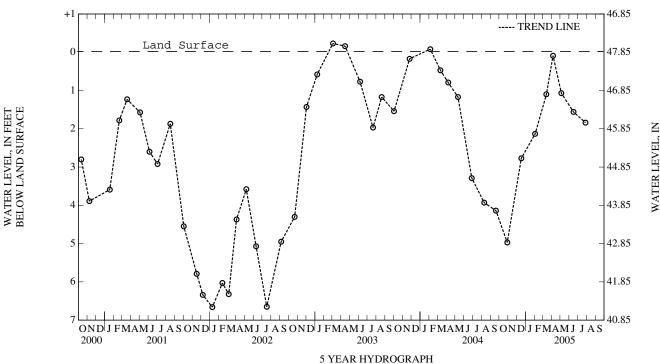
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.42 ft above land surface, February 25, 1998; lowest measured, 7.42 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.97 2.77	FEB 03, 2005 MAR 14	2.13 1.10	APR 06, 2005 MAY 05	.09 1.07	JUN 16, 2005 JUL 28	1.56 1.84
	HIGHES LOWES						



FEET NGVD 1929

## SUSSEX COUNTY—Continued

WELL NUMBER.--Of22-08. SITE ID.--384344075230301. PERMIT NUMBER.--95799.

LOCATION.--Lat 38°43'44", long 75°23'03", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 48.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.96 ft above land surface.

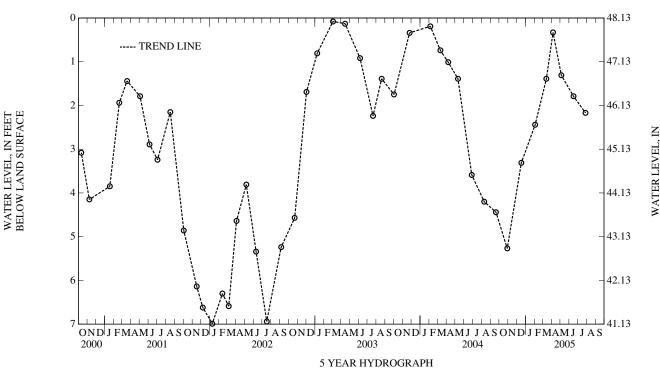
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.00 ft at land surface, February 25, 1998; lowest measured, 8.74 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.27 3.31	FEB 03, 2005 MAR 14	2.44 1.39	APR 06, 2005 MAY 05	.33 1.31	JUN 16, 2005 JUL 28	1.79 2.17
	HIGHES LOWES	ST .33 APR 06, 20 T 5.27 OCT 29, 20					



WELL NUMBER.--Of22-09. SITE ID.--384344075230102. PERMIT NUMBER.--95784.

LOCATION.--Lat 38°43'44", long 75°23'01", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 2 in., to 52 ft; screen diameter 2 in., from 52 to 55 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.34 ft above land surface.

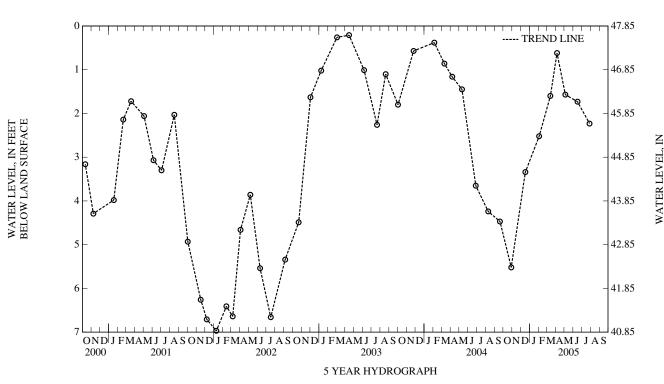
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.09 ft above land surface, March 22, 1994; lowest measured, 7.78 ft below land surface, December 4, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.52 3.34	FEB 03, 2005 MAR 14	2.52 1.60	APR 06, 2005 MAY 05	.62 1.57	JUN 16, 2005 JUL 28	1.73 2.23
	HIGHES LOWES	ST .62 APR 06, 20 ST 5.52 OCT 29, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

WELL NUMBER.--Of22-10. SITE ID.--384341075230003. PERMIT NUMBER.--95777.

LOCATION.--Lat 38°43'41", long 75°23'00", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 2 in., to 115 ft; screen diameter 2 in., from 115 to 118 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.20 ft above land surface.

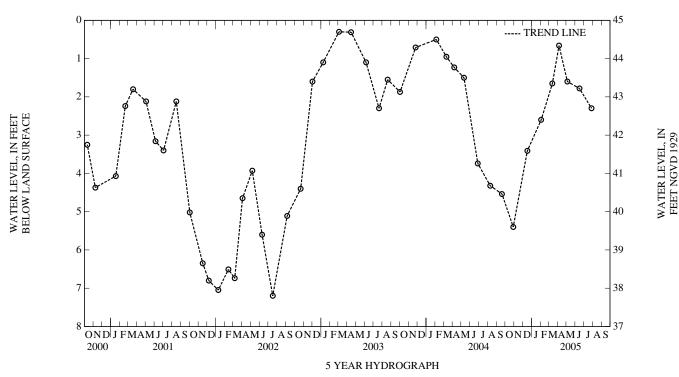
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.00 ft at land surface, March 22, 1994; lowest measured, 7.84 ft below land surface, December 4, 1998.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	5.40 3.41	FEB 03, 2005 MAR 14	2.60 1.65	APR 06, 2005 MAY 05	.66 1.60	JUN 16, 2005 JUL 28	1.78 2.30
	HIGHES						



WELL NUMBER.--Of22-11. SITE ID.--384341075230001. PERMIT NUMBER.--95795.

LOCATION.--Lat 38°43'44", long 75°23'01", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 16 ft; casing diameter 2 in., to 13 ft; screen diameter 2 in., from 13 to 16 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to July 2001.

DATUM.--Altitude of land surface is 47.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 2.70 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.53 ft above land surface, March 3, 1994 (recorder); lowest measured, 7.52 ft below land surface, September 15, 1999 (recorder).

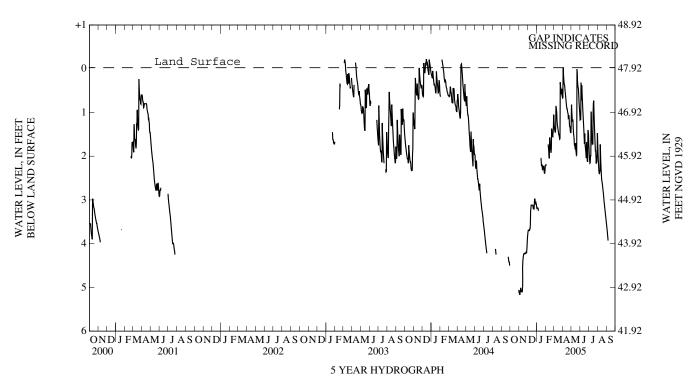
## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	5.06 3.10 2.18	MAR 14, 2005 APR 07 MAY 05	1.23 .33 1.17	JUN 16, 2005 JUL 28 SEP 07	1.61 1.91 3.96
	HIGHES LOWES	ST .33 APR 07, 20 T 5.06 OCT 29, 20			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	  	  	5.12 5.12 5.16 5.16 5.07	5.07 5.11 5.12 5.07 5.07	3.79 3.75 3.69 3.69 3.70	3.75 3.69 3.69 3.69 3.69	3.16 3.19 3.18 3.19 3.19	3.10 3.16 3.18 3.18 3.18	2.21 2.21 2.19 2.19	2.20 2.19 2.18 2.07	1.05 1.18 1.30 1.35 1.41	0.93 0.99 1.18 1.30 1.34
6 7 8 9 10	  	  	5.07 5.01 5.06 5.10 5.10	5.01 4.99 4.99 5.06 5.10	3.70 3.70 3.66 3.66 3.58	3.69 3.66 3.66 3.58 3.26	3.19 3.25 	3.17 3.17 	   1.73	   1.67	1.45 1.45 1.36 0.85 0.91	1.35 1.36 0.76 0.76 0.85
11 12 13 14 15	  	  	5.10 5.10 5.01 4.42 4.31	5.08 5.01 4.42 4.31 4.28	3.26 3.20 3.12 3.12 3.12	3.20 3.12 3.11 3.12 3.12	   2.05	   2.04	1.81 1.89 2.04 2.04 1.59	1.72 1.81 1.89 1.59 1.47	0.92 1.09 1.19 1.29 1.35	0.88 0.92 1.09 1.19 1.29
16 17 18 19 20	  	  	4.28 4.24 4.24 4.22 4.22	4.24 4.24 4.22 4.22 4.22	3.12 3.12 3.12 3.12 3.19	3.12 3.11 3.11 3.11 3.12	2.05 2.13 2.23 2.21 2.19	1.99 2.01 2.13 2.12 2.13	1.57 1.69 1.80 1.88 1.92	1.41 1.57 1.69 1.80 1.82	1.37 1.41 1.49 1.51 1.51	1.35 1.36 1.41 1.49 1.45
21 22 23 24 25	  	  	4.23 4.23 4.22 4.22 4.20	4.22 4.22 4.22 4.16 4.14	3.19 3.21 3.21 3.08 2.98	3.17 3.19 3.08 2.98 2.98	2.31 2.31 2.22 2.26 2.25	2.19 2.08 2.08 2.19 2.19	1.82 1.37 1.53 1.54 1.54	1.37 1.37 1.37 1.45 1.46	1.57 1.61 1.60 0.31 0.39	1.45 1.57 0.01 0.08 0.31
26 27 28 29 30 31	5.06 5.07	5.06 5.06	4.21 4.21 4.15 3.98 3.85	4.20 4.15 3.98 3.85 3.79	2.98 3.05 3.07 3.04 3.10 3.10	2.95 2.96 3.03 3.02 3.04 3.09	2.23 2.35 2.39 2.39 2.33 2.21	2.19 2.23 2.35 2.33 2.18 2.18	1.55 1.45 1.37 	1.38 1.37 1.05 	0.52 0.57 0.57 0.46 0.61 0.64	0.39 0.52 0.23 0.23 0.46 0.61
MONTH	5.07	5.06	5.16	3.79	3.79	2.95	3.25	1.99	2.21	1.05	1.61	0.01

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	0.67 0.66 -0.03 0.11 0.23	0.64 -0.08 -0.08 -0.03 0.11	1.23 0.82 0.98 1.10 1.20	0.34 0.65 0.80 0.98 1.10	1.17 1.16 1.16 0.32 0.52	1.06 1.15 0.06 0.14 0.32	1.70 1.86 2.02 2.10 2.16	1.50 1.70 1.86 2.00 2.09	1.72 1.90 2.08 2.21 2.34	1.47 1.72 1.89 2.08 2.21	3.57 3.65 3.72 3.80 3.87	3.50 3.57 3.65 3.72 3.80
6 7 8 9 10	0.31 0.36 0.37 0.46 0.52	0.23 0.31 0.36 0.37 0.46	1.20 1.19 1.37 1.48 1.53	1.04 1.02 1.19 1.37 1.48	0.72 0.38 0.61 0.80 0.88	0.25 0.12 0.38 0.61 0.79	2.15 1.99 1.99 0.98 1.23	1.62 1.88 0.36 0.61 0.98	2.38 2.41 2.33 2.35 1.73	2.31 2.13 2.14 1.66 1.63	3.93   	3.87
11 12 13 14 15	0.62 0.64 0.73 0.80 0.89	0.52 0.62 0.64 0.73 0.80	1.60 1.74 1.76 1.78 1.84	1.53 1.60 1.74 1.72 1.58	1.04 1.17 1.28 1.44 1.60	0.87 1.02 1.11 1.25 1.39	1.44 1.62 1.72 1.71 1.73	1.23 1.42 1.56 1.55 0.60	2.00 2.19 2.34 2.46 2.56	1.73 2.00 2.19 2.34 2.46	   	  
16 17 18 19 20	0.92 0.92 0.97 1.01 1.02	0.89 0.89 0.92 0.97 1.01	1.70 1.86 1.91 1.98 1.97	1.40 1.70 1.86 1.91 -0.22	1.72 1.48 1.73 1.80 1.86	1.05 1.11 1.48 1.72 1.79	1.01 0.78 0.73 0.97 1.20	0.56 0.22 0.41 0.73 0.96	2.58 2.63 2.71 2.74 2.80	2.55 2.47 2.63 2.71 2.74	   	  
21 22 23 24 25	1.13 1.12 1.06 1.15 1.30	1.02 1.06 0.92 0.93 1.15	0.01 0.14 0.28 0.40 0.43	-0.12 0.01 0.14 0.28 0.30	1.94 2.04 1.68 1.90 2.05	1.85 1.38 1.38 1.68 1.90	1.40 1.56 1.74 1.88 1.88	1.17 1.36 1.53 1.72 1.64	2.87 2.96 3.03 3.10 3.17	2.79 2.87 2.96 3.03 3.10	  	  
26 27 28 29 30 31	1.33 1.33 1.44 1.46 1.46	1.30 1.16 1.33 1.44 1.12	0.46 0.62 0.72 0.84 0.97 1.07	0.31 0.46 0.62 0.71 0.84 0.93	2.12 2.12 1.40 1.42 1.51	2.04 1.01 1.11 1.14 1.25	2.02 2.17 2.09 2.10 1.97 1.47	1.87 1.82 1.82 1.97 1.06 1.26	3.23 3.27 3.34 3.40 3.43 3.50	3.17 3.23 3.27 3.34 3.40 3.43	   	   
MONTH	1.46	-0.08	1.98	-0.22	2.12	0.06	2.17	0.22	3.50	1.47	3.93	3.50
YEAR	5.16	-0.22										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of23-01. SITE ID.--384338075222303. PERMIT NUMBER.--95775.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 99 ft; casing diameter 2 in., to 96 ft; screen diameter 2 in., from 96 to 99 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 51.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.38 ft above land surface.

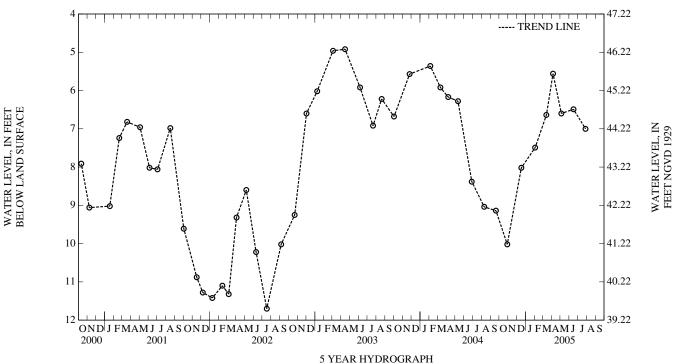
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.73 ft below land surface, February 25, 1998; lowest measured, 12.20 ft below land surface, October 14, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	10.02 8.02	FEB 03, 2005 MAR 14	7.49 6.64	APR 06, 2005 MAY 05	5.56 6.60	JUN 16, 2005 JUL 28	6.49 7.00
		ST 5.56 APR 06, 2 ST 10.02 OCT 29, 2					



## SUSSEX COUNTY—Continued

WELL NUMBER.--Of23-02. SITE ID.--384333075222902. PERMIT NUMBER.--95782.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., from 47 to 50 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 51.25 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 2.25 ft above land surface.

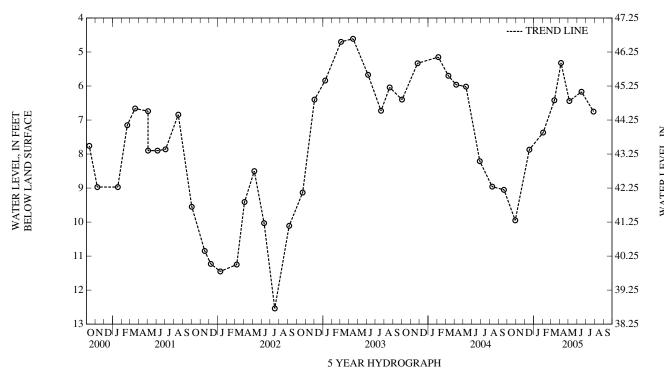
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.41 ft below land surface, February 25, 1998; lowest measured, 12.54 ft below land surface, July 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	9.95 7.87	FEB 03, 2005 MAR 14	7.37 6.42	APR 06, 2005 MAY 05	5.32 6.44	JUN 16, 2005 JUL 28	6.17 6.75
	HIGHES LOWES	ST 5.32 APR 06, 2 T 9.95 OCT 29, 20					



WELL NUMBER.--Of23-03. SITE ID.--384333075222901. PERMIT NUMBER.--95793.

LOCATION.--Lat 38°43'33", long 75°22'29", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 2 in., to 17 ft; screen diameter 2 in., from 17 to 20 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1993 to current year.

DATUM.--Altitude of land surface is 51.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.20 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.34 ft below land surface, April 1, 1994 (recorder); lowest measured, 12.69 ft below land surface, August 27, 2002 (recorder).

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

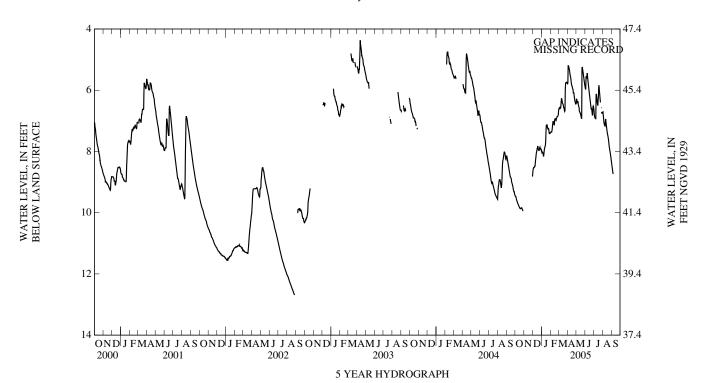
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	9.95 7.83 7.32	MAR 14, 2005 APR 07 MAY 05	6.38 5.31 6.40	JUN 16, 2005 JUL 28 SEP 07	6.10 6.68 8.78
		ST 5.31 APR 07, 2 T 9.95 OCT 29, 20			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	9.45 9.47 9.47 9.49 9.55	9.42 9.45 9.46 9.47 9.49	   	  	8.72 8.62 8.56 8.53 8.53	8.57 8.56 8.53 8.52 8.52	8.01 8.04 8.02 8.05 8.05	7.93 8.01 7.99 7.99 8.03	7.38 7.38 7.36 7.36 7.36	7.38 7.35 7.34 7.36 7.31	6.64 6.61 6.58 6.57 6.56	6.61 6.58 6.57 6.55 6.55
6 7 8 9 10	9.58 9.62 9.63 9.66 9.70	9.55 9.58 9.62 9.63 9.66	   	  	8.53 8.50 8.48 8.48 8.40	8.50 8.41 8.41 8.40 8.25	8.05 8.15 8.15 8.04 7.98	8.00 8.05 8.01 7.98 7.87	7.31 7.23 7.12 7.06 7.01	7.23 7.12 7.06 7.01 7.00	6.60 6.59 6.57 6.48 6.34	6.56 6.57 6.45 6.34 6.26
11 12 13 14 15	9.72 9.74 9.76 9.79 9.81	9.70 9.72 9.74 9.76 9.79	   	  	8.25 8.19 8.06 8.01 7.98	8.19 8.06 7.99 7.98 7.95	7.90 7.86 7.84 7.79 7.66	7.86 7.83 7.79 7.66 7.37	7.04 7.05 7.13 7.13 6.99	7.00 7.02 7.05 6.98 6.94	6.26 6.30 6.34 6.42 6.44	6.19 6.20 6.30 6.34 6.40
16 17 18 19 20	9.83 9.85 9.85 9.87 9.87	9.81 9.83 9.85 9.85 9.86	   	  	7.95 7.90 7.84 7.82 7.93	7.90 7.83 7.80 7.80 7.82	7.37 7.16 7.14 7.14 7.12	7.16 7.13 7.14 7.07 7.07	6.94 6.93 6.95 6.98 6.99	6.85 6.92 6.92 6.95 6.94	6.45 6.48 6.55 6.58 6.58	6.43 6.45 6.48 6.54 6.57
21 22 23 24 25	9.86 9.85 9.84 9.84 9.87	9.85 9.83 9.83 9.83 9.84	   	  	7.94 7.97 7.97 7.92 7.88	7.92 7.94 7.87 7.88 7.86	7.22 7.22 7.27 7.27 7.24	7.12 7.07 7.08 7.20 7.20	6.94 6.91 6.87 6.87 6.86	6.89 6.87 6.86 6.80 6.80	6.66 6.69 6.66 5.99 5.79	6.58 6.66 5.99 5.79 5.74
26 27 28 29 30 31	9.90 9.91 9.95 	9.87 9.90 9.91 	8.82	   8.72	7.86 7.92 7.92 7.91 7.95 7.95	7.79 7.82 7.88 7.88 7.91 7.93	7.31 7.40 7.42 7.42 7.41 7.38	7.21 7.31 7.40 7.41 7.34 7.34	6.85 6.83 6.78 	6.82 6.78 6.64 	5.75 5.75 5.74 5.74 5.77 5.78	5.74 5.74 5.60 5.62 5.74 5.76
MONTH	9.95	9.42	8.82	8.72	8.72	7.79	8.15	7.07	7.38	6.64	6.69	5.60

SUSSEX COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4	5.79 5.76 5.20 5.20	5.76 5.20 5.10 5.12	6.43 6.28 6.30 6.37	6.27 6.22 6.25 6.30	5.92 5.96 5.96 5.60	5.87 5.92 5.60 5.51	6.59 6.72 6.80 6.86	6.53 6.59 6.72 6.80	6.72 6.71 6.83 6.92	6.66 6.66 6.71 6.83	8.38 8.45 8.54 8.62	8.31 8.38 8.45 8.54
5 6 7 8 9	5.24 5.27 5.32 5.38 5.45 5.49	5.20 5.24 5.27 5.32 5.38 5.45	6.40 6.39 6.36 6.46 6.50 6.54	6.37 6.33 6.32 6.36 6.46 6.50	5.54 5.62 5.57 5.44 5.54 5.61	5.51 5.54 5.39 5.39 5.44 5.54	6.90 6.90 6.93 6.93 6.17 6.12	6.86 6.87 6.17 6.07 6.08	7.03 7.09 7.13 7.16 7.17 7.05	6.92 7.03 7.09 7.11 7.05 6.92	8.69 8.74  	8.62 8.69  
11 12 13 14 15	5.57 5.60 5.68 5.77 5.82	5.49 5.57 5.60 5.68 5.77	6.57 6.69 6.71 6.72 6.76	6.54 6.57 6.69 6.69 6.72	5.71 5.80 5.86 5.97 6.07	5.61 5.71 5.80 5.86 5.97	6.21 6.32 6.41 6.46 6.50	6.12 6.21 6.32 6.41 6.32	6.94 7.00 7.09 7.19 7.29	6.91 6.94 7.00 7.09 7.19	  	  
16 17 18 19 20	5.86 5.87 5.93 5.96 5.98	5.82 5.86 5.87 5.93 5.96	6.77 6.82 6.87 6.92 6.92	6.76 6.77 6.82 6.87 5.29	6.14 6.20 6.31 6.39 6.45	6.07 6.14 6.20 6.31 6.39	6.32 6.22 5.90 5.84 5.96	6.22 5.90 5.79 5.78 5.84	7.31 7.38 7.45 7.49 7.55	7.29 7.31 7.38 7.45 7.49	   	  
21 22 23 24 25	6.09 6.09 6.09 6.19 6.29	5.98 6.06 6.05 6.09 6.19	5.29 5.24 5.32 5.40 5.43	5.20 5.20 5.24 5.32 5.40	6.51 6.62 6.58 6.64 6.72	6.45 6.51 6.55 6.58 6.64	6.06 6.18 6.31 6.40	5.96 6.06 6.18 6.31	7.61 7.71 7.78 7.87 7.93	7.55 7.61 7.71 7.78 7.87	  	  
26 27 28 29 30 31	6.31 6.36 6.43 6.45 6.45	6.29 6.29 6.36 6.43 6.40	5.48 5.57 5.62 5.71 5.79 5.87	5.41 5.48 5.57 5.62 5.71 5.78	6.81 6.81 6.56 6.52 6.54	6.72 6.56 6.51 6.50 6.50	6.57  6.71 6.75 6.75 6.72	6.47  6.66 6.71 6.72 6.71	7.99 8.04 8.12 8.18 8.21 8.31	7.93 7.99 8.04 8.12 8.18 8.21	   	   
MONTH	6.45	5.10	6.92	5.20	6.81	5.39	6.93	5.78	8.31	6.66	8.74	8.31
YEAR	9.95	5.10										

## Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.-Of23-04. SITE ID.--384341075223803. PERMIT NUMBER.--95776.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 104 ft; casing diameter 2 in., to 101 ft; screen diameter 2 in., from 101 to 104 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.29 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the elevation of land surface was 52.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 0.76 ft above land surface. Prior to July 2, 1998, the MP was 2.24 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

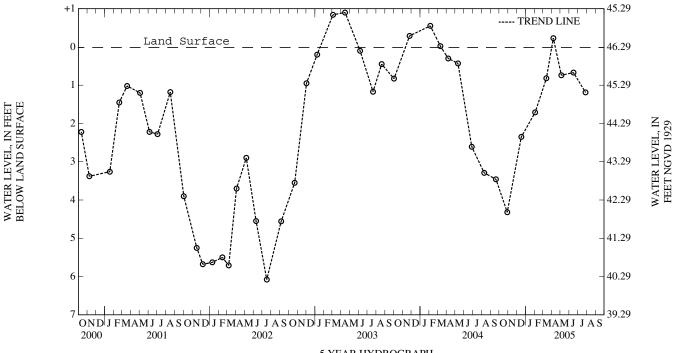
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.90 ft above land surface, April 15, 2003; lowest measured, 10.37 ft below land surface, October 19, 1995.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.32 2.35	FEB 03, 2005 MAR 14	1.71 .82	APR 07, 2005 MAY 05	+.23 .74	JUN 16, 2005 JUL 28	.67 1.19
	HOUR	TE . 22 APR 07 2	1005				

HIGHEST +.23 APR 07, 2005 LOWEST 4.32 OCT 29, 2004



5 YEAR HYDROGRAPH

WELL NUMBER .-- Of23-05. SITE ID .-- 384341075223801. PERMIT NUMBER .-- 95794.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18 ft; casing diameter 2 in., to 15 ft; screen diameter 2 in., from 15 to 18 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1998 to current year.

DATUM.—Elevation of land surface is 46.49 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the elevation of land surface was 50.13 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.30 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD.--September 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.17 ft above land surface, December 17, 2003 (recorder); lowest measured, 9.95 ft below land surface, October 19, 1995.

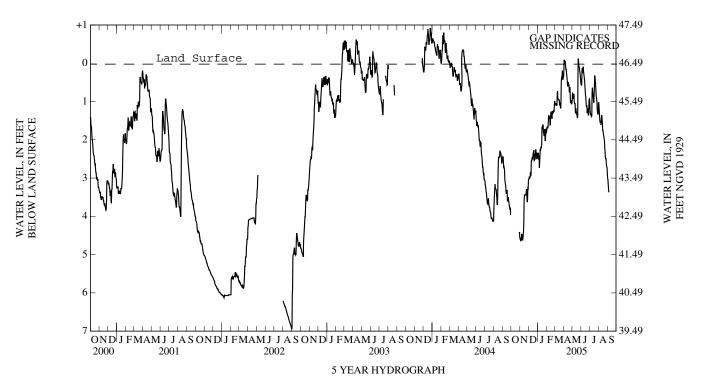
## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17 FEB 03, 2005	4.41 2.28 1.59	MAR 14, 2005 APR 07 MAY 05	.90 +.07 .90	JUN 16, 2005 JUL 28 SEP 07	.72 1.24 3.39
	HIGHE	ST +.07 APR 07, 2			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	  	  	4.60 4.58 4.65 4.63 4.56	4.55 4.45 4.45 4.32 4.35	3.03 3.03 2.97 2.97 2.99	2.56 2.72 2.70 2.83 2.87	2.48 2.49 2.34 2.46 2.41	2.27 2.33 2.26 2.25 2.32	1.78 1.74 1.65 1.67 1.70	1.72 1.65 1.55 1.58 1.65	0.99 1.09 1.09 1.09 1.05	0.92 0.99 1.03 0.97 0.96
6 7 8 9 10	  	  	4.56 4.46 4.61 4.62 4.62	4.42 4.38 4.40 4.58 4.53	2.98 2.84 2.94 2.91 2.54	2.79 2.55 2.63 2.52 2.36	2.43 2.73 2.59 2.42 2.25	2.22 2.43 2.22 2.17 2.05	1.66 1.53 1.37 1.37 1.38	1.52 1.36 1.29 1.21 1.19	1.08 1.04 1.10 1.10 0.80	0.87 0.85 0.68 0.78 0.69
11 12 13 14 15	  	  	4.53 4.49 4.38 4.12 3.64	4.44 4.38 4.12 3.64 3.46	2.53 2.53 2.47 2.48 2.49	2.42 2.30 2.27 2.42 2.37	2.29 2.20 2.19 2.22 2.11	2.13 2.11 2.05 2.00 1.67	1.44 1.44 1.61 1.60 1.39	1.37 1.32 1.44 1.20 1.19	0.73 0.91 0.93 0.95 0.96	0.55 0.63 0.88 0.85 0.89
16 17 18 19 20	  	  	3.46 3.46 3.43 3.43 3.43	3.40 3.41 3.35 3.39 3.36	2.38 2.33 2.32 2.27 2.54	2.21 2.15 2.13 2.13 2.27	1.67 1.66 1.73 1.60 1.62	1.37 1.44 1.60 1.34 1.41	1.28 1.28 1.41 1.44 1.44	0.98 1.19 1.28 1.37 1.22	0.96 0.96 1.06 1.10 1.03	0.88 0.88 0.96 1.02 0.94
21 22 23 24 25	  	  	3.45 3.40 3.31 3.29 3.54	3.40 3.31 3.27 3.04 3.04	2.53 2.49 2.38 2.41 2.30	2.34 2.37 2.09 2.26 2.25	1.81 1.81 1.89 1.89 1.72	1.62 1.28 1.39 1.54 1.57	1.25 1.32 1.26 1.25 1.27	1.14 1.20 1.20 1.05 1.06	1.15 1.18 1.05 0.48 0.38	1.02 1.05 0.47 0.38 0.23
26 27 28 29 30 31	4.45 4.41 4.55	4.37 4.37 4.38	3.63 3.55 3.26 3.27 3.05	3.54 3.21 3.07 3.05 2.82	2.25 2.49 2.48 2.34 2.43 2.40	2.07 2.21 2.18 2.16 2.34 2.23	1.83 2.03 1.98 1.79 1.71 1.83	1.50 1.83 1.79 1.61 1.58 1.71	1.25 1.27 1.06 	1.18 1.05 0.77 	0.35 0.31 0.19 0.42 0.42 0.37	0.29 0.19 +0.11 0.01 0.33 0.27
MONTH	4.55	4.37	4.65	2.82	3.03	2.07	2.73	1.28	1.78	0.77	1.18	+0.11

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	M	AY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3	0.36 0.20 +0.09	0.20 +0.19 +0.19	0.95 0.79 0.80	0.79 0.60 0.71	0.56 0.57 0.55	0.50 0.53 0.18	1.01 1.24 1.31	0.90 1.01 1.24	1.02 1.11 1.29	0.96 1.01 1.11	3.01 3.04 3.16	2.91 2.98 3.04
4 5	+0.04 0.02	-0.12 -0.08	0.90 0.93	0.80 0.83	0.18 0.13	0.08 0.07	1.34 1.33	1.30 1.28	1.39 1.50	1.29 1.39	3.28 3.36	3.16 3.28
6 7 8	+0.06 +0.03 0.09	-0.12 -0.12 -0.07	0.83 0.80 1.02	0.70 0.71 0.80	0.25 0.20 0.09	0.10 +0.07 +0.03	1.33 1.41 1.36	1.29 1.32 0.77	1.56  1.58	1.49  1.54	3.37	3.34
9 10	0.17 0.15	0.09 0.10	1.03 1.07	0.98 1.01	0.19 0.24	0.09 0.16	0.77 0.64	0.57 0.61	1.61 1.47	1.47 1.28		
11 12 13 14 15	0.27 0.28 0.37 0.50 0.60	0.15 0.17 0.20 0.35 0.50	1.04 1.29 1.31 1.17 1.27	0.99 1.04 1.17 1.06 1.13	0.33 0.39 0.44 0.58 0.70	0.24 0.33 0.37 0.44 0.56	0.72 0.82 0.90 0.96 1.03	0.64 0.71 0.80 0.90 0.81	1.35 1.40 1.49 1.60 1.76	1.28 1.34 1.39 1.49 1.60	   	  
16 17 18 19 20	0.58 0.49 0.57 0.59 0.58	0.49 0.38 0.47 0.51 0.50	1.29 1.34 1.38 1.43 1.40	1.23 1.27 1.30 1.38 0.23	0.83 0.88 1.01 1.13 1.14	0.70 0.78 0.88 1.01 1.07	0.81 0.62 0.32 0.34 0.47	0.62 0.32 0.19 0.22 0.34	1.76 1.82 1.90 1.94 1.97	1.70 1.71 1.82 1.90 1.93	  	
21 22 23 24 25	0.76 0.74 0.62 0.83 1.02	0.54 0.53 0.52 0.62 0.83	0.23 +0.12 +0.07 0.09 0.09	+0.12 +0.19 +0.18 +0.10 0.01	1.10 1.30 1.28 1.18 1.26	1.04 1.10 1.12 1.10 1.16	0.52 0.68 0.85 0.89 0.95	0.45 0.52 0.68 0.85 0.84	2.04 2.22 2.30 2.46 2.49	1.94 2.04 2.22 2.30 2.45	  	  
26 27 28 29 30 31	1.02 0.97 1.06 1.06 1.03	0.89 0.82 0.97 0.98 0.85	0.11 0.21 0.24 0.33 0.41 0.51	+0.03 0.11 0.13 0.23 0.33 0.39	1.35 1.34 1.04 0.94 0.93	1.26 1.04 0.88 0.87 0.86	1.04 1.22 1.30 1.34 1.31 1.04	0.94 1.04 1.18 1.29 1.04 0.96	2.49 2.57 2.67 2.71 2.73 2.91	2.47 2.49 2.56 2.67 2.67 2.63	   	   
MONTH	1.06	+0.19	1.43	-+0.19	1.35	+0.07	1.41	0.19	2.91	0.96	3.37	2.91
YEAR	4.65	-0.19										

## Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### SUSSEX COUNTY—Continued

WELL NUMBER.--Of23-06. SITE ID.--384341075223802. PERMIT NUMBER.--95783.

LOCATION.--Lat 38°43'41", long 75°22'38", Hydrologic Unit 02060008, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 2 in., to 52 ft; screen diameter 2 in., from 52 to 55 ft.

INSTRUMENTATION .-- Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46.38 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1998 (due to excavation of material during construction of artificial wetland) the elevation of land surface was 50.14 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 1.42 ft above land surface. Prior to July 2, 1998, the MP was 2.34 ft above land surface.

REMARKS.--Delaware Department of Transportation Project observation well.

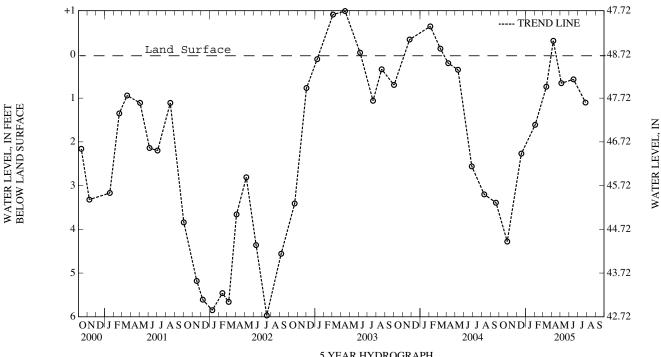
PERIOD OF RECORD.--September 1993 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.99 ft above land surface, April 15, 2003; lowest measured, 10.48 ft below land surface, October 19, 1995.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.28 2.27	FEB 03, 2005 MAR 14	1.61 .74	APR 07, 2005 MAY 05	+.31 .66	JUN 16, 2005 JUL 28	.57 1.10
	HICHE	OT . 21 ADD 07 2	1005				

+.31 APR 07, 2005 4.28 OCT 29, 2004 LOWEST



5 YEAR HYDROGRAPH

N

### SUSSEX COUNTY—Continued

WELL NUMBER.--Of23-11. SITE ID.--384345075225101. PERMIT NUMBER.--159964.

WATER

LEVEL

4.38

2.45

1.67

LOCATION.--Lat 38°43'45", long 75°22'50", Hydrologic Unit 02040207, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

DATE

OCT 29, 2004

FEB 03, 2005

**DEC 17** 

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 2 in., to 16 ft; screen diameter 2 in., from 16 to 19 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1998 to current year.

DATUM.--Altitude of land surface is 46.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.60 ft above land surface.

REMARKS.--Delaware Department of Transportation Wetlands Project observation well. Missing data due to recorder malfunction. Periods of equal maximum and minimum daily values may be questionable due to the float hanging up in small diameter wells or other well construction factors.

PERIOD OF RECORD .-- August 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.31 ft above land surface December 14, 2003 (recorder); lowest measured, 7.37 ft, below land surface, August 31, 2002 (recorder).

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE

MAR 14, 2005

APR 07

MAY 05

WATER

LEVEL

.76

+.27

.64

WATER

LEVEL

66

1.19

3.25

DATE

JUN 16, 2005 JUL 28

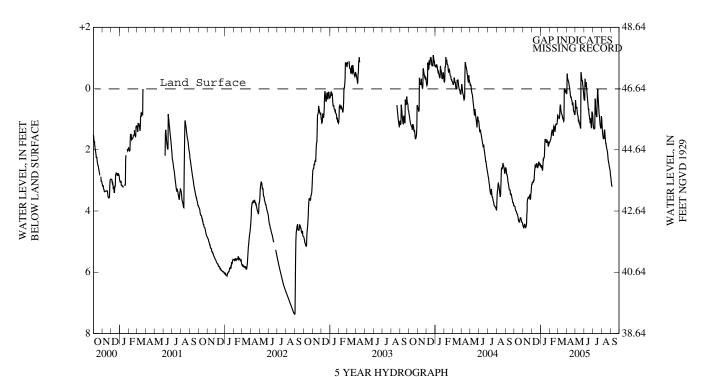
SEP 07

		1 LD	05, 2005	1.07	111111 0.	,	.0.	SEI 07		3.23		
				HIGHE LOWE		PR 07, 2005 CT 29, 2004						
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MA	RCH
1 2 3 4 5	3.84 3.84 3.85 3.86 3.94	3.81 3.81 3.82 3.84 3.86	4.50 4.50 4.55 4.55 4.46	4.45 4.47 4.47 4.34 4.37	3.13 3.13 3.06 3.06 3.07	2.95 2.98 2.97 3.01 3.01	2.55 2.56 2.50 2.56 2.54	2.44 2.50 2.49 2.45 2.50	1.76 1.75 1.71 1.68 1.66	1.74 1.71 1.65 1.66 1.62	0.87 0.88 0.93 0.94 0.95	0.81 0.82 0.88 0.91 0.91
6 7 8 9 10	3.97 4.00 4.01 4.02 4.08	3.94 3.97 4.00 4.01 4.02	4.46 4.42 4.51 4.53 4.54	4.39 4.37 4.39 4.51 4.50	3.07 3.01 3.02 3.01 2.85	3.00 2.88 2.90 2.85 2.68	2.52 2.68 2.65 2.46 2.29	2.44 2.52 2.42 2.29 2.22	1.62 1.57 1.44 1.39 1.34	1.57 1.44 1.38 1.30 1.28	0.98 0.97 0.89 0.64 0.54	0.88 0.88 0.60 0.53 0.53
11 12 13 14 15	4.09 4.10 4.14 4.20 4.22	4.08 4.09 4.10 4.14 4.16	4.50 4.49 4.42 4.09 3.80	4.47 4.42 4.09 3.80 3.66	2.68 2.62 2.51 2.53 2.55	2.61 2.47 2.45 2.50 2.50	2.31 2.26 2.26 2.20 1.94	2.24 2.24 2.19 1.94 1.70	1.38 1.42 1.53 1.53 1.27	1.34 1.34 1.42 1.24 1.17	0.54 0.69 0.76 0.81 0.84	0.48 0.52 0.69 0.76 0.80
16 17 18 19 20	4.30 4.33 4.36 4.36 4.36	4.22 4.30 4.33 4.32 4.28	3.66 3.60 3.58 3.55 3.55	3.60 3.58 3.54 3.54 3.53	2.51 2.47 2.47 2.44 2.57	2.43 2.39 2.39 2.38 2.44	1.70 1.65 1.70 1.68 1.65	1.53 1.55 1.65 1.54 1.55	1.22 1.24 1.34 1.39 1.41	1.06 1.18 1.24 1.34 1.29	0.85 0.88 0.95 0.98 0.97	0.82 0.84 0.88 0.95 0.92
21 22 23 24 25	4.28 4.23 4.22 4.22 4.27	4.23 4.22 4.19 4.18 4.22	3.57 3.55 3.51 3.49 3.57	3.55 3.51 3.49 3.36 3.35	2.57 2.58 2.55 2.50 2.42	2.50 2.55 2.40 2.41 2.39	1.76 1.76 1.76 1.76 1.72	1.65 1.51 1.54 1.64 1.64	1.29 1.20 1.16 1.16 1.17	1.20 1.12 1.12 1.06 1.08	1.04 1.07 1.04 0.01 0.01	0.95 1.02 +0.02 +0.03 -0.01
26 27 28 29 30 31	4.30 4.34 4.37 4.39 4.39 4.45	4.27 4.30 4.34 4.36 4.36 4.37	3.63 3.60 3.44 3.38 3.23	3.57 3.44 3.35 3.23 3.08	2.39 2.50 2.50 2.44 2.48 2.48	2.30 2.36 2.38 2.37 2.44 2.43	1.75 1.87 1.88 1.84 1.74 1.78	1.62 1.75 1.84 1.74 1.69 1.71	1.17 1.14 1.04 	1.14 1.04 0.87 	0.08 0.10 0.07 0.06 0.12 0.14	0.01 0.07 -0.25 -0.20 0.06 0.12
MONTH	4.45	3.81	4.55	3.08	3.13	2.30	2.68	1.51	1.76	0.87	1.07	+0.25

CLICCEN	COLINITY	C4:1
SUSSEX	COUNTY-	–Continued

					DCDDL11 (	0001111	Continued					
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	M	AY	JU	NE	JU	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	0.18 0.12 +0.49 +0.36 +0.30	0.12 +0.61 +0.62 +0.49 +0.36	0.73 0.38 0.49 0.59 0.64	0.31 0.31 0.38 0.49 0.59	0.36 0.38 0.38 +0.32 +0.19	0.28 0.36 +0.35 +0.37 +0.32	0.92 1.09 1.21 1.28 1.32	0.80 0.92 1.09 1.21 1.28	1.02 1.15 1.31 1.44 1.56	0.90 1.02 1.15 1.31 1.44	2.87 2.93 3.02 3.11 3.18	2.80 2.87 2.93 3.02 3.11
6 7 8 9 10	+0.28 +0.26 +0.22 +0.16 +0.11	+0.31 +0.28 +0.28 +0.22 +0.16	0.64 0.63 0.78 0.84 0.88	0.56 0.54 0.63 0.78 0.84	+0.05 +0.18 +0.21 +0.06 0.03	+0.19 +0.45 +0.38 +0.21 +0.06	1.32 1.29 1.29 0.33 0.49	1.17 1.22 0.24 0.22 0.33	1.61 1.65 1.62 1.64 1.38	1.55 1.56 1.55 1.38 1.23	3.21   	3.18
11 12 13 14 15	+0.02 0.00 0.09 0.20 0.28	+0.11 +0.03 +0.01 0.09 0.20	0.91 1.07 1.08 1.06 1.14	0.88 0.91 1.06 1.03 1.06	0.15 0.26 0.35 0.51 0.64	0.03 0.15 0.26 0.35 0.50	0.65 0.78 0.87 0.90 0.93	0.49 0.65 0.77 0.87 0.50	1.34 1.46 1.59 1.69 1.80	1.23 1.34 1.46 1.59 1.69	  	  
16 17 18 19 20	0.28 0.28 0.35 0.38 0.40	0.27 0.27 0.28 0.35 0.38	1.11 1.18 1.23 1.29 1.29	1.04 1.11 1.18 1.23 +0.55	0.70 0.66 0.83 0.93 0.96	0.53 0.51 0.66 0.83 0.92	0.50 0.24 0.02 0.20 0.39	0.24 +0.09 +0.11 0.02 0.20	1.80 1.87 1.95 1.97 2.02	1.79 1.79 1.87 1.95 1.97	  	  
21 22 23 24 25	0.53 0.53 0.46 0.59 0.73	0.40 0.45 0.43 0.46 0.59	+0.54 +0.47 +0.37 +0.27 +0.27	+0.57 +0.55 +0.47 +0.38 +0.35	1.01 1.13 0.97 1.07 1.18	0.96 0.97 0.91 0.94 1.07	0.51 0.66 0.83 0.93 0.98	0.38 0.51 0.66 0.83 0.90	2.08 2.19 2.27 2.37 2.42	2.02 2.08 2.19 2.27 2.37	  	  
26 27 28 29 30 31	0.73 0.75 0.83 0.85 0.85	0.71 0.66 0.75 0.83 0.69	+0.25 +0.13 +0.06 0.06 0.15 0.28	+0.37 +0.25 +0.13 +0.06 0.06 0.15	1.28 1.28 0.75 0.77 0.81	1.18 0.73 0.70 0.69 0.70	1.11 1.23 1.27 1.29 1.27 0.90	0.98 1.10 1.17 1.27 0.88 0.87	2.45 2.52 2.59 2.64 2.66 2.80	2.42 2.45 2.52 2.59 2.64 2.64	   	   
MONTH	0.85	+0.62	1.29	+0.57	1.28	+0.45	1.32	+0.11	2.80	0.90	3.21	2.80
YEAR	4.55	-0.62										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--Of23-12. SITE ID.--384345075225102. PERMIT NUMBER.--159965.

 $LOCATION. --Lat~38^{\circ}43'45", long~75^{\circ}22'51", Hydrologic~Unit~02040207, near~Redden~State~Forest.~Owner:~Delaware~Department~of~Transportation.$ 

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

 $WELL\ CHARACTERISTICS.-Drilled,\ observation,\ water-table\ well,\ depth\ 60\ ft;\ casing\ diameter\ 2\ in.,\ to\ 57\ ft;\ screen\ diameter\ 2\ in.,\ from\ 57\ to\ 60\ ft.$ 

INSTRUMENTATION .-- Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 3.75 ft above land surface.

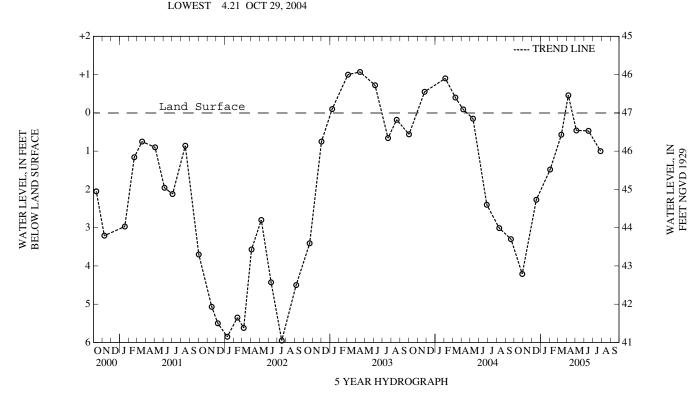
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD .-- August 1998 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft above land surface, April 15, 2003; lowest measured, 6.59 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.21 2.27	FEB 03, 2005 MAR 14	1.48 .57	APR 07, 2005 MAY 05	+.46 .46	JUN 16, 2005 JUL 28	.47 1.00
	HIGHES	ST +.46 APR 07, 2					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

## SUSSEX COUNTY—Continued

WELL NUMBER.--Of23-13. SITE ID.--384345075225103. PERMIT NUMBER.--159966.

LOCATION.--Lat 38°43'45", long 75°22'51", Hydrologic Unit 02060007, near Redden State Forest. Owner: Delaware Department of Transportation.

AQUIFER.--Pleistocene-Pliocene Series. Aquifer code: 112PCPC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 110 ft; casing diameter 2 in., to 106 ft; screen diameter 2 in., from 107 to 110 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of metal sleeve, 3.72 ft above land surface.

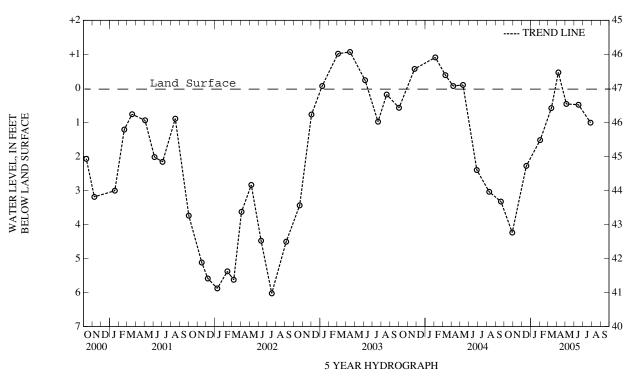
REMARKS.--Delaware Department of Transportation Project observation well.

PERIOD OF RECORD .-- August 1998 to July 2005 (Discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft above land surface, April 15, 2003; lowest measured, 6.63 ft below land surface, December 4, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004 DEC 17	4.24 2.28	FEB 03, 2005 MAR 14	1.52 .58	APR 07, 2005 MAY 05	+.47 .46	JUN 16, 2005 JUL 28	.48 1.01
		ST +.47 APR 07, 2 ST 4.24 OCT 29, 20					



WELL NUMBER.--Pf24-02. SITE ID.--383730075213501.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, near DE Rt. 113, near Stockley Hospital. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 49 ft; casing diameter 4 in., to 46 ft; screen diameter 4 in., from 46 to 49 ft.

INSTRUMENTATION.—Monthly water-level measurements with chalked steel tape or electric tape by U.S. Geological Survey personnel from June 1998 to current year. Equipped with graphic water-level recorder from January 1970 to January 1982. Intermittent water level measurements from April 1982 to August 1987. Twice yearly water level measurements from February 1988 to April 1993.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well.

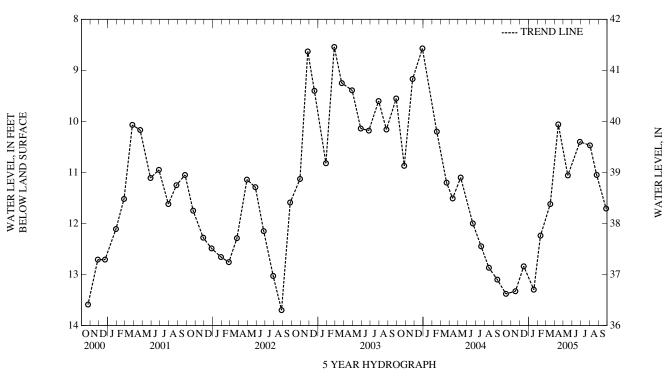
PERIOD OF RECORD.--January 1970 to April 1993, June 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.53 ft below land surface, March 10, 1979. lowest measured, 14.68 ft below land surface, September 2, 1999.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	13.38	JAN 19, 2005	13.30	APR 14, 2005	10.06	AUG 02, 2005	10.47
NOV 16	13.33	FEB 11	12.24	MAY 17	11.06	25	11.05
DEC 15	12.84	MAR 17	11.62	JUN 28	10.40	SEP 27	11.71

HIGHEST 10.06 APR 14, 2005 LOWEST 13.38 OCT 14, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

### SUSSEX COUNTY—Continued

WELL NUMBER .-- Pf24-03. SITE ID .-- 383730075213502.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, near DE Rt. 113, near Stockley Hospital. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 178 ft; casing diameter 4 in., to 58 ft; casing diameter 2 in., to 168 ft; screen diameter 2 in., from 168 to 178 ft.

INSTRUMENTATION.—Monthly water-level measurements with chalked steel tape or electric tape by U.S. Geological Survey personnel from June 1998 to current year. Weekly water level measurements from November 1976 to May 1977. Monthly water level measurements from June 1977 to December 1986. Intermittent water level measurements from February 1987 to November 1988. Twice yearly water level measurements from April 1989 to April 1993.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface.

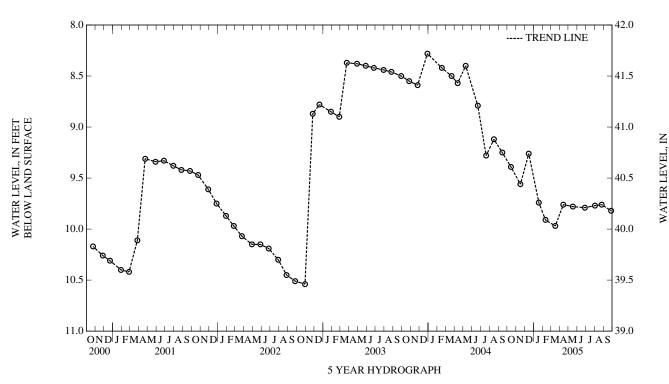
REMARKS.--Delaware Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1976 to April 1993, June 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.67 ft below land surface, April 2, 1979; lowest measured, 12.72 ft below land surface, August 28, 1979.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004 NOV 16 DEC 15	9.39 9.56 9.26	JAN 19, 2005 FEB 11 MAR 17	9.74 9.91 9.97	APR 14, 2005 MAY 17 JUN 28	9.76 9.78 9.79	AUG 02, 2005 25 SEP 27	9.77 9.76 9.82
	HIGHES LOWES	ST 9.26 DEC 15, 2 T 9.97 MAR 17, 2					



WATER LEVEL, IN FEET BELOW LAND SURFACE

### ALLEGANY COUNTY

WELL NUMBER.--AL Ah 1. SITE ID.--394024078273401. PERMIT NUMBER--None

 $LOCATION. --Lat\ 39^{\circ}40'24'', long\ 78^{\circ}27'34'', Hydrologic\ Unit\ 02070003, near\ Fifteen\ Mile\ Creek, 2.8\ mi\ southeast\ of\ Pratt.\ Owner:\ Green\ Ridge\ State\ Forest.$ 

AQUIFER.--Brallier Formation of Upper Devonian Age. Aquifer code: 341BRLR.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, reported depth 300 ft, measured depth 114.5 ft; casing diameter 8 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly water-level measurements with steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 720 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of sanitary seal in casing, 0.25 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level was more than 40 ft below land surface on November 19, 1969, and February 12, 1970, when well was being pumped. Water levels may be affected by local ground-water withdrawal.

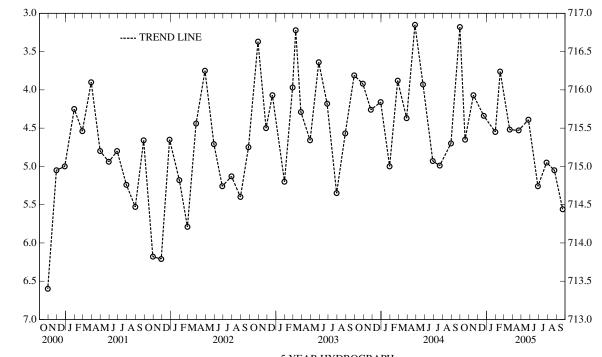
PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land surface, May 18, 1978; lowest measured 19.75 ft below land surface, July 17, 1968.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 2004 NOV 16 DEC 22	4.65 4.07 4.34	JAN 31, 2005 FEB 17 MAR 22	4.55 3.76 4.52	APR 22, 2005 MAY 26 JUN 28	4.53 4.39 5.26	JUL 28, 2005 AUG 24 SEP 22	4.95 5.05 5.56
	HIGHE	ST 3.76 FEB 17. 20	005				

LOWEST 5.56 SEP 22, 2005



WATER LEVEL, II FEET NGVD 1929

5 YEAR HYDROGRAPH

## ALLEGANY COUNTY—Continued

WELL NUMBER.--AL Ca 20. SITE ID.--393148079010601. PERMIT NUMBER.--AL-81-0477.

LOCATION .-- Lat 39°31'48", long 79°01'06", Hydrologic Unit 02070002, at Barton Municipal Park. Owner: Town of Barton.

AQUIFER.--Conemaugh Group of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 71 ft; casing diameter 8 in., to 20 ft; open hole.

INSTRUMENTATION.—Monthly water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from October 2003 to current year.

DATUM.--Elevation of land surface is 1,250 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface through June 2003, 4.00 ft above land surface from July 2003 to present.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- March 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.40 ft below land surface, March 8, 2004; lowest measured, 26.00 ft below land surface, March 17, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

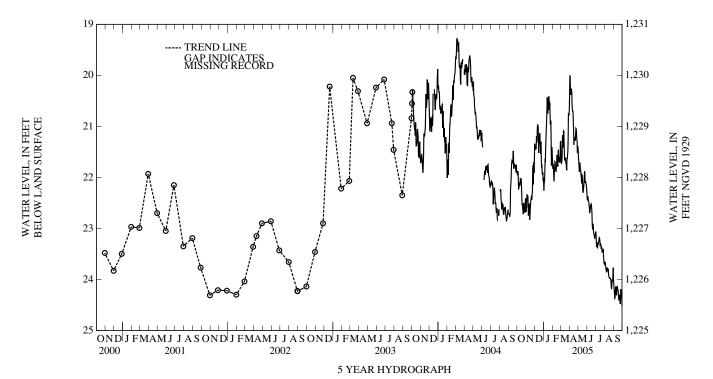
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2004 29	22.73 22.59	DEC 22, 2004 FEB 07, 2005	21.55 21.93	APR 22, 2005 MAY 20	21.35 22.23	JUL 19, 2005 AUG 17	23.40 24.01
NOV 24	22.14	MAR 25	21.65	JUN 23	23.12	SEP 19	24.44

HIGHEST 21.35 APR 22, 2005 LOWEST 24.44 SEP 19, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAR	RCH
1	21.99	21.92	22.75	22.68	21.66	21.34	22.31	22.13	21.86	21.72	21.49	21.29
2	22.01	21.92	22.71	22.57	21.67	21.46	22.34	22.26	21.91	21.83	21.71	21.49
3	22.06	21.96	22.79	22.59	21.50	21.42	22.26	22.09	21.83	21.74	21.81	21.71
4	22.07	21.88	22.74	22.33	21.50	21.39	22.21	22.08	21.97	21.80	21.81	21.72
5	22.24	22.07	22.59	22.41	21.59	21.44	22.18	21.91	22.09	21.97	21.83	21.69
6	22.30	22.22	22.58	22.44	21.59	21.44	21.91	21.63	22.14	22.08	21.83	21.62
7	22.30	22.21	22.48	22.36	21.47	21.19	21.85	21.70	22.10	21.92	21.65	21.24
8	22.24	22.16	22.76	22.48	21.62	21.31	21.70	21.42	21.94	21.86	21.51	21.17
9	22.20	22.10	22.81	22.75	21.62	21.30	21.60	21.24	21.90	21.69	21.52	21.41
10	22.23	22.13	22.79	22.67	21.30	21.03	21.24	21.08	21.89	21.70	21.41	21.26
11	22.26	22.16	22.67	22.54	21.15	20.96	21.14	20.91	21.93	21.85	21.27	21.09
12	22.21	22.03	22.65	22.53	21.16	21.02	20.91	20.79	21.89	21.79	21.34	21.10
13	22.11	22.04	22.90	22.65	21.27	21.00	20.79	20.43	22.08	21.89	21.54	21.34
14	22.16	22.03	22.92	22.83	21.52	21.27	20.84	20.45	22.07	21.81	21.66	21.54
15	22.17	22.03	22.84	22.67	21.58	21.52	20.89	20.75	21.97	21.76	21.73	21.66
16	22.34	22.17	22.68	22.56	21.54	21.32	20.75	20.44	21.76	21.56	21.72	21.66
17	22.56	22.34	22.57	22.49	21.41	21.32	20.68	20.52	21.69	21.61	21.66	21.61
18	22.61	22.54	22.49	22.42	21.40	21.19	20.81	20.68	21.80	21.65	21.75	21.65
19	22.60	22.52	22.45	22.40	21.35	21.13	20.72	20.41	21.87	21.79	21.79	21.71
20	22.64	22.60	22.44	22.36	21.48	21.35	20.65	20.48	21.87	21.59	21.82	21.71
21	22.72	22.64	22.50	22.44	21.58	21.41	20.91	20.65	21.61	21.46	21.95	21.80
22	22.76	22.72	22.46	22.33	21.62	21.54	20.91	20.53	21.72	21.61	21.98	21.86
23	22.74	22.56	22.33	22.27	21.73	21.30	21.21	20.70	21.78	21.70	21.86	21.62
24	22.61	22.50	22.29	21.85	21.80	21.72	21.21	20.94	21.78	21.59	21.74	21.64
25	22.72	22.61	22.17	21.76	21.90	21.78	21.06	20.97	21.73	21.65	21.73	21.56
26 27 28 29 30 31	22.75 22.74 22.76 22.68 22.55 22.69	22.68 22.68 22.68 22.53 22.41 22.46	22.20 22.16 21.98 22.01 21.92	22.14 21.83 21.70 21.91 21.60	21.92 22.19 22.19 22.04 22.12 22.13	21.77 21.92 21.95 21.90 22.04 22.03	21.31 21.79 21.85 21.77 21.58 21.72	20.89 21.31 21.77 21.46 21.41 21.58	21.81 21.84 21.65 	21.71 21.65 21.32 	21.56 21.50 21.27 21.01 21.00 20.79	21.49 21.27 20.74 20.76 20.79 20.67
MONTH	22.76	21.88	22.92	21.60	22.19	20.96	22.34	20.41	22.14	21.32	21.98	20.67

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	AY	JUNE		JUI	LY	AUG	UST	SEPTEMBER	
1	20.71	20.40	21.65	21.52	22.46	22.40	23.12	23.06	23.76	23.66	24.15	24.05
2	20.40	20.01	21.70	21.61	22.50	22.45	23.31	23.12	23.75	23.66	24.20	24.13
3	20.29	20.01	21.82	21.69	22.46	22.38	23.42	23.31	23.75	23.67	24.28	24.20
4	20.45	20.29	21.99	21.82	22.45	22.38	23.46	23.36	23.79	23.73	24.37	24.28
5	20.49	20.38	22.03	21.89	22.51	22.45	23.38	23.27	23.84	23.77	24.43	24.37
6	20.44	20.34	21.95	21.79	22.53	22.46	23.40	23.32	23.87	23.82	24.44	24.36
7	20.35	20.26	21.81	21.71	22.56	22.50	23.46	23.39	23.88	23.84	24.38	24.24
8	20.51	20.29	21.90	21.80	22.62	22.56	23.39	23.31	23.92	23.86	24.26	24.14
9	20.62	20.51	21.95	21.86	22.71	22.62	23.36	23.31	23.88	23.81	24.24	24.17
10	20.68	20.62	21.95	21.88	22.73	22.70	23.36	23.30	23.84	23.77	24.32	24.24
11	20.77	20.68	22.06	21.95	22.71	22.67	23.32	23.26	23.87	23.82	24.40	24.31
12	20.81	20.71	22.23	22.05	22.67	22.61	23.27	23.22	23.89	23.82	24.35	24.20
13	20.92	20.71	22.27	22.12	22.62	22.54	23.23	23.18	23.87	23.79	24.25	24.14
14	21.08	20.92	22.12	21.95	22.57	22.53	23.24	23.19	23.94	23.85	24.24	24.14
15	21.36	21.08	22.12	21.96	22.55	22.52	23.34	23.23	24.03	23.94	24.30	24.21
16	21.44	21.36	22.28	22.12	22.64	22.54	23.40	23.33	24.03	23.95	24.30	24.21
17	21.38	21.24	22.35	22.27	22.78	22.63	23.40	23.32	24.04	23.96	24.33	24.23
18	21.30	21.25	22.40	22.30	22.94	22.78	23.40	23.31	24.05	23.98	24.45	24.33
19	21.32	21.27	22.39	22.24	23.07	22.94	23.42	23.33	24.03	23.98	24.49	24.41
20	21.32	21.21	22.29	22.17	23.13	23.02	23.42	23.40	24.05	23.98	24.45	24.38
21	21.41	21.28	22.30	22.15	23.05	22.92	23.46	23.36	24.03	23.98	24.47	24.41
22	21.41	21.16	22.15	21.98	23.07	22.92	23.46	23.40	24.07	24.00	24.44	24.30
23	21.16	21.04	21.99	21.88	23.14	23.07	23.58	23.46	24.16	24.07	24.48	24.35
24	21.14	21.05	22.11	21.92	23.14	23.10	23.59	23.45	24.26	24.16	24.55	24.48
25	21.38	21.12	22.15	22.11	23.15	23.12	23.47	23.43	24.28	24.19	24.52	24.38
26 27 28 29 30 31	21.39 21.50 21.56 21.54 21.52	21.25 21.27 21.50 21.49 21.39	22.11 22.14 22.16 22.23 22.28 22.40	22.07 22.09 22.11 22.15 22.22 22.28	23.20 23.26 23.22 23.19 23.21	23.14 23.20 23.14 23.12 23.11	23.50 23.55 23.64 23.69 23.77 23.79	23.41 23.41 23.55 23.64 23.69 23.70	24.19 24.08 24.08 24.10 24.04 24.05	24.08 24.01 24.01 24.04 23.81 23.77	24.38 24.51 24.55 24.54 24.61	24.19 24.30 24.37 24.24 24.52
MONTH	21.56	20.01	22.40	21.52	23.26	22.38	23.79	23.06	24.28	23.66	24.61	24.05
YEAR	24.61	20.01										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## ANNE ARUNDEL COUNTY

WELL NUMBER.--AA Ac 11. SITE ID.--391101076404001. PERMIT NUMBER.--AA-00-2445.

LOCATION.--Lat 39°11'01", long 76°40'40", Hydrologic Unit 02060003, Baltimore-Washington International Airport. Owner: Maryland Department of Transportation.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 320 ft; casing diameter 6 in., to 312 ft; screened from 312 to 320 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 136.9 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Well used during construction of airport. Water level reported by driller as 90 ft below land surface, April 23, 1948. Water levels are affected by local ground-water withdrawal.

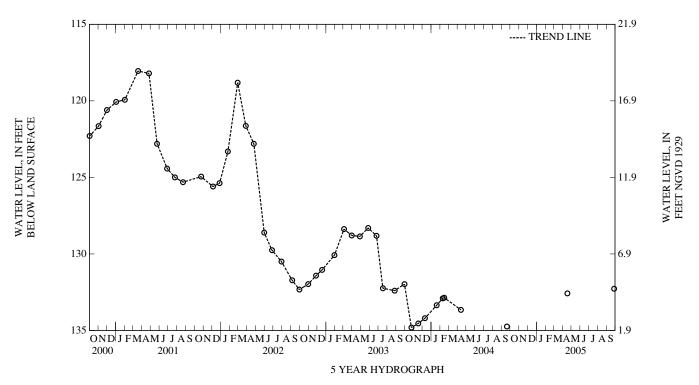
PERIOD OF RECORD .-- June 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.60 ft below land surface, March 9, 1965; lowest measured, 134.81 ft below land surface, October 24, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	132.58	SEP 27, 2005	132.28
	HIGHES	T 132 28 SEP 27	2005

LOWEST 132.58 APR 18, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER .-- AA Ad 29. SITE ID .-- 391015076373501.

LOCATION.--Lat 39°10'15", long 76°37'35", Hydrologic Unit 02060003, near Linden Lane, Glen Burnie, near the Anne Arundel County Department of Public Works office. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 500 ft; casing diameter 3 in., to 395 ft, and from 400 to 420 ft; casing diameter 2 in. from 420 to 460 ft; screened with 3 in. slotted pipe from 395 to 400 ft; screened with 2 in., slotted pipe from 460 to 500 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from July 19, 1948 to January 18, 1968.

DATUM.--Elevation of land surface is 37.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.85 ft above land surface. Prior to December 5, 1972, measuring point was 16.3 ft above land surface.

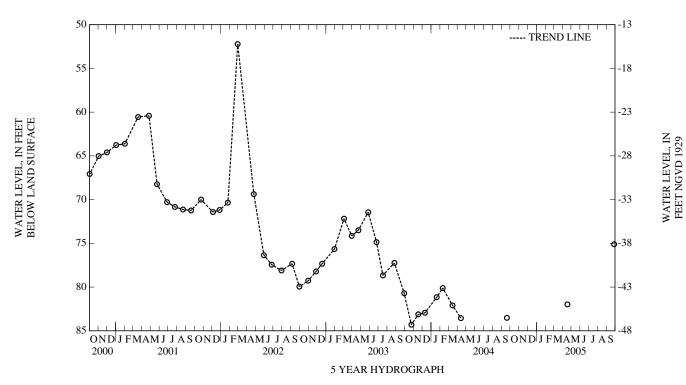
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--June 1948 to February 1968, April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.15 ft above land surface, September 1, 1952 (recorder); lowest measured, 84.30 ft below land surface, October 24, 2003.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	81.98	SEP 27, 2005	75.10
		75.10 SEP 27, 2 81.98 APR 18, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## WELL NUMBER.--AA Ad 90. SITE ID.--391032076385902. PERMIT NUMBER.--AA-04-0298.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd, 0.5 mi north of Dorsey Road intersection. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 453 ft; casing diameter 6 in., to 443 ft; screen diameter 6 in., from 443 to 453 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with graphic water-level recorder from August 1977 to September 1979. Periodic measurements from September 1979 to March 1980. Equipped with digital water-level recorder--30-minute recorder interval from March 1980 to December 1984, and August 1989 to September 2005.

DATUM.--Elevation of land surface is 77.85 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.20 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observartion well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD .-- April 1977 to current year.

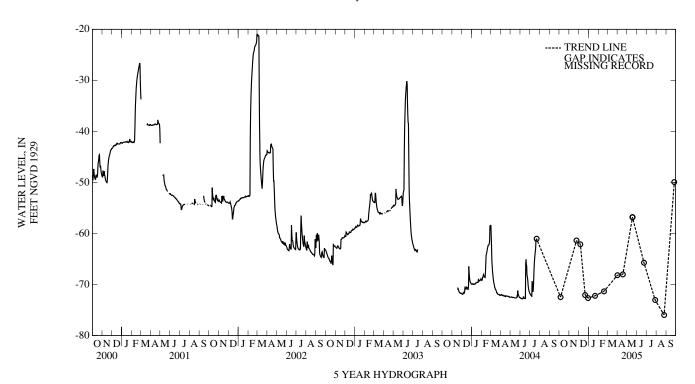
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.87 ft above sea level, November 20, 1978 (recorder); lowest measured, 75.98 ft below sea level, August 25, 2005.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 2004 NOV 24	-72.48 -61.39	DEC 30, 2004 JAN 21, 2005	-72.68 -72.22	APR 18, 2005 MAY 18	-68.03 -56.83	JUL 28, 2005 AUG 25	-73.05 -75.98
DEC 06	-62.13 -72.07	FEB 18 APR 01	-71.34 -68.18	18 IUN 23	-56.80 -65.75	SEP 26	-49.93

LOWEST -75.98 AUG 25, 2005 HIGHEST -49.93 SEP 26, 2005

## Daily Low Water Levels



WELL NUMBER.--AA Ad 102. SITE ID.--391032076385904. PERMIT NUMBER.--AA-81-2641.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd., 0.5 mi north of Dorsey Road intersection. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well (semi-confined), depth 95 ft; casing diameter 6 in., to 85 ft; screen diameter 6 in., from 85 to 95 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from December 1983 to October 1990.

DATUM.--Elevation of land surface is 76.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.27 ft above land surface.

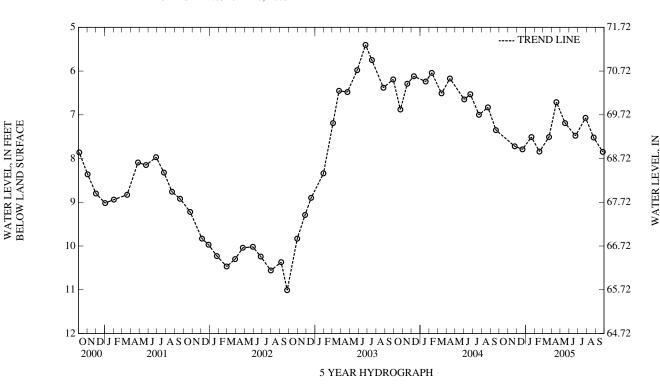
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD.--December 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.75 ft below land surface, April 3, 1998; lowest measured, 14.36 ft below land surface, November 3, 1986.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004 DEC 21 JAN 21, 2005	7.72 7.79 7.51	FEB 18, 2005 MAR 23 APR 18	7.84 7.51 6.71	MAY 18, 2005 JUN 23 JUL 28	7.19 7.48 7.07	AUG 25, 2005 SEP 26	7.52 7.85
	HIGHES LOWES	T 6.71 APR 18, 2 Γ 7.85 SEP 26, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

FEET NGVD 1929

#### ANNE ARUNDEL COUNTY-Continued

WELL NUMBER.--AA Ad 108. SITE ID.--391032076385906. PERMIT NUMBER.--AA-81-3475.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Aviation Blvd., 0.5 mi north of Dorsey Road intersection. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11 ft; casing diameter 4 in., to 6 ft and casing diameter 6 in., to 3 ft; screen diameter 4 in., from 6 to 11 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1986 to September 1990.

DATUM.--Elevation of land surface is 78.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.50 ft above land surface.

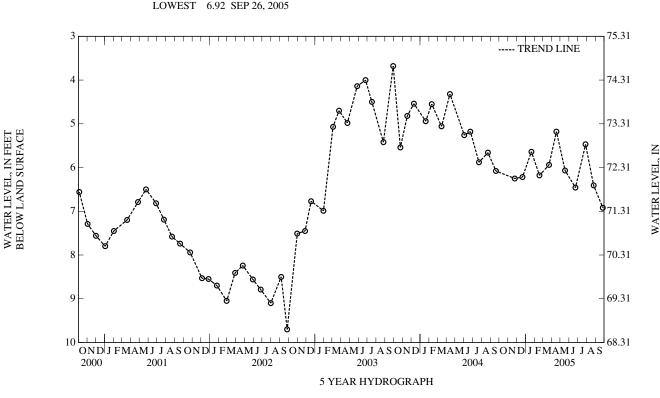
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- August 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.68 ft below land surface, September 29, 2003; lowest measured, Dry on August 22, 1985; January 17, 1986; May 20, 1986; July 8, 1986 and November 3, 1986 (recorder), (well depth 11 ft).

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004 DEC 21 JAN 21, 2005	6.25 6.22 5.64	FEB 18, 2005 MAR 23 APR 18	6.18 5.94 5.18	MAY 18, 2005 JUN 23 JUL 28	6.07 6.46 5.47	AUG 25, 2005 SEP 26	6.41 6.92
	HIGHES	T 5.18 APR 18, 2	005				



WELL NUMBER.--AA Ad 109. SITE ID.--391006076380101. PERMIT NUMBER.--AA-81-4890.

LOCATION.--Lat 39°10'06", long 76°38'01", Hydrologic Unit 02060003, 0.05 mi south of Dorsey Road, 0.17 mi west of MD Rt. 648, near Robert Pascal Senior Center. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 46 ft; casing diameter 4 in., to 36 ft; screen diameter 4 in., from 36 to 46 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1985 to July 1998, and 30-minute recorder interval from July 1998 to August 2005.

DATUM.—Elevation of land surface is 35.78 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 7.10 ft above land surface. On August 1, 1996, 1.15 ft of casing was added. The new measuring point height was 5.44 ft. This extended casing was later removed on March 24, 1997. On January 5, 2000 an extension pipe was added to the casing. The new measuring point height is 7.10 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels before February 23, 1986 are not currently available. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD, -- October 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.35 ft above sea level, July 3, 2003 (recorder) (See Measuring point description - many flowing water levels prior to measuring point entention on January 5, 2000); lowest measured, 20.20 ft above sea level, October 15, 1987 (recorder).

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004 DEC 21 JAN 21, 2005	39.57 39.36 39.43	FEB 18, 2005 APR 01 18	39.34 39.66 40.11	MAY 18, 2005 JUN 23 AUG 25	39.89 39.67 39.54	SEP 26, 2005	39.44

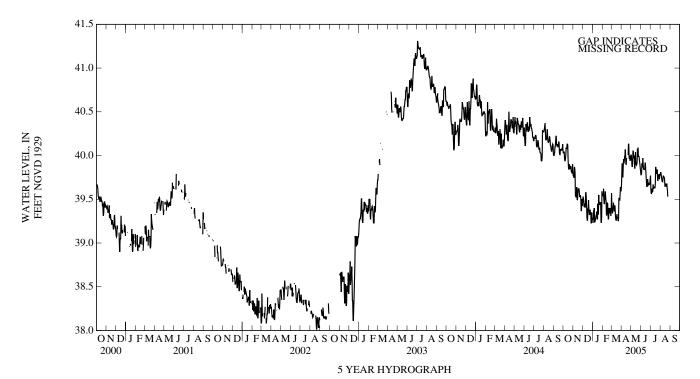
LOWEST 39.34 FEB 18, 2005 HIGHEST 40.11 APR 18, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1	40.06	40.03	39.84	39.77	39.73	39.50	39.37	39.27	39.54	39.54	39.64	39.57
2	40.07	40.03	39.87	39.77	39.60	39.53	39.27	39.23	39.54	39.54	39.57	39.44
3	40.07	40.04	39.87	39.75	39.60	39.51	39.40	39.27	39.64	39.54	39.44	39.38
4	40.08	40.04	40.09	39.75	39.51	39.48	39.42	39.37	39.65	39.62	39.40	39.34
5	40.08	39.96	40.09	39.87	39.49	39.42	39.40	39.37	39.62	39.50	39.41	39.40
6	39.96	39.94	39.87	39.85	39.45	39.41	39.48	39.40	39.50	39.45	39.47	39.39
7	39.97	39.94	39.85	39.79	39.62	39.45	39.46	39.24	39.53	39.45	39.59	39.46
8	40.01	39.97	39.79	39.54	39.62	39.41	39.39	39.24	39.59	39.53	39.67	39.43
9	40.09	40.01	39.54	39.54	39.57	39.41	39.28	39.25	39.65	39.59	39.43	39.36
10	40.10	40.09	39.54	39.52	39.71	39.57	39.37	39.28	39.67	39.57	39.43	39.40
11	40.09	40.08	39.64	39.54	39.71	39.58	39.32	39.30	39.57	39.50	39.54	39.43
12	40.13	40.08	39.71	39.64	39.58	39.51	39.33	39.32	39.52	39.48	39.54	39.42
13	40.13	40.13	39.71	39.53	39.55	39.42	39.42	39.33	39.48	39.32	39.42	39.32
14	40.16	40.13	39.53	39.49	39.42	39.29	39.57	39.36	39.53	39.32	39.32	39.28
15	40.15	40.12	39.58	39.52	39.29	39.26	39.36	39.27	39.53	39.44	39.28	39.26
16	40.12	39.97	39.63	39.58	39.40	39.26	39.49	39.28	39.60	39.46	39.30	39.26
17	39.97	39.88	39.63	39.62	39.41	39.39	39.49	39.45	39.49	39.45	39.33	39.30
18	39.88	39.84	39.64	39.62	39.49	39.39	39.45	39.33	39.45	39.32	39.33	39.33
19	39.93	39.86	39.64	39.62	39.55	39.49	39.59	39.33	39.32	39.27	39.33	39.29
20	39.92	39.90	39.62	39.60	39.51	39.40	39.60	39.55	39.40	39.28	39.36	39.29
21	39.90	39.88	39.60	39.53	39.40	39.34	39.55	39.44	39.51	39.40	39.36	39.28
22	39.88	39.85	39.54	39.53	39.34	39.32	39.68	39.44	39.50	39.39	39.28	39.25
23	39.88	39.85	39.54	39.54	39.60	39.34	39.68	39.47	39.39	39.35	39.73	39.28
24	39.92	39.88	39.72	39.54	39.47	39.38	39.47	39.44	39.42	39.34	39.68	39.51
25	39.92	39.87	39.76	39.50	39.38	39.34	39.51	39.46	39.42	39.40	39.52	39.51
26 27 28 29 30 31	39.87 39.82 39.82 39.90 39.97 39.97	39.82 39.82 39.80 39.80 39.90 39.84	39.50 39.50 39.68 39.50 39.50	39.37 39.37 39.50 39.43 39.43	39.41 39.41 39.35 39.40 39.38 39.37	39.34 39.23 39.23 39.35 39.28 39.28	39.60 39.46 39.28 39.59 39.66 39.63	39.46 39.25 39.23 39.28 39.59 39.54	39.40 39.39 39.64 	39.37 39.31 39.39 	39.52 39.57 40.02 40.00 39.64 39.66	39.49 39.49 39.57 39.64 39.59 39.60
MONTH	40.16	39.80	40.09	39.37	39.73	39.23	39.68	39.23	39.67	39.27	40.02	39.25

ANNE ARUNDEL COUNTY—Continued

				All	INL AROND	LL COUN	i i —continu	icu				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JU	LY	AUG	UST	SEPTE	MBER
1	39.76	39.65	40.13	40.01	39.81	39.78	39.79	39.77	39.81	39.79		
2	40.15	39.76	40.02	40.00	39.79	39.78	39.77	39.63	39.83	39.81		
2 3	40.21	39.91	40.00	39.95	39.93	39.79	39.63	39.57	39.83	39.79		
4	39.91	39.80	39.95	39.88	39.93	39.91	39.60	39.56	39.79	39.76		
5	39.80	39.75	39.91	39.87	39.91	39.87	39.67	39.60	39.76	39.74		
6	39.92	39.80	40.05	39.91	39.99	39.87	39.68	39.62	39.74	39.71		
7	40.02	39.92	40.13	40.05	40.00	39.97	39.62	39.58	39.72	39.70		
8	40.03	39.96	40.13	40.05	39.97	39.90	39.83	39.59	39.74	39.70		
9	39.96	39.91	40.05	40.01	39.90	39.85	39.72	39.67	39.77	39.74		
10	40.01	39.94	40.02	39.97	39.85	39.84	39.67	39.62	39.80	39.77		
11	40.01	39.99	40.03	40.00	39.84	39.84	39.64	39.63	39.80	39.76		
12	40.07	40.00	40.03	39.89	39.85	39.84	39.64	39.64	39.76	39.75		
13	40.09	40.07	39.93	39.85	39.92	39.85	39.65	39.64	39.75	39.75		
14	40.07	40.00	40.09	39.93	39.92	39.92	39.65	39.63	39.75	39.72		
15	40.00	39.90	40.09	40.04	39.92	39.90	39.71	39.63	39.72	39.65		
16	39.97	39.90	40.04	39.93	39.90	39.84	39.87	39.67	39.71	39.65		
17	40.12	39.97	39.93	39.90	39.84	39.78	39.88	39.87	39.71	39.68		
18			39.91	39.89	39.78	39.71	39.87	39.85	39.68	39.65		
19			39.92	39.90	39.71	39.65	39.85	39.83	39.67	39.65		
20			40.13	39.92	39.69	39.64	39.83	39.79	39.69	39.66		
21	40.13	40.01	40.11	40.07	39.78	39.69	39.88	39.80	39.70	39.68		
22	40.13	40.01	40.09	40.07	39.78	39.73	39.87	39.84	39.68	39.63		
23	40.30	40.13	40.09	40.09	39.73	39.65	39.84	39.74	39.63	39.60		
24	40.26	40.13	40.09	39.99	39.68	39.67	39.75	39.71	39.60	39.53		
25	40.13	39.98	39.99	39.99	39.68	39.68	39.83	39.75				
26	40.00	39.96	40.00	39.99	39.68	39.67	39.82	39.78				
27	40.04	40.00	39.99	39.94	39.67	39.67	39.87	39.78				
28	40.01	39.94	39.94	39.93	39.70	39.67	39.83	39.75				
29	39.96	39.95	39.93	39.89	39.73	39.69	39.89	39.73				
30	40.13	39.96	39.89	39.86	39.79	39.73	39.86	39.79				
31			39.86	39.81			39.79	39.78				
MONTH	40.30	39.65	40.13	39.81	40.00	39.64	39.89	39.56	39.83	39.53		
YEAR	40.30	39.23										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Bd 91. SITE ID.--390950076391101. PERMIT NUMBER.--AA-04-2029.

LOCATION.--Lat 39°09'50", long 76°39'11", Hydrologic Unit 02060003, 0.3 mi southeast of the intersection of Dorsey Road and Baltimore Annapolis Blvd., in the median of MD Rt. 176, Glen Burnie. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian (semi-confined), observation well, depth 160 ft; casing diameter 6 in., to 119 ft; casing diameter 4 in., from 119 to 155 ft; screen diameter 2 in., from 155 to 160 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital recorder from April 1981 to March 1986.

DATUM.--Elevation of land surface is 82.63 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.25 ft above land surface.

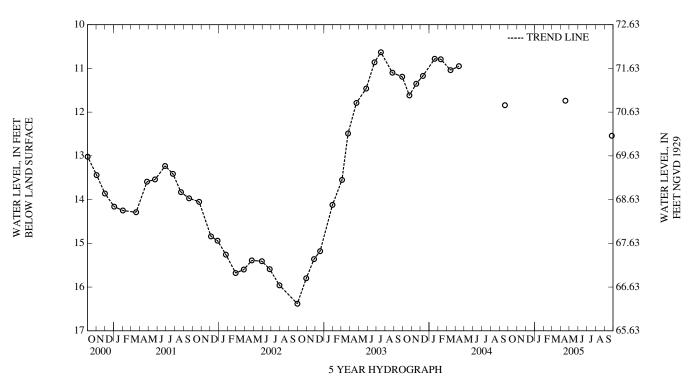
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels were affected by local ground-water withdrawal up to May 1995; when the nearby pumping station discontinued ground-water withdrawal from the Patapsco aquifer.

PERIOD OF RECORD .-- March 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.60 ft below land surface, May 7, 1998; lowest measured, 75.20 ft below land surface, September 1, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	11.74	SEP 26, 2005	12.54
		11.74 APR 18, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Bd 152. SITE ID.--390821076365401. PERMIT NUMBER.--AA-81-3463.

LOCATION.--Lat 39°08'21", long 76°36'54", Hydrologic Unit 02060003, 100 ft north of MD Rt. 100, 0.2 mi southeast of the intersection of Oakwood Road and Funke Road, at Woodside Elementary School. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 103 ft; casing diameter 6 in., to 90 ft; and casing diameter 4 in., from 100 to 103 ft; screen diameter 4 in., from 90 to 100 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to December 1996, and 30-minute recorder interval from December 1996 to August 2005.

DATUM.--Elevation of land surface is 53.29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels before February 23, 1986 are currently not available. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.97 ft above sea level, April 20, 2004 (recorder); lowest measured, 19.88 ft above sea level, August 21, 1987 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004 DEC 21 JAN 21, 2005	25.60 25.33 25.30	FEB 18, 2005 MAR 31 APR 18	25.78 26.25 26.47	MAY 18, 2005 JUN 23 JUL 28	26.54 26.83 27.45	AUG 25, 2005 SEP 26	26.88 26.55

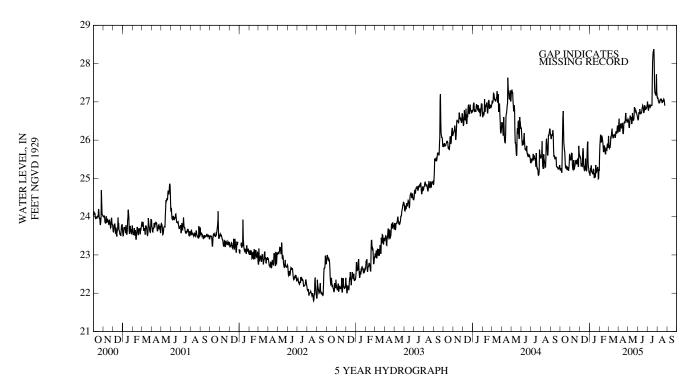
LOWEST 25.30 JAN 21, 2005 HIGHEST 27.45 JUL 28, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1	25.26	25.22	25.61	25.50	25.91	25.60	25.29	25.15	25.87	25.60	26.17	26.11
2	25.29	25.23	25.65	25.50	25.60	25.53	25.24	25.07	25.99	25.87	26.11	25.95
3	25.29	25.25	25.66	25.48	25.71	25.55	25.29	25.19	26.16	25.99	25.95	25.81
4	25.31	25.27	25.89	25.49	25.55	25.52	25.39	25.26	26.19	26.14	25.85	25.79
5	25.28	25.16	25.89	25.65	25.52	25.34	25.47	25.26	26.14	26.01	25.88	25.83
6	25.64	25.16	25.70	25.64	25.45	25.31	25.61	25.34	26.01	25.94	25.91	25.82
7	26.24	25.64	25.88	25.66	25.62	25.40	25.44	25.17	26.12	25.96	26.07	25.89
8	26.57	26.14	25.72	25.34	25.62	25.33	25.46	25.17	26.21	26.12	26.20	26.07
9	26.96	26.57	25.34	25.25	25.64	25.32	25.21	25.17	26.14	26.08	26.14	26.06
10	27.05	26.76	25.28	25.23	25.93	25.64	25.25	25.12	26.15	26.03	26.24	26.14
11	26.94	26.40	25.52	25.28	26.01	25.79	25.30	25.12	26.03	25.92	26.43	26.22
12	26.40	25.94	25.54	25.48	25.79	25.66	25.39	25.23	25.96	25.89	26.42	26.30
13	25.94	25.84	25.52	25.25	25.72	25.47	25.48	25.24	25.89	25.70	26.30	26.14
14	25.85	25.74	25.36	25.23	25.47	25.25	25.63	25.22	25.92	25.70	26.14	26.10
15	25.77	25.70	25.33	25.30	25.30	25.21	25.22	25.02	25.92	25.83	26.10	26.06
16	25.70	25.50	25.41	25.33	25.33	25.19	25.31	25.02	26.04	25.86	26.13	26.06
17	25.50	25.32	25.51	25.39	25.47	25.33	25.28	25.14	25.91	25.82	26.16	26.13
18	25.32	25.26	25.62	25.46	25.62	25.31	25.14	25.04	25.83	25.70	26.18	26.14
19	25.48	25.29	25.53	25.47	25.69	25.52	25.36	25.04	25.71	25.64	26.14	26.10
20	25.41	25.33	25.64	25.47	25.52	25.23	25.49	25.35	25.75	25.64	26.20	26.13
21	25.33	25.27	25.53	25.38	25.34	25.23	25.35	25.15	25.92	25.75	26.19	26.11
22	25.27	25.23	25.44	25.38	25.25	25.20	25.54	25.15	25.90	25.80	26.11	26.06
23	25.29	25.23	25.55	25.44	25.66	25.21	25.53	25.25	25.80	25.75	26.60	26.11
24	25.33	25.29	25.73	25.50	25.90	25.66	25.28	25.18	25.88	25.74	26.52	26.23
25	25.32	25.28	25.85	25.52	25.96	25.90	25.34	25.26	26.55	25.88	26.26	26.21
26 27 28 29 30 31	25.30 25.46 25.42 25.62 25.72 25.72	25.22 25.20 25.28 25.37 25.62 25.61	25.52 25.85 26.13 26.00 25.67	25.34 25.30 25.85 25.67 25.60	26.13 26.12 25.42 25.40 25.27 25.37	25.96 25.42 25.30 25.26 25.16 25.14	25.95 25.87 25.22 25.24 25.34 25.60	25.30 25.22 24.99 25.00 25.24 25.20	26.35 25.91 26.15 	25.91 25.80 25.86 	26.23 26.30 26.80 26.79 26.38 26.30	26.19 26.17 26.30 26.38 26.23 26.20
MONTH	27.05	25.16	26.13	25.23	26.13	25.14	25.95	24.99	26.55	25.60	26.80	25.79

ANNE ARUNDEL COUNTY—Continued

				Air	INL AROND	LL COUN	i i —Continu	cu				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	AY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	26.41 26.90 26.93 26.56 26.31	26.27 26.41 26.56 26.31 26.22	26.71 26.56 26.53 26.48 26.39	26.55 26.53 26.48 26.36 26.32	26.59 26.59 26.77 26.77 26.74	26.53 26.53 26.58 26.73 26.69	27.03 27.03 26.91 26.83 27.00	27.01 26.91 26.81 26.77 26.83	27.15 27.15 27.14 27.09 27.03	27.10 27.11 27.09 27.02 27.01	   	
6 7 8 9 10	26.37 26.47 26.52 26.43 26.40	26.25 26.37 26.43 26.33 26.32	26.59 26.69 26.69 26.64 26.61	26.38 26.59 26.64 26.60 26.57	26.85 26.90 26.81 26.75 26.71	26.69 26.81 26.75 26.71 26.69	27.03 26.93 27.07 26.99 26.91	26.93 26.85 26.89 26.91 26.87	27.07 27.07 27.08 27.09 27.10	26.96 26.99 26.97 27.05 27.06	   	  
11 12 13 14 15	26.40 26.45 26.48 26.45 26.36	26.35 26.35 26.45 26.36 26.18	26.65 26.65 26.50 26.71 26.76	26.60 26.46 26.42 26.50 26.71	26.72 26.75 26.87 26.87 26.91	26.70 26.71 26.75 26.84 26.85	26.91 26.92 26.93 26.93 27.58	26.89 26.90 26.91 26.91 26.91	27.10 27.08 27.09 27.09 27.07	27.07 27.05 27.07 27.07 26.99	   	
16 17 18 19 20	26.24 26.44 26.46 26.50 26.61	26.16 26.24 26.44 26.44 26.49	26.71 26.58 26.58 26.63 26.96	26.58 26.53 26.52 26.53 26.63	26.96 26.93 26.89 26.81 26.80	26.91 26.89 26.81 26.72 26.72	28.06 28.23 28.33 28.38 28.39	27.58 28.06 28.23 28.32 28.33	27.07 27.06 27.04 27.04 27.07	26.97 27.04 27.01 27.01 27.03	   	  
21 22 23 24 25	26.61 26.63 26.85 26.85 26.71	26.46 26.46 26.63 26.71 26.54	27.02 26.86 26.88 26.88 26.77	26.86 26.82 26.84 26.77 26.74	26.92 26.95 26.91 26.84 26.85	26.80 26.91 26.80 26.81 26.84	28.50 28.51 28.03 27.43 27.29	28.38 28.03 27.43 27.24 27.24	27.10 27.09 27.05 26.99	27.07 27.05 26.99 26.90	   	  
26 27 28 29 30 31	26.56 26.59 26.54 26.50 26.71	26.50 26.54 26.47 26.47 26.50	26.79 26.77 26.72 26.72 26.68 26.67	26.76 26.72 26.71 26.66 26.63 26.58	26.85 26.85 26.89 26.93 27.02	26.81 26.82 26.84 26.88 26.93	27.26 27.28 27.84 27.96 27.72 27.26	27.19 27.18 27.28 27.72 27.26 27.15	   	   	   	   
MONTH YEAR	26.93 28.51	26.16 24.99	27.02	26.32	27.02	26.53	28.51	26.77	27.15	26.90		

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Bd 156. SITE ID.--390922076371001. PERMIT NUMBER.--AA-81-3462.

LOCATION.--Lat 39°09'22", long 76°37'10", Hydrologic Unit 02060003, off Wardour Road, 0.3 mi north of Aquahart Road intersection, next to the Baltimore and Annapolis bike trail. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 173 ft; casing diameter 6 in., to 160 ft; casing diameter 4 in., from 170 to 173 ft; screen diameter 4 in., from 160 to 170 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from October 1984 to June 1998, and 15-minute recorder interval from June 1998 to August 2005.

DATUM.--Elevation of land surface is 68.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.26 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD, -- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.70 ft above sea level, September 22, 2003 (recorder); lowest measured, 12.76 ft above sea level, September 14, 1987.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004	23.06	FEB 18, 2005	22.24	MAY 18, 2005	23.05	AUG 25, 2005	23.95
DEC 21	22.50	MAR 31	22.39	JUN 23	23.68	SEP 26	23.02
JAN 21, 2005	22.37	APR 18	22.90	JUL 28	26.28		

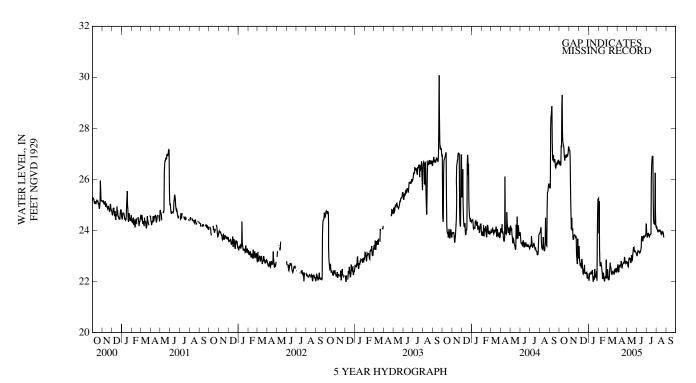
LOWEST 22.24 FEB 18, 2005 HIGHEST 26.28 JUL 28, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBI	RUARY	MAI	RCH
1	26.65	26.59	27.26	27.15	25.18	22.99	22.29	22.12	25.35	25.26	22.81	22.48
2	26.74	26.61	27.36	27.15	25.49	23.38	22.16	22.03	25.38	23.89	23.67	22.38
3	26.74	26.66	27.37	27.14	23.38	22.90	22.36	22.16	25.57	25.15	22.48	22.10
4	26.82	26.72	27.46	26.84	22.90	22.81	22.69	22.31	25.64	23.29	22.15	22.05
5	26.79	26.56	27.44	25.83	22.83	22.63	22.41	22.31	23.29	22.75	22.15	22.12
6	28.45	26.57	27.27	24.98	22.72	22.63	22.79	22.34	22.75	22.61	22.24	22.10
7	28.66	27.30	24.98	24.47	22.97	22.72	22.60	22.29	22.76	22.61	22.45	22.22
8	28.91	27.29	25.46	24.04	22.97	22.57	22.77	22.29	22.95	22.76	24.07	22.45
9	29.31	28.91	26.45	24.49	22.85	22.55	22.52	22.29	22.78	22.70	24.65	22.74
10	29.45	29.31	24.49	24.01	23.25	22.85	22.48	22.35	22.81	22.60	22.74	22.57
11	29.55	27.85	24.83	24.01	23.26	22.88	22.53	22.33	22.71	22.48	22.85	22.57
12	27.85	27.49	24.61	24.08	22.88	22.71	22.88	22.43	22.55	22.40	22.75	22.52
13	27.50	27.42	24.28	23.69	22.79	22.52	22.61	22.43	22.40	22.12	22.52	22.36
14	27.42	27.30	23.69	23.63	22.56	22.33	22.75	22.16	22.44	22.12	22.36	22.30
15	27.36	27.29	23.78	23.69	22.43	22.29	22.16	21.99	22.44	22.25	22.43	22.25
16	27.29	27.06	23.90	23.78	22.52	22.32	22.40	22.06	22.62	22.34	22.39	22.33
17	27.06	26.89	23.89	23.82	22.61	22.47	22.40	22.21	22.36	22.25	22.42	22.39
18	26.89	26.74	23.89	23.83	22.80	22.47	22.21	22.09	22.29	22.08	22.52	22.40
19	26.98	26.89	23.88	23.81	22.79	22.65	22.57	22.11	22.27	22.03	22.40	22.32
20	26.96	26.93	23.81	23.79	22.65	22.32	22.58	22.49	22.17	22.00	22.48	22.37
21	26.94	26.91	23.79	23.71	22.49	22.32	22.49	22.20	22.37	22.17	22.44	22.31
22	26.91	26.86	23.74	23.71	22.35	22.31	22.67	22.20	23.46	22.18	22.68	22.27
23	26.98	26.86	23.82	23.73	22.67	22.33	22.67	22.18	22.42	22.15	22.73	22.43
24	27.06	26.98	23.78	23.06	22.43	22.34	22.39	22.14	22.85	22.12	23.30	22.50
25	27.04	26.94	23.37	22.91	22.37	22.33	22.41	22.34	24.51	22.85	22.55	22.44
26 27 28 29 30 31	26.96 27.97 27.27 27.29 27.44 27.45	26.91 26.91 26.99 27.07 27.29 27.26	22.91 23.68 23.96 23.77 23.14	22.70 22.70 23.68 23.04 22.91	22.51 22.49 22.35 22.40 22.31 22.30	22.35 22.14 22.13 22.31 22.17 22.17	23.43 23.82 24.72 25.21 25.42 25.37	22.41 22.03 23.82 24.72 25.21 25.24	22.90 22.25 23.60 	22.25 22.12 22.21 	22.45 22.53 23.03 23.01 22.49 22.48	22.38 22.39 22.53 22.49 22.37 22.38
MONTH	29.55	26.56	27.46	22.70	25.49	22.13	25.42	21.99	25.64	22.00	24.65	22.05

ANNE ARUNDEL COUNTY—Continued

				Ai	WILL AROUND	LL COUN	i i —Continu	icu				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU:	NE	JUI	LY	AUG	UST	SEPTEMBER	
1 2 3 4 5	22.70 23.11 23.11 22.65 22.64	22.47 22.65 22.65 22.44 22.36	22.96 22.96 22.80 22.70 22.73	22.76 22.76 22.70 22.59 22.57	23.06 23.24 23.24 23.24 23.20	23.01 23.01 23.14 23.19 23.16	24.27 24.05 23.84 23.81 24.23	24.05 23.84 23.74 23.74 23.81	24.21 24.17 24.15 24.09 24.03	24.10 24.13 24.07 24.01 23.97	   	  
6 7 8 9 10	22.60 22.77 22.80 22.65 22.71	22.50 22.60 22.65 22.55 22.60	22.91 23.05 23.02 23.09 22.93	22.70 22.91 22.92 22.87 22.86	23.28 23.25 23.23 23.23 23.16	23.16 23.21 23.16 23.14 23.11	24.14 23.94 23.95 23.85 23.81	23.89 23.80 23.85 23.81 23.75	24.73 24.33 24.07 23.99 24.04	23.93 23.99 23.96 23.97 23.99	   	  
11 12 13 14 15	22.71 22.83 22.86 22.80 22.68	22.66 22.67 22.80 22.68 22.53	23.02 23.27 22.86 23.12 23.12	22.91 22.81 22.72 22.86 23.03	23.16 23.22 23.60 23.42 23.76	23.15 23.16 23.22 23.35 23.38	24.23 23.89 23.87 23.92 25.98	23.78 23.84 23.84 23.85 23.86	24.07 24.01 24.02 24.02 24.01	24.01 23.98 24.00 23.98 23.88	   	  
16 17 18 19 20	22.67 22.93 22.93 22.76 22.88	22.53 22.67 22.68 22.70 22.76	23.03 22.89 23.10 23.19 24.39	22.89 22.82 22.85 23.07 23.16	23.98 23.84 23.92 23.71 23.86	23.76 23.76 23.71 23.59 23.59	26.53 26.75 27.01 26.94 26.97	25.98 26.53 26.75 26.90 26.91	23.93 23.93 24.02 23.92 23.95	23.85 23.92 23.89 23.87 23.89	   	  
21 22 23 24 25	22.88 22.94 23.19 23.11 22.94	22.72 22.72 22.94 22.93 22.75	24.27 23.35 23.55 23.38 23.20	23.32 23.31 23.33 23.18 23.17	23.87 23.88 23.84 23.77 23.80	23.75 23.80 23.69 23.73 23.77	27.11 27.07 25.17 24.41 24.42	26.90 25.17 24.41 24.28 24.29	23.97 24.08 23.93 23.83	23.95 23.93 23.83 23.72	   	  
26 27 28 29 30 31	22.80 22.86 22.82 22.77 22.96	22.70 22.79 22.70 22.72 22.77	23.88 23.32 23.19 23.18 23.22 23.15	23.20 23.18 23.16 23.13 23.10 23.06	23.80 23.99 23.85 25.35 26.14	23.77 23.77 23.81 23.85 24.27	24.34 26.66 26.66 26.58 24.71 24.22	24.25 24.24 26.26 24.71 24.22 24.14	   	   	   	   
MONTH YEAR	23.19 29.55	22.36 21.99	24.39	22.57	26.14	23.01	27.11	23.74	24.73	23.72		

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Bd 159. SITE ID.--390737076374402. PERMIT NUMBER.--AA-81-3949.

LOCATION.--Lat 39°07'37", long 76°37'44", Hydrologic Unit 02060003, off Nolfield Dr., 0.14 mi east of Phrine Rd., at Rippling Woods Elementary School. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 99 ft; casing diameter 6 in., to 89 ft; screen diameter 4 in., from 89 to 99 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to July 1989.

DATUM.--Elevation of land surface is 75.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

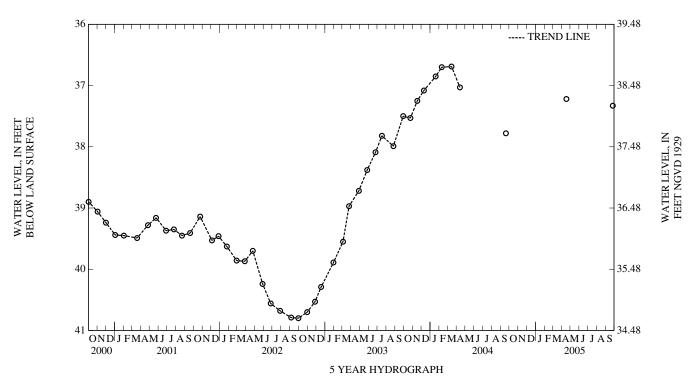
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.77 ft below land surface, September 14, 1987; lowest measured, 42.38 ft below land surface, September 7, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	37.22	SEP 26, 2005	37.33
		37.22 APR 18, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER .-- AA Bf 3. SITE ID .-- 390945076285601.

LOCATION.--Lat 39°09'45", long 76°28'56", Hydrologic Unit 02060003, 8 mi east of Glen Burnie at Fort Smallwood Park. Owner: Baltimore City Department of Recreation and Parks.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Dug, brick-lined, unused, water-table well, diameter 48 in., depth 22.8 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 20.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Hole in concrete cover at land surface.

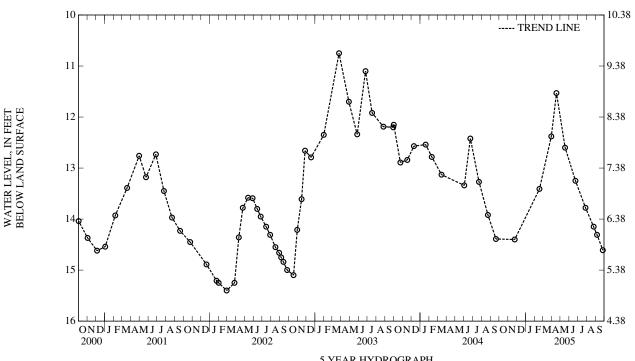
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level measured 14.10 ft below land surface, January 27, 1944. PERIOD OF RECORD .-- April 1956 to September 2005 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.40 ft below land surface, March 31, 1958; lowest measured, 19.09 ft below land surface, December 7, 1965.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 24, 2004 FEB 18, 2005	14.40 13.41	APR 18, 2005 MAY 18	11.53 12.60	JUL 28, 2005 AUG 25	13.78 14.15	SEP 26, 2005	14.61
MAR 31	12.38	JUN 23	13.25	SEP 06	14.13		

HIGHEST 11.53 APR 18, 2005 LOWEST 14.61 SEP 26, 2005



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--AA Cb 1. SITE ID.--390303076463201. PERMIT NUMBER.--AA-03-5695.

LOCATION.--Lat 39°03'03", long 76°46'32", Hydrologic Unit 02060006, on Duvall Bridge Rd., Patuxent Wildlife Research Center. Owner: U.S. Fish and Wildlife (formerly U.S. Army).

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 505 ft; casing diameter 6 in., to 485 ft; screen diameter 6 in., from 485 to 505 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 1984 to current year.

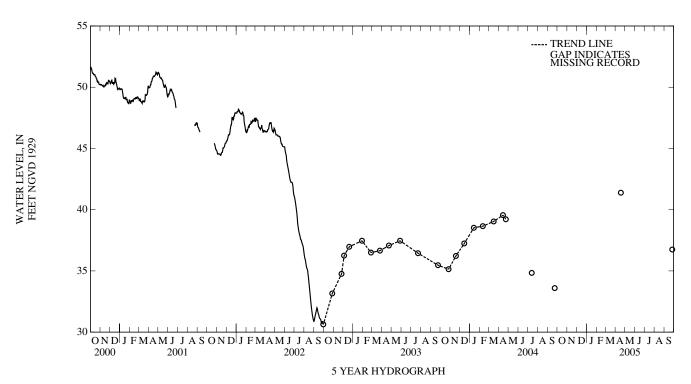
DATUM.--Elevation of land surface is 129.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.50 ft above sea level, May 1, 1962; lowest measured, 30.63 ft above sea level, September 30, 2002 (recorder).

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	41.39	SEP 26, 2005	36.75
		Γ 36.75 SEP 26, 20 Τ 41.39 APR 18.2	



WELL NUMBER.--AA Cc 40. SITE ID.--390423076432001. PERMIT NUMBER.--AA-03-5693.

LOCATION.--Lat 39°04'23", long 76°43'20", Hydrologic Unit 02060006, on Rifle Range Rd., Fort George Meade. Owner: U.S. Army.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 238 ft; casing diameter 6 in., to 208 ft; screened diameter 6 in., from 208 to 238 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1959 to July 1960 and a digital water-level recorder from January 1978 to December 1985.

DATUM.--Elevation of land surface is 136.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Network observation well. Water levels are affected by local and regional ground-water withdrawal.

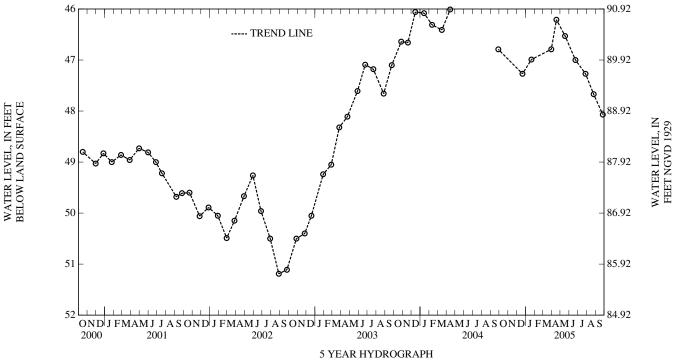
PERIOD OF RECORD .-- December 1959 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.58 ft below land surface, March 25, 1961; lowest measured, 51.69 ft below land surface, September 1, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

D . TD	WATER	D + 577	WATER	D + mp	WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
DEC 21, 2004	47.27	APR 18, 2005	46.21	JUL 28, 2005	47.27
JAN 21, 2005	46.99	MAY 18	46.53	AUG 25	47.67
MAR 31	46.79	JUN 23	47.00	SEP 26	48.07

HIGHEST 46.21 APR 18, 2005 LOWEST 48.07 SEP 26, 2005



3 TEAR III DROOKAIII

WELL NUMBER.- AA Cc 89. SITE ID.--390010076415703. PERMIT NUMBER.--AA-65-0672.

LOCATION.--Lat 39°00'10", long 76°41'57", Hydrologic Unit 02060006, at Crofton water treatment plant, on east side of Route 3, 1.2 mi south of Route 424. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 605 ft; casing diameter 20 in. to 525 ft depth; casing diameter 10 in. to 260 ft; and casing diameter 8 in. from 260 to 575 ft; screen diameteer 8 in. from 575 to 605 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personel. Equipped with digital water-level recorder--30 minute recording interval, October 2004 to current year.

DATUM.--Elevation of land surface is 52.57 ft above NGVD of 1929. Measuring point: Top of 2 in coupling, 3.3 ft above land surface.

REMARKS.--Formerly production Well Crofton #2. Ground-Water-Level Monitoring Network and Maryland Water-Level Network obsevation well.

PERIOD OF RECORD .-- 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.12 ft above sea level, March 12, 1980; lowest measured, 17.43 ft below sea level, October 18, 1965.

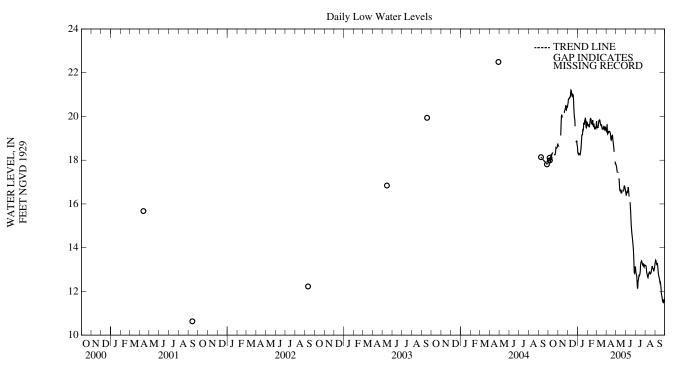
## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2004 NOV 19	18.31 20.17	JAN 07, 2005 MAR 17	18.21 19.62	MAY 24, 2005 JUL 21	16.57 13.37	SEP 09, 2005	13.15

LOWEST 13.15 SEP 09, 2005 HIGHEST 20.17 NOV 19, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	OCTO	OBER	NOVE	MBER	DECE	DECEMBER		JANUARY		FEBRUARY		MARCH	
1 2 3 4 5	  18.33	   18.11	18.73 18.78 18.78 19.01	18.67 18.65 18.64 18.65	20.79 20.78 20.81 20.88 20.88	20.55 20.61 20.78 20.78 20.83	18.67 18.42 18.35 18.36 18.34	18.42 18.31 18.32 18.26 18.28	19.72 19.64 19.69 19.71 19.64	19.64 19.59 19.60 19.64 19.53	19.87 19.79 19.59 19.51 19.54	19.79 19.59 19.49 19.48 19.50	
6 7 8 9 10	18.11 17.99 18.23 18.35 18.35	17.99 17.91 17.94 18.23 18.25	  19.61 19.98	  19.13 19.61	20.90 21.06 21.05 21.08 21.27	20.83 20.88 20.88 20.89 21.08	18.44  18.46 18.34 18.50	18.33  18.21 18.30 18.34	19.56 19.70 19.83 20.00 20.02	19.52 19.54 19.70 19.82 19.93	19.67 19.87 20.00 19.82 19.85	19.50 19.63 19.79 19.77 19.79	
11 12 13 14 15	18.25 18.32 18.35 18.38 18.45	18.20 18.23 18.30 18.33 18.33	20.11 20.19 20.24 20.01	19.98 20.08 20.01 19.95	21.29 21.22 21.24 21.03 20.96	21.21 21.19 21.03 20.94 20.92	18.68 18.85 19.15 19.40 19.46	18.49 18.68 18.85 19.15 19.15	19.93 19.91 19.87 19.79 19.78	19.89 19.87 19.67 19.66 19.65	19.94 19.90 19.78 19.68 19.62	19.83 19.78 19.68 19.62 19.59	
16 17 18 19 20	18.41  18.31 18.29	18.32  18.26 18.25	20.19 20.28	20.17 20.18	21.10 21.10 21.02 20.98 20.77	20.96 21.01 20.98 20.77 20.38	19.41 19.42 19.42 19.71 19.74	19.17 19.38 19.36 19.42 19.71	19.91 19.89 19.83 19.64 19.67	19.71 19.83 19.64 19.55 19.54	19.67 19.68 19.61 19.48 19.54	19.62 19.61 19.48 19.43 19.45	
21 22 23 24 25	18.29 18.29 18.42 18.58 18.61	18.26 18.25 18.29 18.42 18.57	20.29 20.36 20.40 20.64 20.75	20.25 20.29 20.35 20.39 20.51	20.38 20.11 20.02 19.88	20.11 19.92 19.87 19.55	19.74 20.00 20.01 19.96 19.99	19.64 19.65 19.81 19.80 19.94	19.81 19.72 19.55 19.58 19.55	19.67 19.55 19.43 19.43 19.49	19.54 19.49 19.93 19.97 19.57	19.47 19.43 19.46 19.57 19.51	
26 27 28 29 30 31	18.59 18.61 18.61 18.71 18.83 18.82	18.55 18.55 18.57 18.59 18.70 18.73	20.51 20.48 20.64 20.51 20.55	20.32 20.30 20.48 20.44 20.43	19.22 18.94 18.98 18.89 18.72	18.88 18.82 18.89 18.70 18.67	20.04 19.85 19.53 19.74 19.83 19.81	19.85 19.53 19.48 19.51 19.74 19.72	19.49 19.57 19.85 	19.47 19.45 19.57 	19.51 19.44 19.94 19.95 19.53 19.41	19.41 19.38 19.44 19.53 19.41 19.37	
MONTH	18.83	17.91	20.75	18.64	21.29	18.67	20.04	18.21	20.02	19.43	20.00	19.37	

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	API	RIL	MA	ΑY	JUI	JUNE		JULY		AUGUST		SEPTEMBER	
1 2 3 4 5	19.41 19.93 19.99 19.64 19.30	19.33 19.41 19.64 19.30 19.20	17.87 17.79 17.73 17.69 17.53	17.79 17.72 17.69 17.53 17.43	16.57 16.48 16.59 16.60 16.61	16.47 16.38 16.48 16.55 16.57	13.14 13.10 12.90 12.81 12.75	12.90 12.81 12.75	13.22 13.23 13.22 13.16 13.02	13.18 13.18 13.16 13.02 12.86	13.44 13.49 13.46 13.40 13.32	13.34 13.43 13.40 13.32 13.24	
6 7 8 9 10	19.28 19.34 19.38 19.34 19.34	19.23 19.27 19.34 19.29 19.30	17.50  17.31	 17.44  17.17	16.60 16.77 16.80 16.77 16.66	16.54 16.58 16.77 16.66 16.48	12.67 12.39 12.51 12.62 12.65	12.15 12.15 12.48	12.86 12.81 12.74 12.72 12.79	12.80 12.74 12.66 12.63 12.72	13.30 13.35 13.33 13.20 13.05	13.20 13.30 13.20 13.05 12.87	
11 12 13 14 15	19.34 19.31 19.32 19.26 19.13	19.31 19.28 19.26 19.13 18.96	17.17 17.07 16.75 16.71 16.71	17.07 16.75 16.61 16.62 16.66	16.48  16.27 16.08	16.34  16.08 15.83	12.76 12.76 12.74 12.84 12.99	12.73 12.71 12.74	12.83 12.88 12.94 12.96 12.96	12.79 12.83 12.88 12.89 12.85	12.87 12.76 12.70 12.66 12.57	12.76 12.70 12.61 12.57 12.45	
16 17 18 19 20	18.96 19.09 19.14 19.17 19.18	18.92 18.96 19.09 19.13 19.14	16.68 16.56 16.56 16.63 16.82	16.56 16.51 16.53 16.52 16.63	15.83 15.51 15.24 14.97 14.71	15.51 15.24 14.97 14.71 14.58	13.18 13.35 13.41 13.42 13.43	13.18 13.35 13.37	12.86 12.86 12.89 12.96 13.05	12.80 12.82 12.83 12.89 12.95	12.46 12.46 12.41 12.29 12.11	12.38 12.41 12.29 12.11 11.90	
21 22 23 24 25	19.17 18.97 18.82 18.73 18.57	18.97 18.82 18.73 18.57 18.38	16.80  16.64 16.77	16.63  16.57 16.62	14.58 14.49 14.33 14.14 14.00	14.47 14.33 14.14 14.00 13.71	13.40 13.38 13.31 13.25 13.30	13.30 13.22 13.19	13.16 13.17 13.16 13.13 13.07	13.05 13.16 13.11 13.07 13.04	11.90 11.81 11.77 11.63 11.56	11.81 11.74 11.63 11.54 11.51	
26 27 28 29 30 31	18.17 17.94 17.87	17.94 17.83 17.83	16.89 16.89 16.84 16.79 16.74 16.68	16.77 16.84 16.79 16.74 16.68 16.57	13.71 13.33 12.95 13.20 13.21	13.33 12.86 12.83 12.95 13.14	13.30 13.28 13.23 13.25 13.27 13.27	13.14 13.11 13.21 13.21	13.07 13.01 13.06 13.13 13.30 13.40	13.01 12.92 12.95 13.06 13.13 13.30	11.69 11.66 11.65 11.74 11.74	11.56 11.51 11.54 11.65 11.66	
MONTH	19.99	17.83	17.87	16.51	16.80	12.83	13.43	12.15	13.40	12.63	13.49	11.51	
YEAR	21.29	11.51											



5 YEAR HYDROGRAPH
OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.- AA Cc 102. SITE ID.--390004076420001. PERMIT NUMBER.--AA-72-0907.

LOCATION.--Lat 39°00'04", long 76°42'00", Hydrologic Unit 02060006, at Crofton water treatment plant, on east side of Rt 3, 1.2 mi south of Rt 424. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 960 ft; casing diameter 20 in., to 820 ft; casing diameter 10 in., to 850 ft; screen diameter 10 in. from 850 to 960 ft..

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, October 2004 to July 2005.

DATUM.--Elevation of land surface is 53.82 ft above NGVD of 1929. Measuring point: Top of 2 in. coupling, 3.0 ft above land surface.

REMARKS.--Formerly production Well Crofton #3. Ground-Water-Level Monitoring Network and Maryland Water-Level Network obsevation well. PERIOD OF RECORD.--1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.82 ft above sea level, Dec 01, 1972; lowest measured, 32.36 ft below sea level, May 15, 2003.

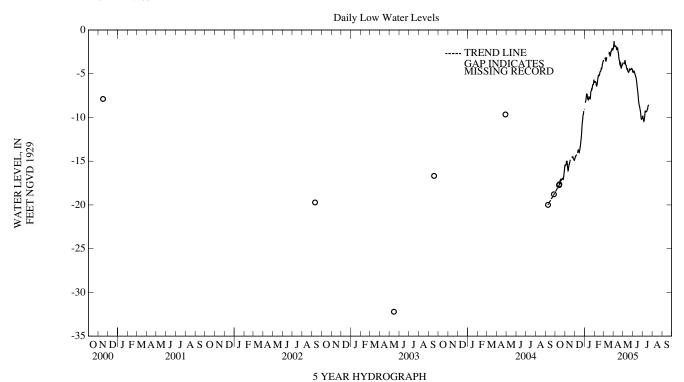
## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2004 NOV 19	-17.74 -14.54	JAN 07, 2005 MAR 17	-7.22 -2.92	MAY 24, 2005 JUL 21	-4.59 -8.42	SEP 09, 2005	-10.76

LOWEST -17.74 OCT 13, 2004 HIGHEST -2.92 MAR 17, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JANUARY		FEBRUARY		RCH
1 2 3 4 5	  	  	-15.41 -15.30 -15.29 -14.89	-15.53 -15.52 -15.39 -15.37 -15.01	-14.48 -14.45 -14.41 -14.28 -14.26	-14.72 -14.64 -14.45 -14.45 -14.34	 -8.09 -8.02 -7.62	-8.31 -8.13 -8.02	-5.94 -5.87 -5.79 -5.72 -5.90	-5.99 -5.94 -5.92 -5.90 -5.96	-3.32   -3.13	-3.42   -3.29
6 7 8 9 10	  	  	-14.90 -14.89 -14.91 -15.49 -15.90	-15.01 -15.01 -15.49 -15.90 -16.09	-14.17 -14.10  -13.78	-14.29 -14.24  -14.06	-7.27 -7.21 -7.17 -7.24 -7.28	-7.62 -7.29 -7.39 -7.39 -7.85	-5.93 -6.19 -6.24 -5.86 -5.61	-6.20 -6.40 -6.40 -6.27 -5.86	-3.11 -3.18 -3.32 -3.35 -3.11	-3.22 -3.37 -3.55 -3.55 -3.35
11 12 13 14 15	  -17.43 -17.17	  -17.65 -17.44	-15.69 -15.36 -15.31 -15.18 -15.00	-16.02 -15.69 -15.37 -15.36 -15.18	-13.65 -13.58 -13.52 -13.81 -13.84	-13.80 -13.72 -13.81 -13.96 -14.01	-7.85 -7.80 -7.60 -7.31 -7.35	-7.93 -7.97 -7.99 -7.60 -7.80	-5.41 -5.17 -5.14 -5.14 -5.15	-5.62 -5.41 -5.18 -5.22 -5.22	-2.77   	-3.11   
16 17 18 19 20	-17.11 -17.07 -17.09 -17.17 -17.10	-17.25 -17.13 -17.25 -17.25 -17.17	-14.83 -14.66 	-15.01 -14.83 	-13.58 -13.47 -12.96 -12.72 -12.55	-13.84 -13.59 -13.47 -12.96 -12.76	-7.57 -7.58 -7.74 -7.08 -6.89	-7.83 -7.76 -7.93 -7.74 -7.08	-4.97 -4.78 -4.71 -4.61 -4.58	-5.19 -5.01 -4.78 -4.75 -4.73	-2.57 -2.39 -2.38	 -2.78 -2.57 -2.59
21 22 23 24 25	-17.02 -16.90 -16.82 -16.84 -16.99	-17.10 -17.02 -16.97 -17.04 -17.10	-14.39 -14.48 -14.34 -14.26	-14.48 -14.57 -14.57 -14.51	-12.01 -11.40 -10.77 -10.45 -10.11	-12.55 -12.01 -11.40 -10.77 -10.45	-6.95 -6.38 -6.42 -6.57 -6.28	-7.01 -6.95 -6.72 -6.76 -6.57	-4.30 -4.28 -4.34 -3.97 -3.88	-4.58 -4.39 -4.42 -4.34 -3.97	-2.59 -2.82 -2.19 -2.14 -2.35	-2.97 -2.97 -2.82 -2.46 -2.46
26 27 28 29 30 31	-16.91 -16.50 -16.25 -15.90 -15.50 -15.36	-17.10 -16.91 -16.50 -16.25 -15.90 -15.50	-14.51 -14.64 -14.58 -14.77 -14.72	-14.69 -14.73 -14.77 -14.89 -14.90	-9.70 -9.64 -9.27 -9.04  -8.67	-10.14 -9.70 -9.66 -9.27  -9.07	-6.04 -6.13 -6.04 -5.60 -5.56 -5.67	-6.28 -6.25 -6.25 -6.04 -5.67 -5.99	-3.62 -3.55 -3.42 	-3.88 -3.67 -3.55 	-2.24 -2.05 -1.85 -1.92 -2.19 -1.99	-2.35 -2.24 -2.06 -2.29 -2.29 -2.19
MONTH	-15.36	-17.65	-14.26	-16.09	-8.67	-14.72	-5.56	-8.31	-3.42	-6.40	-1.85	-3.55

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΛY	JU	NE	JUI	LY	AUC	JUST	SEPTE	MBER
1	-1.74	-1.99	-3.54	-3.69	-4.76	-4.83	-9.74	-9.87				
2	-1.07	-1.74			-4.78	-4.86	-9.75	-9.85				
3	-1.01	-1.29			-4.67	-4.82	-9.85	-10.10				
4	-1.29	-1.86	-3.64	-3.77	-4.58	-4.69	-10.10	-10.10				
5	-1.79	-1.89	-3.73	-3.82	-4.63	-4.72	-10.10	-10.28				
3	-1.79	-1.09	-3.73	-3.62	-4.03	-4.72	-10.28	-10.43				
6	-1.72	-1.82	-3.45	-3.73	-4.70	-4.85	-10.13	-10.41				
7	-1.70	-1.81	-3.38	-3.45	-4.80	-5.00	-9.87	-10.13				
8	-1.80	-1.87	-3.40	-3.62	-5.00	-5.09	-9.28	-9.87				
9	-1.73	-1.86	-3.62	-3.96	-5.09	-5.26	-9.18	-9.28				
10	-1.86	-2.06	-3.96	-4.01	-5.26	-5.34	-9.24	-9.26				
1.1	2.06	2.22	4.01	4.07	5.24	£ 12	0.24	0.22				
11	-2.06	-2.23	-4.01	-4.07	-5.34	-5.43	-9.24	-9.32				
12	-2.03	-2.21	-4.07	-4.30	-5.43	-5.74	-9.32	-9.36				
13	-1.97	-2.03	-4.30	-4.48	-5.74	-6.12	-9.28	-9.32				
14	-1.97	-2.04	-4.34	-4.48	-6.12	-6.32	-9.23	-9.31				
15	-2.04	-2.36	-4.35	-4.45	-6.32	-6.67	-9.10	-9.23				
16	-2.36	-2.54	-4.45	-4.71	-6.67	-7.00	-9.00	-9.11				
17	-2.54	-2.78	-4.71	-4.78	-7.00	-7.36	-8.78	-9.00				
18	-2.78	-3.19	-4.77	-4.84	-7.36	-7.77	-8.62	-8.78				
19	-3.19	-3.44	-4.64	-4.81	-7.77	-8.29	-8.48	-8.63				
20	-3.35	-3.48	-4.51	-4.70	-8.29	-8.48	-8.43	-8.55				
	3.33						0.15	0.55				
21	-3.48	-3.93	-4.39	-4.51	-8.48	-8.56						
22	-3.76	-4.01	-4.35	-4.45	-8.54	-8.77						
23	-3.44	-3.76	-4.42	-4.55	-8.77	-9.03						
24	-3.49	-3.82	-4.54	-4.57	-9.03	-9.16						
25	-3.82	-4.34	-4.47	-4.54	-9.16	-9.45						
26	-4.18	-4.35	-4.42	-4.47	-9.45	-9.88						
27	-4.05	-4.18	-4.36	-4.43	-9.88	-10.16						
28	-3.91	-4.16	-4.35	-4.39	-10.14	-10.10						
29	-3.91	-3.98	-4.39	-4.39 -4.43	-10.14	-10.21						
					-10.08							
30	-3.54	-3.93	-4.42	-4.50		-10.08						
31			-4.50	-4.76								
MONTH	-1.01	-4.35	-3.38	-4.84	-4.58	-10.21	-8.43	-10.45				
YEAR	-1.01	-17.65										



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# WELL NUMBER.--AA Cc 115. SITE ID.--390103076402601.--PERMIT NUMBER.--AA-73-9755

LOCATION.--Lat 39°01'03", long 76°40'26", Hydrologic Unit 02060006, at Crofton Meadows water treatment plant, on east side of Ridel Road, 0.6 mi north of Route 424. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 671 ft; casing diameter 4 in., to 661 ft; screen diameter 4 in from 661 to 671 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 134.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter box, 3.55 ft above land surface.

REMARKS.-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- March 20, 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.26 ft below land surface, June 28, 1979; lowest measured, 190.40 ft below land surface, September 17, 1998.

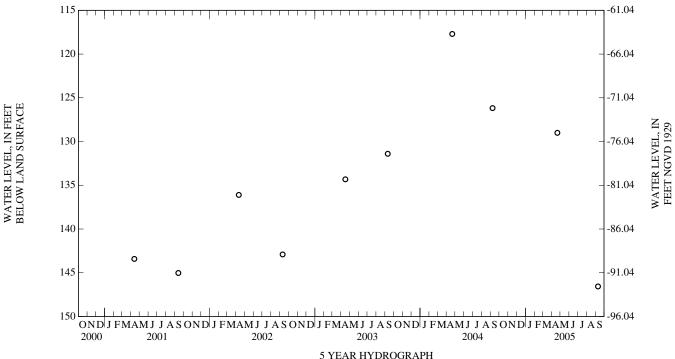
## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

 DATE
 WATER LEVEL
 DATE
 WATER LEVEL

 APR 21, 2005
 129.00
 SEP 09, 2005
 146.56

 HIGHEST
 129.00
 APR 21, 2005

HIGHEST 129.00 APR 21, 2005 LOWEST 146.56 SEP 09, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cc 116. SITE ID.--390103076402602.--PERMIT NUMBER.--AA-73-9756

LOCATION.--Lat 39°01'03", long 76°40'26", Hydrologic Unit 02060006, at Crofton Meadows water treatment plant, on east side of Ridel Road, 0.6 mi north of Route 424. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 483 ft; casing diameter 4 in., to 473 ft; screen diameter 4 in from 473 ft to 483 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 134.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter platform, 3.00 ft above land surface.

REMARKS .-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

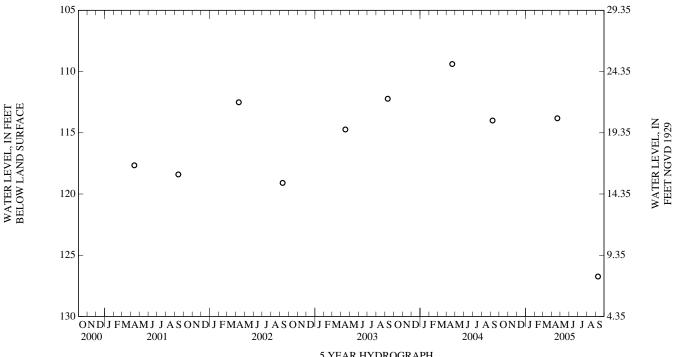
PERIOD OF RECORD .-- June 26, 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 85.04 ft below land surface, June 28, 1979; lowest measured, 126.74 ft below land surface, September 09, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 2005	113.81	SEP 09, 2005	126.74
	HIGHES	T 113 91 ADD 21	2005

LOWEST 126.74 SEP 09, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cc 117. SITE ID.--390103076402603.--PERMIT NUMBER.--AA-73-9757

LOCATION.--Lat 39°01'03", long 76°40'26", Hydrologic Unit 02060006, at Crofton Meadows water treatment plant, on east side of Ridel Road, 0.6 mi north of Route 424. Owner: U.S. Geological Survey.

AQUIFER.-Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 147 ft; casing diameter 4 in., to 136 ft; screen diameter 4 in from 136 to 146 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. .

DATUM.--Altitude of land surface is 134.14 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter platform, 3.00 ft above land surface.

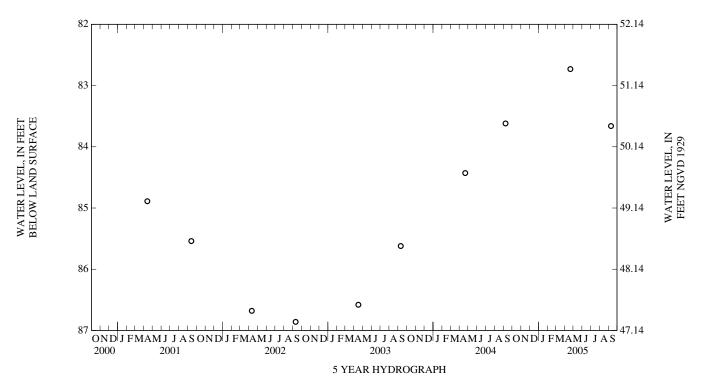
REMARKS.-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- June 28, 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.09 ft below land surface, June 28, 1979; lowest measured, 86.86 ft below land surface, September 10, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 2005	82.73	SEP 09, 2005	83.66
		82.73 APR 21, 2 83.66 SEP 09, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cc 135. SITE ID.--390126076403001. PERMIT NUMBER.--AA-93-0998.

LOCATION.--Lat 39°01'26", long 76°40'30", Hydrologic Unit 02060006, near Reidel Rd and Johns Hopkins Rd, at Crofton Meadows. Owner: Anne Arundel County.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.—Drilled, observation, artesian well, depth 1,100 ft; casing diameter 4 in., to 299 ft, and casing diameter 2 in., from 299 to 985 ft, and 1,035 to 1,070 ft; screen diameter 2 in., from 985 to 1,035 ft, and 1,070 to 1,100 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1998 to September 2004.

DATUM.--Elevation of land surface is 114.81 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 3.48 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

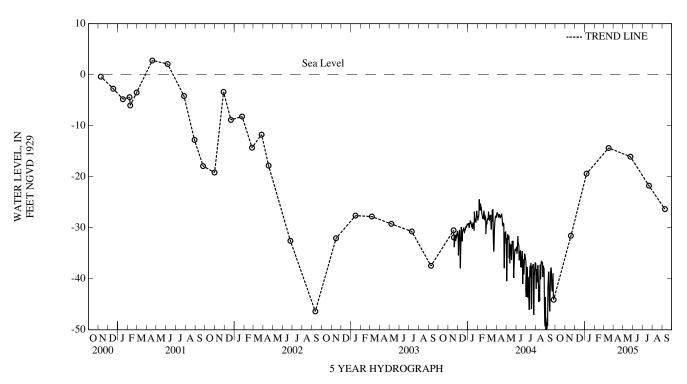
PERIOD OF RECORD .-- May 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.78 ft above sea level, May 4, 1999 (recorder); lowest measured, 49.92 ft below sea level, September 3, 2004 (recorder).

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004	-31.57	MAR 17, 2005	-14.36	JUL 21, 2005	-21.74
JAN 07, 2005	-19.39	MAY 24	-16.07	SEP 09	-26.36

LOWEST -31.57 NOV 19, 2004 HIGHEST -14.36 MAR 17, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cc 137. SITE ID.--390126076402901. PERMIT NUMBER.--AA-93-0993.

LOCATION.--Lat 39°01'26", long 76°40'29", Hydrologic Unit 02060006, near Reidel Rd and Johns Hopkins Rd, at Crofton Meadows. Owner: Anne Arundel County.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.—Drilled, observation, artesian well, depth 690 ft; casing diameter 4 in., to 300 ft, and casing diameter 2 in., from 300 to 476 ft, and 506 to 536 ft, 576 to 606 ft, and 686 to 690 ft; screen diameter 2 in., from 476 to 506 ft, and 536 to 576 ft, and 606 to 686 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from May 1998 to September 2004.

DATUM.--Elevation of land surface is 115.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.10 ft above land surface.

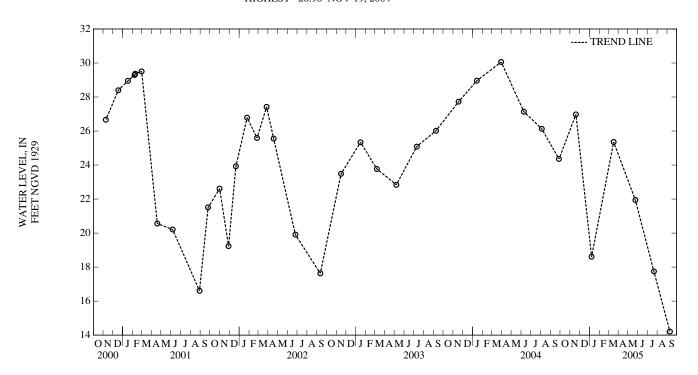
REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD .-- December 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.28 ft above sea level, February 17, 2001 (recorder); lowest measured, 4.49 ft above sea level, June 2, 1999 (recorder).

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 JAN 07, 2005			25.36 21.94	JUL 21, 2005 SEP 09	17.75 14.21
		ST 14.21 SEP 09, 20			



WELL NUMBER.--AA Ce 117. SITE ID.--390450076343402. PERMIT NUMBER.--AA-73-0172.

LOCATION.--Lat 39°04'50", long 76°34'35", Hydrologic Unit 02060004, 0.1 mi southwest of intersection of Severndale Road and Southway Road. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 922 ft; casing diameter 6 in., to 836 ft, 851 to 870 ft, and 890 to 907 ft; screen diameter 6 in., from 836 to 851 ft, 870 to 890 ft, and 907 to 922 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from August 1977 to April 1980, and August 1983 to July 2005.

DATUM.--Elevation of land surface is 86.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 0.5 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.52 ft above sea level, May 15, 1975; lowest measured, 28.66 ft below sea level, September 26, 2002 (recorder).

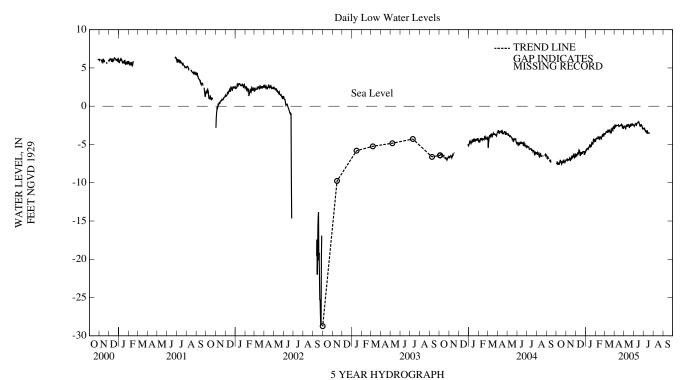
## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 JAN 07, 2005	-6.44 -5.20	MAR 17, 2005 MAY 24	-3.12 -2.21	JUL 21, 2005 SEP 09	-3.33 -4.05
		T -6.44 NOV 19, 2 ST -2.21 MAY 24,			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	-7.08 -7.11 -7.12 -7.14 -7.14	-7.47 -7.47 -7.51 -7.22 -7.63	-6.91 -6.86 -6.85 -6.58 -6.57	-7.07 -7.07 -6.96 -6.98 -6.83	-5.87 -6.09 -6.08 -6.08	-6.24 -6.27 -6.39 -6.51 -6.40	-5.55 -5.59 -5.38 -5.34 -5.25	-5.96 -5.77 -5.66 -5.73 -5.70	-4.12 -4.15 -4.05 -4.01 -4.02	-4.60 -4.25 -4.25 -4.17 -4.21	-3.09 -3.12 -3.49 -3.37 -3.26	-3.58 -3.59 -3.63 -3.63 -3.42
6 7 8 9 10	-7.35 -7.35 -7.31 -7.22 -7.18	-7.37 -7.49 -7.69 -7.37 -7.50	-6.73 -6.71 -6.74 -6.94 -6.86	-7.12 -7.08 -6.97 -6.98 -6.98	-6.09 -5.81 -5.81 -5.88 -5.61	-6.33 -6.09 -6.07 -6.31 -6.07	-5.01 -5.17 -5.03 -5.12 -4.94	-5.50 -5.50 -5.50 -5.60 -5.44	-4.09 -3.98 -3.84 -3.73 -3.67	-4.27 -4.24 -4.10 -3.99 -4.05	-3.15 -3.00 -2.85 -3.19 -3.19	-3.42 -3.30 -3.32 -3.40 -3.41
11 12 13 14 15	-7.23 -7.09 -6.97 -6.87 -6.80	-7.62 -7.25 -7.13 -7.24 -7.16	-6.70 -6.64 -6.68 -6.73 -6.72	-6.87 -6.75 -6.86 -7.17 -6.94	-5.58 -5.71 -5.65 -5.82 -6.06	-5.71 -5.77 -5.82 -6.30 -6.51	-4.90 -4.82 -4.63 -4.50 -4.87	-5.43 -5.26 -5.23 -5.00 -5.40	-3.86 -3.79 -3.93 -3.75 -3.75	-4.23 -4.23 -4.30 -4.11 -3.93	-2.89 -2.89 -2.98 -3.02 -3.10	-3.21 -3.04 -3.40 -3.16 -3.32
16 17 18 19 20	-6.84 -7.00 -7.13 -7.06 -7.12	-7.23 -7.42 -7.57 -7.44 -7.23	-6.58 -6.54 -6.43 -6.41 -6.33	-6.96 -6.74 -6.80 -6.44 -6.71	-5.91 -5.90 -5.77 -5.63 -5.71	-6.27 -5.98 -6.33 -6.10 -6.06	-4.67 -4.67 -4.77 -4.45 -4.42	-5.25 -5.08 -5.09 -5.17 -4.75	-3.61 -3.71 -3.82 -3.94 -3.84	-4.10 -4.16 -4.15 -4.36 -4.04	-3.08 -3.07 -3.00 -3.04 -2.92	-3.27 -3.14 -3.08 -3.46 -3.40
21 22 23 24 25	-7.03 -7.07 -7.03 -6.90 -6.92	-7.19 -7.16 -7.43 -7.11 -6.98	-6.36 -6.29 -6.24 -5.99 -5.86	-6.44 -6.68 -6.57 -6.52 -6.19	-5.77 -5.81 -5.59 -5.73 -5.76	-6.08 -6.22 -5.94 -5.92 -5.92	-4.45 -4.13 -4.24 -4.38 -4.19	-4.79 -4.88 -4.69 -4.98 -4.38	-3.61 -3.66 -3.64 -3.54 -3.56	-3.91 -3.81 -4.00 -3.80 -3.66	-2.97 -3.01 -2.62 -2.74 -2.73	-3.34 -3.43 -3.26 -2.88 -2.88
26 27 28 29 30 31	-6.96 -6.99 -6.96 -6.83 -6.81	-7.28 -7.27 -7.38 -7.31 -7.23 -7.05	-6.19 -6.20 -6.04 -6.19 -6.13	-6.61 -6.70 -6.31 -6.52 -6.58	-5.66 -5.75 -5.66 -5.57 -5.69 -5.55	-5.92 -5.99 -6.35 -5.95 -5.92 -6.07	-4.05 -4.22 -4.49 -4.17 -4.07 -4.15	-4.25 -4.54 -4.57 -4.62 -4.33 -4.61	-3.55 -3.58 -3.24 	-3.77 -3.95 -3.65 	-2.79 -2.73 -2.30 -2.36 -2.64 -2.61	-3.13 -3.18 -2.75 -2.66 -2.70 -2.72
MONTH	-6.80	-7.69	-5.86	-7.17	-5.55	-6.51	-4.05	-5.96	-3.24	-4.60	-2.30	-3.63

ANNE ARUNDEL COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΛY	JU	NE	JUI	LY	AUC	JUST	SEPTE	MBER
1 2 3 4 5	-2.54 -2.10 -2.11 -2.38 -2.54	-2.99 -2.55 -2.38 -2.78 -2.64	-2.38 -2.45 -2.54 -2.61 -2.66	-2.59 -2.59 -2.65 -2.73 -2.73	-2.41 -2.36 -2.19 -2.22 -2.24	-2.55 -2.63 -2.51 -2.51 -2.32	-2.53 -2.55 -2.75 -2.80 -2.78	-2.90 -2.91 -3.07 -2.90 -2.97	  	  	  	  
6 7 8 9 10	-2.48 -2.39 -2.35 -2.48 -2.41	-2.63 -2.51 -2.50 -2.54 -2.54	-2.50 -2.42 -2.34 -2.40 -2.37	-3.01 -2.71 -2.50 -2.50 -2.71	-2.14 -2.11 -2.13 -2.19 -2.17	-2.32 -2.31 -2.21 -2.55 -2.25	-2.82 -2.90 -2.73 -2.91 -3.02	-3.20 -3.29 -3.22 -3.33 -3.41	  	  	  	  
11 12 13 14 15	-2.43 -2.40 -2.38 -2.42 -2.49	-2.51 -2.48 -2.42 -2.49 -2.66	-2.35 -2.37 -2.50 -2.35 -2.33	-2.37 -2.57 -2.60 -2.50 -2.41	-2.14 -2.15 -2.07 -2.07 -2.03	-2.21 -2.18 -2.15 -2.09 -2.13	-3.11 -3.11 -3.12 -3.11 -3.12	-3.47 -3.39 -3.15 -3.51 -3.47	  	  	  	  
16 17 18 19 20	-2.58 -2.49 -2.49 -2.47 -2.39	-2.65 -2.58 -2.54 -2.54 -2.48	-2.36 -2.46 -2.45 -2.45 -2.23	-2.46 -2.58 -2.85 -2.48 -2.45	-1.98 -2.02 -2.11 -2.23 -2.30	-2.04 -2.14 -2.30 -2.39 -2.62	-3.16 -3.13 -3.17 -3.22 -3.27	-3.51 -3.50 -3.53 -3.51 -3.57	  	  	  	  
21 22 23 24 25	-2.39 -2.32 -2.06 -2.16 -2.26	-2.53 -2.54 -2.40 -2.51 -2.47	-2.30 -2.19 -2.16 -2.16 -2.21	-2.68 -2.51 -2.28 -2.46 -2.31	-2.23 -2.23 -2.38 -2.39 -2.40	-2.63 -2.38 -2.54 -2.55 -2.45	  	   	  	  	  	  
26 27 28 29 30 31	-2.37 -2.31 -2.41 -2.48 -2.32	-2.77 -2.70 -2.87 -2.91 -2.86	-2.16 -2.19 -2.26 -2.32 -2.34 -2.35	-2.52 -2.49 -2.33 -2.37 -2.41 -2.44	-2.44 -2.52 -2.54 -2.53 -2.52	-2.53 -2.76 -2.93 -2.85 -2.88	   	   	   	   	   	   
MONTH	-2.06	-2.99	-2.16	-3.01	-1.98	-2.93	-2.53	-3.57				
YEAR	-1.98	-7.69										



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## WELL NUMBER.--AA Cf 99. SITE ID.--390150076283002. PERMIT NUMBER.--AA-70-0199.

LOCATION.--Lat 39°01'50", long 76°28'30", Hydrologic Unit 02060004, 3.1 mi northeast of Annapolis, near Anne Arundel Co. Traffic Engineering Building, Broad Neck. Owner: Anne Arundel Co. Dept. of Recreation and Parks.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian, observation well, depth 220 ft; casing diameter 2 in., to 210 ft; screen diameter 2 in., from 210 to 220 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from September 1969 to July 1971.

DATUM.--Elevation of land surface is 93.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

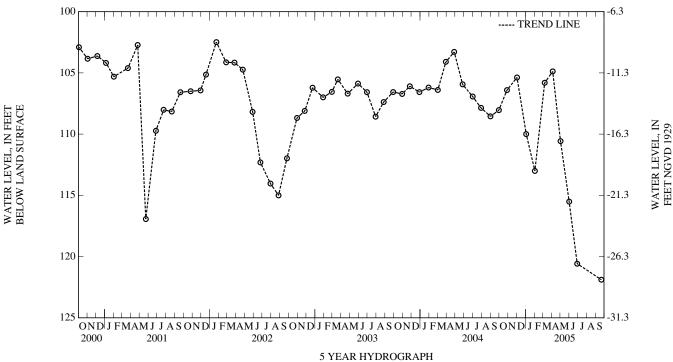
PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.29 ft below land surface, April 13, 1976; lowest measured, 121.89 ft below land surface, September 21, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	106.41 105.37 110.00	FEB 02, 2005 MAR 08 APR 05	113.00 105.81 104.88	MAY 02, 2005 JUN 01 29	110.58 115.51 120.58	SEP 21, 2005	121.89

HIGHEST 104.88 APR 05, 2005 LOWEST 121.89 SEP 21, 2005



WELL NUMBER.--AA Cf 137. SITE ID.--390205076292702. PERMIT NUMBER.--AA-86-0401.

LOCATION.--Lat 39°02'05", long 76°29'27", Hydrologic Unit 02060004, at the Arnold Water Treatment Plant, on the south side of Jones Stataion Road, 0.6 mile southeast of College Parkway. Owner: Anne Arundel County Department of Public Works

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,030 ft; casing diameter 6 in., to 543 ft; 4 in. from 543 to 791 ft., 816 to 826 ft, 856 to 876 ft, 896 to 916 ft, and 966 to 976 ft; screen diameter 4 in., from 791 to 816 ft, 826 to 856 ft, 876 to 896 ft, and 916 to 966 ft.

INSTRUMENTATION.--Monthly measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital water-level recorder 15-minute interval September 8, 2003 to current year.

DATUM.--Altitude of land surface is 124.28 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.50 ft above land surface.

REMARKS .-- Anne Arundel County Network observation well.

PERIOD OF RECORD .-- March 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.48 ft above sea level, March 18 and 19, 1991; lowest measured, 76.87 ft below sea level, May 11, 1999.

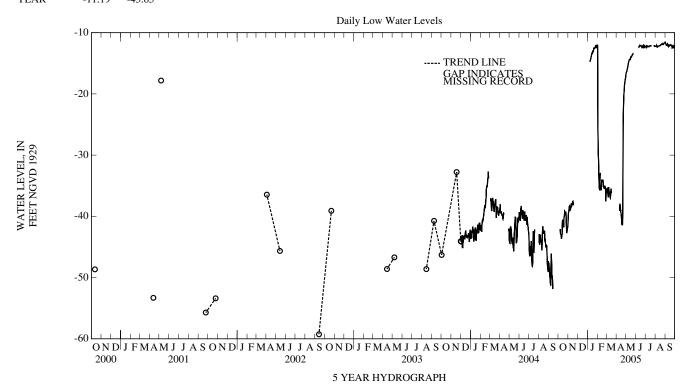
## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 JAN 07, 2005	-33.08 -14.88	FEB 11, 2005 MAR 17	-31.14 -33.30	MAY 24, 2005 JUL 21	-12.99 -11.96	SEP 09, 2005	-11.78

LOWEST -33.30 MAR 17, 2005 HIGHEST -11.78 SEP 09, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1 2			-32.39 -32.13	-40.27 -39.35					-11.78 -11.75	-12.07 -25.49	-27.23 -27.20	-35.60 -35.50
3 4 5			-31.64 -30.91 -30.03	-39.25 -38.46 -38.36					-18.83 -22.84 -23.10	-29.50 -30.81 -33.50	-27.50 -27.56 -27.27	-35.44 -36.12 -36.09
6			-29.86	-38.99					-24.87	-35.30	-27.46	-36.91
7 8 9	-34.03 -34.75 -34.36	-42.07 -42.89 -42.96	-30.09 -30.98 -30.32	-39.02 -38.92 -38.59			-14.31 -14.21	-14.77 -14.63	-27.30 -27.33 -25.69	-35.57 -35.73 -33.24	-28.38 -27.73 -28.05	-36.49 -35.24 -35.93
10	-33.83	-43.02	-30.62	-37.94			-13.91	-14.37	-25.33	-32.91	-28.03	-36.22
11 12 13 14 15	-35.77 -35.38 -34.92 -34.06 -32.79	-43.65 -43.12 -42.96 -40.79 -40.56	-29.83 -30.42 -29.08 -29.37 -30.78	-38.53 -38.07 -38.17 -38.07 -37.61	   	  	-13.68 -13.52 -13.16 -12.99 -13.19	-14.14 -13.88 -13.72 -13.39 -13.45	-22.77 -25.95 -26.64 -26.08	-35.76 -34.71 -33.99 -34.32	-27.56 -27.76 -27.30 -28.84 -28.25	-36.29 -36.91 -37.01 -36.39 -35.47
16 17 18 19 20	-32.42 -32.23 -33.51 -32.75 -32.29	-40.92 -41.05 -41.77 -40.13 -40.07	-29.67 -29.93 -27.99 	-37.54 -37.97 -38.17 	   	  	-12.86 -12.80 -12.83 -12.40 -12.27	-13.39 -13.06 -13.12 -13.03 -12.57	-26.25 -26.31 -25.95 -26.22 -26.31	-34.35 -34.29 -34.02 -35.17 -34.98	-28.12   	-36.19   
21 22 23 24 25	-30.69 -32.88 -31.24 -31.11 -31.57	-39.18 -39.28 -39.68 -39.61 -39.25	   	  	   	   	-12.27 -11.94 -11.91 -12.14 -11.88	-12.60 -12.57 -12.47 -12.50 -12.37	-27.00 -27.10 -27.07 -27.10 -27.23	-35.37 -35.34 -35.53 -34.98 -35.30	   	  
26 27 28 29 30	-31.08 -34.29 -34.92 -34.95 -33.47	-40.82 -42.46 -42.73 -42.14 -41.74	   	   	   	  	-11.68 -11.88 -12.17 -11.85 -11.68	-12.07 -12.34 -12.44 -12.40 -12.04	-26.64 -25.59 -28.71 	-35.57 -37.54 -35.67 	   	  
31 MONTH	-32.56 -30.69	-41.74 -43.65	-27.99	-40.27			-11.75 -11.68	-12.07 -14.77	 -11.75	-37.54	-27.20	-37.01

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JUI	LY	AUG	GUST	SEPTE	MBER
1 2 3 4 5	  	  	-16.34 -16.11 -15.91 -15.78 -15.55	-16.66 -16.53 -16.34 -16.17 -16.01	  	  	-11.93 -11.93 -12.06 -12.09 -11.93	-12.25 -12.22 -12.38 -12.19 -12.29	-11.91 -11.88 -11.91 -11.98 -11.94	-12.24 -12.21 -12.17 -12.24 -12.07	-11.35 -11.45 -11.71 -11.81 -11.88	-11.55 -11.75 -11.94 -12.04 -12.07
6 7 8 9 10	  	   	-15.19 -14.96 -14.76 -14.63 -14.40	-15.68 -15.38 -15.12 -14.79 -14.66	 -12.09 -12.09 -12.02	-12.38 -12.35 -12.35	-11.93 -11.96 -11.83 -11.86 -11.93	-12.22 -12.32 -12.29 -12.19 -12.22	-11.98 -12.01 -12.01 -11.94 -11.88	-12.24 -12.27 -12.34 -12.27 -12.21	-11.91 -11.81 -11.78 -11.75 -11.88	-12.01 -12.07 -11.85 -11.94 -12.14
11 12 13 14 15	-30.77 -30.54 -29.82 -30.35 -30.58	-39.11 -37.92 -38.55 -38.84 -39.30	-14.24 -14.24 -14.20 -13.88 -13.84	-14.43 -14.37 -14.40 -14.40 -14.14	-11.99 -11.96 -11.89 -11.89 -11.86	-12.29 -12.29 -11.99 -12.19 -12.15	-11.99 -11.99 -11.93 -11.83 -11.86	-12.29 -12.29 -12.25 -12.19 -12.15	-11.94 -11.85 -11.81 -11.81 -11.85	-12.17 -12.17 -12.14 -12.11 -12.14	-11.91 -11.85 -11.88 -11.94 -11.88	-12.24 -12.01 -12.01 -12.01 -12.14
16 17 18 19 20	-30.58 -30.41 -32.25 -32.84 -32.45	-39.76 -41.24 -41.21 -40.85 -41.44	-13.78 -13.68 -13.55 -13.51 -13.28	-13.97 -14.04 -13.94 -13.81 -13.74	-11.79 -11.83 -11.93 -12.02 -12.06	-12.12 -12.12 -12.22 -12.32 -12.42	-11.93 -11.86 -11.83 -11.86 -11.89	-12.19 -12.15 -12.15 -12.15 -12.15	-11.85 -11.78 -11.75 -11.71 -11.58	-12.11 -12.01 -12.01 -11.94 -11.91	-11.81 -11.81 -11.85 -11.98 -11.94	-12.07 -11.98 -12.04 -12.04 -12.04
21 22 23 24 25	-25.06 -22.08 -20.40 -19.45 -18.86	-38.12 -25.06 -22.21 -20.47 -19.58	-13.28 -13.12 -12.99 	-13.58 -13.58 -13.32	-11.93 -11.89 -12.02 -12.02 -12.02	-12.35 -12.22 -12.35 -12.12 -12.25	  	   	-11.52 -11.52 -11.58 -11.62 -11.65	-11.85 -11.78 -11.88 -11.88 -11.94	-12.01 -12.01 -12.01 -12.11 -12.04	-12.11 -12.40 -12.30 -12.40 -12.47
26 27 28 29 30 31	-18.17 -17.68 -17.35 -16.93 -16.43	-19.06 -18.17 -17.85 -17.58 -17.16	   	  	-12.02 -12.06 -12.06 -11.99 -11.93	-12.06 -12.09 -12.38 -12.32 -12.25	-11.78 -11.81 -11.98 -11.91 -11.94	-12.07 -12.11 -12.21 -12.17 -12.24	-11.58 -11.55 -11.42 -11.48 -11.39 -11.19	-11.91 -11.81 -11.71 -11.71 -11.68 -11.55	-11.91 -11.98 -12.21 -12.04 -12.14	-12.14 -12.21 -12.44 -12.21 -12.27
MONTH	-16.43	-41.44	-12.99	-16.66	-11.79	-12.42	-11.78	-12.38	-11.19	-12.34	-11.35	-12.47
YEAR	-11.19	-43.65										



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cg 22. SITE ID.--390123076241601. PERMIT NUMBER.--AA-73-8606.

LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1,500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park. Owner: U.S. Geological Survey

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.—Drilled, observation, artesian well, depth 1,760 ft; casing diameter 10 in., to 163 ft; casing diameter 8 in., 0 to 1,760 ft; screen diameter 4 in., from 1,735 to 1,755 ft.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.61 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.47 ft above sea level, September 6, 1979; lowest measured, 9.37 ft below sea level, January 3, 2005.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	-8.79 -9.30 -9.37	FEB 02, 2005 MAR 08 APR 05	-8.99 -8.10 -8.26	MAY 02, 2005 JUN 01 29	-7.99 -7.81 -7.52	SEP 13, 2005	-7.68
		ST -9.37 JAN 03, 20 ST -7.52 JUN 29, 2					

TREND LINE -3 -4 WATER LEVEL, IN FEET NGVD 1929 -5 -6 -7 -8 -9 OND|JFMAMJ JASOND|JFMAMJ JASOND|JFMAMJ JASOND|JFMAMJ JASOND|JFMAMJ JAS 2000 2001 2002 2003 2004 2005

5 YEAR HYDROGRAPH
OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--AA Cg 23. SITE ID.--390123076241602. PERMIT NUMBER.--AA-73-8959.

LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park. Owner: U.S. Geological Survey

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 986 ft; casing diameter 4 in., to 968 ft; and 978 to 986 ft; screen diameter 4 in., from 968 to 978 ft.

INSTRUMENTATION.-- Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with a graphic water-level recorder from September 1978 to February 1980. Equipped with digital water-level recorder--60-minute recorder interval from September 1990 to August 2001.

DATUM.--Elevation of land surface is 12.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

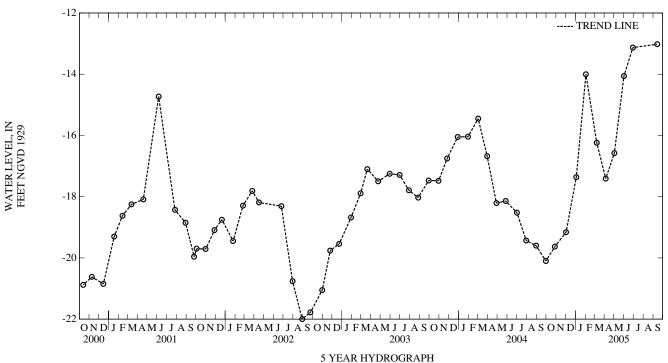
PERIOD OF RECORD.-- September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.92 ft above sea level, September 6, 1979; lowest measured, 23.93 ft below sea level, August 9, 1999 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	-19.63 -19.16 -17.36	FEB 02, 2005 MAR 08 APR 05	-14.00 -16.24 -17.41	MAY 02, 2005 JUN 01 29	-16.58 -14.06 -13.13	SEP 13, 2005	-13.02

LOWEST -19.63 OCT 28, 2004 HIGHEST -13.02 SEP 13, 2005



3 TEAR ITT DROOM ITT

WELL NUMBER.--AA Cg 24. SITE ID.--390123076241603 PERMIT NUMBER.--AA-73-8960.

LOCATION.—Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1500 ft northeast of Oceanic Dr. and South Beach Rd., at Sandy Point State Park. Owner: U.S. Geological Survey

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 664 ft; casing diameter 6 in., to 158 ft; casing diameter 4 in., 158 to 605 ft, 615 to 648 ft, and 658 to 664 ft; screen diameter 4 in., from 605 to 615 ft, and 648 to 658 ft.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.68 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.16 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network obersvation well. Water levels are affected by regional ground-water withdrawal.

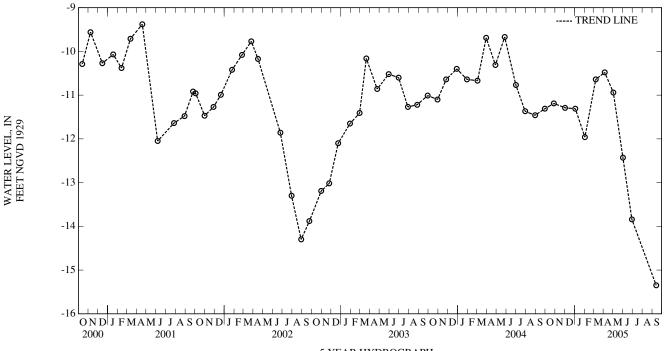
PERIOD OF RECORD.-- September 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.21 ft above sea level, August 15, 1980; lowest measured, 15.35 ft below sea level, September 13, 2005.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	-11.19 -11.29 -11.31	FEB 02, 2005 MAR 08 APR 05	-11.96 -10.64 -10.48	MAY 02, 2005 JUN 01 29	-10.94 -12.43 -13.84	SEP 13, 2005	-15.35

LOWEST -15.35 SEP 13, 2005 HIGHEST -10.48 APR 05, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--AA Cg 25. SITE ID.--390127076240301. PERMIT NUMBER.--AA-74-1240.

LOCATION.--Lat 39°01'27", long 76°24'03", Hydrologic Unit 02060004, at Sandy Point State Park, near maintenance area. Owner: Maryland Department of Natural Resources.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 107 ft; casing diameter 3 in., to 100 ft; screen diameter 3 in., from 100 to 107 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 17.33 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.43 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

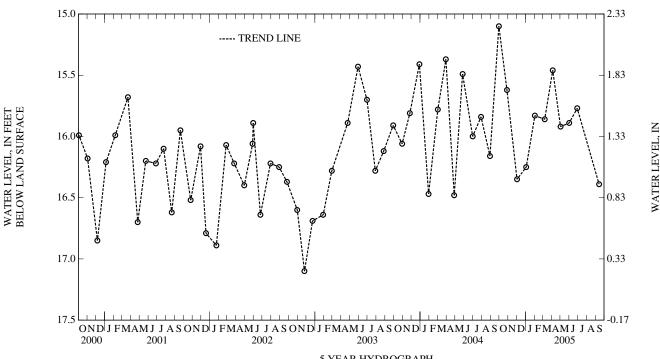
PERIOD OF RECORD .-- April 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.74 ft below land surface, April 13, 1988; lowest measured, 18.25 ft below land surface, October 1, 1986.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	15.62 16.35 16.25	FEB 02, 2005 MAR 08 APR 05	15.83 15.86 15.46	MAY 02, 2005 JUN 01 29	15.92 15.89 15.77	SEP 13, 2005	16.39

HIGHEST 15.46 APR 05, 2005 LOWEST 16.39 SEP 13, 2005



5 YEAR HYDROGRAPH

FEET NGVD 1929

# WELL NUMBER.--AA De 128. SITE ID.--385530076334701.--PERMIT NUMBER.--AA-73-8278

LOCATION.--Lat 38°55'30", long 76°33'47", Hydrologic Unit 02060004, near Central; Elementary School, at south end of Stepneys Lane. Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Upper Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 708 ft; casing diameter 24 in., to 547 ft; and casing diameter 12 in. to 554 ft, and from 644 ft to 686 ft; screen diameter 12 in. from 554 to 644 ft, and 686 to 708 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 28.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 24 in. casing, 3.65 ft above land surface.

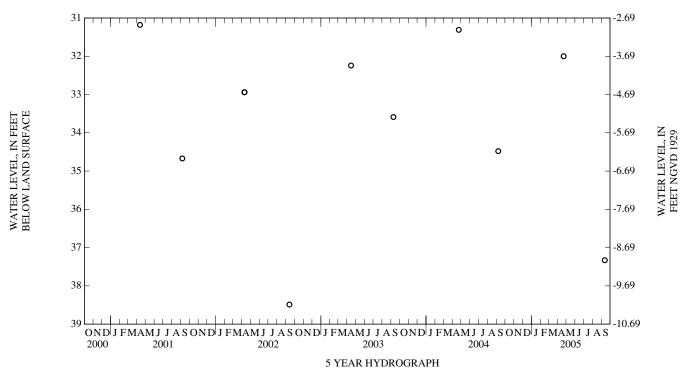
REMARKS.-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- June, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.15 ft below land surface, September 01, 1978; lowest measured, 38.49 ft below land surface, September 13, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	32.00	SEP 12, 2005	37.33
		T 32.00 APR 22, 2	



# WELL NUMBER.--AA De 203. SITE ID.--385854076333202.--PERMIT NUMBER.--AA-81-7170

LOCATION.--Lat 38°58'40", long 76°33'32", Hydrologic Unit 02060004, Located at the Broadcreek water treatment plant, Harry Truman parkway, Annapolis, MD. Owner: Anne Arundel County Department of Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 1646 ft; casing diameter 8 in., to 20 ft; casing diameter 6 in., from 550 to 1552 ft, 1582 to 1602 ft, 1622 to 1624 ft, 1644 to 1646 ft, screen diameter 6 in. from 1552 to 1582 ft, 1602 to 1622 ft, 1624 to 1644 ft.

INSTRUMENTATION.--Measured twice a year with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 94.39 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: 2 in. riser pipe, 3.0 ft above land surface.

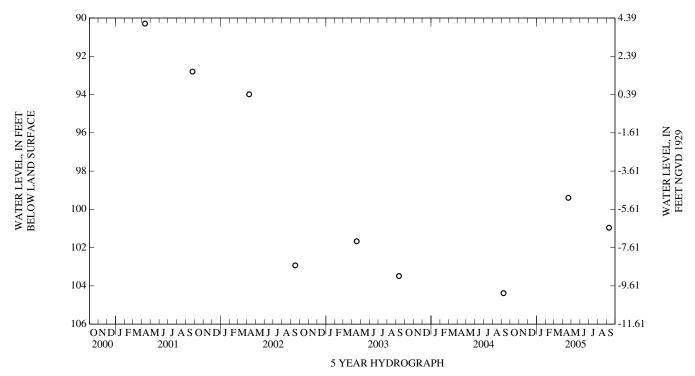
REMARKS.-- Broadcreek test well. Well replaced AA De 117. Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- January 16, 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.43 ft below land surface, May 05, 1995; lowest measured, 104.38 ft below land surface, September 08, 2004.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 2005	99.40	SEP 09, 2005	100.96
		ST 99.40 APR 21, 2 T 100 96 SEP 09, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### ANNE ARUNDEL COUNTY—Continued

WELL NUMBER.--AA Ed 45. SITE ID.--385406076383901. PERMIT NUMBER.--AA-74-1005.

LOCATION.--Lat 38°54'06", long 76°38'39", Hydrologic Unit 02060006, at Anne Arundel County Police Academy, near Davidsonville. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 157 ft; casing diameter 4 in., to 147 ft; screen diameter 2 in., from 147 to 157 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.87 ft above land surface.

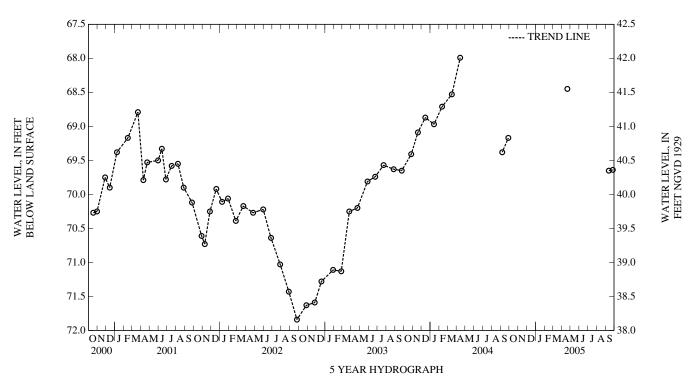
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.51 ft below land surface, May 6, 1980; lowest measured, 71.84 ft below land surface, September 25, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
APR 21, 2005	68.45	SEP 12, 2005	69.65	SEP 26, 2005	69.64
		ST 68.45 APR 21, 2			



#### ANNE ARUNDEL COUNTY-Continued

WELL NUMBER.--AA Ed 65. SITE ID.--385406076383902. PERMIT NUMBER.--AA-94-5387.

LOCATION.--Lat 38°54′06", long 76°38′39", Hydrologic Unit 02060006, at Anne Arundel County Police Academy, near Davidsonville. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 310 ft; casing diameter 4.5 in., to 285 ft, and 305 to 310 ft; screen diameter 4.5 in., from 285 to 305 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

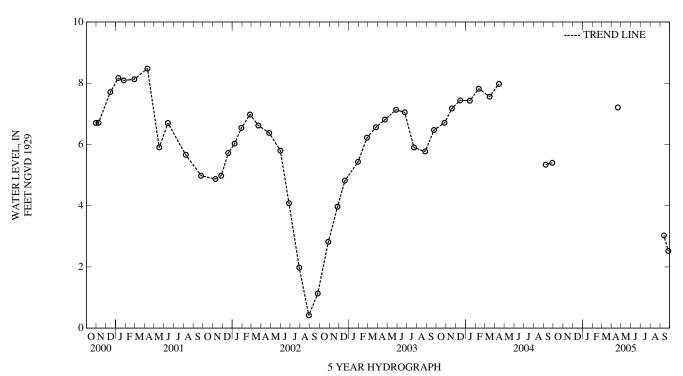
DATUM.--Elevation of land surface is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--October 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.48 ft above sea level, April 10, 2001; lowest measured, 0.42 ft above sea level, August 28, 2002.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 2005	7.21	SEP 12, 2005	3.03	SEP 26, 2005	2.52
		2.52 SEP 26, 200 7.21 APR 21, 20			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### ANNE ARUNDEL COUNTY—Continued

WELL NUMBER.--AA Fe 92. SITE ID.--384644076331201. PERMIT NUMBER.--AA-94-5386.

LOCATION .-- Lat 38°46'44", long 76°33'12", Hydrologic Unit 02060004, at Deale. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 205 ft; casing diameter 4.5 in., to 170 ft, and 200 to 205 ft; screen diameter 4.5 in., from 170 to 200 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder with a 30-minute recording interval from September 2000 to November 2004.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.00 ft above land surface.

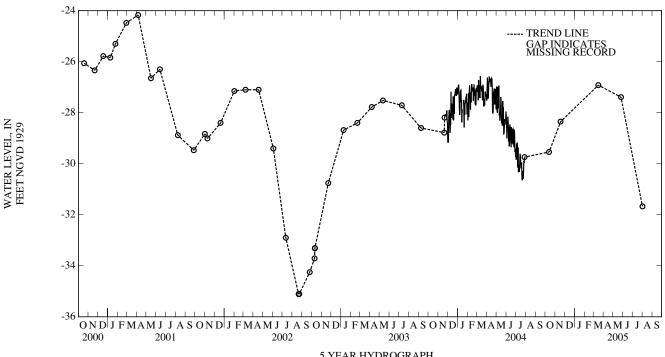
REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. PERIOD OF RECORD .-- August 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.88 ft below sea level, March 22, 2001 (recorder); lowest measured, 36.20 ft below sea level, August 20, 2002 (recorder).

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2004 NOV 18	-29.54 -28.35	MAR 16, 2005 MAY 26	-26.92 -27.39	AUG 01, 2005	-31.67

LOWEST -31.67 AUG 01, 2005 HIGHEST -26.92 MAR 16, 2005



5 YEAR HYDROGRAPH

#### ANNE ARUNDEL COUNTY-Continued

WELL NUMBER.--AA Fe 93. SITE ID.--384644076331202. PERMIT NUMBER.--AA-94-5391.

LOCATION .-- Lat 38°46'44", long 76°33'12", Hydrologic Unit 02060004, at Deale. Owner: Maryland Geological Survey.

AQUIFER .-- Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 470 ft; casing diameter 4.5 in., to 429 ft, 449 to 454 ft, and 464 to 470 ft; screen diameter 4.5 in., from 429 to 449 ft, and 454 to 464 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder with a 30-minute recording interval from September 2000 to November 2004.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.35 ft above land surface.

REMARKS.--Anne Arundel County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

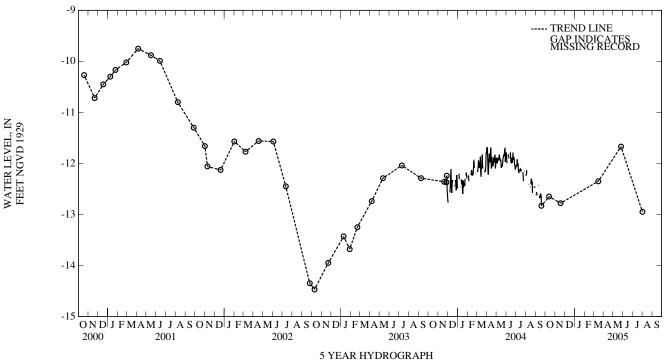
PERIOD OF RECORD.--September 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.55 ft below sea level, March 22, 2001 (recorder); lowest measured, 14.47 ft below sea level, October 16, 2002 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13, 2004 NOV 18	-12.65 -12.78	MAR 16, 2005 MAY 26	-12.35 -11.67	AUG 01, 2005	-12.95

LOWEST -12.95 AUG 01, 2005 HIGHEST -11.67 MAY 26, 2005



3 TEAR HIDROGRAPH

### BALTIMORE CITY

WELL NUMBER.--2S5E- 1. SITE ID.--391617076322001.

LOCATION.--Lat 39°16'17", long 76°32'20", Hydrologic Unit 02060003, near Holabird Ave. and Pumphrey St. at Ft. Holabird Industrial Park. Owner: City of Baltimore.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 12 in. to unknown depth.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 28.2 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing extension, 2.35 ft above land surface.

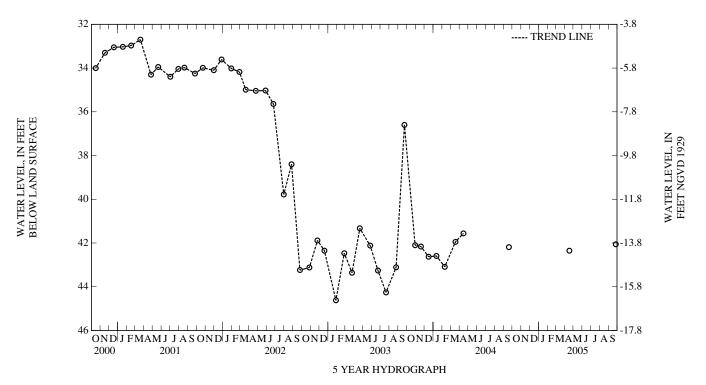
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported 58 ft below land surface in 1934.

PERIOD OF RECORD .-- April 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.70 ft below land surface, March 20, 2001; lowest measured, 103.70 ft below land surface, October 15, 1948.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	42.35	SEP 26, 2005	42.06
		ST 42.06 SEP 26, 2	



WELL NUMBER.--3S2E- 5. SITE ID.--391600076353301. PERMIT NUMBER.--BC-81-0087.

LOCATION .-- Lat 39°16'00", long 76°35'33", Hydrologic Unit 02060003, at Latrobe Park. Owner: U.S. Geological Survey.

AQUIFER .-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 136 ft; casing diameter 4 in., to 126 ft; screen diameter 3 in., from 126 to 136 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft. above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.92 ft above land surface.

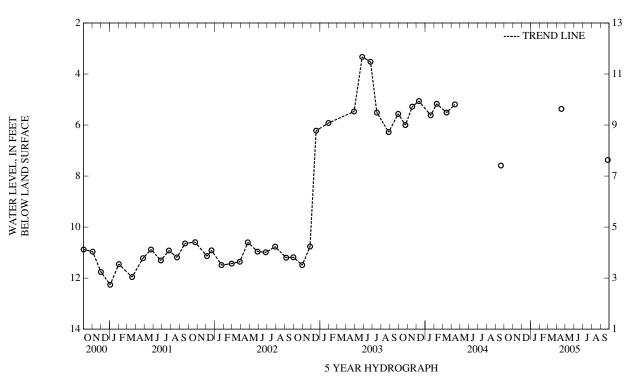
REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.33 ft below land surface, May 27, 2003; lowest measured, 17.71 ft below land surface, December 30, 1983.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	5.37	SEP 26, 2005	7.37
		5.37 APR 18, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

#### Baltimore City--Continued

WELL NUMBER.--3S5E- 46. SITE ID.--391556076315301. PERMIT NUMBER.--BC-81-0088.

 $LOCATION. -Lat\ 39^{\circ}15^{\circ}56^{\circ}, long\ 76^{\circ}31^{\prime}53^{\circ}, Hydrologic\ Unit\ 02060003, at\ Ft.\ Holabird\ Industrial\ Park, near\ Colgate\ Creek.\ Owner:\ U.S.\ Geological\ Survey.$ 

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 73 ft; casing diameter 4 in., to 63 ft; screen diameter 3 in., from 63 to 73 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.07 ft above land surface.

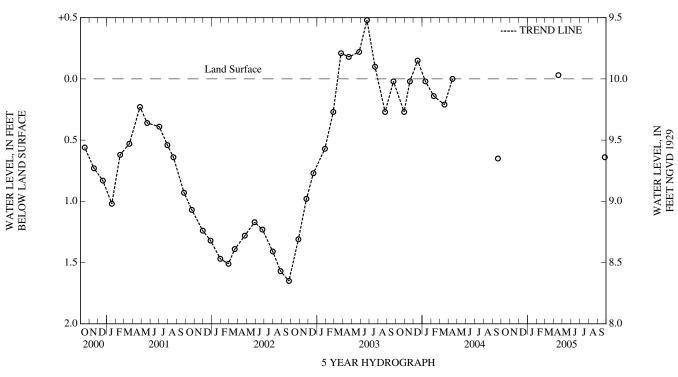
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.48 ft above land surface, June 23, 2003; lowest measured, 3.07 ft below land surface, July 8, 1986.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	+.03	SEP 26, 2005	.64
		+.03 APR 18, 200 .64 SEP 26, 2005	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### BALTIMORE COUNTY

WELL NUMBER.--BA Ce 21. SITE ID.--393102076341801. PERMIT NUMBER.--BA-02-1266.

LOCATION.--Lat 39°31'02", long 76°34'18", Hydrologic Unit 02060003, on Paper Mill Road, 0.6 mi west of Jacksonville. Owner: Baltimore County.

AQUIFER.--Loch Raven Formation of Cambrian Age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 350 ft; casing diameter 10 in., to 12.4 ft; casing diameter 6 in., to 33.2 ft; open hole.

INSTRUMENTATION .-- Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 536 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

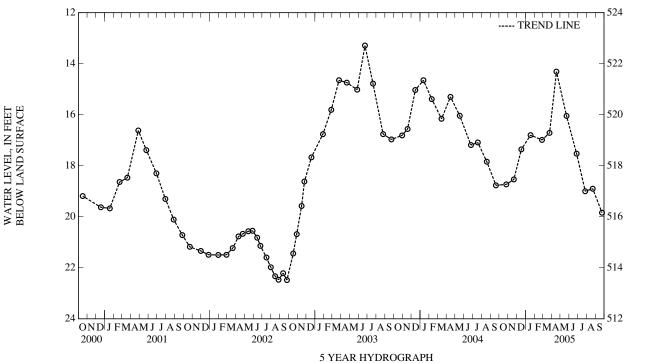
PERIOD OF RECORD.--November and December 1955, November 1956 through September 1975, July 1977 through July 1996, November 1996 to September 1999, and May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.60 ft below land surface, June 23, 1972; lowest measured, 22.48 ft below land surface, September 25, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26, 2004	18.73	JAN 18, 2005	16.80	APR 18, 2005	14.31	JUL 27, 2005	19.00
NOV 21	18.54	FEB 27	16.99	MAY 23	16.05	AUG 22	18.90
DEC 17	17.36	MAR 25	16.71	JUN 27	17.53	SEP 23	19.84

HIGHEST 14.31 APR 18, 2005 LOWEST 19.84 SEP 23, 2005



WATER LEVEL, IN FEET NGVD 1929

### GROUND-WATER LEVELS IN MARYLAND--Continued

### BALTIMORE COUNTY—Continued

WELL NUMBER.-- BA Dc 444. SITE ID.--392931076410301. PERMIT NUMBER.--BA-81-4198.

LOCATION.--Lat 39°29'31", long 76°41'03", Hydrologic Unit 02060003, at Oregon Ridge Park. Owner: Baltimore County Parks and Recreation.

AQUIFER.--Cockeysville Marble of Cambrian age. Aquifer code: 370CCKV.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 300 ft; casing diameter 6 in., to 88 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from November 1998 to current year.

DATUM.--Elevation of land surface is 390 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.62 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.46 ft below land surface, April 9, 1997; lowest measured, 45.88 ft below land surface, November 10, 2002 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

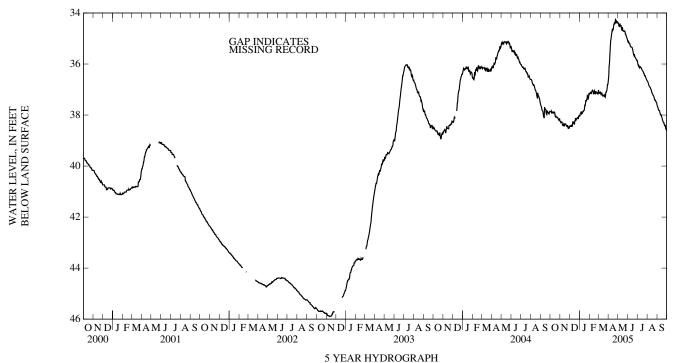
	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
NOV 22, 2004	38.43	FEB 17, 2005	37.00	MAY 16, 2005	34.63	AUG 18, 2005	37.21
DEC 13	38.22	MAR 22	37.26	JUN 20	35.67	SEP 19	38.29
JAN 25, 2005	37.21	APR 19	34.42	JUL 25	36.42		

HIGHEST 34.42 APR 19, 2005 LOWEST 38.43 NOV 22, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANI	JARY	FEBR	UARY	MA	RCH
1	37.87	37.86	38.25	38.23	38.43	38.25	38.01	37.96	37.17	37.16	37.02	36.95
2	37.87	37.82	38.25	38.18	38.44	38.36	38.02	37.94	37.16	37.12	37.11	37.02
3	37.87	37.84	38.30	38.18	38.42	38.35	37.94	37.86	37.12	37.07	37.15	37.11
4	37.84	37.81	38.29	38.09	38.42	38.38	37.92	37.86	37.11	37.07	37.15	37.09
5	37.91	37.84	38.27	38.09	38.45	38.39	37.91	37.86	37.15	37.11	37.13	37.09
6	37.93	37.90	38.27	38.23	38.45	38.38	37.86	37.80	37.16	37.13	37.13	37.04
7	37.92	37.90	38.28	38.24	38.38	38.26	37.96	37.84	37.14	37.04	37.08	36.97
8	37.91	37.87	38.39	38.27	38.44	38.27	37.95	37.82	37.06	37.01	37.17	36.93
9	37.88	37.85	38.41	38.38	38.44	38.28	37.93	37.88	37.05	36.96	37.20	37.15
10	37.90	37.85	38.41	38.37	38.28	38.17	37.88	37.81	37.03	36.94	37.17	37.10
11	37.92	37.90	38.37	38.31	38.26	38.17	37.88	37.83	37.06	37.03	37.12	37.02
12	37.90	37.85	38.35	38.32	38.27	38.23	37.85	37.83	37.07	37.00	37.17	37.05
13	37.88	37.86	38.43	38.35	38.30	38.19	37.85	37.78	37.17	37.07	37.21	37.17
14	37.91	37.85	38.43	38.38	38.35	38.30	37.82	37.71	37.17	36.98	37.24	37.21
15	37.91	37.85	38.38	38.34	38.36	38.33	37.82	37.75	37.09	36.99	37.26	37.23
16	38.02	37.91	38.35	38.32	38.33	38.21	37.75	37.58	37.04	36.93	37.24	37.21
17	38.07	38.02	38.36	38.33	38.23	38.20	37.62	37.58	37.07	37.03	37.22	37.20
18	38.08	38.03	38.35	38.34	38.23	38.12	37.63	37.58	37.15	37.07	37.22	37.19
19	38.05	38.00	38.38	38.35	38.12	38.07	37.58	37.40	37.17	37.15	37.25	37.22
20	38.07	38.05	38.41	38.38	38.20	38.12	37.42	37.40	37.17	37.06	37.25	37.17
21	38.08	38.06	38.44	38.41	38.20	38.13	37.45	37.40	37.06	37.00	37.28	37.21
22	38.10	38.08	38.44	38.40	38.16	38.14	37.45	37.20	37.13	37.05	37.30	37.21
23	38.09	38.05	38.41	38.40	38.14	37.93	37.39	37.22	37.14	37.10	37.22	37.01
24	38.09	38.05	38.41	38.28	38.12	38.09	37.39	37.23	37.14	37.06	37.11	37.02
25	38.13	38.09	38.48	38.26	38.10	38.08	37.24	37.19	37.13	37.07	37.11	37.04
26 27 28 29 30 31	38.16 38.19 38.20 38.18 38.13 38.23	38.13 38.15 38.17 38.11 38.10 38.12	38.52 38.52 38.48 38.51 38.48	38.48 38.42 38.32 38.48 38.41	38.10 38.14 38.14 38.02 38.05 38.04	37.99 38.02 38.00 37.96 38.02 37.95	37.26 37.37 37.37 37.28 37.14 37.19	37.12 37.26 37.28 37.11 37.07 37.14	37.15 37.17 37.10 	37.11 37.10 36.94 	37.07 37.04 36.94 36.81 36.81 36.73	37.04 36.94 36.66 36.68 36.73 36.60
MONTH	38.23	37.81	38.52	38.09	38.45	37.93	38.02	37.07	37.17	36.93	37.30	36.60

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	36.60 36.47 36.11 36.00 35.80	36.47 36.11 36.00 35.80 35.53	34.40 34.40 34.45 34.52 34.53	34.29 34.37 34.40 34.45 34.48	35.13 35.15 35.12 35.15 35.19	35.08 35.12 35.06 35.08 35.15	35.89 36.00 36.05 36.08 36.06	35.85 35.89 36.00 36.04 36.03	36.67 36.69 36.72 36.77 36.81	36.64 36.65 36.68 36.72 36.76	37.65 37.67 37.72 37.76 37.81	37.60 37.64 37.67 37.72 37.76
6 7 8 9 10	35.53 35.29 35.08 35.02 34.92	35.29 35.08 35.01 34.92 34.79	34.48 34.41 34.49 34.52 34.52	34.41 34.36 34.40 34.46 34.48	35.21 35.21 35.27 35.32 35.32	35.14 35.18 35.20 35.27 35.29	36.11 36.15 36.13 36.11 36.14	36.04 36.11 36.00 36.07 36.11	36.85 36.88 36.90 36.91 36.92	36.81 36.84 36.87 36.90 36.90	37.82 37.82 37.83 37.90 37.95	37.80 37.80 37.81 37.83 37.90
11 12 13 14 15	34.81 34.75 34.64 34.63 34.67	34.74 34.64 34.61 34.59 34.63	34.51 34.64 34.66 34.57 34.57	34.48 34.50 34.57 34.49 34.49	35.33 35.34 35.34 35.35 35.39	35.30 35.33 35.31 35.32 35.35	36.13 36.14 36.16 36.19 36.23	36.12 36.12 36.14 36.16 36.19	36.97 36.99 37.02 37.07 37.13	36.92 36.97 36.99 37.02 37.07	37.99 37.98 38.00 38.04 38.10	37.95 37.95 37.96 38.00 38.04
16 17 18 19 20	34.64 34.54 34.45 34.42 34.39	34.54 34.44 34.42 34.39 34.32	34.68 34.70 34.71 34.72 34.70	34.57 34.68 34.68 34.70 34.65	35.45 35.52 35.58 35.64 35.67	35.39 35.45 35.52 35.58 35.60	36.25 36.26 36.28 36.31 36.36	36.23 36.24 36.24 36.27 36.31	37.14 37.16 37.21 37.23 37.24	37.10 37.12 37.16 37.20 37.21	38.12 38.17 38.23 38.26 38.28	38.09 38.10 38.17 38.23 38.23
21 22 23 24 25	34.42 34.40 34.26 34.28 34.38	34.33 34.26 34.16 34.22 34.28	34.72 34.72 34.73 34.83 34.83	34.70 34.69 34.71 34.73 34.82	35.61 35.69 35.73 35.74 35.76	35.57 35.57 35.69 35.71 35.72	36.36 36.39 36.46 36.47 36.46	36.33 36.35 36.39 36.43 36.40	37.27 37.32 37.36 37.42 37.43	37.22 37.27 37.32 37.36 37.41	38.31 38.31 38.39 38.42 38.42	38.28 38.29 38.31 38.39 38.41
26 27 28 29 30 31	34.38 34.34 34.38 34.38 34.36	34.31 34.29 34.34 34.36 34.27	34.87 34.92 34.94 34.99 35.02 35.08	34.80 34.87 34.91 34.94 34.99 35.02	35.80 35.82 35.83 35.87 35.86	35.76 35.80 35.81 35.78 35.83	36.49 36.54 36.58 36.60 36.64 36.65	36.46 36.48 36.54 36.58 36.60 36.63	37.42 37.45 37.48 37.51 37.52 37.60	37.41 37.42 37.44 37.48 37.50 37.48	38.41 38.52 38.54 38.58 38.62	38.37 38.41 38.51 38.48 38.58
MONTH	36.60	34.16	35.08	34.29	35.87	35.06	36.65	35.85	37.60	36.64	38.62	37.60
YEAR	38.62	34.16										

Daily Low Water Levels



3 TE/IK III DROOM II II

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### GROUND-WATER LEVELS IN MARYLAND--Continued

### BALTIMORE COUNTY—Continued

WELL NUMBER.--BA Ea 18. SITE ID.--392045076512501. PERMIT NUMBER.--BA-01-8151.

LOCATION.--Lat 39°20'45", long 76°51'25", Hydrologic Unit 02060003, at Granite. Owner: Maryland National Guard (U.S. Army).

AQUIFER.--Woodstock Granite of Silurian age. Aquifer code: 350WDCK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 250 ft; casing diameter 10 in., to 50.7 ft; casing diameter 6 in., with depth to 71.3 ft; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level digital recorder--60 minute recorder interval from September 1999 to current Year.

DATUM.--Elevation of land surface is 491 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. U.S. Geological Survey water-level telemeter at well (See MD-DE-DC District WEB page, Real-Time, Ground-Water, Maryland).

PERIOD OF RECORD .-- November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.94 ft below land surface, June 24, 1972; lowest measured, 28.24 ft below land surface, November 4, 5, 7, and 8, 2002 (recorder).

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

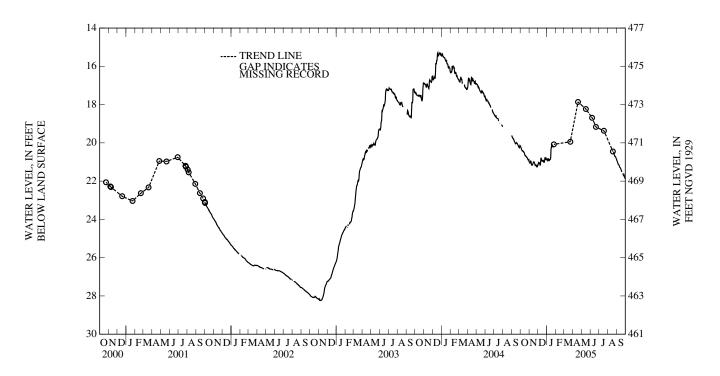
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	21.04	JAN 25, 2005	20.08	MAY 16, 2005	18.23	JUL 18, 2005	19.37
19	21.05	MAR 23	19.94	JUN 07	18.69	AUG 18	20.45
30	21.17	APR 19	17.86	20	19.17	SEP 19	21.53

HIGHEST 17.86 APR 19, 2005 LOWEST 21.53 SEP 19, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JAN	IUARY	FEBR	UARY	MAI	RCH
1 2 3 4 5	20.18 20.21 20.26 20.30 20.36	20.14 20.17 20.21 20.23 20.30	21.00 21.01 21.06 21.05 20.95	20.98 20.94 20.95 20.85 20.85	21.14 21.07 21.02 21.03 21.09	20.98 20.96 20.95 20.99 21.01	20.89 20.92 20.86 20.88 20.86	20.80 20.86 20.80 20.78 20.81	  	  	  	  
6 7 8 9 10	20.39 20.41 20.42 20.41 20.45	20.36 20.38 20.38 20.38 20.39	20.95 20.99 21.12 21.16 21.17	20.89 20.93 20.97 21.11 21.12	21.09 21.07 21.16 21.16 21.02	21.05 20.97 20.99 21.02 20.81	20.81 20.93 20.93 20.93 20.87	20.74 20.80 20.80 20.86 20.78	  	  	  	  
11 12 13 14 15	20.47 20.46 20.48 20.52 20.55	20.43 20.42 20.44 20.46 20.46	21.13 21.14 21.11 21.07 21.00	21.08 21.10 21.04 21.00 20.97	20.81 20.80 20.85 20.93 20.96	20.74 20.76 20.73 20.85 20.93	20.88 20.86 20.86 20.78 20.35	20.81 20.83 20.78 20.35 20.25	  	  	   	  
16 17 18 19 20	20.62 20.67 20.68 20.67 20.70	20.54 20.61 20.64 20.63 20.67	20.99 21.01 21.01 21.06 21.11	20.95 20.97 20.99 21.01 21.06	20.96 20.93 20.93 20.89 20.99	20.87 20.87 20.84 20.79 20.88	20.25 20.18 20.21 20.17 20.09	20.11 20.12 20.17 20.03 20.05	  	  	  	  
21 22 23 24 25	20.71 20.75 20.76 20.76 20.81	20.70 20.71 20.72 20.72 20.76	21.17 21.15 21.17 21.16 21.21	21.11 21.12 21.13 21.04 21.02	21.01 21.02 21.01 20.90 20.78	20.94 20.99 20.84 20.77 20.74	20.18 20.18 20.21 20.21	20.09 19.97 20.00 20.08	  	  	  	  
26 27 28 29 30 31	20.84 20.87 20.90 20.90 20.88 20.99	20.80 20.83 20.87 20.84 20.85 20.88	21.25 21.25 21.20 21.23 21.20	21.21 21.15 21.08 21.20 21.14	20.78 20.87 20.87 20.81 20.85 20.85	20.70 20.74 20.77 20.73 20.81 20.77	   	   	   	   	   	   
MONTH	20.99	20.14	21.25	20.85	21.16	20.70	20.93	19.97				

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	ΑY	JU	NE	JUI	LY	AUC	UST	SEPTE	MBER
1 2 3 4 5	  	  	  	  	   	  	  	  	  	  	20.93 20.96 21.01 21.05 21.11	20.88 20.93 20.96 21.01 21.05
6 7 8 9 10	  	  	  	  	   	  	  	  	  	  	21.12 21.13 21.15 21.20 21.24	21.10 21.12 21.13 21.15 21.20
11 12 13 14 15	  	  	  	  	   	   	  	  	  	  	21.28 21.29 21.31 21.34 21.39	21.24 21.25 21.27 21.30 21.33
16 17 18 19 20	  	   	   	  	   	  	   	  	  20.49 20.49	20.45 20.45	21.42 21.47 21.52	21.38 21.41 21.46 
21 22 23 24 25	  	  	   	  	   	  	  	  	20.52 20.58 20.62 20.69 20.70	20.47 20.52 20.58 20.62 20.68	21.60 21.60 21.68 21.70 21.72	21.56 21.57 21.60 21.68 21.69
26 27 28 29 30 31	   	20.70 20.73 20.76 20.80 20.82 20.88	20.70 20.70 20.72 20.76 20.79 20.77	21.69 21.77 21.81 21.84 21.88	21.64 21.69 21.77 21.76 21.84							
MONTH YEAR	21.88	 19.97							20.88	20.45	21.88	20.88

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--BA Ee 145. SITE ID.--392436076332201. PERMIT NUMBER:--BA-94-5859.

LOCATION.--Lat 39°24'36", long 76°33'22", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Colluvium of Quaternary age. Aquifer code: 110CLVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 14.15 ft; casing diameter 2 in., to 8.65 ft., and 13.65 to 14.15 ft; screen diameter 2 in., from 8.65 to 13.65 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 223.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.85 ft above land surface.

REMARKS .--- Minebank Run Project observation well.

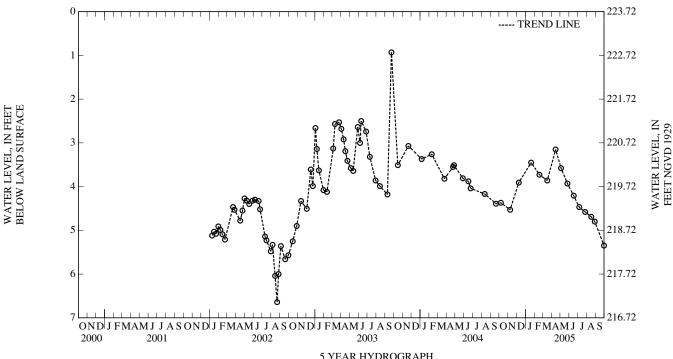
PERIOD OF RECORD .-- January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.93 ft below land surface, September 23, 2003; lowest measured, 6.64 ft below land surface, August 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 2004	4.37	FEB 18, 2005	3.73	MAY 26, 2005	3.93	AUG 17, 2005	4.69
NOV 08	4.53	MAR 17	3.86	JUN 17	4.21	29	4.80
DEC 08	3.91	APR 15	3.15	JUL 06	4.47	SEP 30	5.35
JAN 20, 2005	3.45	MAY 04	3.58	27	4.58		

HIGHEST 3.15 APR 15, 2005 LOWEST 5.35 SEP 30, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--BA Ee 161. SITE ID.--392437076332301. PERMIT NUMBER.--BA-94-5863.

LOCATION.--Lat 39°24'37", long 76°33'23", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 10.80 ft; casing diameter 2 in., to 5.30 ft, and 10.30 to 10.80 ft; screen diameter 2 in., from 5.30 to 10.30 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 224.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land surface.

REMARKS.-Minebank Run Project observation well.

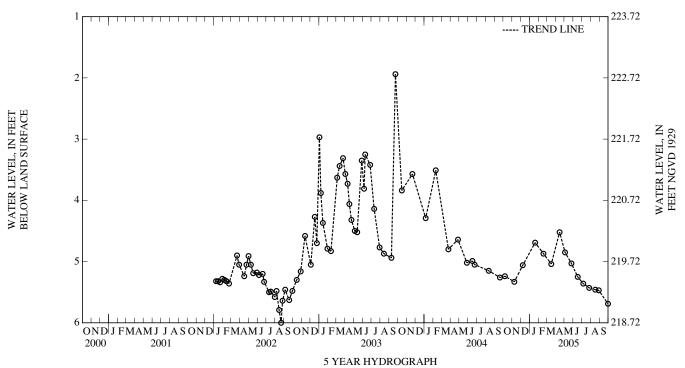
PERIOD OF RECORD .-- January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.94 ft below land surface, September 23, 2003; lowest measured, 6.00 ft below land surface, August 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 2004 NOV 09	5.24 5.33	FEB 18, 2005 MAR 17	4.87 5.04	MAY 26, 2005 JUN 17	5.03 5.25	AUG 17, 2005 29	5.46 5.47
DEC 08	5.06	APR 15	4.52	JUL 06	5.36	SEP 30	5.69
JAN 20, 2005	4.69	MAY 04	4.85	27	5.43		

HIGHEST 4.52 APR 15, 2005 LOWEST 5.69 SEP 30, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--BA Ee 170. SITE ID.--392438076332201. PERMIT NUMBER.--BA-94-5876.

LOCATION.--Lat 39°24'38", long 76°33'22", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 15 ft; casing diameter 2 in., to 9.50 ft, and 14.50 to 15.00 ft; screen diameter 2 in., from 9.50 to 14.50 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 228.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.22 ft above land surface.

REMARKS.-- Minebank Run Project observation well.

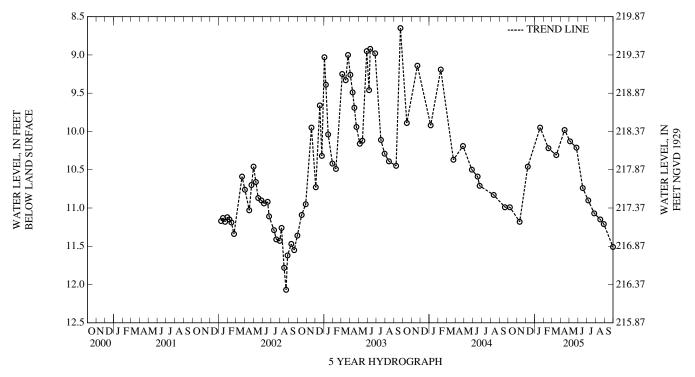
PERIOD OF RECORD .-- January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.65 ft below land surface, September 23, 2003; lowest measured, 12.07 ft below land surface, August 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 07 2004	10.00	EED 10 2005	10.00	MAN 06 0005	10.01	ATTC 17 2005	11 15
OCT 07, 2004	10.99	FEB 18, 2005	10.22	MAY 26, 2005	10.21	AUG 17, 2005	11.15
NOV 10	11.18	MAR 17	10.31	JUN 17	10.74	29	11.21
DEC 08	10.46	APR 15	9.98	JUL 06	10.90	SEP 30	11.51
JAN 20, 2005	9.95	MAY 04	10.13	27	11.07		

HIGHEST 9.95 JAN 20, 2005 LOWEST 11.51 SEP 30, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--BA Ee 183. SITE ID.--392440076332002. PERMIT NUMBER.--BA-94-5897.

LOCATION.--Lat 39°24'40", long 76°33'20", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 7.50 ft; casing diameter 2 in., to 2.00 ft, and 7.00 to 7.50 ft; screen diameter 2 in., from 2.00 to 7.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 221.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

REMARKS .-- Minebank Run Project observation well.

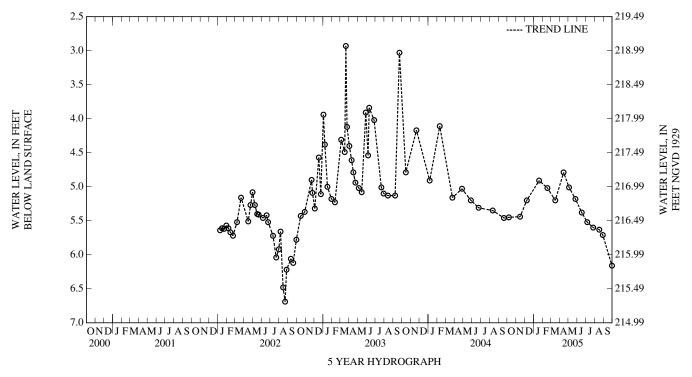
PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.93 ft below land surface, March 21, 2003; lowest measured, 6.69 ft below land surface, August 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 2004 NOV 15 DEC 08 JAN 20, 2005	5.45 5.44 5.20 4.91	FEB 18, 2005 MAR 17 APR 15 MAY 04	5.02 5.20 4.79 5.01	MAY 26, 2005 JUN 17 JUL 06 27	5.18 5.38 5.52 5.60	AUG 17, 2005 29 SEP 30	5.63 5.71 6.16

HIGHEST 4.79 APR 15, 2005 LOWEST 6.16 SEP 30, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--BA Ee 189. SITE ID.--392436076331901. PERMIT NUMBER.--BA-94-5882.

LOCATION.--Lat 39°24'36, long 76°33'19", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Colluvium of Quaternary Age. Aquifer code: 110CLVM.

WELL CHARACTERISTICS.--Cored, observation, water-table well, depth 24.50 ft; casing diameter 2 in., to 19.00 ft, and 24.00 to 24.50 ft; screen diameter 2 in., from 19.00 to 24.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 223.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.99 ft above land surface.

REMARKS .-- Minebank Run Project observation well.

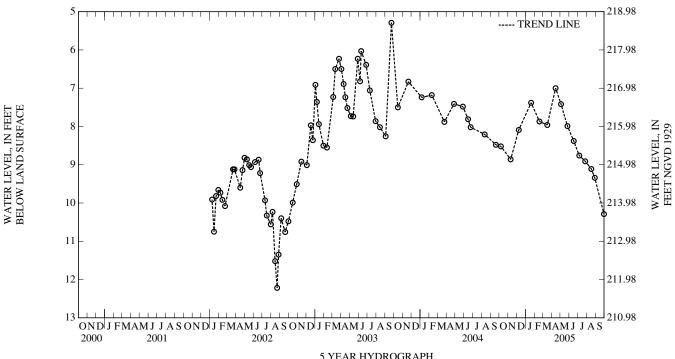
PERIOD OF RECORD .-- January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.29 ft below land surface, September 23, 2003; lowest measured, 12.22 ft below land surface, August 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 2004	8.52	FEB 18, 2005	7.87	MAY 26, 2005	7.99	AUG 17, 2005	9.11
NOV 10	8.86	MAR 17	7.96	JUN 17	8.38	29	9.34
DEC 08	8.09	APR 15	7.00	JUL 06	8.76	SEP 30	10.29
JAN 20, 2005	7.38	MAY 04	7.42	27	8.91		

HIGHEST 7.00 APR 15, 2005 LOWEST 10.29 SEP 30, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--BA Ee 198. SITE ID.--392458076330301. PERMIT NUMBER.--BA-94-0454.

LOCATION .-- Lat 39°24'58", long 76°33'03", Hydrologic Unit 02060003, at Cromwell Valley Park. Owner: Baltimore County.

AQUIFER.--Cockeysville Marble of Cambrian age. Aquifer code: 300CCKV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 27.00 ft; casing diameter 4 in., to 6.00 ft, and 26.00 to 27.00 ft; screen diameter 4 in., from 6.00 to 26.00 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 237.66 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.22 ft above land surface.

REMARKS .-- Minebank Run Project observation well.

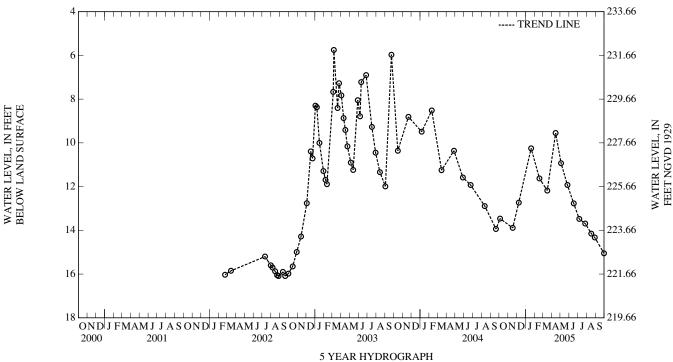
PERIOD OF RECORD .-- February 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.75 ft below land surface, March 5, 2003; lowest measured, 16.09 ft below land surface, August 27, 2002 and September 19, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 04, 2004	13.46	FEB 18, 2005	11.63	MAY 26, 2005	11.93	AUG 17, 2005	14.15
NOV 17	13.89	MAR 17	12.18	JUN 17	12.77	29	14.33
DEC 08	12.73	APR 15	9.55	JUL 06	13.48	SEP 30	15.05
JAN 20, 2005	10.25	MAY 04	10.93	27	13.69		

HIGHEST 9.55 APR 15, 2005 LOWEST 15.05 SEP 30, 2005



#### Baltimore County—Continued

WELL NUMBER.--BA Ee 217. SITE ID.--392408076344401.--PERMIT NUMBER.--

LOCATION.--Lat 39°24′08", long 76°34′44", Hydrologic Unit 02060003, at Intervale Court near Towson, MD. Owner: U.S.Environmental Protection Agency. AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Driven, observation, water table well, depth 7.56 ft; casing diameter 1 in., to 7.06 ft; screen diameter from 7.06 to 7.56 ft. INSTRUMENTATION.--Periodic water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 316.97 ft above North American Vertical Datum of 1988, leveled. Measuring point: Top of 1 in. casing, 0.42 ft above land surface.

REMARKS.--Test well for the Minebank Run Project. Ground-Water-Level Monitoring Network.

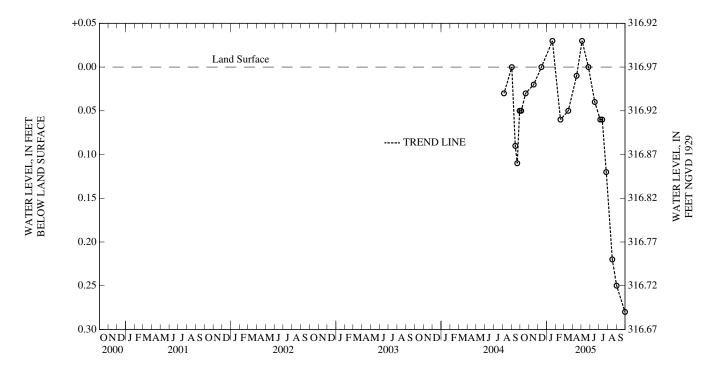
PERIOD OF RECORD .-- August 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft above land surface, January 21, 2005 and May 4, 2005; lowest measured, 0.28 ft below land surface, September 30, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 05, 2004	.05	FEB 18, 2005	.06	JUN 17, 2005	.04	SEP 01, 2005	.25
20	.03	MAR 17	.05	JUL 06	.06	30	.28
NOV 17	.02	APR 15	.01	13	.06		
DEC 14	.00	MAY 04	+.03	27	.12		
JAN 21, 2005	+.03	26	.00	AUG 17	.22		

HIGHEST +.03 JAN 21, 2005 MAY 04, 2005 LOWEST .28 SEP 30, 2005



#### Baltimore County-Continued

WELL NUMBER.--BA Ee 229. SITE ID.--392407076344501.--PERMIT NUMBER.--BA-94-0156

LOCATION.--Lat 39°24′07", long 76°34′45", Hydrologic Unit 02060003, at Intervale Court near Towson, MD. Owner: U.S. Environmental Protection Agency.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Driven, observation, water table well, depth 9.62 ft; casing diameter 1 in., to 9.12 ft; screen diameter 1 in. from 9.12 to 9.62 ft. INSTRUMENTATION.--Periodic water-levela measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 318.69 ft above North American Vertical Datum of 1988, leveled. Measuring point: Top of 1 in. steel casing, 0.57 ft above land surface.

REMARKS.--Test well for the Minebank Run Project. Ground-Water-Level Monitoring Network.

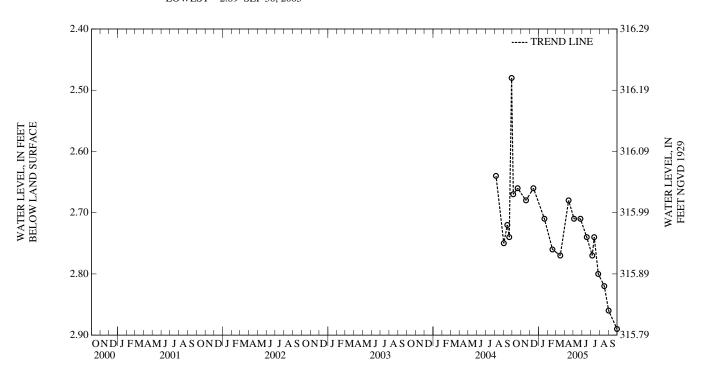
PERIOD OF RECORD .-- August 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.48 ft below land surface, September 29. 2004; lowest measured, 2.89 ft below land surface, September 30, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 2004 20 NOV 18 DEC 14 JAN 21, 2005	2.67 2.66 2.68 2.66 2.71	FEB 18, 2005 MAR 17 APR 15 MAY 04 26	2.76 2.77 2.68 2.71 2.71	JUN 17, 2005 JUL 06 13 27 AUG 17	2.74 2.77 2.74 2.80 2.82	SEP 01, 2005 30	2.86 2.89

HIGHEST 2.66 OCT 20, 2004 DEC 14, 2004 LOWEST 2.89 SEP 30, 2005



WELL NUMBER.--BA Fe 19. SITE ID.--391607076312901.

LOCATION.--Lat 39°16′07", long 76°31′29", Hydrologic Unit 02060003, 0.2 mi east of Willow Spring Road, at Seagrams warehouse facility, Dundalk. Owner: Montebello Brands.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 402 ft; casing diameter 8 in., to unknown depth; screen length 35 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a graphic water-level recorder from January 1944 to March 1954.

DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land surface.

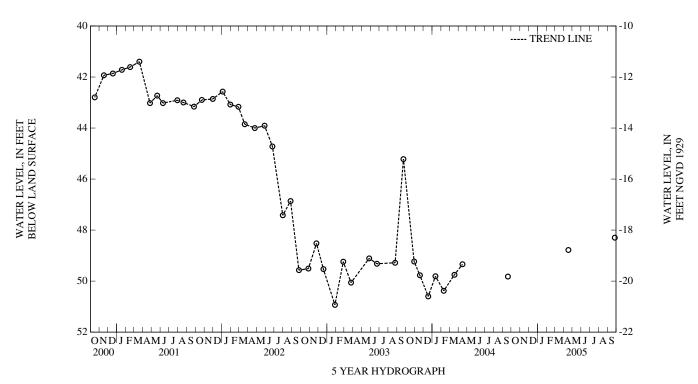
REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--February 1944 to March 1954, January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.40 ft below land surface, March 20, 2001; lowest measured, 97.42 ft below land surface, June 9,1951.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	48.78	SEP 26, 2005	48.30
		ST 48.30 SEP 26, 2 T 48.78 APR 18.2	



WELL NUMBER.--BA Gf 11. SITE ID.--391356076293501.

LOCATION.--Lat 39°13'56", long 76°29'35", Hydrologic Unit 02060003, near Tin Mill Rd., Sparrows Point. Owner: Bethlehem Steel Co.

AQUIFER .-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 645 ft; casing diameter 14 in., to 422.70 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.57 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.58 ft above land surface.

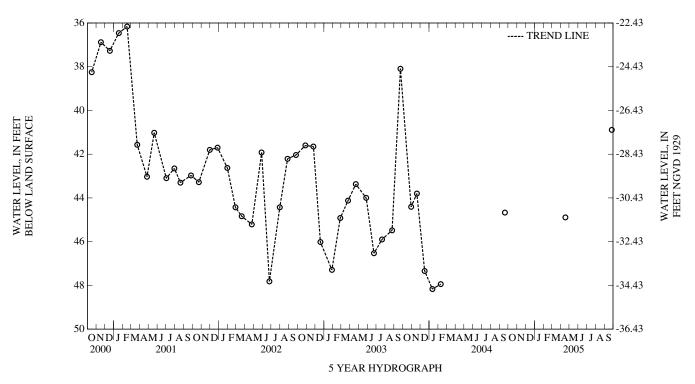
REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--September 1981, March 1982, September 1982, January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.25 ft below land surface, June 3, 1983; lowest measured, 62.27 ft below land surface, October 20, 1997.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 18, 2005	44.89	SEP 26, 2005	40.89
		40.89 SEP 26, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### Calvert County

## WELL NUMBER.--CA Bb 10. SITE ID.--384028076354201.--PERMIT NUMBER.--CA-00-9048

LOCATION.--Lat 38°40'28", long 076°35'42", Hydrologic Unit 02060004, at Mt. Hope Community Recreation Center, near northeast corner of Route 2 and Pushaw Station Road. Owner: Calvert County Commissioners.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 703 ft; casing diameter 6 in., to 688 ft; screen diameter 3 in. from 688 to 703 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 186.90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of manhole cover lip, 2.0 ft beloe land surface.

REMARKS .-- Maryland Water-Level Network observation well.

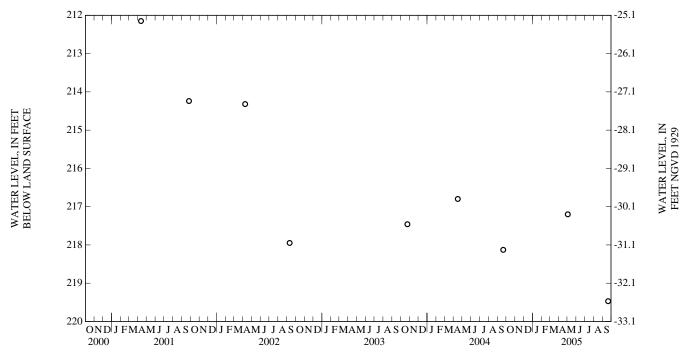
PERIOD OF RECORD.--December 4, 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 167.00 ft below land surface, December 4, 1951; lowest measured, 219.47 ft below land surface, September 20, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03, 2005	217.20	SEP 20, 2005	219.47

HIGHEST 217.20 MAY 03, 2005 LOWEST 219.47 SEP 20, 2005



5 YEAR HYDROGRAPH

Calvert County--Continued

# WELL NUMBER.--CA Bb 23. SITE ID.--384458076375501.--PERMIT NUMBER.--CA-71-0013

LOCATION.--Lat 38°44'58", long 76°37'55", Hydrologic Unit 02060006, at Cavalier Country. on the north side of Knight Avenue, 0.2 mi west of Cavalier Drive. Owner: Calvert County Commissioners.

AQUIFER .-- Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 552 ft; casing diameter 6 in., to 533 ft; screen of unknown diameter from 533 to 552 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 146.86 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of vent pipe, 1.15 ft above land surface.

REMARKS .-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

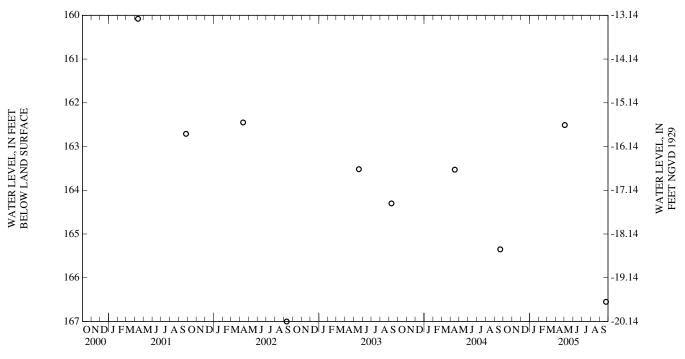
PERIOD OF RECORD .-- August 11, 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.63 ft below land surface, May 13, 1975; lowest measured, 167.00 ft below land surface, September 10, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03, 2005	162.51	SEP 23, 2005	166.55

HIGHEST 162.51 MAY 03, 2005 LOWEST 166.55 SEP 23, 2005



5 YEAR HYDROGRAPH

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Bb 27. SITE ID.--384333076394701. PERMIT NUMBER.--CA-73-3303.

LOCATION.--Lat 38°43'33", long 76°39'47", Hydrologic Unit 02060006, at Dunkirk Regional Park, Dunkirk. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 4 in., to 250 ft; casing diameter 2 in., from 250 to 310 ft; screen diameter 2 in., from 310 to 320 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital real-time water-level recorder from February 2004 to current year.

DATUM.--Elevation of land surface is 137.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.80 ft above land surface.

 $REMARKS. \hbox{\it --} Calvert\ County\ Ground-Water-Level\ Monitoring\ Network\ observation\ well.\ Water\ levels\ are\ affected\ by\ regional\ ground-water\ withdrawal.$ 

PERIOD OF RECORD .-- August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.05 ft above sea level, May 6, 1980; lowest measured, 45.08 ft below sea level, August 28, 2002.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

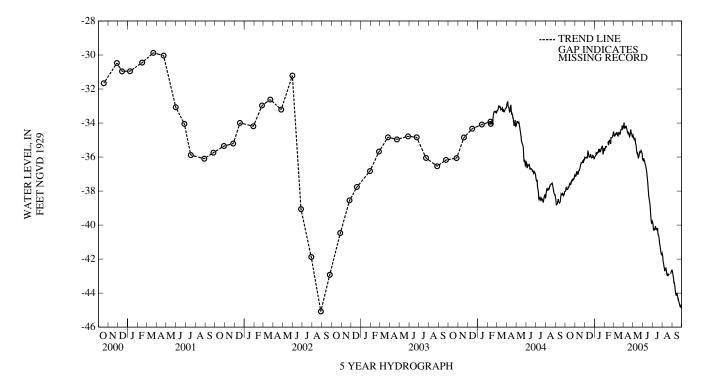
	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
DEC 14, 2004	-35.80	MAR 25, 2005	-34.24	JUN 09, 2005	-36.41	AUG 26, 2005	-41.84
JAN 18, 2005	-35.49	APR 21	-34.63	21	-38.40	SEP 21	-44.30
FEB 10	-35.01	MAY 19	-35.97	JUL 27	-41.30		
16	-34.84	23	-35.59	AUG 23	-41.89		

LOWEST -44.30 SEP 21, 2005 HIGHEST -34.24 MAR 25, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	-37.94 -37.81 -37.79 -37.70 -37.77	-38.01 -37.98 -37.85 -37.80 -37.88	-37.03 -37.00 -37.02 -36.72 -36.77	-37.13 -37.13 -37.10 -37.10 -36.89	-35.78 -35.95 -35.88 -35.93 -35.95	-36.03 -36.06 -36.02 -36.02 -36.04	-35.91 -35.92 -35.83 -35.80 -35.71	-36.00 -35.99 -35.93 -35.91 -35.88	-35.38 -35.38 -35.32 -35.18 -35.24	-35.63 -35.56 -35.48 -35.36 -35.43	-34.26 -34.42 -34.54 -34.62 -34.58	-34.50 -34.60 -34.79 -34.73 -34.76
6 7 8 9 10	-37.84 -37.83 -37.84 -37.75 -37.66	-37.88 -37.91 -37.91 -37.88 -37.78	-36.76 -36.72 -36.78 -36.91 -36.89	-36.88 -36.83 -36.99 -37.01 -37.01	-35.94 -35.80 -35.82 -35.79 -35.54	-36.04 -36.02 -36.06 -36.04 -35.79	-35.53 -35.61 -35.53 -35.64 -35.55	-35.72 -35.84 -35.82 -35.79 -35.72	-35.28 -35.18 	-35.42 -35.34  	-34.53 -34.49 -34.35 -34.53 -34.49	-34.75 -34.65 -34.62 -34.65 -34.63
11 12 13 14 15	-37.68 -37.67 -37.56 -37.49 -37.42	-37.79 -37.77 -37.70 -37.60 -37.59	-36.76 -36.62 -36.61 -36.69 -36.58	-36.93 -36.83 -36.78 -36.78 -36.72	-35.48 -35.64 -35.60 -35.78 -35.92	-35.67 -35.71 -35.85 -35.96 -36.00	-35.59 -35.55 -35.50 -35.33 -35.52	-35.72 -35.73 -35.64 -35.54 -35.63	-35.04 -35.01 -35.10 -35.01 -35.02	-35.16 -35.13 -35.30 -35.24 -35.08	-34.40 -34.40 -34.52 -34.56 -34.59	-34.56 -34.57 -34.69 -34.74 -34.76
16 17 18 19 20	-37.42 -37.49 -37.55 -37.45 -37.39	-37.54 -37.61 -37.62 -37.55 -37.47	-36.48 -36.45 -36.36 -36.28 -36.24	-36.65 -36.54 -36.48 -36.38 -36.33	-35.87 -35.85 -35.80 -35.65 -35.70	-36.00 -35.96 -35.96 -35.82 -35.90	-35.33 -35.28 -35.45 -35.28 -35.22	-35.57 -35.55 -35.71 -35.57 -35.63	-34.78 -34.83 -34.90 -34.97 -34.82	-35.02 -35.05 -35.05 -35.18 -35.23	-34.54 -34.47 -34.46 -34.50 -34.37	-34.67 -34.58 -34.61 -34.58
21 22 23 24 25	-37.33 -37.34 -37.31 -37.13 -37.14	-37.39 -37.43 -37.41 -37.31 -37.29	-36.27 -36.24 -36.22 -36.09 -35.97	-36.34 -36.33 -36.29 -36.20	-35.82 -35.94 -35.77 -35.90 -35.84	-36.01 -36.05 -36.03 -36.00 -35.99	-35.34 -35.09 -35.08 -35.23 -35.22	-35.57 -35.49 -35.41 -35.40 -35.37	-34.66 -34.71 -34.75 -34.58 -34.52	-34.87 -34.88 -34.87 -34.85 -34.84	-34.35 -34.45 -34.12 -34.22 -34.23	-34.66 -34.63 -34.51 -34.39 -34.38
26 27 28 29 30 31	-37.22 -37.20 -37.15 -37.08 -36.96 -36.97	-37.34 -37.32 -37.26 -37.25 -37.10 -37.05	-36.18 -36.12 -35.91 -36.08 -36.03	-36.32 -36.31 -36.12 -36.17 -36.17	-35.68 -35.79 -35.92 -35.84 -35.95 -35.93	-35.87 -36.02 -36.02 -36.01 -36.10 -36.09	-35.15 -35.42 -35.64 -35.47 -35.24 -35.30	-35.43 -35.85 -35.74 -35.69 -35.50	-34.56 -34.62 -34.35 	-34.76 -34.71 -34.62 	-34.23 -34.17 -33.81 -33.91 -34.15 -34.19	-34.37 -34.35 -34.17 -34.18 -34.33 -34.29
MONTH	-36.96	-38.01	-35.91	-37.13	-35.48	-36.10	-35.08	-36.00	-34.35	-35.63	-33.81	-34.79

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	-34.11 -33.77 -33.77 -33.94 -34.17	-34.23 -34.11 -33.97 -34.26 -34.30	-34.58 -34.63 -34.72 -34.79 -34.85	-34.72 -34.80 -34.87 -34.92 -34.97	-35.97 -36.07 -35.95 -35.93 -35.97	-36.13 -36.19 -36.13 -36.07 -36.22	-39.62 -39.67 -39.81 -39.91 -40.13	-39.83 -39.89 -39.98 -40.26 -40.32	-41.47 -41.56 -41.69 -41.95 -42.19	-41.73 -41.84 -42.11 -42.22 -42.30	-42.55 -42.60 -42.69 -42.82 -42.96	-42.67 -42.82 -42.92 -43.02 -43.17
6 7 8 9	-34.14 -34.08 -34.01 -34.06 -34.12	-34.27 -34.25 -34.17 -34.25 -34.22	-34.77 -34.72 -34.78 -34.91 -35.13	-34.92 -34.87 -34.99 -35.21 -35.27	-36.02 -36.10 -36.19 -36.24 -36.38	-36.22 -36.34 -36.39 -36.50 -36.52	-40.12 -40.15 -39.98 -39.91	-40.22 -40.30 -40.21 -40.22 -40.06	-42.24 -42.31 -42.39 -42.51 -42.35	-42.48 -42.50 -42.71 -42.62 -42.62	-43.15 -43.28 -43.29 -43.44 -43.65	-43.39 -43.38 -43.44 -43.66 -43.82
11 12 13 14 15	-34.16 -34.25 -34.23 -34.29 -34.44	-34.33 -34.37 -34.48 -34.55 -34.60	-35.21 -35.34 -35.60 -35.58 -35.63	-35.36 -35.61 -35.72 -35.80 -35.77	-36.42 -36.57 -36.70 -36.87 -37.08	-36.64 -36.79 -36.90 -37.10 -37.26	-39.88 -40.06 -40.08 -40.10 -40.13	-40.14 -40.23 -40.22 -40.26 -40.22	-42.30 -42.35 -42.42 -42.53 -42.68	-42.54 -42.53 -42.64 -42.77 -42.91	-43.82 -43.95 -44.02 -43.97 -43.93	-43.99 -44.03 -44.15 -44.04 -44.07
16 17 18 19 20	-34.52 -34.41 -34.42 -34.52 -34.55	-34.64 -34.57 -34.62 -34.65 -34.80	-35.65 -35.81 -35.87 -35.91 -35.66	-35.85 -36.01 -36.04 -35.99 -35.92	-37.25 -37.48 -37.74 -37.99 -38.20	-37.50 -37.75 -38.01 -38.23 -38.46	-40.17 -40.12 -40.17 -40.32 -40.45	-40.26 -40.19 -40.50 -40.58 -40.59	-42.86 -42.82 -42.83 -42.72 -42.68	-42.95 -42.92 -43.00 -42.89 -42.92	-43.91 -43.87 -44.07 -44.19 -44.26	-44.04 -44.15 -44.23 -44.38 -44.36
21 22 23 24 25	-34.64 -34.51 -34.31 -34.27 -34.31	-34.76 -34.69 -34.52 -34.39 -34.59	-35.64 -35.57 -35.53 -35.55 -35.56	-35.75 -35.69 -35.71 -35.73 -35.67	-38.38 -38.43 -38.61 -38.76 -39.02	-38.49 -38.61 -38.77 -39.05 -39.27	-40.50 -40.65 -40.79 -41.01 -41.13	-40.70 -40.83 -41.06 -41.17 -41.27	-42.62 -42.69  	-42.90 -42.94  	-44.29 -44.36 -44.45 -44.58 -44.61	-44.48 -44.55 -44.61 -44.69 -44.80
26 27 28 29 30 31	-34.51 -34.48 -34.59 -34.69 -34.62	-34.60 -34.62 -34.75 -34.81 -34.78	-35.50 -35.53 -35.56 -35.63 -35.67 -35.79	-35.61 -35.65 -35.70 -35.73 -35.90 -36.14	-39.24 -39.51 -39.70 -39.65	-39.55 -39.82 -39.89 -39.87 -39.77	-41.25 -41.30 -41.48 -41.68 -41.63 -41.50	-41.44 -41.52 -41.72 -41.77 -41.71 -41.65	-42.75 -42.64 -42.60 -42.56 -42.47	 -42.86 -42.75 -42.73 -42.68 -42.62	-44.61 -44.66 -44.74 -44.63 -44.73	-44.75 -44.82 -44.84 -44.77 -44.83
MONTH	-33.77	-34.81	-34.58	-36.14	-35.93	-39.89	-39.62	-41.77	-41.47	-43.00	-42.55	-44.84
YEAR	-33.77	-44.84										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CALVERT COUNTY—Continued

WELL NUMBER.--CA Bb 28. SITE ID.--384333076394702. PERMIT NUMBER.--CA-73-3721.

LOCATION.--Lat 38°43'33", long 76°39'47", Hydrologic Unit 02060006, at Dunkirk Regional Park, Dunkirk. Owner: U.S. Geological Survey.

AQUIFER .-- Nanjemoy Formation of Lower Eocene age. Aquifer code: 124NNJM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 170 ft; casing diameter 4 in., to 147 ft; casing diameter 2 in., from 147 to 160 ft; screen diameter 2 in., from 160 to 170 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 138.67 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

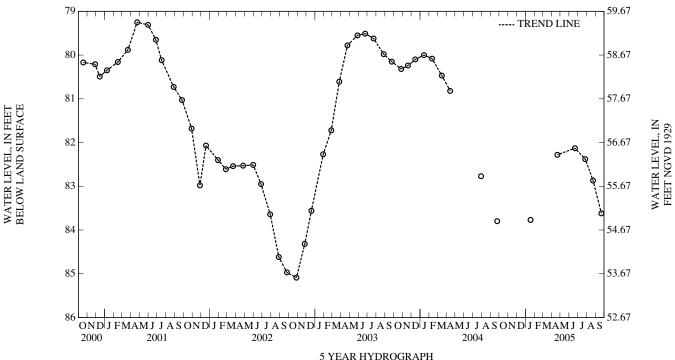
PERIOD OF RECORD .-- July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.55 ft below land surface, May 4, 1998; lowest measured, 85.09 ft below land surface, October 28, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005 APR 21	83.77 82.28	JUN 21, 2005 JUL 27	82.13 82.38	AUG 23, 2005 SEP 21	82.87 83.62
	HIGHE	T 92 13 HIN 21 2	005		

LOWEST 83.77 JAN 18, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 18. SITE ID.--383940076314801.

LOCATION.--Lat 38°39'40", long 76°31'48", Hydrologic Unit 02060004, at Naval Research Laboratory, Randle Cliff. Owner: U.S.Navy.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 476 ft; casing diameter 6 in., to 462 ft; screened from 462 to 476 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder September 1958 to December 1962.

DATUM.--Elevation of land surface is 111.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.30 ft above land surface.

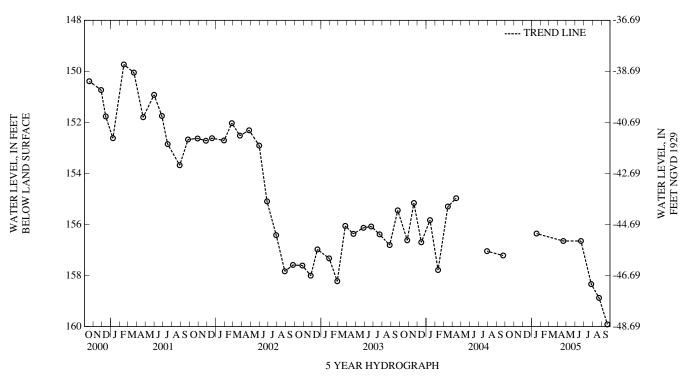
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--September 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 76.68 ft below land surface, September 10, 1952; lowest measured, 159.92 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005	156.36	JUN 21, 2005	156.65	AUG 23, 2005	158.88
APR 21	156.65	JUL 27	158.34	SEP 21	159.92

HIGHEST 156.36 JAN 18, 2005 LOWEST 159.92 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### CALVERT COUNTY—Continued

WELL NUMBER.--CA Cc 55. SITE ID.--383934076320201.--PERMIT NUMBER.--None

LOCATION.--Lat 38°39'34", long 76°32'02", Hydrologic Unit 02060004, at Randle Cliff Naval Research Lab, near the northwest corner of Karen Drive and Route 261. Owner: U.S. Navy.

AQUIFER.--Upper Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 868 ft; casing diameter 4 in., to 858 ft; screen diameter 4 in. from 858 to 868 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 95.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 3.0 ft above land surface.

REMARKS.-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- January 28, 1974 to current year.

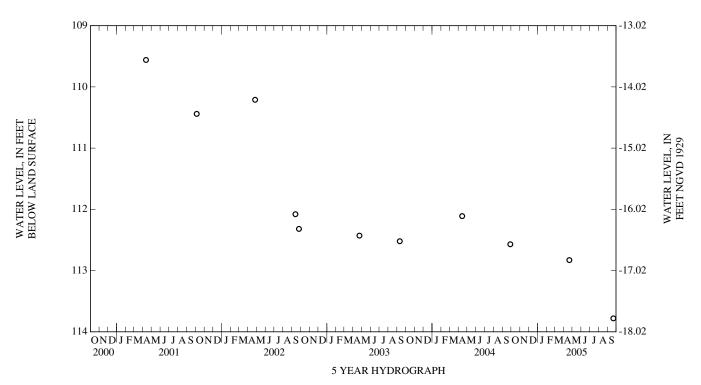
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.90 ft below land surface, September 18, 1974; lowest measured, 113.78 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

 DATE
 WATER LEVEL
 DATE
 WATER LEVEL

 APR 21, 2005
 112.83
 SEP 21, 2005
 113.78

 HIGHEST 112.83 APR 21, 2005 LOWEST 113.78 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 56. SITE ID.--383934076320001.--PERMIT NUMBER.--None

LOCATION.--Lat 38°39'34", long 76°32'00", Hydrologic Unit 02060004, at Randle Cliff Naval Research Lab, near the northwest corner of Karen Drive and Route 261. Owner: U.S. Navy.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 724 ft; casing diameter 6 in., to 704 ft; screen diameter 6 in. from 704 to 724 ft.

INSTRUMENTATION.--Periodic water-level measurement with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 96.11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 6 in. Flange, 3.5 ft above land surface.

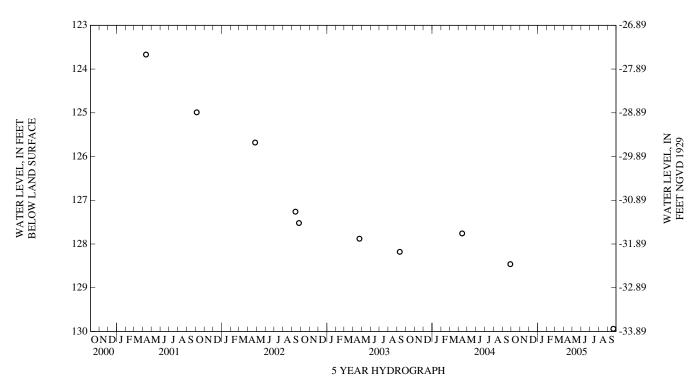
REMARKS .-- Ground-Water-Level Monitoring Network.

PERIOD OF RECORD.--February 14, 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 83.00 ft below land surface, February 14, 1974; lowest measured, 129.94 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE WATER LEVEL SEP 21, 2005 129.94



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CALVERT COUNTY—Continued

WELL NUMBER.--CA Cc 57. SITE ID.--383605076344601. PERMIT NUMBER.--CA-73-2893.

LOCATION.--Lat 38°36'05", long 76°34'46", Hydrologic Unit 02060006, Cox Rd. near MD Rt. 263, Huntingtown. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 4 in., to 211 ft; casing diameter 2 in., from 211 to 511 ft, and 521 to 579 ft; screen diameter 3 in., from 511 to 521 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 138.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.66 ft above land surface.

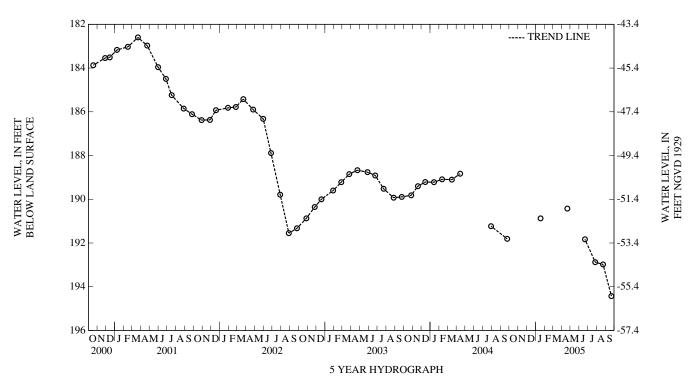
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 140.00 ft below land surface, March 7, 1979; lowest measured, 194.43 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005	190.87	JUN 21, 2005	191.83	AUG 23, 2005	192.98
APR 21	190.43	JUL 27	192.88	SEP 21	194.43

HIGHEST 190.43 APR 21, 2005 LOWEST 194.43 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 47. SITE ID.--383239076354201. PERMIT NUMBER.--CA-73-3304.

LOCATION .-- Lat 38°32'39", long 76°35'42", Hydrologic Unit 02060006, Prince Frederick. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 570 ft; casing diameter 4 in., to 483 ft; casing diameter 2 in., from 483 to 560 ft; screen diameter 2 in., from 560 to 570 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital real-time water-level recorder from February 2004 to current year.

DATUM.--Elevation of land surface is 140.4ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.20 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--July 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.14 ft below sea level, July 31, 1979; lowest measured, 68.30 ft below sea level, September 30, 2005 (recorder).

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 2004	-64.38	MAR 25, 2005	-63.67	APR 21, 2005	-63.73	AUG 23, 2005	-67.28
10	-64.60	30	-63.32	MAY 19	-64.48	SEP 21	-68.07
19	-64.29	30	-63.47	JUN 21	-65.36		
JAN 18, 2005	-63.71	APR 07	-63.38	JUL 27	-66.35		

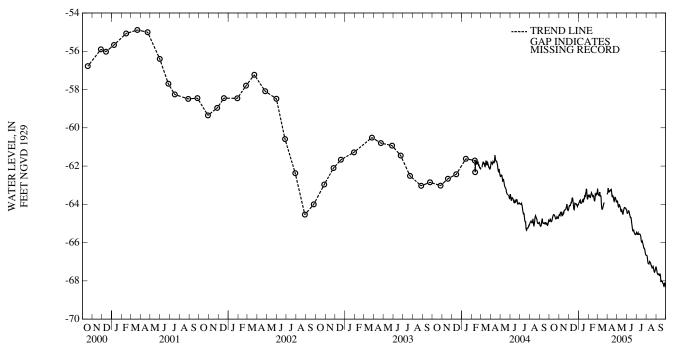
LOWEST -68.07 SEP 21, 2005 HIGHEST -63.32 MAR 30, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAI	RCH
1 2 3	-64.85 -64.82 -64.77	-64.88 -64.89 -64.83	-64.51 -64.50 -64.49	-64.55 -64.57 -64.54	-64.05 -64.07 -64.04	-64.21 -64.11 -64.07	-63.92 -63.90 -63.82	-63.95 -63.92 -63.90	-63.50 -63.54 -63.54	-63.54 -63.59 -63.59	-63.10 -63.12 -63.31	-63.18 -63.31 -63.46
4 5	-64.66 -64.66	-64.77 -64.79	-64.49 -64.38	-64.57 -64.40	-64.05 -64.05	-64.09 -64.07	-63.80 -63.78	-63.82 -63.81	-63.53 -63.55	-63.55 -63.61	-63.46 -63.50	-63.51 -63.52
6 7 8 9	-64.79 -64.88 -64.88 -64.80 -64.70	-64.88 -64.91 -64.89 -64.88 -64.80	-64.40 -64.35 -64.34 -64.43 -64.56	-64.44 -64.41 -64.43 -64.56 -64.60	-63.98 -63.85 -63.84 -63.88 -63.71	-64.06 -63.98 -63.91 -63.92 -63.88	-63.73 -63.76 -63.87 -63.88 -63.87	-63.78 -63.93 -63.94 -63.94 -63.94	-63.61 -63.51 -63.44 -63.39 -63.35	-63.65 -63.64 -63.51 -63.45 -63.39	-63.47 -63.36 -63.27 -63.36 -63.54	-63.54 -63.47 -63.36 -63.54 -63.57
11 12 13 14 15	-64.64 -64.59 -64.54 -64.52 -64.48	-64.70 -64.64 -64.59 -64.54	-64.51 -64.40 -64.40 -64.45 -64.39	-64.59 -64.51 -64.45 -64.51 -64.48	-63.62 -63.63 -63.65 -63.66 -63.81	-63.71 -63.67 -63.67 -63.81 -63.94	-63.83 -63.78 -63.72 -63.68 -63.74	-63.90 -63.83 -63.79 -63.74	-63.36 -63.44 -63.46 -63.50 -63.50	-63.44 -63.48 -63.56 -63.59 -63.55	-63.50 -63.50 -63.61 -63.97 -64.19	-63.56 -63.61 -63.97 -64.19 -64.26
16 17 18 19 20	-64.49 -64.54 -64.57 -64.60 -64.64	-64.54 -64.58 -64.61 -64.64 -64.72	-64.31 -64.27 -64.27 -64.24	-64.39 -64.32 -64.32 -64.29 -64.27	-63.94 -64.14 -64.16 -63.94 -63.90	-64.14 -64.26 -64.28 -64.16 -63.94	-63.71 -63.67 -63.68 -63.53 -63.44	-63.87 -63.71 -63.72 -63.71 -63.53	-63.50 -63.53 -63.59 -63.71 -63.74	-63.54 -63.59 -63.71 -63.81 -63.82	-64.22 -64.13 -64.07 -64.02 -63.93	-64.26 -64.22 -64.13 -64.07 -64.02
21 22 23 24 25	-64.72 -64.74 -64.71 -64.64 -64.62	-64.76 -64.76 -64.75 -64.71 -64.64	-64.24 -64.16 -64.13 -63.99 -63.90	-64.26 -64.24 -64.16 -64.13 -63.99	-63.92 -63.94 -63.85 -63.86 -63.97	-63.95 -63.98 -63.98 -63.97 -64.02	-63.44 -63.40 -63.35 -63.19	-63.53 -63.56 -63.40 -63.38 -63.19	-63.48 -63.45 -63.45 -63.42 -63.41	-63.74 -63.48 -63.51 -63.53 -63.43	-63.88 -63.87 	-63.93 -63.90 
26 27 28 29 30 31	-64.63 -64.66 -64.71 -64.67 -64.59 -64.51	-64.66 -64.71 -64.74 -64.74 -64.67 -64.59	-63.94 -64.06 -64.26 -64.27 -64.21	-64.06 -64.29 -64.29 -64.32 -64.29	-63.94 -63.95 -64.03 -63.97 -63.98 -63.95	-64.02 -64.06 -64.11 -64.03 -64.03	-63.17 -63.23 -63.55 -63.64 -63.49 -63.48	-63.23 -63.55 -63.71 -63.72 -63.64 -63.50	-63.42 -63.42 -63.18	-63.45 -63.47 -63.42	    -63.44	   -63.48
MONTH	-64.48	-64.91	-63.90	-64.60	-63.62	-64.28	-63.15	-63.95	-63.18	-63.82	-63.10	-64.26

CALVERT COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3	-63.40 -63.12 -63.09	-63.44 -63.40 -63.15	-63.79 -63.79 -63.81	-63.82 -63.82 -63.87	-64.28 -64.40 -64.42	-64.40 -64.47 -64.47	-65.42 -65.43 -65.50	-65.46 -65.50 -65.57	-66.64 -66.65	-66.67 -66.69	-67.20 -67.33 -67.42	-67.33 -67.42 -67.51
4 5	-63.15 -63.26	-63.26 -63.35	-63.87 -64.02	-64.02 -64.12	-64.39 -64.34	-64.42 -64.39	-65.54 -65.47	-65.57 -65.54	-66.69 -66.79	-66.79 -66.96	-67.51 -67.61	-67.61 -67.65
6 7 8 9 10	-63.32 -63.28 -63.25 -63.26 -63.23	-63.35 -63.35 -63.29 -63.31 -63.30	-64.09 -64.00 -63.97 -63.98 -64.05	-64.14 -64.09 -64.00 -64.05 -64.10	-64.30 -64.31 -64.35 -64.40 -64.49	-64.34 -64.35 -64.40 -64.49 -64.57	-65.46 -65.49 -65.52 -65.53	-65.49 -65.57 -65.56 -65.55 -65.56	-66.96 -67.07 -67.10 -67.05 -66.98	-67.07 -67.10 -67.11 -67.12 -67.05	-67.65 -67.65 -67.61 -67.61 -67.63	-67.67 -67.68 -67.65 -67.63 -67.67
11 12 13 14 15	-63.21 -63.21 -63.19 -63.22 -63.34	-63.24 -63.24 -63.22 -63.34 -63.54	-64.10 -64.13 -64.27 -64.27 -64.22	-64.13 -64.27 -64.36 -64.37 -64.27	-64.57 -64.64 -64.63 -64.64 -64.70	-64.64 -64.69 -64.68 -64.70 -64.84	-65.53 -65.57 -65.60 -65.66	-65.55 -65.57 -65.60 -65.66 -65.79	-66.97 -66.99 -67.01 -67.03 -67.06	-66.99 -67.02 -67.04 -67.06 -67.15	-67.67 -67.65 -67.65 -67.66 -67.72	-67.72 -67.71 -67.67 -67.72 -68.04
16 17 18 19 20	-63.54 -63.56 -63.54 -63.56 -63.61	-63.61 -63.61 -63.56 -63.61 -63.64	-64.20 -64.28 -64.37 -64.45 -64.33	-64.28 -64.37 -64.45 -64.51	-64.84 -64.99 -65.11 -65.25 -65.36	-64.99 -65.11 -65.25 -65.36 -65.39	-65.79 -65.92 -65.93 -65.90 -65.92	-65.92 -65.98 -65.98 -65.93 -66.01	-67.15 -67.17 -67.20 -67.30 -67.28	-67.20 -67.20 -67.30 -67.33 -67.31	-67.98 -67.96 -67.97 -68.00 -68.00	-68.04 -67.99 -68.01 -68.03 -68.04
21 22 23 24 25	-63.63 -63.80 -63.66 -63.60 -63.59	-63.80 -63.85 -63.82 -63.67 -63.61	-64.30 -64.20 -64.14 -64.14	-64.35 -64.30 -64.20 -64.17 -64.19	-65.30 -65.29 -65.32 -65.43 -65.48	-65.37 -65.32 -65.43 -65.48 -65.53	-66.01 -66.06 -66.12 -66.23 -66.25	-66.06 -66.12 -66.23 -66.29	-67.23 -67.24 -67.25 -67.32 -67.42	-67.29 -67.25 -67.32 -67.42 -67.52	-68.01 -68.10 -68.12 -68.15 -68.25	-68.10 -68.14 -68.15 -68.26 -68.29
26 27 28 29 30 31	-63.61 -63.68 -63.71 -63.79 -63.82	-63.68 -63.71 -63.79 -63.87 -63.88	-64.16 -64.16 -64.22 -64.21	-64.18 -64.18 -64.22 -64.25 -64.25 -64.28	-65.53 -65.53 -65.55 -65.51 -65.46	-65.56 -65.56 -65.58 -65.56 -65.51	-66.26 -66.31 -66.38 -66.50 -66.58 -66.64	-66.31 -66.38 -66.50 -66.58 -66.64 -66.66	-67.52 -67.48 -67.39 -67.31 -67.25 -67.18	-67.55 -67.53 -67.48 -67.39 -67.31 -67.25	-68.08 -68.08 -68.10 -68.16 -68.20	-68.25 -68.10 -68.18 -68.20 -68.30
MONTH	-63.09	-63.88	-63.79	-64.51	-64.28	-65.58	-65.42	-66.66	-66.64	-67.55	-67.20	-68.30
YEAR	-63.09	-68.30										

Daily Low Water Levels



5 YEAR HYDROGRAPH

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 65. SITE ID.--383216076351401. PERMIT NUMBER.--CA-81-2415.

LOCATION.--Lat 38°32'16", long 76°35'14", Hydrologic Unit 02060006, at St. Paul's Episcopal Church parking lot, Prince Frederick. Owner: U.S. Geological Survey.

AQUIFER.--Brandywine Formation of Pliocene age. Aquifer code: 112UPLD.

WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 49 ft; casing diameter 3 in., to 22 ft, and 32 to 49 ft; screen diameter 3 in., from 22 to 32 ft.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 159.33 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of PVC casing, 2.38 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. The water level measurement of 17.42 ft below land surface, on August 24, 1999, was made after a heavy rain shower earlier in the day.

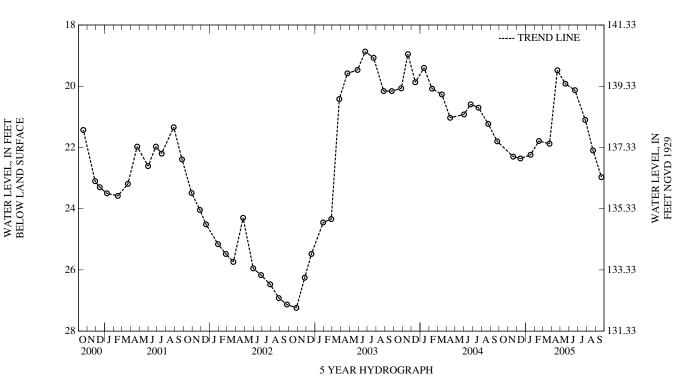
PERIOD OF RECORD.--July and August 1986, October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.64 ft below land surface, May 9, 1990; lowest measured, 27.24 ft below land surface, October 28, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 DEC 14 JAN 18, 2005	22.30 22.36 22.24	FEB 16, 2005 MAR 25 APR 21	21.79 21.88 19.48	MAY 19, 2005 JUN 21 JUL 27	19.92 20.13 21.10	AUG 23, 2005 SEP 21	22.10 22.97

HIGHEST 19.48 APR 21, 2005 LOWEST 22.97 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### GROUND-WATER LEVELS IN MARYLAND--Continued

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 96. SITE ID.--383244076354201. PERMIT NUMBER.--CA-94-4191.

LOCATION.--Lat 38°32'44", long 76°35'42", Hydrologic Unit 02060006. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco Aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 970 ft; casing diameter 4 in., to 970 ft. depth.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, March 2003 to September 2005.

DATUM.--Elevation of land surface is 151.56 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 3.00 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD .-- March 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.08 ft below sea level, April 12, 2003 (recorder); lowest measured, 38.25 ft below sea level, Sept. 21, 2005 .

### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004	-36.84	JAN 18, 2005	-37.02	APR 21, 2005	-36.83	JUL 27, 2005	-37.18
DEC 14	-36.75	FEB 16	-36.86	MAY 19	-36.95	SEP 21	-38.25

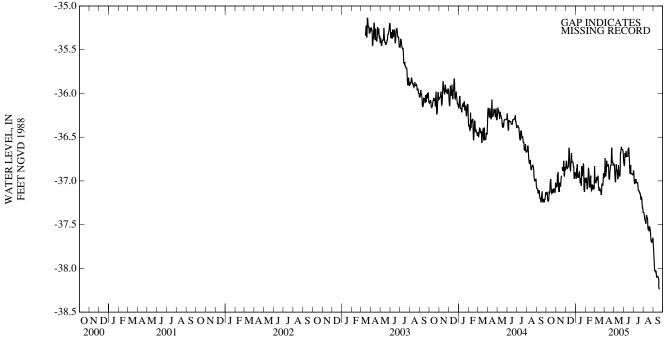
LOWEST -38.25 SEP 21, 2005 HIGHEST -36.75 DEC 14, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	OCTOBER		NOVE	NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1 2 3 4 5	-37.15 -37.12 -37.12 -37.11 -37.12	-37.15 -37.15 -37.13 -37.13 -37.20	-37.03 -37.00 -37.00 -36.81 -36.81	-37.07 -37.07 -37.06 -37.06 -36.92	-36.61 -36.77 -36.75 -36.77 -36.80	-36.84 -36.81 -36.77 -36.80 -36.86	-36.89 -36.92 -36.86 -36.84 -36.81	-36.92 -36.97 -36.97 -36.86 -36.85	-36.97 -37.01 -36.96 -36.95 -36.96	-37.02 -37.01 -37.01 -36.96 -37.04	-36.82 -36.82 -36.93 -37.02 -37.00	-36.83 -36.93 -37.02 -37.02 -37.02	
6 7 8 9 10	-37.20 -37.23 -37.20 -37.12 -37.11	-37.23 -37.23 -37.23 -37.20 -37.12	-36.90 -36.88 -36.88 -37.06 -37.12	-36.95 -36.90 -37.06 -37.12 -37.12	-36.83 -36.68 -36.68 -36.74 -36.54	-36.86 -36.84 -36.84 -36.75	-36.71 -36.75 -36.83 -36.96 -36.86	-36.81 -36.95 -36.96 -36.96	-37.04 -37.01 -36.94 -36.84 -36.79	-37.09 -37.09 -37.01 -36.94 -36.85	-36.94 -36.87 -36.71 -36.96 -36.95	-37.02 -36.96 -36.96 -36.99 -36.99	
11 12 13 14 15	-37.11 -37.04 -37.00 -36.95 -36.90	-37.14 -37.13 -37.04 -37.00 -36.98	-37.02 -36.92 -36.92 -37.05 -36.99	-37.12 -37.02 -37.06 -37.06 -37.06	-36.54 -36.62 -36.60 -36.70 -36.83	-36.62 -36.64 -36.70 -36.83 -36.87	-36.90 -36.89 -36.83 -36.78 -36.96	-36.92 -36.90 -36.89 -36.96 -37.02	-36.85 -36.88 -36.93 -36.97	-36.88 -36.93 -37.07 -37.07 -36.99	-36.85 -36.85 -36.94 -37.03 -37.08	-36.95 -36.94 -37.03 -37.08 -37.11	
16 17 18 19 20	-36.98 -37.06 -37.12 -37.09 -37.09	-37.06 -37.13 -37.14 -37.12 -37.10	-36.95 -36.94 -36.87  -36.84	-36.99 -36.95 -36.94 	-36.79 -36.79 -36.68 -36.58 -36.61	-36.89 -36.79 -36.68 -36.78	-36.91 -36.91 -36.97 -36.83 -36.79	-37.02 -36.97 -37.05 -37.05 -36.83	-36.81 -36.89 -36.94 -37.07 -37.09	-36.99 -36.94 -37.07 -37.10 -37.11	-37.11 -37.09 -37.09 -37.09 -37.10	-37.11 -37.11 -37.09 -37.10 -37.11	
21 22 23 24 25	-37.10 -37.10 -37.09 -37.06 -37.07	-37.10 -37.14 -37.13 -37.09 -37.09	-36.84 -36.86 -36.83 -36.66 -36.57	-36.88 -36.86 -36.83 -36.77	-36.74 -36.77 -36.57 -36.73 -36.79	-36.78 -36.78 -36.78 -36.79 -36.84	-36.81 -36.63 -36.63 -36.80	-36.94 -36.94 -36.89 -36.89 -36.80	-36.96 -36.96 -37.04 -36.99 -36.99	-37.09 -37.04 -37.09 -37.09 -37.05	-37.10 -37.13 -36.88 -36.90 -37.03	-37.13 -37.16 -37.14 -37.03 -37.04	
26 27 28 29 30 31	-37.09 -37.10 -37.12 -37.02 -36.96 -36.96	-37.11 -37.12 -37.13 -37.13 -37.02 -37.03	-36.77 -36.84 -36.68 -36.83 -36.84	-36.94 -36.95 -36.84 -36.87 -36.88	-36.76 -36.76 -36.90 -36.83 -36.83 -36.89	-36.84 -36.97 -36.97 -36.90 -36.91 -36.91	-36.69 -36.82 -37.09 -36.97 -36.85 -36.85	-36.82 -37.09 -37.12 -37.12 -36.97 -36.97	-37.05 -37.08 -36.83 	-37.08 -37.09 -37.08 	-37.04 -37.00 -36.66 -36.66 -36.91 -36.96	-37.05 -37.05 -37.00 -36.91 -36.96 -36.96	
MONTH	-36.90	-37.23	-36.57	-37.12	-36.54	-36.97	-36.63	-37.12	-36.79	-37.11	-36.66	-37.16	

CALVERT COUNTY—Continued

DAY	MAX	MIN											
	APRIL		MA	MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	-36.88	-36.96	-36.77	-36.81	-36.76	-36.81	-36.85	-36.88	-37.36	-37.36	-37.65	-37.74	
2	-36.56	-36.88	-36.81	-36.82	-36.81	-36.82	-36.85	-36.90	-37.34	-37.36	-37.74	-37.79	
3	-36.56	-36.74	-36.82	-36.88	-36.68	-36.81	-36.90	-36.99	-37.34	-37.37	-37.79	-37.87	
4	-36.74	-36.87	-36.88	-36.96	-36.68	-36.68	-36.99	-37.03	-37.37	-37.40	-37.87	-37.94	
5	-36.87	-36.95	-36.96	-37.01	-36.68	-36.70	-36.98	-37.03	-37.40	-37.44	-37.94	-38.02	
3	-30.67	-30.93	-30.90	-37.01	-30.00	-30.70	-30.96	-37.03	-37.40	-37.44	-31.94	-36.02	
6	-36.88	-36.92	-36.88	-37.01	-36.69	-36.73	-36.96	-36.98	-37.44	-37.45	-38.02	-38.03	
7	-36.77	-36.88	-36.80	-36.88	-36.62	-36.69	-36.97	-37.02	-37.45	-37.46	-38.03	-38.03	
8	-36.73	-36.77	-36.80	-36.81	-36.63	-36.66	-36.93	-37.02	-37.46	-37.48	-38.03	-38.04	
9	-36.77	-36.83	-36.81	-36.86	-36.66	-36.72	-36.94	-36.98	-37.40	-37.49	-38.03	-38.03	
10	-36.83	-36.83	-36.86	-36.88	-36.72	-36.72	-36.98	-37.02	-37.39	-37.40	-38.03	-38.04	
10	30.03	30.03	30.00	30.00	30.72	30.72	30.70	37.02	31.37	37.40	30.03	30.04	
11	-36.83	-36.83	-36.88	-36.88	-36.72	-36.72	-37.02	-37.02	-37.39	-37.39	-38.04	-38.10	
12	-36.81	-36.83	-36.88	-36.94	-36.72	-36.72	-37.02	-37.02	-37.39	-37.42	-38.10	-38.10	
13	-36.77	-36.81	-36.94	-36.98	-36.64	-36.72	-37.02	-37.02	-37.42	-37.42	-38.08	-38.10	
14	-36.77	-36.84	-36.82	-36.97	-36.63	-36.64	-37.02	-37.02	-37.42	-37.44	-38.08	-38.09	
15	-36.84	-36.97	-36.81	-36.82	-36.62	-36.63	-37.02	-37.07	-37.44	-37.53	-38.09	-38.09	
13	30.04	30.77	30.01	30.02	30.02	30.03	37.02	37.07	37.44	37.33	30.07	30.07	
16	-36.97	-36.98	-36.82	-36.88	-36.62	-36.62	-37.07	-37.11	-37.52	-37.56	-38.09	-38.10	
17	-36.91	-36.98	-36.88	-36.92	-36.62	-36.68	-37.11	-37.11	-37.51	-37.52	-38.10	-38.11	
18	-36.87	-36.91	-36.92	-36.93	-36.68	-36.75	-37.11	-37.11	-37.52	-37.57	-38.11	-38.19	
19	-36.83	-36.87	-36.93	-36.95	-36.75	-36.84	-37.11	-37.12	-37.54	-37.57	-38.19	-38.23	
20	-36.75	-36.83	-36.68	-36.93	-36.84	-36.92	-37.12	-37.14	-37.53	-37.54	-38.23	-38.24	
			30.00								30.23	30.21	
21	-36.75	-36.82	-36.68	-36.68	-36.82	-36.90	-37.14	-37.14	-37.52	-37.53			
22	-36.71	-36.82	-36.64	-36.68	-36.80	-36.82	-37.14	-37.14	-37.53	-37.55			
23	-36.55	-36.71	-36.61	-36.64	-36.82	-36.92	-37.14	-37.18	-37.55	-37.58			
24	-36.56	-36.62	-36.60	-36.61	-36.92	-36.92	-37.18	-37.21	-37.58	-37.65			
25	-36.62	-36.74	-36.61	-36.64	-36.92	-36.92	-37.19	-37.21	-37.65	-37.69			
26	-36.74	-36.79	-36.59	-36.64	-36.92	-36.92	-37.19	-37.19	-37.69	-37.69			
27	-36.73	-36.78	-36.62	-36.64	-36.92	-36.92	-37.18	-37.20	-37.69	-37.70			
28	-36.75	-36.82	-36.64	-36.64	-36.92	-36.93	-37.20	-37.27	-37.66	-37.70			
29	-36.82	-36.82	-36.64	-36.66	-36.92	-36.93	-37.27	-37.31	-37.66	-37.66			
30	-36.77	-36.82	-36.66	-36.70	-36.88	-36.92	-37.31	-37.31	-37.65	-37.67			
31			-36.70	-36.76			-37.31	-37.36	-37.61	-37.65			
MONTH	-36.55	-36.98	-36.59	-37.01	-36.62	-36.93	-36.85	-37.36	-37.34	-37.70	-37.65	-38.24	
YEAR	-36.54	-38.24											

# Daily Low Water Levels



5 YEAR HYDROGRAPH

WELL NUMBER.--CA Dc 35. SITE ID.--383050076305501. PERMIT NUMBER.--CA-73-0718.

LOCATION.--Lat 38°30'50", long 76°30'55", Hydrologic Unit 02060004, 5.1 mi. southeast of Prince Frederick, at Scientist Cliff community. Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 760 ft; casing diameter 4 in., to 750 ft; screen diameter 2 in., from 750 to 760 ft.

INSTRUMENTATION.—Monthly water-level measurements with electric tape by U.S. Geological Survey personnel from November 1991 to current year. Twice yearly water level measurements from April 1975 to September 1978, and April 1983 to September 1990. Equipped with water-level recorder from February 1976 to January 1980.

DATUM.--Elevation of land surface is 91.60 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.90 ft above land surface.

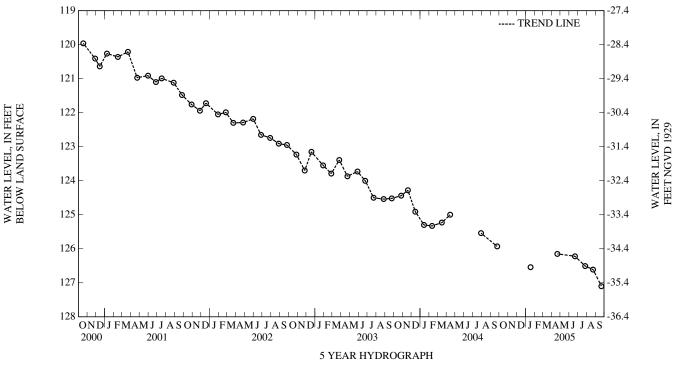
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.30 ft below land surface, September 12, 1975; lowest measured, 127.10 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005	126.54	JUN 21, 2005	126.22	AUG 23, 2005	126.61
APR 21	126.15	JUL 27	126.51	SEP 21	127.10

HIGHEST 126.15 APR 21, 2005 LOWEST 127.10 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CA Ed 32. SITE ID.--382527076280801.--PERMIT NUMBER.--CA 23170

LOCATION.-Lat 38°25'27", long 76°28'08", Hydrologic Unit 02060006, at White Sands subdivision, on Osprey Lane. Owner: White Sands Corp..

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 389 ft; casing diameter 6 in., to 341 ft; casing diameter 6 in., from 356 to 374 ft and casing diameter 6 in., from 389 to 400 ft; screened from 341 to 356 ft, screen diameter 6 in. from 374 to 389 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 100.00 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 1 in. pipe, 1.5 ft above land surface.

REMARKS .-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

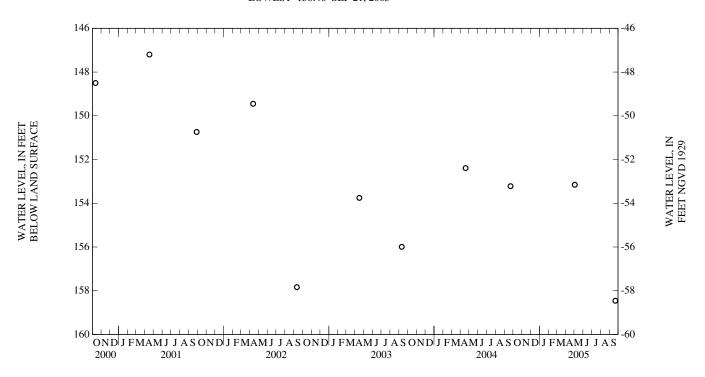
PERIOD OF RECORD .-- July 18, 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.00 ft below land surface, July 18, 1979; lowest measured, 158.46 ft below land surface, September 21, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03, 2005	153.15	SEP 21, 2005	158.46

HIGHEST 153.15 MAY 03, 2005 LOWEST 158.46 SEP 21, 2005



WELL NUMBER.--CA Ed 42. SITE ID.--382528076280701. PERMIT NUMBER.--CA-73-0369.

LOCATION.--Lat 38°25'52", long 76°27'48", Hydrologic Unit 02060004, at Calvert Cliffs Nuclear Power Plant near maintenance buildings. Owner: Constellation Energy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquuifer Code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 620 ft; casing diameter 4 in., to 321 ft, and 2 in., from 313 to 594 ft; screen diameter 2 in. from 594 to 620.

INSTRUMENTATION .-- Periodic water-level measurements with steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 121.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 0.84 ft above land surface.

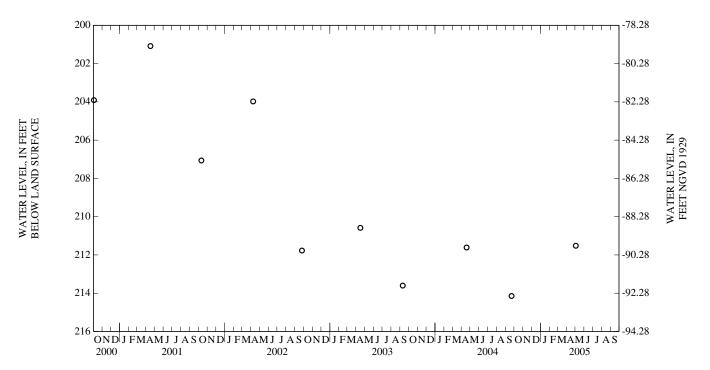
REMARKS.--Ground-Water-Level Monitoring Network and Maryland Water-Level Network obsevation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD .-- August 17, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 138.56 ft below land surface, August 17, 1978; lowest measured, 214.15 ft below land surface, September 22, 2004.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE WATER LEVEL MAY 03, 2005 211.52



# WELL NUMBER.--CA Ed 49. SITE ID.--382733076290101.--PERMIT NUMBER.--CA 81-1940

LOCATION.--Lat 38°27'33", long 76°29'01", Hydrologic Unit 002060004, at intersection of Long Beach Dr. and Hillside Rd., St. Leonards, MD. Owner: Beaches Water Co..

AQUIFER.--Piney-Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 356 ft; casing diameter 4 in., to 331 ft; casing diameter 3 in., from 331 to 356 ft; screened from 331 to 356 ft.

INSTRUMENTATION .-- Periodic water-level measurements with steel tape by MD Geological Survey personnel.

DATUM.--Altitude of land surface is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 6 in. casing, 1.2 ft above land surface.

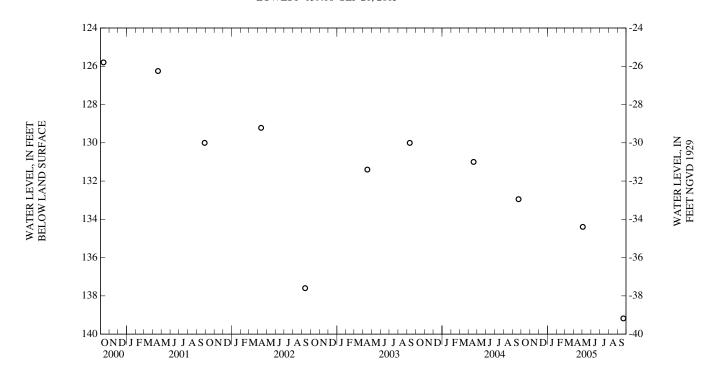
REMARKS .-- Calvert County Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- August 17, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 84.0 ft below land surface, January 24, 1986; lowest measured, 139.18 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03, 2005	134.39	SEP 21, 2005	139.18
		ST 134.39 MAY 03, T 139.18 SEP 21, 2	



WELL NUMBER.--CA Ed 52. SITE ID.--382549076260101. PERMIT NUMBER.--CA-92-0081.

LOCATION.--Lat 38°25'49", long 76°26'01", Hydrologic Unit 020600004, at Calvert Cliffs Nuclear Power Plant, 4.3 mi. southeast of St. Leonard. Owner: Constellation Energy.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 590 ft; casing diameter 4.5 in., to 460 ft; casing diameter 2 in., from 455 to 565 ft, and 580 to 590 ft; screen diameter 2 in., from 565 to 580 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from April 1995 to curent year.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.40 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--April 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.66 ft below sea level, May 21, 1995 (recorder); lowest measured, 114.00 ft below sea level, February 5 and 14, 2004 (recorder).

# WATER SURFACE ELEVATION IN FEET NGVD 1929

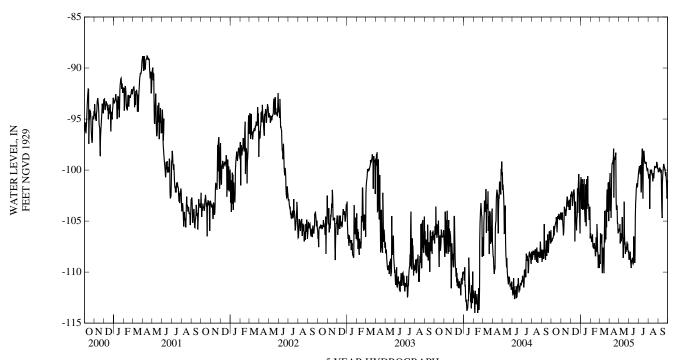
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 2004 JAN 11, 2005	-104.02 -100.42	MAR 22, 2005 MAY 27	-102.69 -107.85	AUG 01, 2005	-99.54

LOWEST -107.85 MAY 27, 2005 HIGHEST -99.54 AUG 01, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1	-104.8	-107.0	-103.6	-104.8	-101.3	-102.4	-100.4	-101.3	-102.8	-106.2	-103.6	-108.3
2	-105.5	-107.0	-103.5	-104.6	-101.8	-102.6	-100.1	-100.7	-102.3	-106.6	-103.7	-108.5
3	-105.4	-106.9	-103.4	-104.9	-100.4	-102.2	-99.8	-102.0	-102.2	-106.5	-105.2	-109.2
4	-105.0	-106.9	-102.9	-104.2	-101.2	-102.1	-101.0	-103.8	-102.9	-107.0	-103.1	-106.2
5	-105.5	-106.7	-102.9	-104.2	-101.8	-102.3	-100.0	-101.2	-102.8	-107.0	-103.3	-107.2
6	-105.1	-106.7	-103.5	-105.2	-102.3	-103.5	-99.6	-100.9	-102.7	-106.6	-103.1	-107.1
7	-105.6	-106.6	-104.7	-105.6	-102.0	-103.3	-99.8	-103.9	-102.0	-106.3	-103.1	-106.9
8	-105.0	-106.4	-104.7	-106.4	-101.8	-102.7	-100.2	-101.4	-102.0	-107.4	-103.3	-106.3
9	-104.6	-105.5	-104.5	-106.1	-101.5	-102.3	-99.9	-103.8	-104.2	-107.6	-105.0	-109.1
10	-104.6	-106.4	-102.8	-105.2	-101.2	-102.1	-100.4	-103.8	-103.5	-107.3	-105.0	-110.1
11	-104.6	-105.8	-102.5	-103.6	-101.3	-101.9	-100.0	-101.0	-103.6	-107.7	-104.2	-107.7
12	-104.5	-105.6	-102.6	-103.9	-101.8	-102.3	-99.6	-100.9	-103.6	-107.2	-103.6	-107.6
13	-104.4	-105.4	-102.7	-103.8	-101.8	-103.6	-100.0	-103.6	-103.6	-107.2	-104.2	-108.4
14	-104.2	-105.3	-103.0	-104.0	-103.1	-107.0	-99.8	-104.4	-103.1	-107.6	-105.1	-109.2
15	-103.8	-105.1	-103.2	-104.5	-99.4	-103.3	-101.7	-105.1	-103.1	-107.8	-106.8	-110.1
16	-104.0	-105.1	-103.1	-104.3	-98.0	-103.1	-101.0	-105.0	-103.8	-108.4	-103.2	-106.8
17	-104.1	-104.6	-102.7	-104.0	-101.1	-105.0	-100.4	-101.4	-103.3	-108.4	-102.3	-104.0
18	-104.3	-105.3	-102.6	-103.4	-100.8	-105.0	-100.7	-105.5	-103.2	-106.6	-102.0	-107.1
19	-104.4	-106.1	-101.9	-102.9	-101.3	-105.9	-100.3	-102.5	-103.0	-108.0	-102.3	-106.3
20	-103.5	-105.3	-102.1	-102.6	-101.9	-104.7	-99.9	-100.9	-103.7	-107.7	-102.2	-106.0
21	-103.6	-104.5	-102.1	-102.8	-101.6	-104.6	-99.9	-103.8	-101.9	-105.3	-102.2	-106.8
22	-103.3	-104.6	-102.5	-103.5	-100.8	-101.8	-99.8	-102.8	-101.9	-106.2	-101.9	-103.9
23	-103.3	-104.8	-102.5	-103.6	-100.4	-104.2	-99.8	-100.6	-103.1	-108.0	-101.8	-105.6
24	-103.5	-104.3	-102.3	-103.3	-100.7	-102.0	-99.7	-103.3	-104.3	-108.1	-101.3	-102.5
25	-103.4	-104.5	-102.0	-103.0	-100.4	-101.2	-99.8	-103.4	-105.1	-109.6	-100.9	-101.9
26 27 28 29 30 31	-103.6 -103.7 -103.6 -103.6 -103.2 -103.4	-104.7 -104.8 -104.9 -104.4 -104.2 -104.2	-103.0 -102.7 -102.2 -102.1 -101.8	-103.9 -103.3 -102.9 -103.9 -103.2	-100.0 -100.2 -99.6 -101.5 -102.2 -100.6	-100.4 -101.3 -103.3 -105.0 -106.2 -102.2	-99.4 -101.2 -100.7 -101.2 -100.7 -102.0	-103.4 -104.5 -104.9 -104.4 -103.6 -106.7	-107.9 -104.9 -108.0 	-109.5 -108.3 -109.6 	-100.5 -101.0 -99.9 -99.8 -100.0 -100.8	-102.6 -104.1 -101.3 -101.2 -105.0 -103.3
MONTH	-103.2	-107.0	-101.8	-106.4	-98.0	-107.0	-99.4	-106.7	-101.9	-109.6	-99.8	-110.1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JUI	NE	JU	LY	AUC	UST	SEPTE	MBER
1	-100.2	-101.3	-101.9	-105.8	-104.2	-108.7	-98.5	-100.3	-99.1	-100.5	-99.1	-100.2
2	-98.5	-101.0	-101.9	-105.8	-105.1	-108.8	-98.8	-100.0	-99.5	-100.8	-98.8	-100.1
3	-98.7	-100.3	-102.3	-106.0	-104.2	-108.3	-98.6	-99.8	-99.4	-100.8	-99.0	-100.2
4	-99.6	-104.0	-101.9	-105.3	-104.6	-108.2	-98.6	-99.6	-98.9	-100.4	-98.8	-100.0
5	-99.9	-101.8	-102.8	-107.2	-104.4	-108.0	-98.5	-100.0	-98.9	-103.8	-98.7	-99.8
6	-99.6	-104.7	-102.7	-106.2	-104.7	-108.8	-99.1	-100.4	-99.6	-101.7	-98.4	-99.8
7	-99.9	-103.0	-102.7	-106.5	-105.5	-109.2	-98.8	-100.0	-99.1	-100.0	-98.5	-100.1
8	-99.2	-100.4	-102.2	-107.0	-104.2	-109.6	-98.1	-99.5	-98.6	-100.0	-98.2	-99.9
9	-98.6	-99.5	-103.0	-106.3	-103.7	-108.8	-97.6	-102.2	-99.1	-100.3	-98.9	-100.3
10	-98.2	-99.3	-102.1	-106.7	-105.0	-108.9	-98.3	-101.7	-98.8	-100.0	-98.7	-100.0
11	-97.9	-99.4	-101.6	-104.6	-104.3	-108.8	-97.8	-99.0	-98.7	-100.0	-98.5	-102.3
12	-98.1	-99.1	-101.2	-106.6	-104.8	-108.6	-97.0	-98.6	-99.0	-100.4	-102.3	-104.0
13	-96.5	-99.1	-102.6	-106.8	-105.2	-109.1	-95.4	-97.9	-99.3	-100.5	-100.8	-104.7
14	-96.4	-97.9	-103.4	-108.6	-105.1	-109.2	-94.7	-101.3	-99.5	-100.6	-99.2	-101.0
15	-97.8	-102.7	-103.6	-107.7	-104.4	-109.1	-98.8	-102.8	-99.7	-101.1	-98.9	-100.4
16	-98.1	-99.2	-102.7	-107.1	-103.0	-106.5	-97.2	-99.2	-99.0	-100.3	-98.8	-100.0
17	-97.8	-98.8	-101.5	-103.1	-104.1	-107.2	-96.7	-98.2	-99.0	-100.7	-98.2	-99.6
18	-97.7	-99.0	-102.6	-106.1	-104.3	-107.6	-96.6	-98.1	-99.3	-100.8	-98.0	-99.4
19	-97.5	-98.7	-102.6	-107.3	-104.0	-109.1	-96.6	-98.6	-99.2	-100.2	-98.2	-99.6
20	-97.2	-98.5	-103.0	-107.1	-103.8	-108.5	-97.5	-99.2	-98.7	-99.8	-98.3	-99.7
21	-97.1	-98.3	-103.5	-108.2	-102.5	-104.6	-97.8	-99.2	-98.4	-99.6	-98.5	-99.9
22	-97.3	-103.1	-103.7	-107.5	-102.0	-103.2	-97.8	-99.4	-98.4	-99.8	-98.4	-99.9
23	-99.4	-103.9	-105.5	-108.0	-101.1	-102.7	-98.0	-99.3	-98.5	-99.7	-98.9	-100.3
24	-99.7	-103.5	-103.8	-107.7	-100.7	-101.8	-98.0	-99.3	-98.5	-99.7	-99.4	-100.6
25	-100.4	-103.5	-103.6	-107.6	-100.3	-101.5	-97.8	-99.2	-98.8	-99.8	-99.2	-100.2
26 27 28 29 30 31	-101.1 -100.9 -100.7 -101.8 -101.8	-105.2 -105.2 -106.2 -106.0 -105.8	-103.3 -103.0 -103.6 -103.8 -103.8 -104.5	-107.0 -107.8 -107.2 -107.9 -108.0 -107.9	-100.3 -100.6 -100.0 -99.6 -99.4	-101.3 -101.7 -101.6 -101.0 -100.7	-98.2 -98.3 -98.6 -98.5 -98.6 -99.2	-99.7 -99.8 -100.1 -99.8 -99.9 -100.3	-98.5 -98.2 -98.1 -98.1 -98.5 -98.5	-99.6 -99.2 -99.3 -99.5 -99.9 -99.8	-99.6 -100.0 -100.1 -100.4 -100.1	-100.9 -101.4 -102.8 -101.5 -101.0
MONTH YEAR	-96.4 -94.7	-106.2 -110.1	-101.2	-108.6	-99.4	-109.6	-94.7	-102.8	-98.1	-103.8	-98.0	-104.7

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

### CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 13. SITE ID.--382343076302901. PERMIT NUMBER.--CA-81-2391.

LOCATION.--Lat 38°23'41", long 76°30'29", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum. Owner: U.S. Geological Survey.

AQUIFER.--Choptank-St. Mary's undivided, Chesapeake Group of Miocene age. Aquifer code: 122CSPK.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 34 ft; casing diameter 3.5 in., to 29 ft; screen diameter 3.5 in., from 29 to 34 ft.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1986 to April 1996.

DATUM.--Elevation of land surface is 47.44 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well, and Maryland Water Quality Network observation well. Water levels respond to natural climatic affects.

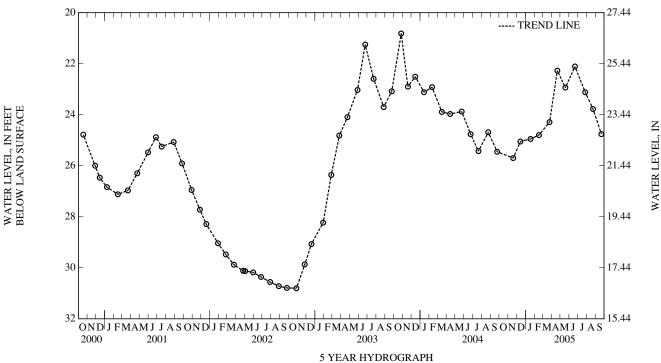
PERIOD OF RECORD.--October 1986 to November 1995, September 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.82 ft below land surface, October 27, 2003; lowest measured, 30.80 ft below land surface, October 28, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 DEC 14	25.70 25.05	FEB 16, 2005	24.80 24.29	MAY 19, 2005 JUN 21	22.94 22.11	AUG 23, 2005 SEP 21	23.78 24.76
JAN 18, 2005	23.05 24.95	MAR 25 APR 21	24.29	JUN 21 JUL 27	23.12	SEP 21	24.70

HIGHEST 22.11 JUN 21, 2005 LOWEST 25.70 NOV 19, 2004



WELL NUMBER.--CA Fd 51. SITE ID.--382408076260401. PERMIT NUMBER.--CA-73-1449.

LOCATION.--Lat 38°24'08", long 76°26'04", Hydrologic Unit 02060004, at Calvert Cliffs State Park. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 352 ft; casing diameter 6 in., to 140 ft; casing diameter 2 in., from 140 to 342 ft; screen diameter 2 in., from 342 to 352 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 129.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of protective casing, 3.63 ft above land surface.

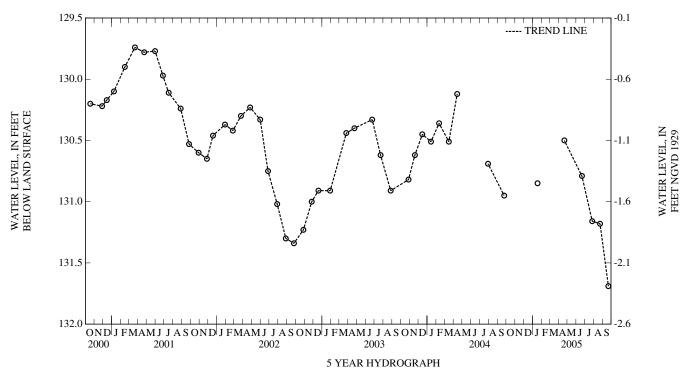
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 116.36 ft below land surface, January 8, 1980; lowest measured, 131.69 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005	130.85	JUN 21, 2005	130.79	AUG 23, 2005	131.18
APR 21	130.50	JUL 27	131.16	SEP 21	131.69

HIGHEST 130.50 APR 21, 2005 LOWEST 131.69 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CA Fd 54. SITE ID.--382407076260301. PERMIT NUMBER.--CA-73-2892.

LOCATION.--Lat 38°24'07", long 76°26'03", Hydrologic Unit 02060004, at Calvert Cliffs State Park. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 698 ft; casing diameter 4 in., to 234 ft; casing diameter 2 in., from 234 to 641 ft, and 651 to 698 ft; screen diameter 3 in., from 641 to 651 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital real-time water-level recorder from March 2004 to current year.

DATUM.--Elevation of land surface is 129.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.92 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.26 ft below sea level, April 21, 1980; lowest measured, 109.16 ft below sea level, August 28 and September 25, 2002.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

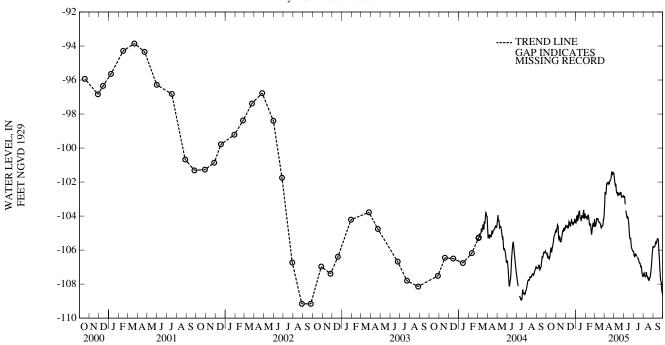
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 09, 2004 JAN 18, 2005 APR 21	-105.23 -104.22 -101.77	MAY 19, 2005 JUN 09 27	-102.68 -103.80 -105.94	JUL 13, 2005 AUG 16	-106.36 -107.69 -107.32	SEP 21, 2005	-106.72

LOWEST -107.69 AUG 16, 2005 HIGHEST -101.77 APR 21, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECEM	MBER	JANU	ARY	FEBRU	JARY	MAR	СH
1 2 3 4 5	-106.14 -106.11 -106.17 -106.17 -106.22	-106.20 -106.20 -106.25 -106.22 -106.42	-104.70 -104.67	-104.94 -104.93 -104.73 -104.73 -104.51	-104.47 -104.46 -104.50	-104.58 -104.61 -104.57 -104.58 -104.65	-104.25 -104.28 -104.03 -103.96 -103.92	-104.38 -104.41 -104.28 -104.03 -103.99			-104.18 -104.39	-104.18 -104.39 -104.59 -104.60 -104.53
6 7 8 9 10	-106.42 -106.44 -106.40 -106.28 -106.26	-106.46 -106.48 -106.48 -106.40 -106.45	-105.01	-104.55 -104.58 -105.01 -105.34 -105.40	-104.51	-104.66 -104.61 -104.71 -104.70 -104.51	-103.84 -103.97 -104.04 -103.95 -103.71	-103.97 -104.26 -104.24 -104.19 -103.95			-103.79 -104.07	-104.45 -104.27 -104.13 -104.18 -104.14
11 12 13 14 15	-106.41 -106.25 -106.03 -105.94 -105.71	-106.50 -106.41 -106.25 -106.03 -105.98	-105.21 -105.05 -105.07 -105.27 -105.46	-105.36 -105.23 -105.27 -105.51 -105.52	-104.38	-104.32 -104.36 -104.40 -104.54 -104.59	-103.63 -103.63 -103.63 -103.59 -103.98	-103.79 -103.71 -103.71 -103.98 -104.11	-104.11 -104.26 -104.29	-104.15 -104.26 -104.52 -104.53 -104.45	-104.02 -104.05 -104.17 -104.22 -104.28	-104.14 -104.17 -104.27 -104.31 -104.36
16 17 18 19 20	-105.72 -105.85 -105.98 -105.84 -105.77	-105.85 -106.07 -106.10 -105.98 -105.86	-105.17 -105.07	-105.51 -105.41 -105.34 -105.17 -105.07	-104.33 -104.17 -104.05	-104.59 -104.39 -104.35 -104.17 -104.39	-103.97 -103.99 -104.16 -103.94 -103.89	-104.11 -104.16 -104.25 -104.21 -103.95	-104.45 -104.54 -104.80	-104.46 -104.54 -104.80 -105.02 -105.05	-104.34	-104.37 -104.36 -104.43 -104.46 -104.47
21 22 23 24 25	-105.65 -105.55 -105.33 -105.21 -105.15	-105.77 -105.66 -105.55 -105.33 -105.23	-104.83 -104.71 -104.78 -104.59 -104.44	-104.94 -104.83 -104.90 -104.88 -104.70	-104.13 -104.29	-104.41 -104.46 -104.39 -104.37 -104.46	-103.88 -103.67 -103.71 -103.79 -103.59	-104.03 -104.02 -104.10 -104.10 -103.79	-104.56 -104.44 -104.24	-104.92 -104.71 -104.56 -104.48 -104.39	-104.62 -104.30 -104.39	-104.63 -104.69 -104.63 -104.59 -104.60
26 27 28 29 30 31	-105.10 -105.04 -104.94 -104.80 -104.77 -104.80	-105.16 -105.13 -105.05 -104.97 -104.87 -104.91	-104.65 -104.49	-104.85 -104.85 -104.71 -104.74 -104.70	-104.11 -104.04 -104.16	-104.41 -104.39 -104.39 -104.16 -104.27 -104.27	-103.45 -103.64 -104.03 -103.84 -103.71 -103.79	-103.64 -104.03 -104.11 -104.07 -103.84 -103.96	-104.52	-104.52 -104.64 -104.53 	-104.41 -104.00 -104.01 -103.93	-104.59 -104.54 -104.41 -104.17 -104.17 -103.93
MONTH	-104.77	-106.50	-104.34	-105.52	-104.04	-104.71	-103.45	-104.41	-103.76	-105.05	-103.56	-104.69

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	Υ	JUN	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	-103.21 -102.57 -102.54 -102.56 -102.65	-103.56 -103.21 -102.59 -102.65 -102.73	-101.59 -101.71	-101.60 -101.71 -101.90 -102.11 -102.18	-102.75 -102.81	-102.90 -102.90 -102.82 -103.05 -103.31	-106.02 -106.02 -106.16 -106.29 -106.18	-106.08 -106.17 -106.31 -106.36 -106.29	-107.36 -107.29 -107.26 -107.31 -107.39	-107.47 -107.37 -107.34 -107.42 -107.50	-105.77 -105.76 -105.74	-105.82 -105.83 -105.83 -105.81 -105.81
6 7 8 9 10	-102.40 -102.07 -101.98 -102.02 -101.99	-102.65 -102.40 -102.07 -102.12 -102.07	-102.06 -102.15	-102.13 -102.16 -102.46 -102.60 -102.63	-103.63 -103.76	-103.67 -103.79 -103.95 -104.04	-106.13 -106.21 -106.08 -106.18 -106.23	-106.25 -106.31 -106.24 -106.25 -106.33	-107.46 -107.51 -107.52 -107.23 -107.24	-107.56 -107.57 -107.57 -107.53 -107.29	-105.53 -105.41 -105.42	-105.76 -105.68 -105.55 -105.51 -105.54
11 12 13 14 15	-101.95 -101.93 -101.86 -101.96 -102.06	-102.03 -102.01 -102.00 -102.07 -102.13	-102.56 -102.70 -102.55	-102.58 -102.75 -102.78 -102.70 -102.62	-104.05 -103.99 -104.01	-104.10 -104.12 -104.05 -104.09 -104.24	-106.31  -106.35 -106.38	-106.37  -106.39 -106.48	-107.29 -107.41 -107.51 -107.53 -107.54	-107.41 -107.51 -107.56 -107.57 -107.66	-105.33 -105.31 -105.27	-105.58 -105.48 -105.36 -105.33 -105.32
16 17 18 19 20	-102.05 -101.91 -101.90 -101.87 -101.75	-102.10 -102.05 -101.93 -101.92 -101.87	-102.70	-102.72 -102.75 -102.75 -102.71 -102.64	-104.44 -104.66 -105.02	-104.44 -104.66 -105.02 -105.24 -105.33	-106.48 -106.46 -106.46 -106.65 -106.69	-106.56 -106.57 -106.67 -106.74 -106.77	-107.56 -107.64	-107.71 -107.67 -107.77 -107.78 -107.67	-105.32 -105.51 -105.90	-105.35 -105.51 -105.90 -106.24 -106.53
21 22 23 24 25	-101.72 -101.49 -101.29 -101.30 -101.37	-101.80 -101.77 -101.49 -101.39 -101.52	-102.59 -102.51 -102.47 -102.58 -102.79	-102.68 -102.62 -102.62 -102.83 -102.89	-105.23 -105.29 -105.56	-105.33 -105.32 -105.58 -105.76 -105.88	-106.68 -106.69 -106.76 -106.91 -106.87	-106.76 -106.81 -106.93 -106.99 -106.96	-107.55 -107.44 -107.23 -107.21 -106.95	-107.62 -107.61 -107.47 -107.27 -107.23	-106.95 -107.29 -107.58	-106.95 -107.29 -107.58 -107.80 -107.85
26 27 28 29 30 31	-101.44 -101.37 -101.47 -101.46 -101.37	-101.55 -101.48 -101.53 -101.52 -101.47	-102.80 -102.79 -102.77 -102.75	-102.88 -102.86 -102.86 -102.80 -102.79 -102.84	-105.90 -105.97 -105.99	-105.94 -105.98 -106.02 -106.05 -106.09		-107.01 -107.24 -107.41 -107.47 -107.55 -107.56	-106.62 -106.34 -106.17 -106.00 -105.76 -105.65	-106.95 -106.62 -106.34 -106.17 -106.00 -105.76	-107.91 -108.30 -108.36	-107.91 -108.30 -108.42 -108.51 -108.61
MONTH	-101.29	-103.56	-101.41	-102.89	-102.75	-106.09	-106.02	-107.56	-105.65	-107.78	-105.25	-108.61
YEAR	-101.29	-108.61										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

### WELL NUMBER.--CA Fd 70. SITE ID.--382155076254502.--PERMIT NUMBER.--CA-81-1754

LOCATION.--Lat 38°21'55", long 76°25'45", Hydrologic Unit 02060006, Located near intersection of Thunderbird Dr. and Spruce St. Owner: Chesapeake Ranch Water Company.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.—Drilled, artesian well, depth 650 ft; casing diameter 18 in. to 50 ft; casing diameter 8 in. 0 to 580 ft; and casing diameter 8 in. from 640 t 650 ft; and screened diameter 8 in. from 580 to 640 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 108.50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: top of 2 in. riser pipe, 1.5 ft. Above Land Surface.

REMARKS.--Owner Number: Production Well #2, Calvert County Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

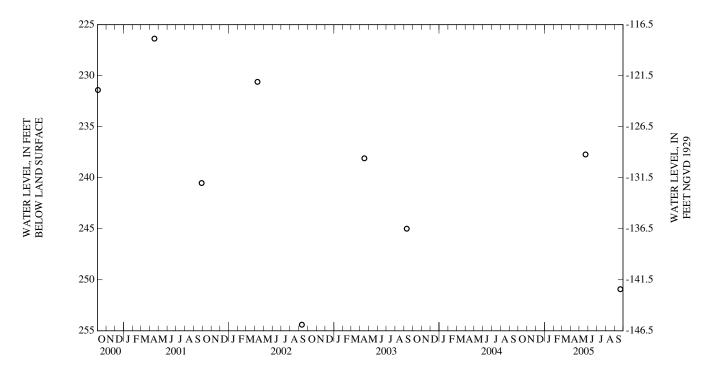
PERIOD OF RECORD .-- November 25, 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 147.32 ft below land surface, April 01,1986; lowest measured, 254.41 ft. below land surface, September 11, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE WATER LEVEL DATE WATER LEVEL MAY 23, 2005 237.72 SEP 21, 2005 250.92

HIGHEST 237.72 MAY 23, 2005 LOWEST 250.92 SEP 21, 2005



N

#### CALVERT COUNTY—Continued

WELL NUMBER.--CA Fd 85. SITE ID.--382236076255401. PERMIT NUMBER.--CA-94-3305.

LOCATION.--Lat 38°22'36", long 76°25'54", Hydrologic Unit 02060004, at Chesapeake Ranch Water Company facility. Owner: Maryland Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 1,643 ft; casing diameter 12 in., to 54 ft, casing diameter 4 in., from +2.0 to 1,535 ft, 1,545 to 1,560 ft, 1,570 to 1,623 ft, and 1,633 to 1,643 ft; screen diameter 4 in., from 1,535 to 1,545 ft, 1,560 to 1,570 ft, and 1,623 to 1,633 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S.Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, January 2002 to August 2005.

DATUM.--Elevation of land surface is 105.98 ft above North American Vertical Datum of 1988. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--November 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.34 ft below sea level, February 1, 2002 (recorder); lowest measured, 18.75 ft below sea level, August 8, 2005 (recorder).

### WATER SURFACE ELEVATION IN FEET NAVD 1988

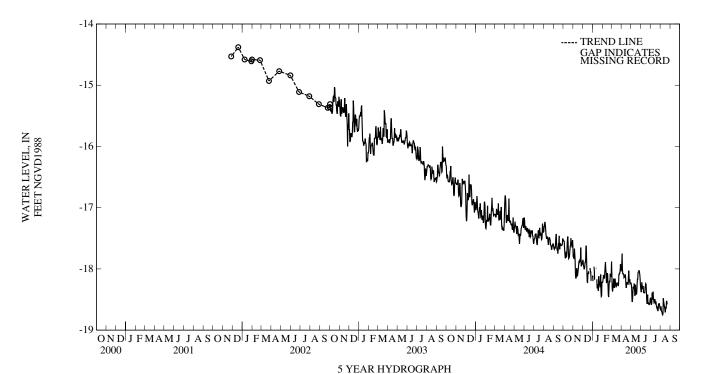
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19, 2004 DEC 14	-17.83	FEB 16, 2005	-17.97	MAY 19, 2005	-18.37	AUG 23, 2005 SEP 21	-18.64
IAN 18 2005	-17.93 -18.31	MAR 25 APR 21	-18.02 -18.25	JUN 21 II II . 27	-18.46 -18.58	SEP 21	-18.91

LOWEST -18.91 SEP 21, 2005 HIGHEST -17.83 NOV 19, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1 2 3 4 5	-17.51 -17.48 -17.49 -17.51 -17.52	-17.53 -17.54 -17.55 -17.55 -17.67	-17.61 -17.65 -17.65 -17.52 -17.52	-17.80 -17.81 -17.82 -17.84 -17.67	-17.63 -17.81 -17.84 -17.93 -17.93	-17.86 -17.86 -17.94 -17.96 -18.00	-18.08 -18.11  -17.94 -17.91	-18.11 -18.20  -17.97 -17.97	-18.20 -18.15 -18.09 -18.06 -18.09	-18.22 -18.20 -18.15 -18.10 -18.13	-17.87 -17.87 -18.08 -18.31 -18.24	-17.88 -18.08 -18.31 -18.37 -18.34
6 7 8 9 10	-17.67 -17.75 -17.80 -17.70 -17.69	-17.75 -17.82 -17.82 -17.81 -17.72	-17.67 -17.76 -17.84 -18.07 -18.12	-17.76 -17.85 -18.07 -18.15 -18.15	-17.98 -17.77 -17.77 -17.84 -17.57	-18.00 -17.98 -17.90 -17.90 -17.84	-17.80 -18.01 -18.06 	-18.01 -18.17 -18.17 	-18.11 -18.05 -17.94 -17.86 -17.82	-18.15 -18.15 -18.05 -17.96 -17.89	-18.16 -18.06 -17.90 -18.16 -18.24	-18.29 -18.21 -18.16 -18.28 -18.31
11 12 13 14 15	-17.69 -17.63 -17.52 -17.44 -17.32	-17.81 -17.77 -17.63 -17.52 -17.47	-17.99 -17.88 -17.88 -18.08 -18.05	-18.12 -17.99 -18.08 -18.12 -18.10	-17.52 -17.62 -17.62 -17.84 -18.07	-17.62 -17.63 -17.84 -18.07 -18.21	-17.96   -17.87 -18.17	-17.99  -18.17 -18.31	-17.89 -18.02 -18.05 -18.07 -18.07	-18.02 -18.05 -18.23 -18.22 -18.09	-18.09 -18.09 -18.16 -18.20 -18.22	-18.26 -18.16 -18.21 -18.22 -18.30
16 17 18 19 20	-17.38 -17.57 -17.72 -17.75 -17.75	-17.57 -17.72 -17.83 -17.82 -17.81	-17.99 -17.94 -17.88 -17.85 -17.84	-18.05 -18.00 -17.94 -17.88 -17.87	-18.09 -18.07 -18.04 -17.88 -17.90	-18.23 -18.09 -18.07 -18.04 -18.08	-18.18 -18.18 -18.25 -18.12 -18.09	-18.31 -18.25 -18.35 -18.35 -18.12	-17.96 -18.07 -18.10 -18.28 -18.32	-18.07 -18.10 -18.28 -18.43 -18.46	-18.27 -18.24 -18.21 -18.22 -18.15	-18.29 -18.27 -18.24 -18.23 -18.23
21 22 23 24 25	-17.65 -17.63 -17.60 -17.48 -17.45	-17.75 -17.68 -17.63 -17.60 -17.50	-17.84 -17.84 -17.78 -17.57 -17.43	-17.89 -17.88 -17.84 -17.81 -17.65	 -17.79 -17.90 -17.97	 -18.01 -17.99 -18.05	-18.10 -17.91 -17.91 -18.19 -18.09	-18.22 -18.22 -18.26 -18.30 -18.19	-18.13 -18.15 -18.15 -18.03 -18.04	-18.32 -18.21 -18.19 -18.22 -18.08	-18.17 -18.24 -17.97 -17.97 -18.03	-18.24 -18.28 -18.25 -18.09 -18.09
26 27 28 29 30 31	-17.46 -17.54 -17.59 -17.53 -17.47	-17.56 -17.59 -17.64 -17.64 -17.53 -17.61	-17.65 -17.88 -17.66 -17.84 -17.86	-17.95 -17.95 -17.88 -17.92 -17.92	-17.91 -17.96 -18.08   -18.08	-18.05 -18.19 -18.19  -18.14	-17.96 -18.04 -18.37 -18.21 -18.07 -18.09	-18.09 -18.37 -18.45 -18.44 -18.21 -18.22	-18.08 -18.09 -17.87 	-18.11 -18.13 -18.09 	-18.04 -18.02 -17.65 -17.65 -17.92 -18.02	-18.07 -18.07 -18.02 -17.92 -18.02 -18.03
MONTH	-17.32	-17.83	-17.43	-18.15	-17.52	-18.23	-17.80	-18.45	-17.82	-18.46	-17.65	-18.37

DAY	MAX	MIN	MAX	MIN								
	AP	RIL	MA	ΑY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1	-17.93	-18.02	-18.08	-18.23	-18.29	-18.36	-18.38	-18.47	-18.62	-18.66		
2	-17.55	-17.93	-18.22	-18.26	-18.28	-18.38	-18.37	-18.49	-18.57	-18.62		
3	-17.55	-17.75	-18.26	-18.32	-18.16	-18.28	-18.49	-18.58	-18.58	-18.62		
4	-17.75	-17.79	-18.32	-18.50	-18.16	-18.22	-18.56	-18.58	-18.62	-18.68		
5	-17.73	-18.08	-18.49	-18.54	-18.21	-18.22	-18.38	-18.56	-18.66	-18.70		
3	-17.99	-10.00	-10.49	-10.54	-10.21	-10.29	-10.30	-16.50	-16.00	-16.70		
6	-18.08	-18.08	-18.31	-18.49	-18.26	-18.33	-18.36	-18.39	-18.66	-18.71		
7	-18.00	-18.08	-18.27	-18.36	-18.21	-18.30	-18.39	-18.50	-18.70	-18.74		
8	-17.99	-18.09	-18.26	-18.29	-18.21	-18.28	-18.26	-18.48	-18.72	-18.75		
9	-18.09	-18.14	-18.25	-18.32	-18.28	-18.38	-18.31	-18.37	-18.46	-18.73		
10	-18.08	-18.13	-18.23	-18.30	-18.36	-18.39	-18.36	-18.47	-18.46	-18.48		
11	-18.09	-18.12	-18.22	-18.24	-18.38	-18.39	-18.47	-18.52	-18.48	-18.53		
12	-18.07	-18.13	-18.22	-18.33	-18.39	-18.39	-18.52	-18.55	-18.53	-18.57		
13	-18.05	-18.09	-18.33	-18.44	-18.25	-18.39	-18.50	-18.54	-18.54	-18.59		
14	-18.09	-18.14	-18.21	-18.42	-18.25	-18.30	-18.47	-18.50	-18.56	-18.62		
15	-18.14	-18.26	-18.23	-18.26	-18.24	-18.28	-18.47	-18.50	-18.59	-18.68		
1.6	10.26	10.21	10.25	10.25	10.20	10.04	10.50	10.57	10.57	10.71		
16	-18.26	-18.31	-18.25	-18.35	-18.20	-18.24	-18.50	-18.57	-18.57	-18.71		
17	-18.14	-18.26	-18.34	-18.40	-18.20	-18.25	-18.52	-18.57	-18.56	-18.62		
18	-18.14	-18.22	-18.37	-18.42	-18.25	-18.35	-18.51	-18.53	-18.58	-18.65		
19	-18.21	-18.25	-18.26	-18.38	-18.35	-18.50	-18.53	-18.59	-18.52	-18.64		
20	-18.14	-18.22	-18.06	-18.26	-18.43	-18.57	-18.56	-18.62	-18.50	-18.53		
21	-18.14	-18.25	-18.09	-18.17	-18.39	-18.49	-18.60	-18.64	-18.52	-18.53		
22	-18.11	-18.25	-18.06	-18.17	-18.36	-18.42	-18.59	-18.63	-18.53	-18.58		
23	-17.93	-18.11	-18.02	-18.06	-18.40	-18.56	-18.59	-18.66				
24	-17.92	-18.03	-18.02	-18.05	-18.56	-18.57	-18.66	-18.69				
25	-18.03	-18.15	-18.02	-18.05	-18.56	-18.56	-18.56	-18.67				
	10.00	10.10	10.02	10.00	10.00	10.00	10.00	10.07				
26	-18.15	-18.22	-17.99	-18.02	-18.56	-18.57	-18.56	-18.58				
27	-18.12	-18.17	-17.99	-18.04	-18.56	-18.58	-18.43	-18.58				
28	-18.16	-18.24	-18.03	-18.07	-18.54	-18.57	-18.44	-18.56				
29	-18.22	-18.23	-18.07	-18.14	-18.47	-18.55	-18.56	-18.58				
30	-18.12	-18.23	-18.14	-18.22	-18.41	-18.49	-18.57	-18.62				
31			-18.22	-18.29			-18.60	-18.65				
MONTH	-17.55	-18.31	-17.99	-18.54	-18.16	-18.58	-18.26	-18.69	-18.46	-18.75		
YEAR	-17.32	-18.75										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CA Fe 22. SITE ID.--382318076242401. PERMIT NUMBER.--CA-73-1386.

LOCATION.--Lat 38°23'18", long 76°24'24", Hydrologic Unit 02060004, at Williams LNG Plant, Cove Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 350 ft; casing diameter 6 in., to 10 ft; casing diameter 2 in., from 10 to 340 ft; screen diameter 2 in., from 340 to 350 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 113.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.82 ft above land surface.

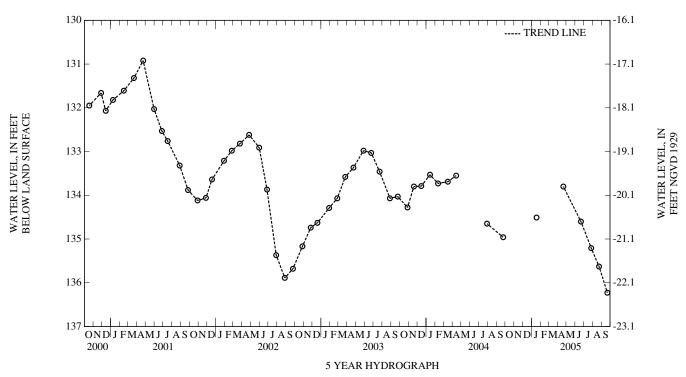
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.50 ft below land surface, October 5, 1976; lowest measured, 136.23 ft below land surface, September 21, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18, 2005	134.51	JUN 21, 2005	134.60	AUG 23, 2005	135.63
APR 21	133.80	JUL 27	135.21	SEP 21	136.23

HIGHEST 133.80 APR 21, 2005 LOWEST 136.23 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER .-- CA Gd 6. SITE ID .-- 381952076270901.

LOCATION.--Lat 38°19'52", long 76°27'09", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, 0.5 mi northeast of Solomons. Owner: Calvert Marina.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 493 ft; casing diameter 8 in., to 272 ft; casing diameter 6 in., from 272 to 472 ft; screened from 472 to 493 ft.

INSTRUMENTATION.--Monthly water level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with a graphic water-level recorder from October 1949 to February 1960.

DATUM.--Elevation of land surface is 12.73 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of sanitary seal, 1.59 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported at land surface 1942, and the water level measured 58.90 ft below land surface on January 13, 1944. The well was not measured from April through July 1988 during building construction at well site. On July 18, 1991 the water-level measured 119.93 ft below land surface due to an extended period of pumping. Water levels are affected by local and regional ground-water withdrawal.

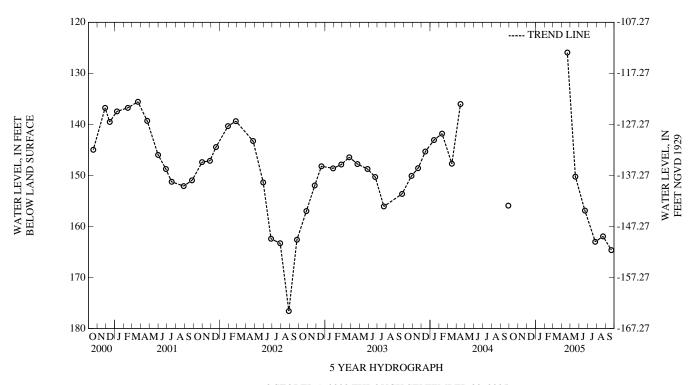
PERIOD OF RECORD .-- October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.21 ft below land surface, May 19, 1950; lowest measured, 176.59 ft below land surface, August 28, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 21, 2005	125.93	JUN 21, 2005	156.91	AUG 23, 2005	161.95
MAY 19	150.25	JUL 27	163.00	SEP 21	164.64

HIGHEST 125.93 APR 21, 2005 LOWEST 164.64 SEP 21, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CA Gd 61. SITE ID.--381956076275301. PERMIT NUMBER--CA-94-5034.

LOCATION.--Lat 38°19'56", long 76°27'53", Hydrologic Unit 02060006, at Calvert Marine Museum, Solomons. Owner: Calvert County Department of Public Works.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 500 ft; casing diameter 4.5 to 450 ft; casing diameter 2 in. from 450 to 474 ft; screened from 474 to 494 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital real-time water-level recorder--30-minute recorder interval, March 18, 2004 to current year.

DATUM.--Altitude of land surface is 18.1 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 1.9 ft above land surface.

REMARKS.--Calvert County Ground-Water-Level Monitoring Network and Maryland Ground-Water-Level Monitoring Network observation well. U.S. Geological Survey Water-level telemeter at well (See MD-DE-DC District Web pages, Real-Time, Ground-Water, Maryland at http://waterdata.usgs.gov/md/nwis/current/?type=gw).

PERIOD OF RECORD.--March 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.39 ft below sea level, April 13, 2004 (recorder); lowest measured, 148.34 ft below sea level, September 24, 2005 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 2004	-131.41	APR 21, 2005	-130.45	JUL 27, 2005	-146.31
JAN 18, 2005	-129.69	MAY 19	-134.37	AUG 23	-146.77
FEB 10	-129.65	JUN 21	-140.51	SEP 21	-148.01

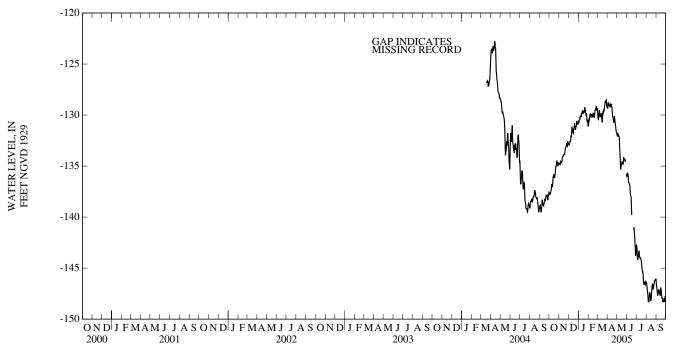
LOWEST -148.01 SEP 21, 2005 HIGHEST -129.65 FEB 10, 2005

DAY	MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
1	-137.27 -137.62	-134.38 -134.78	-132.13 -132.84	-130.23 -130.61	-130.21 -130.92	-128.76 -129.36
2	-137.23 -137.73	-134.21 -134.78	-132.67 -132.97	-130.36 -130.67	-130.06 -130.46	-129.12 -130.23
3	-137.50 -137.78	-134.20 -134.86	-132.54 -132.79	-130.02 -130.51	-129.97 -130.50	-129.97 -130.36
4	-137.19 -137.72	-134.00 -134.87	-132.19 -132.74	-129.86 -130.36	-129.74 -130.25	-129.80 -130.41
5	-137.29 -137.64	-134.08 -134.48	-132.23 -132.54	-129.89 -130.43	-129.57 -130.05	-129.56 -129.91
6	-137.01 -137.47	-134.26 -134.60	-132.22 -132.63	-129.48 -130.10	-129.63 -130.12	-129.34 -129.76
7	-136.90 -137.24	-134.39 -134.69	-131.67 -132.41	-129.67 -130.10	-129.30 -129.85	-129.07 -129.51
8	-136.67 -137.08	-134.41 -134.69	-131.59 -132.01	-129.57 -130.09	-129.37 -129.94	-128.87 -129.96
9	-136.46 -136.75	-134.18 -134.64	-131.55 -132.16	-129.62 -130.20	-129.49 -129.94	-129.73 -130.22
10	-136.50 -136.90	-133.96 -134.48	-131.02 -131.69	-129.29 -129.83	-129.35 -129.95	-129.68 -130.07
11	-136.45 -137.05	-133.64 -134.17	-130.67 -131.14	-129.41 -129.83	-129.74 -130.13	-129.37 -129.91
12	-136.06 -136.56	-133.60 -134.09	-130.83 -131.34	-129.29 -129.67	-129.49 -130.06	-129.47 -129.92
13	-135.57 -136.06	-133.63 -134.02	-130.87 -131.43	-129.13 -129.54	-129.71 -130.18	-129.35 -129.83
14	-135.43 -136.00	-133.66 -134.02	-131.31 -131.71	-129.02 -129.83	-129.40 -130.19	-129.22 -130.28
15	-135.35 -135.81	-133.42 -133.89	-131.48 -131.79	-129.43 -129.85	-129.29 -129.86	-130.19 -130.68
16	-135.61 -135.98	-133.50 -133.89	-131.00 -131.60	-129.07 -129.72	-129.39 -129.89	-129.78 -130.68
17	-135.84 -136.12	-133.55 -133.89	-130.81 -131.25	-128.97 -129.56	-129.50 -129.88	-129.37 -129.96
18	-135.74 -136.12	-133.32 -133.88	-130.66 -131.34	-129.56 -129.76	-129.65 -130.15	-129.44 -129.74
19	-135.44 -135.88	-133.21 -133.56	-130.20 -130.79	-128.94 -129.66	-129.85 -130.19	-129.25 -129.80
20	-135.06 -135.60	-132.97 -133.44	-130.49 -131.18	-128.89 -129.24	-129.59 -129.92	-129.03 -129.45
21	-134.67 -135.10	-132.93 -133.19	-130.59 -131.11	-129.00 -129.40	-129.22 -129.63	-129.09 -129.61
22	-134.67 -135.01	-132.71 -133.10	-131.04 -131.45	-128.83 -129.48	-129.12 -129.50	-129.16 -129.59
23	-134.51 -134.99	-132.55 -133.07	-130.64 -131.28	-128.83 -129.88	-128.92 -129.37	-128.47 -129.16
24	-134.27 -134.63	-132.22 -132.91	-130.70 -131.14	-129.61 -130.04	-128.86 -129.41	-128.69 -128.98
25	-134.10 -134.47	-131.91 -132.76	-130.47 -130.93	-129.48 -129.81	-128.83 -129.19	-128.31 -128.72
26 27 28 29 30 31	-134.13 -134.58 -134.19 -134.67 -134.38 -135.02 -134.37 -134.85 -134.17 -134.71 -134.25 -134.71	-132.65 -132.98 -132.51 -133.04 -132.03 -132.58 -132.52 -132.81 -132.33 -132.79	-130.15 -130.57 -130.42 -130.82 -130.15 -130.81 -130.19 -130.91 -130.44 -130.91 -130.07 -130.72	-129.47 -129.98 -129.93 -130.62 -130.30 -130.64 -129.97 -130.47 -129.97 -130.91 -130.82 -131.10	-128.85 -129.24 -129.11 -129.50 -128.85 -129.48 	-128.30 -128.76 -128.29 -128.76 -127.80 -128.46 -127.99 -128.81 -128.45 -129.20 -128.67 -129.24
MONTH	-134.10 -137.78	-131.91 -134.87	-130.07 -132.97	-128.83 -131.10	-128.83 -130.92	-127.80 -130.68

CALVERT COUNTY—Continued

DAY	MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1 2 3 4 5	-128.87 -129.33 -128.08 -129.33 -128.23 -128.74 -128.42 -128.89 -128.63 -129.00	-131.54 -131.94 -131.55 -132.01 -131.59 -131.75 -131.48 -131.91 -131.59 -132.04	-135.50 -136.02 -135.50 -135.96 -135.26 -135.72 -135.28 -135.75 -135.54 -136.05	-142.33 -142.78 -142.33 -142.84 -142.79 -143.48 -143.40 -144.06 -143.86 -144.20	-146.11 -146.41 -146.18 -146.58 -146.38 -146.91 -146.64 -147.26 -146.99 -147.41	-146.01 -146.53 -146.33 -146.86 -146.62 -146.99 -146.79 -147.41 -147.16 -147.70
6 7 8 9 10	-128.59 -129.03 -128.66 -129.12 -128.49 -128.99 -128.54 -128.91 -128.54 -129.00	-131.56 -132.00 -131.62 -132.07 -131.53 -132.14 -131.96 -133.07 -132.61 -133.63	-135.84 -136.61 -136.20 -136.62 -136.28 -136.71 -136.38 -136.81 -136.54 -136.85	-143.70 -143.94 -143.34 -143.78 -142.82 -143.35 -142.92 -143.34 -143.20 -143.82	-147.15 -147.91 -147.66 -148.31 -147.94 -148.30 -147.59 -148.29 -147.16 -147.67	-147.02 -147.63 -146.88 -147.28 -146.67 -147.08 -146.76 -147.17 -146.87 -147.18
11 12 13 14 15	-128.74 -129.12 -128.59 -129.02 -128.47 -128.91 -128.60 -129.16 -129.11 -129.23	-133.02 -134.36 -134.33 -135.30 -134.68 -135.30 -134.25 -134.81 -134.55 -134.89	-136.67 -137.37 -137.30 -137.81 -137.42 -137.93 -137.68 -138.03 -138.03 -138.82	-143.43 -143.91 -143.71 -144.04 -143.68 -144.04 -143.69 -144.02 -143.75 -144.12	-147.05 -147.42 -147.16 -147.45 -147.29 -147.63 -147.63 -148.08 -147.82 -148.20	-147.00 -147.49 -147.21 -147.56 -147.33 -147.70 -146.78 -147.36 -146.54 -146.90
16 17 18 19 20	-129.10 -129.63 -129.53 -130.02 -129.93 -130.24 -130.05 -130.29 -130.13 -130.50	-134.25 -134.65 -134.39 -134.72 -134.13 -134.56 -134.35 -134.79 -134.21 -134.65	-138.82 -139.81  	-143.94 -144.32 -144.27 -144.64 -144.46 -144.98 -144.60 -145.19 -144.79 -145.48	-147.15 -147.98 -147.04 -147.43 -146.68 -147.14 -146.35 -146.72 -146.10 -146.58	-146.60 -147.12 -146.80 -147.41 -147.24 -147.93 -147.48 -147.95 -147.48 -147.95
21 22 23 24 25	-130.27 -130.75 -129.96 -130.53 -129.66 -130.09 -129.83 -130.43 -130.10 -130.65	-133.92 -134.71 -133.79 -134.13 -133.63 -134.38 -133.88 -134.40 -133.96 -134.42	 -140.36 -141.22 -140.56 -141.00 -140.62 -141.45 -141.04 -141.91	-144.90 -145.32 -144.97 -145.86 -145.47 -146.35 -145.99 -146.58 -145.94 -146.57	-146.20 -146.64 -146.36 -147.04 -146.44 -147.01 -146.25 -146.67 -145.98 -146.58	-147.88 -148.31 -147.78 -148.24 -147.86 -148.19 -147.99 -148.34 -147.71 -148.03
26 27 28 29 30 31	-130.29 -131.03 -130.55 -131.16 -131.02 -131.56 -131.14 -131.65 -131.31 -131.71	-133.77 -134.30 -133.76 -134.60  -135.42 -135.75 -135.52 -135.87	-141.51 -142.14 -141.97 -142.98 -142.95 -143.79 -143.00 -143.56 -142.63 -143.06	-145.98 -146.33 -145.98 -146.55 -146.30 -146.63 -146.11 -146.45 -146.02 -146.32 -146.06 -146.38	-145.95 -146.30 -145.91 -146.21 -145.84 -146.16 -145.82 -146.12 -145.84 -146.23 -145.53 -146.05	-147.68 -147.99 -147.70 -148.31 -147.71 -148.18 -147.39 -147.73 -147.63 -148.01
MONTH	-128.08 -131.71	-131.48 -135.87	-135.26 -143.79	-142.33 -146.63	-145.53 -148.31	-146.01 -148.34
YEAR	-127.80 -148.34					

# Daily Low Water Levels



5 YEAR HYDROGRAPH

### CAROLINE COUNTY

WELL NUMBER.--CO Bd 53. SITE ID.--390227075470201. PERMIT NUMBER.--CO-73-0541.

LOCATION.--Lat 39°02'27", long 75°47'02", Hydrologic Unit 02060005, near MD Rt. 311, Goldsboro. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 312 ft; casing diameter 6 in., to 70 ft; casing diameter 2 in., from 70 to 300 ft; screen diameter 2 in., from 300 to 312 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.45 ft above land surface.

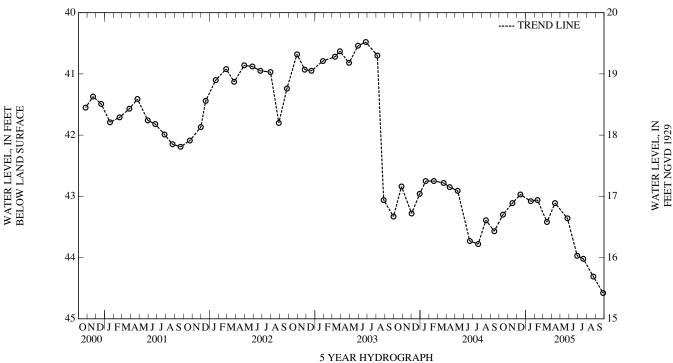
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD .-- February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.64 ft below land surface, December 10, 1976; lowest measured, 44.58 ft below land surface, September 27,2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	43.30	JAN 19, 2005	43.08	APR 13, 2005	43.11	JUL 20, 2005	44.02
NOV 16	43.11	FEB 11	43.06	MAY 26	43.36	AUG 24	44.31
DEC 14	42.97	MAR 16	43.42	IUN 29	43.97	SEP 27	44.58

HIGHEST 42.97 DEC 14, 2004 LOWEST 43.97 JUN 29, 2005



### CAROLINE COUNTY---Continued

WELL NUMBER.--CO Dd 47. SITE ID.--385217075490601. PERMIT NUMBER.--CO-73-0486.

LOCATION.--Lat 38°52'17", long 75°49'06", Hydrologic Unit 02060005, Owner: U.S. Geological Survey.

AQUIFER .-- Piney Point Formation. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 380 ft; casing diameter 4 in., to 100 ft; casing diameter 2 in., from 100 to 370 ft.; screened from 370 to 380 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 46 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of casing, 2.40 ft above land surface.

REMARKS .-- Maryland Water-Level Network observation well.

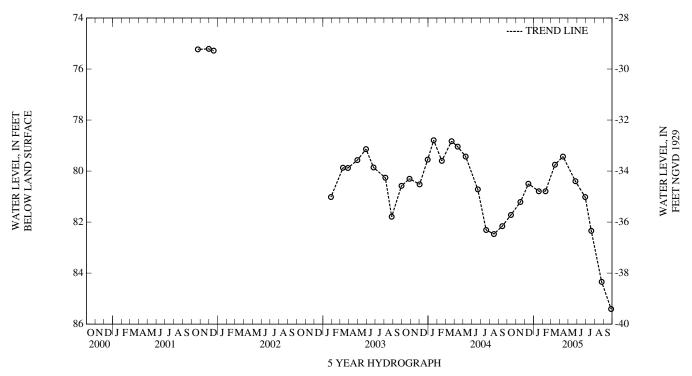
PERIOD OF RECORD .-- November 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.78 ft below land surface, May 27, 1976; lowest measured, 85.41 ft below land surface, September 27, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	81.72	JAN 19, 2005	80.79	APR 13, 2005	79.43	JUL 20, 2005	82.34
NOV 16	81.21	FEB 11	80.79	MAY 26	80.40	AUG 25	84.34
DEC 14	80.50	MAR 16	79.75	JUN 29	81.02	SEP 27	85.41

HIGHEST 79.43 APR 13, 2005 LOWEST 81.72 OCT 14, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### CARROLL COUNTY

WELL NUMBER.--CL Ad 47. SITE ID.--394008077005601. PERMIT NUMBER.--CL-73-3178.

LOCATION.--Lat 39°40'08", long 77°00'56", Hydrologic Unit 02070009, at Union Mills Homestead Park. Owner: U.S. Geological Survey.

AQUIFER.--Marburg Formation of Paleozoic age. Aquifer code: 300MRBG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 310 ft; casing diameter 6 in., to 35 ft.; open hole.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.97 ft above land surface.

REMARKS .-- Collection of Basic Records (CBR) observation well.

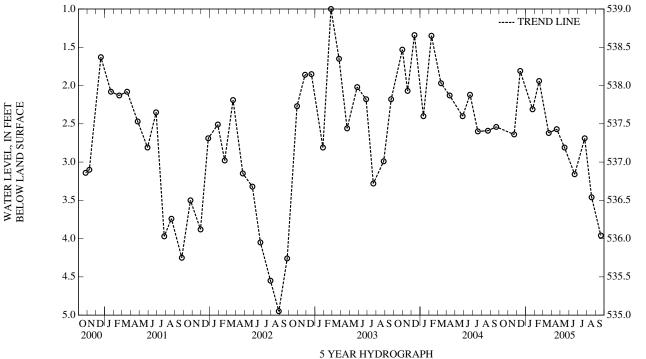
PERIOD OF RECORD .-- August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.00 ft below land surface, February 25, 2003; lowest measured, 4.95 ft below land surface, August 28, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22, 2004 DEC 13 JAN 25, 2005	2.64 1.81 2.31	FEB 17, 2005 MAR 22 APR 19	1.94 2.62 2.57	MAY 16, 2005 JUN 20 JUL 25	2.81 3.16 2.69	AUG 18, 2005 SEP 19	3.46 3.96

HIGHEST 1.81 DEC 13, 2004 LOWEST 3.96 SEP 19, 2005



FEET NGVD 1929

### CARROLL COUNTY—Continued

WELL NUMBER.--CL Ec 75. SITE ID.--392259077052401. PERMIT NUMBER.--CL-73-2722.

LOCATION.--Lat 39°22'59", long 77°05'24", Hydrologic Unit 02060003, 2.3 mi northwest of Woodbine, at Gillis Falls Park. Owner: U.S. Geological Survey. AQUIFER .-- Gillis Group of Ordovician age. Aquifer code: 300GLLS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 248 ft; casing diameter 6 in., to 21 ft; open hole.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1990 to April 1998. Equipped with graphic recorder December 1974 to July 1980.

DATUM.--Elevation of land surface is 550 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.31 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- March 1980 to current year.

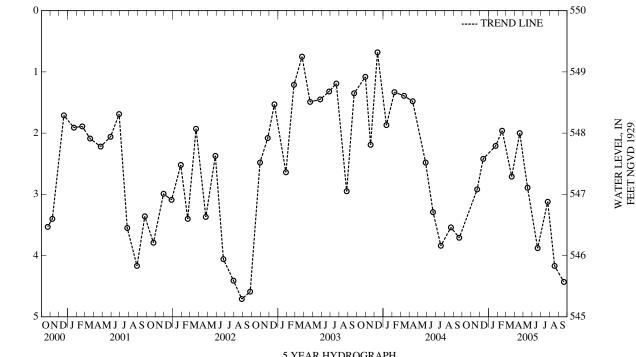
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.68 ft below land surface, December 12, 2003; lowest measured, 5.23 ft below land surface, August 7, 1985.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22, 2004 DEC 13 JAN 25, 2005	2.92 2.42 2.21	FEB 17, 2005 MAR 22 APR 19	1.96 2.71 2.00	MAY 16, 2005 JUN 20 JUL 25	2.89 3.88 3.12	AUG 18, 2005 SEP 19	4.17 4.43

HIGHEST 1.96 FEB 17, 2005 LOWEST 4.43 SEP 19, 2005



5 YEAR HYDROGRAPH

### CECIL COUNTY

WELL NUMBER.--CE Be 74. SITE ID.--393637075535002. PERMIT NUMBER.--CE-81-0464.

LOCATION.--Lat 39°36'37", long 75°53'50", Hydrologic Unit 02060002, 2 mi west of Elkton near US Rt. 40. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 2 in., to 110 ft; screen diameter 2 in., from 110 to 115 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

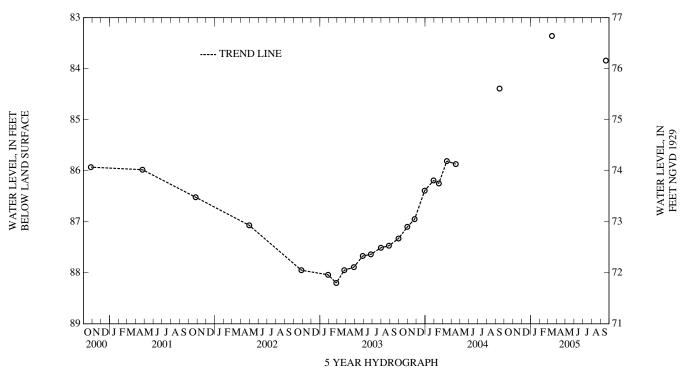
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.12 ft below land surface, July 31, 1984; lowest measured, 88.20 ft below land surface, February 26, 2003.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 2005	83.36	SEP 19, 2005	83.84
		83.36 MAR 16, 83.84 SEP 19, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CE Bf 82. SITE ID.--393537075492001. PERMIT NUMBER.--CE-81-0470.

LOCATION.--Lat 39°35'37", long 75°49'20", Hydrologic Unit 02060002, at Holly Hall Elementary School, Elkton. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 125 ft; casing diameter 4 in., to 120 ft; screen diameter 2 in., from 120 to 125 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder July 1983 to November 1984.

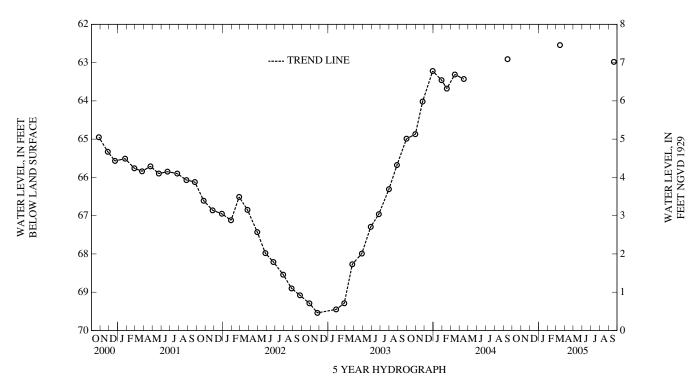
DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.13 ft below land surface, July 1, 1983; lowest measured, 69.54 ft below land surface, November 25, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 2005	62.54	SEP 19, 2005	62.98
		ST 62.54 MAR 16,	



WELL NUMBER.--CE Cd 52. SITE ID.--393432075593602. PERMIT NUMBER.--CE-81-0440.

LOCATION.--Lat 39°34'32", long 75°59'36", Hydrologic Unit 02060002, near intersection of MD Rts. 7 and 267, 1 mi west of Charlestown. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 48 ft; casing diameter 4 in., to 43 ft; screen diameter 2 in., from 43 to 48 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

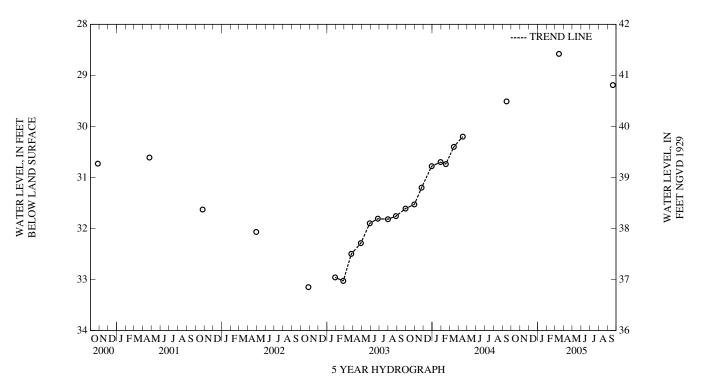
DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.18 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.75 ft below land surface, July 5, 1983; lowest measured, 33.15 ft below land surface, October 28, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 2005	28.58	SEP 19, 2005	29.19
		28.58 MAR 16, 29.19 SEP 19, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CE Ce 55. SITE ID.--393241075500201. PERMIT NUMBER.--CE-81-0465.

LOCATION.--Lat 39°32'41", long 75°50'02", Hydrologic Unit 02060002, Canal National Wildlife Refuge near Elk Forest Rd. Owner: U.S. Geological Survey. AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 375 ft; casing diameter 4 in., to 370 ft; screen diameter 2 in., from 370 to 375 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from July 1983 to November 1984.

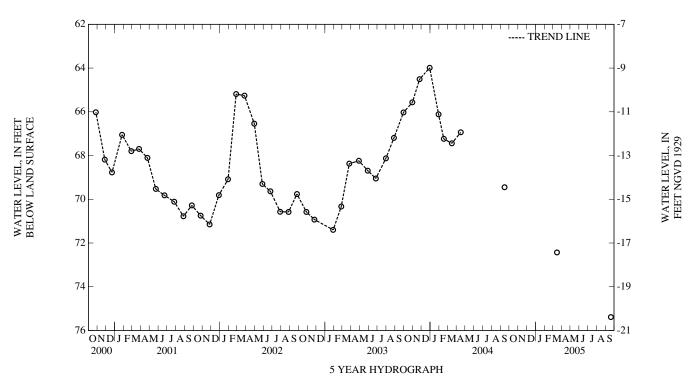
DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.40 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--March 1983 to November 1984, July 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.56 ft below land surface, April 17, 1984; lowest measured, 75.39 ft below land surface, September 19,2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 2005	72.43	SEP 19, 2005	75.39
		72.43 MAR 16,	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CE Ce 56. SITE ID.--393026075523101. PERMIT NUMBER.--CE-81-0466.

LOCATION.--Lat 39°30'26", long 75°52'31", Hydrologic Unit 02060002, 1.2 mi east of Courthouse Point. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 121 ft; casing diameter 4 in., to 116 ft; screen diameter 2 in., from 116 to 121 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

 $REMARKS.--Maryland\ Ground-Water-Level\ Monitoring\ Network\ observation\ well.\ Water\ levels\ are\ affected\ by\ local\ and\ regional\ ground-water\ withdrawal.$ 

PERIOD OF RECORD.--April 1983 to September 1984, April 1988 to current year.

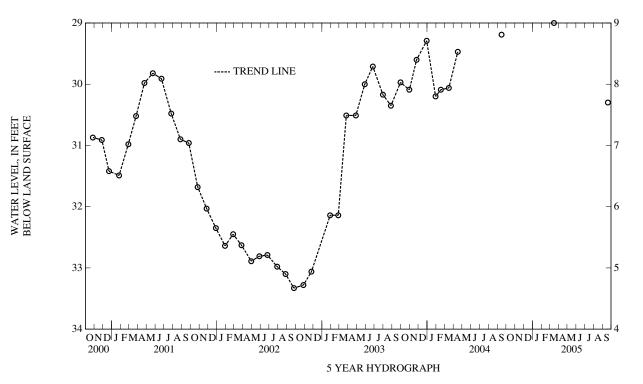
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.42 ft below land surface, April 4, 1997; lowest measured, 34.48 ft below land surface, November 19, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

 DATE
 WATER LEVEL
 DATE
 WATER LEVEL

 MAR 16, 2005
 29.00
 SEP 19, 2005
 30.30

 HIGHEST LOWEST LOWEST SO.30 SEP 19, 2005
 SEP 19, 2005
 30.30



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--CE Ee 29. SITE ID.--392403075521801. PERMIT NUMBER.--CE-73-2266.

LOCATION.--Lat 39°24′03", long 75°52′18", Hydrologic Unit 02060002, 0.3 mi southwest of MD Rts. 213 and 282, Cecilton. Owner: U.S. Geological Survey. AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 547 ft; casing diameter 10 in., to 158 ft; casing diameter 4 in., to 515 ft and 525 to 547 ft; screen diameter 4 in., from 515 to 525 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital water-level recorder from August 1979 to December 1979.

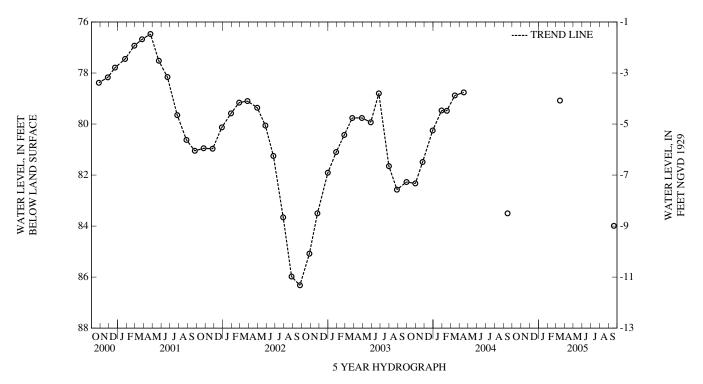
DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.99 ft below land surface, March 25, 1979; lowest measured, 86.32 ft below land surface, September 25, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 2005	79.08	SEP 19, 2005	83.99
		ST 79.08 MAR 16, ST 83.99 SEP 19.20	



### CHARLES COUNTY

WELL NUMBER.--CH Bc 24. SITE ID.--383633077083001. PERMIT NUMBER.--CH-02-0874.

LOCATION.--Lat 38°36'33", long 77°08'30", Hydrologic Unit 0207001, at Cedar Lane, Potomac Heights. Owner: Potomac Heights Mutual Home Owners Association.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 435 ft; casing diameter 10 in., to 383.5 ft, and 398.5 to 415 ft; screen diameter 10 in., from 383.5 to 398.5 ft, and 415 to 435 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, April 1988 to November 1997. Equipped with digital water-level recorder--30-minute recorder interval, November 1997 to June 2000.

DATUM.--Elevation of land surface is 72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.55 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation. Water levels are affected by local ground-water withdrawal.

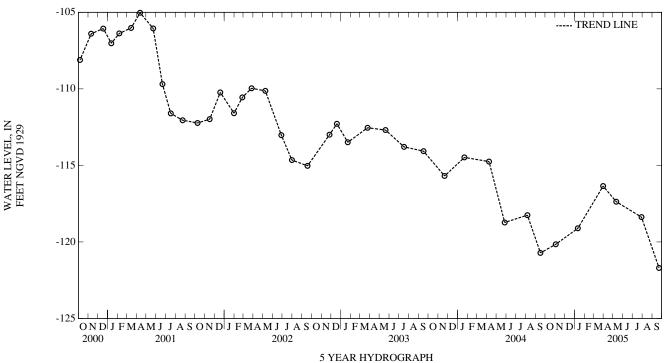
PERIOD OF RECORD .-- March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.83 ft below sea level, March 31, 1988; lowest measured, 121.70 ft below sea level, September 22, 2005.

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-120.15	MAR 31, 2005	-116.35	JUL 29, 2005	-118.38
JAN 11, 2005	-119.11	MAY 11	-117.37	SEP 22	-121.70

LOWEST -121.70 SEP 22, 2005 HIGHEST -116.35 MAR 31, 2005



WELL NUMBER.--CH Bc 75. SITE ID.--383645077062401. PERMIT NUMBER.--CH-92-0500.

LOCATION.--Lat 38°36'45", long 77°06'24", Hydrologic Unit 02070011, Chapmans Landing. Owner: Maryland Department of Natural Resources.

AQUIFER .-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 940 ft; casing diameter 8 in., to 820 ft, 825 to 860 ft, 880 to 898 ft, and 923 to 940 ft; screen diameter 8 in., from 820 to 825 ft, 860 to 880 ft, and 898 to 923 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 124.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.98 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A 48-hour pump test occurred on November 18-20, 1996. The lowest water level measured during this period was 82.53 ft below sea level on November 20, 1996. The land surface was graded on October 16, 1998, and is 12.45 ft below the original land surface.

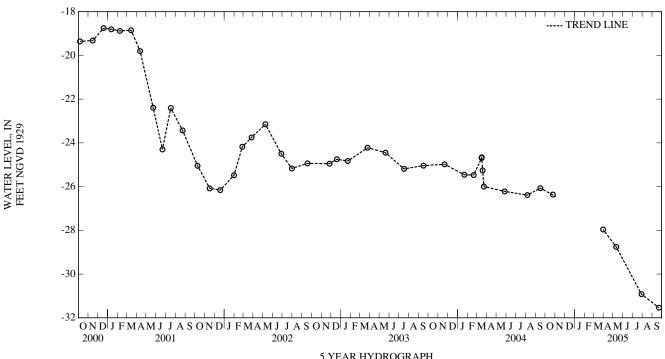
PERIOD OF RECORD .-- June 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft above sea level, September 26, 1994; lowest measured, 31.54 ft below sea level, September 22,2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004 MAR 31, 2005	-26.46 -27.96	MAY 11, 2005 JUL 29	-28.76 -30.92	SEP 22, 2005	-31.54

LOWEST -31.54 SEP 22, 2005 HIGHEST -26.46 NOV 03, 2004



5 YEAR HYDROGRAPH

### WELL NUMBER.--CH Bc 77. SITE ID.--383644077055501. PERMIT NUMBER.--CH-88-1028.

LOCATION.--Lat 38°36'44", long 77°05'55", Hydrologic Unit 02070011, 2.75 mi southwest of intersection with MD Rts. 210 and 227, 0.25 mi south of MD Rt. 210. Owner: The Arden Group.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 955 ft; casing diameter 16 in., to 60 ft; casing diameter 8 in., from 0 to 845 ft; and casing diameter 6 in., from 845 to 925 ft; screen diameter 6 in., from 925 to 955 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, August 1995 to September 2004.

DATUM.--Elevation of land surface is 96.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.38 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A 48-hour pump test occured in a nearby well on November 22 and 23, 1996. The lowest water level measured during this period was 15.54 ft below sea level.

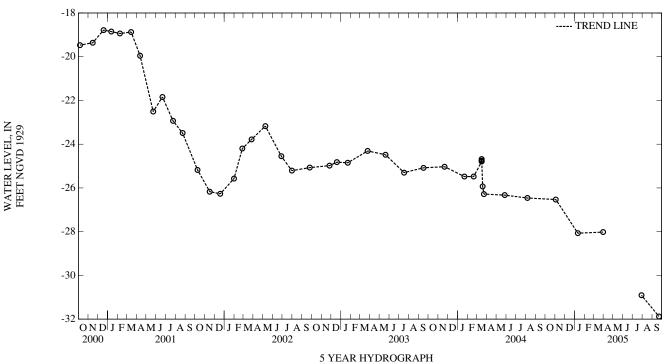
PERIOD OF RECORD .-- August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.76 ft above sea level, August 29, 1995 (recorder); lowest measured, 31.88 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004 IAN 11, 2005	-26.53 -28.07	MAR 31, 2005 JUL 29	-28.02 -30.91	SEP 22, 2005	-31.88

LOWEST -31.88 SEP 22, 2005 HIGHEST -26.53 NOV 03, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### Charles County—Continued

# WELL NUMBER.--CH Bc 78. SITE ID.--383809077053401.--PERMIT NUMBER.--CH-94-0394

LOCATION.--Lat 38°38'09", long 77°05'34", Hydrologic Unit 217PTXN, at South Hampton subdivision, Indian Head. Owner: Charles Co. Dept. of Public Utilities.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 800 ft; casing diameter 10 in., to 550 ft; casing diameter 6 in., from 550 to 675 ft, from 685 to 710 ft and from 790 to 800 ft; screen diameter 6 in. from 675 to 685 ft and from 710 to 790 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 20.13 ft above National Geodetic Vertical Datum of 1929, leveled. Measuring point: 2 in. riser pipe, 1.0 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well. Water levels on February 20, March 16, March 19, and March 23, 2004 were affected by pumpage.

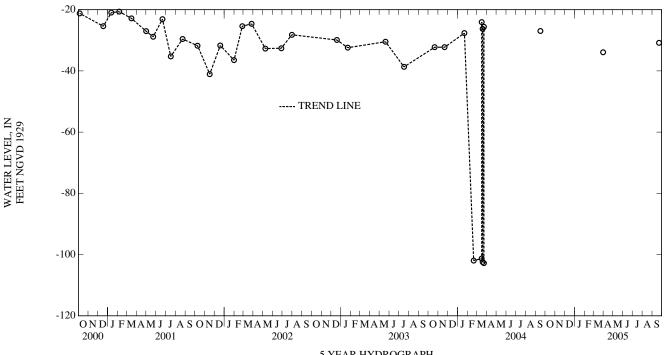
PERIOD OF RECORD.--September 15, 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.13 ft. above sea level, September 15, 1995; lowest measured, 102.79 ft below sea level, March 23, 2004.

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 2005	-33.09	SEP 22, 2005	-30.00
	LOWES	ST -33.09 MAR 31.0	2005

HIGHEST -30.00 SEP 22, 2005



5 YEAR HYDROGRAPH

### WELL NUMBER.--CH Bc 81. SITE ID.--383709077061002. PERMIT NUMBER.--CH-88-0482.

LOCATION.--Lat 38°37′09", long 77°06′10", Hydrologic Unit 02070010, 1.7 mi southwest of intersection with MD Rts. 210 and 227, on northwest side of Chapmans Landing Rd. Owner: Montrose Farms.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 656 ft; casing diameter 6 in., to 541 ft, casing diameter 4 in., from 531 to 556 ft, 588 to 642 ft, and 646 to 656 ft; screen diameter 4 in., from 556 to 588 ft, and 642 to 646 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder from October 1996 to October 2000.

DATUM.--Elevation of land surface is 156.46 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.07 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

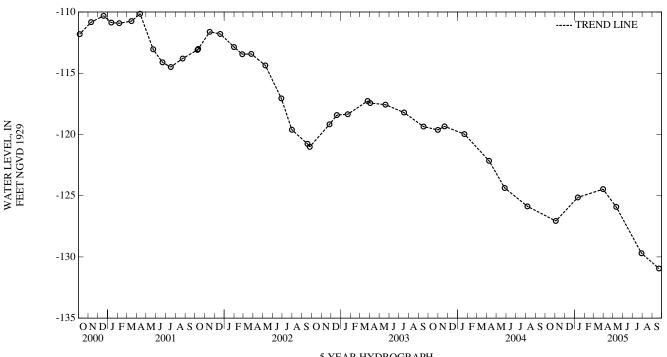
PERIOD OF RECORD .-- August 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 97.97 ft below sea level, July 3 and 4, 1997 (recorder); lowest measured, 130.95 ft below sea level, September 22, 2005.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-127.07	MAR 31, 2005	-124.47	JUL 29, 2005	-129.70
JAN 11, 2005	-125.14	MAY 11	-125.92	SEP 22	-130.95

LOWEST -130.95 SEP 22, 2005 HIGHEST -124.47 MAR 31, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Bd 52. SITE ID.--383553077032401. PERMIT NUMBER.--CH-94-0899.

LOCATION.--Lat 38°35'53", long 77°03'24", Hydrologic Unit 02070011, 2.5 mi southeast of Pomonkey, on east side of MD Rt. 227. Owner: Maryland Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,105 ft; casing diameter 4 in., to 1,040 ft, 1,050 to 1,085 ft, and 1,095 to 1,105 ft; screen diameter 4 in., from 1,040 to 1,050 ft, and 1,085 to 1,095 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 47.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.00 ft above land surface.

 $REMARKS.--Charles\ County\ Ground-Water-Level\ Monitoring\ Network\ observation\ well.\ Water\ levels\ are\ affected\ by\ regional\ ground-water\ withdrawal.$ 

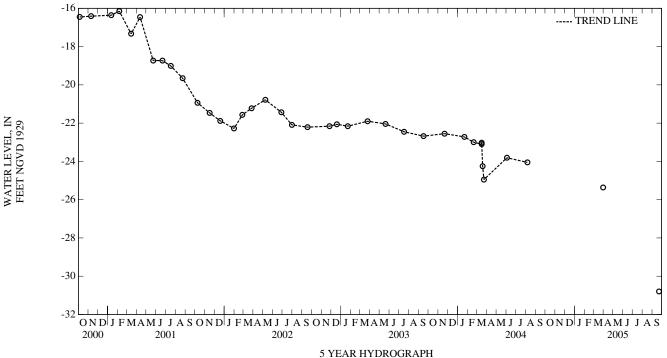
PERIOD OF RECORD.--October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.95 ft above sea level, November 20, 1996; lowest measured, 30.80 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 2005	-25.36	SEP 22, 2005	-30.80
	LOWE	ST -30.80 SEP 22.20	005

LOWEST -30.80 SEP 22, 2005 HIGHEST -25.36 MAR 31, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CH Be 43. SITE ID.--383819076555501. PERMIT NUMBER.--CH-71-0066.

LOCATION.--Lat 38°38'19", long 76°55'55", Hydrologic Unit 02070011, at northeast end of Joy Lane, 0.2 mi east of Sun Valley Drive, Waldorf. Owner: Private Residence.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 459 ft; casing diameter 6 in., to 428 ft; screen diameter 5 in., from 433 to 459 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from February 1977 to January 1978.

DATUM.--Elevation of land surface is 216.79 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land surface.

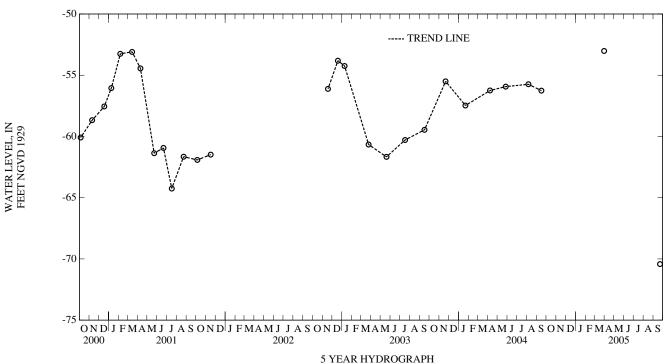
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Water levels were discontinued from December 2001 to November 2002, when another means of access to the well was established.

PERIOD OF RECORD .-- July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.99 ft above sea level, July 14, 1975; lowest measured, 70.42 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 2005	-53.02	SEP 22, 2005	-70.42
		ST -70.42 SEP 22, 20 ST -53.02 MAR 31,	



3 TEAR III DROGRAIII

WELL NUMBER.--CH Be 57. SITE ID.--383706076575601. PERMIT NUMBER.--CH-81-1194.

LOCATION.--Lat 38°37'06", long 76°57'56", Hydrologic Unit 02070011, St. John's pumping station, St. Charles. Owner: Charles County Department of Public Works.

AQUIFER.--Patuxant Formation of Lower Cretaceous age. Aquifer code: 217PTXNU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,696 ft; casing diameter 6 in., to 400 ft; casing diameter 4 in., from 400 to 1,660 ft, screen diameter 4 in., from 1,660 to 1,696 ft.

INSTRUMENTATION .-- Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 212.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.00 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

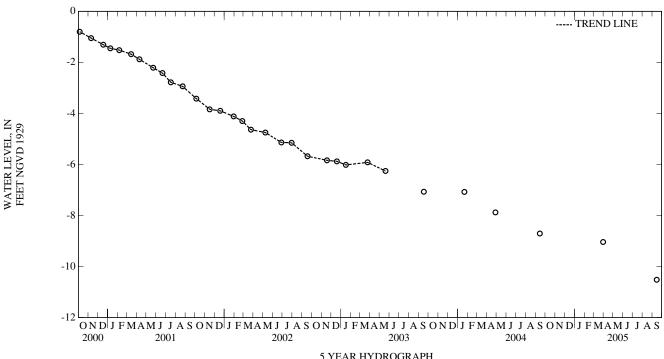
PERIOD OF RECORD .-- April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.16 ft above sea level, April 3, 1986; lowest measured, 10.52 ft below sea level, September 15, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 2005	-9.04	SEP 15, 2005	-10.52
	LOWES	Γ -10.52 SEP 15, 20	005

HIGHEST -9.04 MAR 31, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CH Be 60. SITE ID.--383706076575604. PERMIT NUMBER.--CH-81-1468.

LOCATION.--Lat 38°37'06", long 76°57'56", Hydrologic Unit 02070011, St. John's pumping station, St. Charles. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 625 ft; casing diameter 6 in., to 401 ft; casing diameter 4 in., from 401 ft to 610 ft, and 625 to 635 ft; screen diameter 4 in., from 610 to 625 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

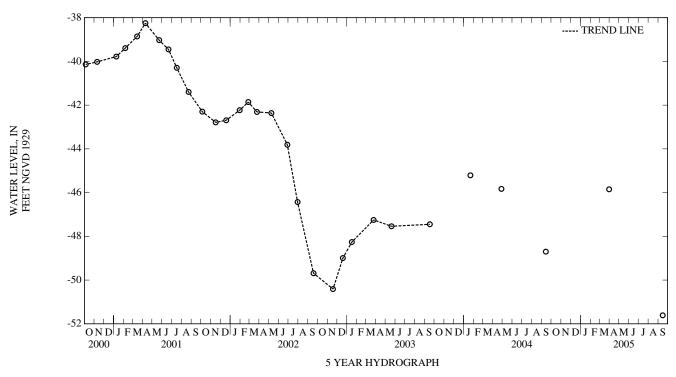
DATUM.--Elevation of land surface is 212.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 2.20 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.30 ft below sea level, April 10, 1987; lowest measured, 51.61 ft below sea level, September 15, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 31, 2005	-45.85	SEP 15, 2005	-51.61
	LOWEST -51.61 SEP 15, 2005 HIGHEST -45.85 MAR 31, 2005		



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CH Bf 133. SITE ID.--383640076545901. PERMIT NUMBER.--CH-70-0069.

LOCATION.--Lat 38°36'40", long 76°54'59", Hydrologic Unit 02070011, at St. Charles, Copely Rd. pumping station. Owner: Charles County Department of Public Works.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 510 ft; casing diameter 10 in., to 77 ft; casing diameter 6 in., from +0.82 to 420 ft, casing diameter 4 in., from 420 to 436 ft, and 506 to 510 ft; screen diameter 4 in., from 436 to 506 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel from April 1992 to current year.

DATUM.--Elevation of land surface is 223.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.82 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

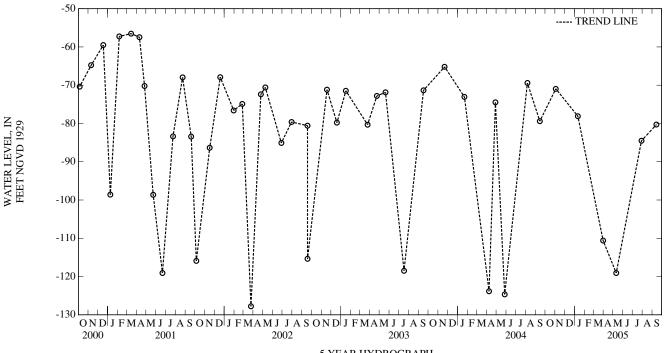
PERIOD OF RECORD.--April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.82 ft above sea level, April 26, 1974; lowest measured, 127.79 ft below sea level, March 25, 2002.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-70.94	MAR 31, 2005	-110.61	JUL 29, 2005	-84.52
JAN 11, 2005	-78.10	MAY 11	-119.08	SEP 14	-80.28

LOWEST -119.08 MAY 11, 2005 HIGHEST -70.94 NOV 03, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Bf 134. SITE ID.--383728076531701. PERMIT NUMBER.--CH-70-0067.

LOCATION.--Lat 38°37'28", long 76°53'17", Hydrologic Unit 02070011, at John Hanson Middle School parking lot, at Waldorf. Owner: Charles County Department of Public Works.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 546 ft; casing diameter 6 in., to 402 ft; casing diameter 4 in., from 422 to 485 ft; screen diameter 4 in., from 402 to 422 ft, and 485 to 546 ft.

INSTRUMENTATION .-- Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 202.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.52 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

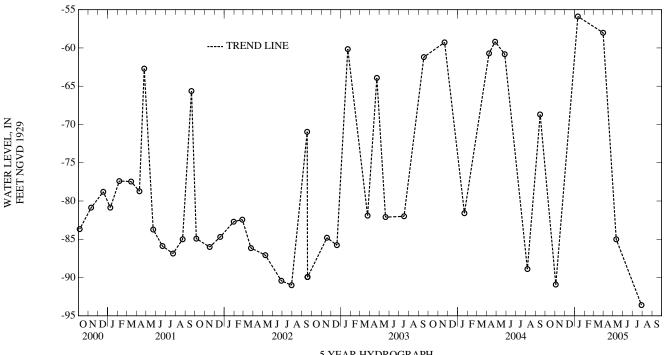
PERIOD OF RECORD .-- April 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.22 ft above sea level, April 26, 1974; lowest measured, 93.60 ft below sea level, July 29, 2005.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004 JAN 11, 2005	-90.93 -55.89	MAR 31, 2005 MAY 11	-58.01 -85.00	JUL 29, 2005	-93.60

LOWEST -93.60 JUL 29, 2005 HIGHEST -55.89 JAN 11, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Bf 146. SITE ID.--383508076540701. PERMIT NUMBER.--CH-81-0593.

LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of the intersection of St. Pauls Dr. and Piney Church Rd., St. Charles. Owner: Charles County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,427 ft; casing diameter 6 in., to 1,059 ft, 1,069 to 1,073 ft, 1,083 to 1,161 ft, 1,166 to 1,170 ft, 1,180 to 1,184 ft, 1,189 to 1,195 ft, 1,205 to 1,244 ft, 1,249 to 1,252 ft, 1,262 to 1,298 ft, 1,328 to 1,342 ft, and 1,417 to 1,427 ft; screen diameter 10 in. from 1,059 to 1,069 ft, 1,073 to 1,083 ft, 1,161 to 1,166 ft, 1,170 to 1,180 ft, 1,184 to 1,189 ft, 1,195 to 1,205 ft, 1,244 to 1,249 ft, 1,252 to 1,262 ft, 1,298 to 1,328 ft, and 1,342 to 1,417 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 192.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

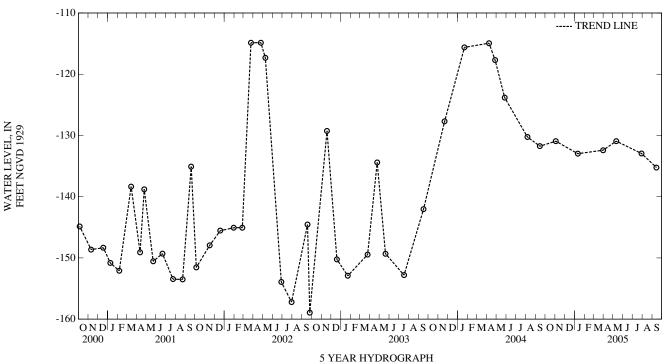
PERIOD OF RECORD .-- April 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.02 ft below sea level, April 4, 1985; lowest measured, 158.94 ft below sea level, September 25, 2002.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-130.94	MAR 31, 2005	-132.41	JUL 29, 2005	-132.94
JAN 11, 2005	-132.98	MAY 11	-130.93	SEP 14	-135.24

LOWEST -135.24 SEP 14, 2005 HIGHEST -130.93 MAY 11, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CH Bf 151. SITE ID.--383508076540703. PERMIT NUMBER.--CH-81-1265.

LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of the intersection of St. Pauls Dr. and Piney Church Rd., St. Charles. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 660 ft; casing diameter 6 in., to 399 ft; casing diameter 4 in., from 399 to 645 ft; screen diameter 4 in., from 645 to 660 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from August 1987 to November 2004.

DATUM.--Elevation of land surface is 192.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

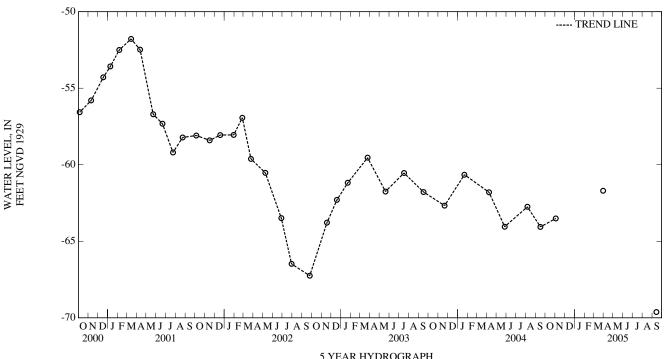
PERIOD OF RECORD.--November 1985 to December 1986, and April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.39 ft below sea level, March 27, 1988 (recorder); lowest measured, 69.64 ft below sea level, August 21, 2002 (recorder).

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-63.51	MAR 31, 2005	-61.70	SEP 14, 2005	-69.62
	LOWEST	60.62 SED 14.20	005		

LOWEST -69.62 SEP 14, 2005 HIGHEST -61.70 MAR 31, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Bf 157. SITE ID.--383637076545803. PERMIT NUMBER.--CH-81-1846.

LOCATION.--Lat 38°36'40", long 76°54'59", Hydrologic Unit 02070011, at St. Charles, Copely Rd. pumping station. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 623 ft; casing diameter 6 in., to 396 ft; casing diameter 4 in., from 396 to 608 ft; screen diameter 4 in., from 608 to 623 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 225.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.70 ft above land surface.

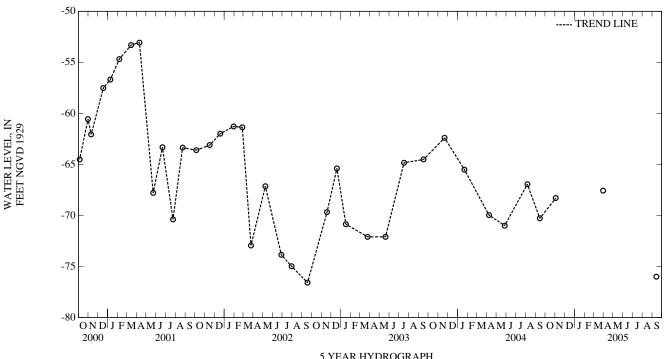
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.27 ft below sea level, April 5, 1988; lowest measured, 76.59 ft below sea level, September 18, 2002.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

	WATER		WATER		WATER		
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL		
NOV 03, 2004	-68.30	MAR 31, 2005	-67.57	SEP 14, 2005	-76.01		
LOWEST -76.01 SEP 14, 2005 HIGHEST -67 57 MAR 31, 2005							



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--CH Bf 158. SITE ID.--383732076531902. PERMIT NUMBER.--CH-81-1847.

LOCATION.--Lat 38°37'32", long 76°53'19", Hydrologic Unit 02070011, at John Hanson Middle School pumping station, Waldorf. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 645 ft; casing diameter 6 in., to 398 ft; casing diameter 4 in., from 398 to 630 ft; screen diameter 4 in., from 630 to 645 ft.

INSTRUMENTATION .-- Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

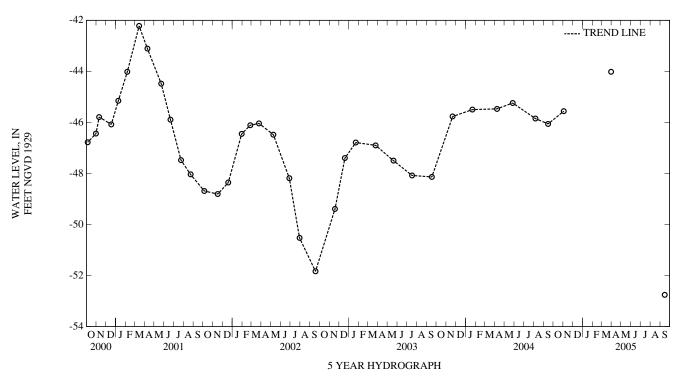
DATUM.--Elevation of land surface is 193 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.0 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--April 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.70 ft below sea level, April 10, 1987; lowest measured, 51.84 ft below sea level, September 18, 2002.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL			
NOV 03, 2004	-45.56	MAR 31, 2005	-44.02	SEP 15, 2005	-52.76			
LOWEST -52.76 SEP 15, 2005 HIGHEST -44.02 MAR 31, 2005								



WELL NUMBER.--CH Bg 12. SITE ID.--383746076482901. PERMIT NUMBER.--CH-81-0600.

LOCATION.--Lat 38°37'46", long 76°48'29", Hydrologic Unit 02070011, Cedarville State Forest, near Forest Rd. Owner: U.S. Geological Survey.

AQUIFER.--Calvert Formation of Lower middle Miocene age. Aquifer code: 122CLVR.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 24.5 ft; casing diameter 4 in., to 13.5 ft; casing diameter 2 in., from 18.5 to 24.5 ft; screen diameter 2 in., from 13.5 to 18.5 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 149.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response. The high water levels from December 1999 through May 2001 is the result of beavers damming nearby Zekiah Swamp Run.

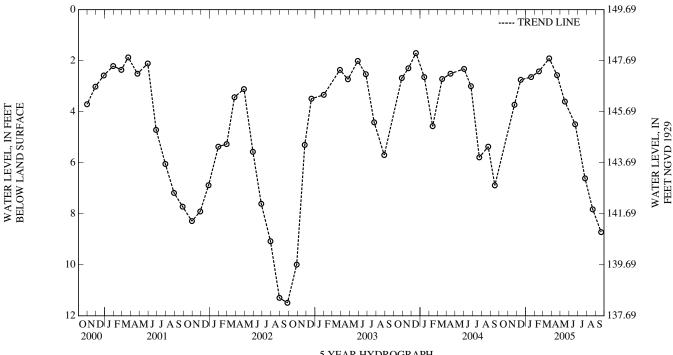
PERIOD OF RECORD .-- August 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land surface, December 17, 2003; lowest measured, 11.49 ft below land surface, September 27, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23, 2004 DEC 15 JAN 20, 2005	3.73 2.75 2.64	FEB 16, 2005 MAR 24 APR 20	2.42 1.91 2.57	MAY 17, 2005 JUN 22 JUL 26	3.60 4.49 6.61	AUG 22, 2005 SEP 20	7.83 8.72

HIGHEST 1.91 MAR 24, 2005 LOWEST 8.72 SEP 20, 2005



5 YEAR HYDROGRAPH

N

### CHARLES COUNTY—Continued

WELL NUMBER.--CH Bg 17. SITE ID.--383706076475401. PERMIT NUMBER.--CH-94-5325.

 $LOCATION. -Lat\ 38^{\circ}37'06'', long\ 76^{\circ}47'54'', Hydrologic\ Unit\ 02070011,\ near\ the\ northeast\ corner\ of\ Forest\ Rd.\ and\ Rt.\ 382.\ Owner:\ U.S.\ Geological\ Survey.$ 

AQUIFER.--Lower Patapsco Aquifer Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, artesian well, well depth 1,353 ft; casing diameter 4 in., to 1,299 ft, from 1,314 to 1,328 ft, and from 1,343 to 1,353 ft; screen diameter 4 in., from 1,299 to 1,314 ft, and from 1,328 to 1,343 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, April 2003 to August 2005.

DATUM.--Elevation of land surface is 199.16 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 3.50 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD .-- April 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.59 ft below sea level, April 4, 2003; lowest measured, 54.81 ft below sea level, August 19, 2005 (recorder).

# WATER SURFACE ELEVATION IN FEET NAVD 1988

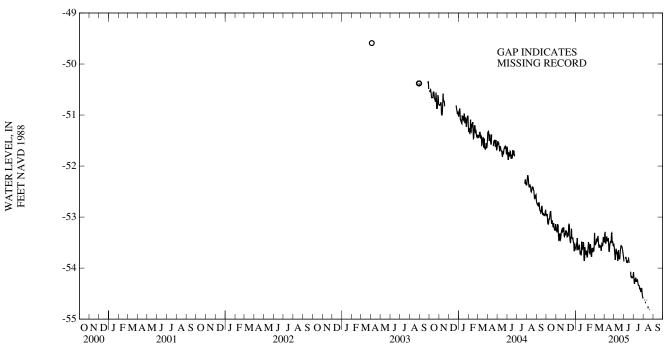
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	-52.93	JAN 20, 2005	-53.44	APR 20, 2005	-53.38	JUL 26, 2005	-54.39
NOV 23	-53.20	FEB 16	-53.49	MAY 17	-53.81	AUG 22	-54.73
DEC 15	-53.46	MAR 24	-53.49	JUN 22	-54.04	SEP 20	-55.26

LOWEST -55.26 SEP 20, 2005 HIGHEST -52.93 OCT 01, 2004

MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
-52.93 -52.88 -52.92 -52.88 -52.94	-52.96 -52.97 -52.96 -52.94 -53.07	-53.18 -53.12 -53.14 -52.94 -52.96	-53.25 -53.26 -53.29 -53.29 -53.14	-53.02 -53.16 -53.16 -53.24 -53.27	-53.26 -53.29 -53.27 -53.30 -53.38	-53.50 -53.58 -53.45 -53.43 -53.41	-53.60 -53.65 -53.58 -53.52 -53.48	-53.66 -53.68 -53.59 -53.57 -53.63	-53.73 -53.73 -53.68 -53.66 -53.76	-53.24 -53.31 -53.44 -53.47 -53.43	-53.31 -53.45 -53.54 -53.54 -53.52
-53.07 -53.08 -53.04 -52.97 -52.94	-53.13 -53.14 -53.13 -53.05 -53.02	-53.07 -53.06 -53.10 -53.32 -53.39	-53.17 -53.15 -53.35 -53.45 -53.47	-53.28 -53.10 -53.14 -53.17 -52.95	-53.37 -53.31 -53.37 -53.36 -53.17	-53.28 -53.41 -53.42 -53.56 -53.45	-53.41 -53.63 -53.64 -53.64 -53.59	-53.72 -53.61 -53.52 -53.40 -53.36	-53.79 -53.77 -53.65 -53.59 -53.49	-53.37 -53.24 -53.08 -53.39 -53.34	-53.51 -53.44 -53.42 -53.47 -53.46
-52.97 -52.88 -52.83 -52.79 -52.75	-53.05 -52.99 -52.92 -52.89 -52.89	-53.27 -53.15 -53.21 -53.39 -53.31	-53.42 -53.32 -53.43 -53.45 -53.43	-52.96 -53.09 -53.06 -53.28 -53.43	-53.13 -53.15 -53.28 -53.43 -53.49	-53.49 -53.49 -53.42 -53.63	-53.60 -53.55 -53.56 -53.63 -53.73	-53.49 -53.46 -53.54 -53.50 -53.51	-53.52 -53.54 -53.70 -53.71 -53.61	-53.21 -53.26 -53.37 -53.48 -53.55	-53.39 -53.37 -53.48 -53.55 -53.60
-52.86 -53.00 -53.06 -53.02 -53.05	-53.00 -53.10 -53.13 -53.06 -53.10	-53.25 -53.25 -53.19 -53.19 -53.17	-53.35 -53.30 -53.27 -53.24 -53.23	-53.36 -53.35 -53.23 -53.13 -53.21	-53.51 -53.40 -53.39 -53.23 -53.41	-53.52 -53.52 -53.66 -53.44 -53.41	-53.70 -53.67 -53.75 -53.70 -53.48	-53.37 -53.48 -53.55 -53.68 -53.63	-53.53 -53.57 -53.71 -53.77 -53.77	-53.52 -53.50 -53.51 -53.54 -53.47	-53.58 -53.54 -53.57 -53.59 -53.56
-53.08 -53.12 -53.10 -53.05 -53.08	-53.13 -53.19 -53.19 -53.12 -53.18	-53.22 -53.20 -53.17 -52.98 -52.88	-53.29 -53.28 -53.23 -53.21 -53.21	-53.31 -53.37 -53.13 -53.36 -53.41	-53.41 -53.42 -53.40 -53.45 -53.50	-53.45 -53.26 -53.30 -53.43 -53.40	-53.64 -53.63 -53.60 -53.60 -53.49	-53.46 -53.52 -53.59 -53.47 -53.52	-53.63 -53.61 -53.68 -53.68 -53.60	-53.51 -53.57 -53.26 -53.36 -53.46	-53.63 -53.66 -53.58 -53.52 -53.53
-53.14 -53.17 -53.21 -53.10 -53.02 -53.06	-53.23 -53.25 -53.26 -53.26 -53.14 -53.18	-53.21 -53.19 -53.06 -53.31 -53.24	-53.37 -53.38 -53.31 -53.35 -53.35	-53.34 -53.44 -53.50 -53.43 -53.52 -53.49	-53.50 -53.66 -53.66 -53.52 -53.59 -53.60	-53.30 -53.52 -53.81 -53.59 -53.49 -53.55	-53.52 -53.82 -53.86 -53.83 -53.59 -53.67	-53.57 -53.54 -53.26 	-53.63 -53.67 -53.55 	-53.48 -53.42 -53.05 -53.10 -53.39 -53.43	-53.56 -53.55 -53.42 -53.39 -53.48 -53.49
-52.75	-53.26	-52.88	-53.47	-52.95	-53.66	-53.26	-53.86	-53.26	-53.79	-53.05	-53.66
	-52.93 -52.88 -52.92 -52.88 -52.94 -53.07 -53.08 -53.04 -52.97 -52.83 -52.83 -52.79 -52.75 -52.86 -53.00 -53.06 -53.02 -53.10 -53.12 -53.10 -53.05 -53.12 -53.05 -53.06 -53.05 -53.06 -53.06 -53.05 -53.06 -53.05 -53.06 -5	OCTOBER  -52.93 -52.96 -52.88 -52.97 -52.92 -52.96 -52.88 -52.94 -52.94 -53.07 -53.07 -53.13 -53.08 -53.14 -53.04 -53.13 -52.97 -53.05 -52.94 -53.02 -52.97 -53.05 -52.88 -52.99 -52.83 -52.99 -52.83 -52.99 -52.83 -52.99 -52.84 -53.00 -53.00 -53.10 -53.06 -53.13 -53.02 -53.06 -53.05 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.08 -53.10 -53.09 -53.00 -53.10 -53.09 -53.00 -53.10 -53.00 -53.10 -53.01 -53.02 -53.02 -53.10 -53.03 -53.11 -53.05 -53.11 -53.05 -53.11 -53.06 -53.12 -53.07 -53.25 -53.11 -53.26 -53.01 -53.26 -53.02 -53.14 -53.06 -53.18	OCTOBER NOVE  -52.93 -52.96 -53.18 -52.88 -52.97 -53.12 -52.92 -52.96 -53.14 -52.88 -52.94 -52.94 -52.94 -52.94 -53.07 -52.96 -53.08 -53.14 -53.06 -53.04 -53.13 -53.10 -52.97 -53.05 -53.32 -52.94 -53.02 -53.39 -52.97 -53.05 -53.27 -52.88 -52.99 -53.15 -52.83 -52.99 -53.15 -52.83 -52.92 -53.21 -52.79 -52.89 -53.31 -52.86 -53.00 -53.25 -53.00 -53.10 -53.25 -53.00 -53.10 -53.25 -53.00 -53.10 -53.25 -53.06 -53.13 -53.19 -53.02 -53.06 -53.19 -53.05 -53.10 -53.17 -53.08 -53.13 -53.29 -53.10 -53.10 -53.25 -53.06 -53.13 -53.19 -53.05 -53.10 -53.17 -53.08 -53.13 -53.29 -53.10 -53.15 -53.05 -53.10 -53.17 -53.08 -53.13 -53.29 -53.10 -53.15 -53.05 -53.10 -53.17 -53.08 -53.13 -53.29 -53.10 -53.16 -53.19 -53.05 -53.10 -53.17 -53.08 -53.13 -53.20 -53.10 -53.26 -53.10 -53.11 -53.25 -53.19 -53.17 -53.25 -53.19 -53.10 -53.26 -53.06 -53.10 -53.26 -53.06 -53.10 -53.26 -53.31	OCTOBER         NOVEMBER           -52.93         -52.96         -53.18         -53.25           -52.88         -52.97         -53.12         -53.26           -52.92         -52.96         -53.14         -53.29           -52.88         -52.94         -52.94         -53.29           -52.94         -53.07         -53.13         -53.07         -53.17           -53.08         -53.14         -53.06         -53.15           -53.04         -53.13         -53.10         -53.35           -52.97         -53.05         -53.32         -53.45           -52.94         -53.02         -53.39         -53.47           -52.97         -53.05         -53.27         -53.42           -52.88         -52.99         -53.15         -53.32           -52.89         -53.15         -53.32           -52.89         -53.31         -53.42           -52.89         -53.31         -53.43           -52.79         -52.89         -53.31           -52.75         -52.89         -53.31           -53.00         -53.10         -53.25           -53.01         -53.13         -53.25           -53.02         -53	OCTOBER         NOVEMBER         DECE           -52.93         -52.96         -53.18         -53.25         -53.02           -52.88         -52.97         -53.12         -53.26         -53.16           -52.92         -52.96         -53.14         -53.29         -53.16           -52.88         -52.94         -52.94         -53.29         -53.24           -52.94         -53.07         -52.96         -53.17         -53.24           -52.94         -53.07         -52.96         -53.17         -53.28           -53.08         -53.14         -53.06         -53.17         -53.28           -53.04         -53.13         -53.00         -53.35         -53.10           -53.04         -53.13         -53.10         -53.35         -53.14           -52.97         -53.05         -53.32         -53.45         -53.17           -52.94         -53.02         -53.39         -53.47         -52.95           -52.97         -53.05         -53.27         -53.42         -52.96           -52.88         -52.99         -53.15         -53.32         -53.09           -52.89         -53.31         -53.43         -53.43         -53.09 <t< td=""><td>OCTOBER         NOVEMBER         DECEMBER           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30           -52.94         -53.07         -53.17         -53.28         -53.37           -53.08         -53.14         -53.06         -53.15         -53.10         -53.31           -53.04         -53.13         -53.00         -53.35         -53.14         -53.37           -52.97         -53.05         -53.32         -53.45         -53.17         -53.36           -52.97         -53.05         -53.27         -53.42         -52.96         -53.17           -52.97         -53.05         -53.27         -53.42         -52.96         -53.17           -52.88         -52.99         -53.15         -53.32         -53.09         -53.15           -52.88         -52.99         -53.15         -53.32         -53.09         -53.15</td><td>OCTOBER         NOVEMBER         DECEMBER         JANU           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.45           -52.88         -52.94         -52.94         -53.29         -53.44         -53.30         -53.43           -52.94         -52.94         -52.96         -53.14         -53.27         -53.38         -53.41           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28           -53.08         -53.14         -53.07         -53.17         -53.28         -53.37         -53.28           -53.04         -53.13         -53.07         -53.15         -53.10         -53.31         -53.41           -53.04         -53.13         -53.10         -53.35         -53.14         -53.37         -53.42           -52.97         -53.05         -53.32         -53.45         -53.17         -53.43         -53.41           -52.97         -53.05         -53.27         -53.42         -52.96         -53.13         -53.49           -52.88         -52.99</td><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60           -52.88         -52.97         -53.12         -53.26         -53.16         -53.27         -53.45         -53.88           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27         -53.45         -53.88           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30         -53.43         -53.42           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41           -53.07         -53.13         -53.07         -53.15         -53.10         -53.31         -53.41         -53.63           -53.04         -53.13         -53.10         -53.35         -53.14         -53.37         -53.42         -53.49         -53.44           -52.97         -53.05         -53.39         -53.47         -52.95         -53.17         -53.45         -53.49         -53.64           -52.97         -53.05         -53.27         -53.42         -52.95         -53.17         -53.45         <t< td=""><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27         -53.45         -53.58         -53.59           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30         -53.43         -53.42         -53.48         -53.49           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.41         -53.67           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72           -53.08         -53.14         -53.06         -53.15         -53.10         -53.31         -53.41         -53.64         -53.52           -52.97         -53.02         -53.39         -53.47         -52.95         -53.17         -53.42         -53.64         -53.59           -52.88         <td< td=""><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.66         -53.73           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68         -53.73           -52.28         -52.90         -53.14         -53.29         -53.16         -53.27         -53.45         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.29         -53.38         -53.41         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.27         -53.38         -53.41         -53.48         -53.63         -53.76           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41         -53.49         -53.72         -53.38         -53.41         -53.49         -53.72         -53.39         -53.61         -53.77         -53.49         -53.63         -53.76         -53.29         -53.31         -53.21         -53.39         -53.63         -53.76         -53.49         -53.6</td><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY         MAI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66         -53.73         -53.24           -52.88         -52.97         -53.12         -53.29         -53.16         -53.29         -53.58         -53.68         -53.73         -53.31           -52.98         -52.94         -52.94         -52.94         -52.99         -53.24         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.30         -53.48         -53.57         -53.68         -53.47           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.57         -53.66         -53.47           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72         -53.37         -53.25         -53.77         -53.42           -53.09         -53.13         -53.10         -53.31         -53.41         -53.66         -53.77         -53.37           -53.04         -53.13         -53.15         -53.10</td></td<></td></t<></td></t<>	OCTOBER         NOVEMBER         DECEMBER           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30           -52.94         -53.07         -53.17         -53.28         -53.37           -53.08         -53.14         -53.06         -53.15         -53.10         -53.31           -53.04         -53.13         -53.00         -53.35         -53.14         -53.37           -52.97         -53.05         -53.32         -53.45         -53.17         -53.36           -52.97         -53.05         -53.27         -53.42         -52.96         -53.17           -52.97         -53.05         -53.27         -53.42         -52.96         -53.17           -52.88         -52.99         -53.15         -53.32         -53.09         -53.15           -52.88         -52.99         -53.15         -53.32         -53.09         -53.15	OCTOBER         NOVEMBER         DECEMBER         JANU           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.45           -52.88         -52.94         -52.94         -53.29         -53.44         -53.30         -53.43           -52.94         -52.94         -52.96         -53.14         -53.27         -53.38         -53.41           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28           -53.08         -53.14         -53.07         -53.17         -53.28         -53.37         -53.28           -53.04         -53.13         -53.07         -53.15         -53.10         -53.31         -53.41           -53.04         -53.13         -53.10         -53.35         -53.14         -53.37         -53.42           -52.97         -53.05         -53.32         -53.45         -53.17         -53.43         -53.41           -52.97         -53.05         -53.27         -53.42         -52.96         -53.13         -53.49           -52.88         -52.99	OCTOBER         NOVEMBER         DECEMBER         JANUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60           -52.88         -52.97         -53.12         -53.26         -53.16         -53.27         -53.45         -53.88           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27         -53.45         -53.88           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30         -53.43         -53.42           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41           -53.07         -53.13         -53.07         -53.15         -53.10         -53.31         -53.41         -53.63           -53.04         -53.13         -53.10         -53.35         -53.14         -53.37         -53.42         -53.49         -53.44           -52.97         -53.05         -53.39         -53.47         -52.95         -53.17         -53.45         -53.49         -53.64           -52.97         -53.05         -53.27         -53.42         -52.95         -53.17         -53.45 <t< td=""><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27         -53.45         -53.58         -53.59           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30         -53.43         -53.42         -53.48         -53.49           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.41         -53.67           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72           -53.08         -53.14         -53.06         -53.15         -53.10         -53.31         -53.41         -53.64         -53.52           -52.97         -53.02         -53.39         -53.47         -52.95         -53.17         -53.42         -53.64         -53.59           -52.88         <td< td=""><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.66         -53.73           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68         -53.73           -52.28         -52.90         -53.14         -53.29         -53.16         -53.27         -53.45         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.29         -53.38         -53.41         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.27         -53.38         -53.41         -53.48         -53.63         -53.76           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41         -53.49         -53.72         -53.38         -53.41         -53.49         -53.72         -53.39         -53.61         -53.77         -53.49         -53.63         -53.76         -53.29         -53.31         -53.21         -53.39         -53.63         -53.76         -53.49         -53.6</td><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY         MAI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66         -53.73         -53.24           -52.88         -52.97         -53.12         -53.29         -53.16         -53.29         -53.58         -53.68         -53.73         -53.31           -52.98         -52.94         -52.94         -52.94         -52.99         -53.24         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.30         -53.48         -53.57         -53.68         -53.47           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.57         -53.66         -53.47           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72         -53.37         -53.25         -53.77         -53.42           -53.09         -53.13         -53.10         -53.31         -53.41         -53.66         -53.77         -53.37           -53.04         -53.13         -53.15         -53.10</td></td<></td></t<>	OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68           -52.92         -52.96         -53.14         -53.29         -53.16         -53.27         -53.45         -53.58         -53.59           -52.88         -52.94         -52.94         -53.29         -53.24         -53.30         -53.43         -53.42         -53.48         -53.49           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.41         -53.67           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72           -53.08         -53.14         -53.06         -53.15         -53.10         -53.31         -53.41         -53.64         -53.52           -52.97         -53.02         -53.39         -53.47         -52.95         -53.17         -53.42         -53.64         -53.59           -52.88 <td< td=""><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.66         -53.73           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68         -53.73           -52.28         -52.90         -53.14         -53.29         -53.16         -53.27         -53.45         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.29         -53.38         -53.41         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.27         -53.38         -53.41         -53.48         -53.63         -53.76           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41         -53.49         -53.72         -53.38         -53.41         -53.49         -53.72         -53.39         -53.61         -53.77         -53.49         -53.63         -53.76         -53.29         -53.31         -53.21         -53.39         -53.63         -53.76         -53.49         -53.6</td><td>OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY         MAI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66         -53.73         -53.24           -52.88         -52.97         -53.12         -53.29         -53.16         -53.29         -53.58         -53.68         -53.73         -53.31           -52.98         -52.94         -52.94         -52.94         -52.99         -53.24         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.30         -53.48         -53.57         -53.68         -53.47           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.57         -53.66         -53.47           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72         -53.37         -53.25         -53.77         -53.42           -53.09         -53.13         -53.10         -53.31         -53.41         -53.66         -53.77         -53.37           -53.04         -53.13         -53.15         -53.10</td></td<>	OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.66         -53.73           -52.88         -52.97         -53.12         -53.26         -53.16         -53.29         -53.58         -53.65         -53.68         -53.73           -52.28         -52.90         -53.14         -53.29         -53.16         -53.27         -53.45         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.29         -53.38         -53.41         -53.59         -53.66           -52.94         -53.07         -52.96         -53.14         -53.27         -53.38         -53.41         -53.48         -53.63         -53.76           -53.07         -53.13         -53.07         -53.17         -53.28         -53.37         -53.28         -53.41         -53.49         -53.72         -53.38         -53.41         -53.49         -53.72         -53.39         -53.61         -53.77         -53.49         -53.63         -53.76         -53.29         -53.31         -53.21         -53.39         -53.63         -53.76         -53.49         -53.6	OCTOBER         NOVEMBER         DECEMBER         JANUARY         FEBRUARY         MAI           -52.93         -52.96         -53.18         -53.25         -53.02         -53.26         -53.50         -53.60         -53.66         -53.73         -53.24           -52.88         -52.97         -53.12         -53.29         -53.16         -53.29         -53.58         -53.68         -53.73         -53.31           -52.98         -52.94         -52.94         -52.94         -52.99         -53.24         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.29         -53.44         -53.30         -53.48         -53.57         -53.68         -53.47           -52.94         -53.07         -53.17         -53.28         -53.37         -53.48         -53.57         -53.66         -53.47           -53.07         -53.13         -53.17         -53.28         -53.37         -53.28         -53.41         -53.72         -53.37         -53.25         -53.77         -53.42           -53.09         -53.13         -53.10         -53.31         -53.41         -53.66         -53.77         -53.37           -53.04         -53.13         -53.15         -53.10

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1	-53.33	-53.48	-53.44	-53.58	-53.79	-53.87	-54.01	-54.08	-54.51	-54.59		
2	-53.03	-53.33	-53.52	-53.60			-54.03	-54.16				
3	-53.04	-53.29	-53.57	-53.68			-54.15	-54.27	 5151	54.60		
4	-53.29	-53.44	-53.66	-53.78	 52.72	 52.01	-54.22	-54.31	-54.54	-54.62		
5	-53.44	-53.52	-53.74	-53.84	-53.72	-53.81	-54.14	-54.25	-54.56	-54.63		
6	-53.40	-53.49	-53.61	-53.75	-53.73	-53.81	-54.11	-54.21				
7	-53.31	-53.44	-53.53	-53.63	-53.70	-53.78	-54.19	-54.27	-54.60	-54.66		
8	-53.23	-53.38	-53.55	-53.63	-53.73	-53.81	-54.07	-54.19	-54.64	-54.68		
9	-53.37	-53.46	-53.62	-53.68	-53.80	-53.87	-54.17	-54.22	-54.60	-54.68		
10	-53.38	-53.46	-53.65	-53.71	-53.84	-53.89	-54.21	-54.27				
11	-53.40	-53.47	-53.64	-53.70	-53.85	-53.89	-54.22	-54.25	-54.60	-54.63		
12	-53.36	-53.47	-53.65	-53.81	-53.84	-53.89	-54.22	-54.24				
13	-53.34	-53.41	-53.77	-53.86	-53.78	-53.84	-54.21	-54.23				
14	-53.41	-53.51	-53.60	-53.77			-54.22	-54.25				
15	-53.51	-53.66	-53.59	-53.65	-53.75	-53.79	-54.24	-54.30	-54.66	-54.75		
16	-53.62	-53.68	-53.63	-53.76	-53.76	-53.83	-54.26	-54.33	-54.69	-54.79		
17	-53.51	-53.62	-53.75	-53.81	-53.82	-53.90	-54.26	-54.34				
18	-53.48	-53.53	-53.75	-53.82			-54.26	-54.34				
19	-53.44	-53.51	-53.73	-53.82			-54.26	-54.35	-54.71	-54.81		
20	-53.36	-53.47	-53.53	-53.73			-54.30	-54.40				
21	-53.37	-53.50	-53.57	-53.64			-54.30	-54.39				
22	-53.32	-53.50	-53.52	-53.60	-53.98	-54.07	-54.32	-54.40				
23	-53.16	-53.32	-53.49	-53.55	-54.06	-54.17	-54.34	-54.43				
24	-53.21	-53.31	-53.48	-53.58	-54.12	-54.18	-54.40	-54.47				
25	-53.30	-53.44	-53.52	-53.58	-54.13	-54.17	-54.35	-54.43				
26	-53.42	-53.50	-53.50	-53.58	-54.14	-54.19	-54.36	-54.39				
27	-53.38	-53.48	-53.56	-53.63	-54.16	-54.19	-54.34	-54.41				
28	-53.48	-53.55	-53.61	-53.65	-54.14	-54.19	-54.41	-54.50				
29	-53.52	-53.56	-53.64	-53.70	-54.10	-54.18	-54.49	-54.55				
30	-53.41	-53.52	-53.68	-53.74	-54.05	-54.13	-54.51	-54.58				
31			-53.71	-53.81			-54.53	-54.59				
MONTH	-53.03	-53.68	-53.44	-53.86	-53.70	-54.19	-54.01	-54.59	-54.51	-54.81		
YEAR	-52.75	-54.81										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Cb 7. SITE ID.--383422077114601. PERMIT NUMBER.--CH-01-1908.

LOCATION.--Lat 38°34'22", long 77°11'46", Hydrologic Unit 02070011, at Caffee and Greenslade Rds., U.S. Naval Ordnance Station, about 2.5 mi southwest of Indian Head. Owner: U.S. Navy.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 167 ft; casing diameter 8 in., to 144 ft; screen diameter 6 in., from 144 to 167 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder September 1953 to July 1965.

DATUM.--Elevation of land surface is 36.0 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.08 ft above land surface.

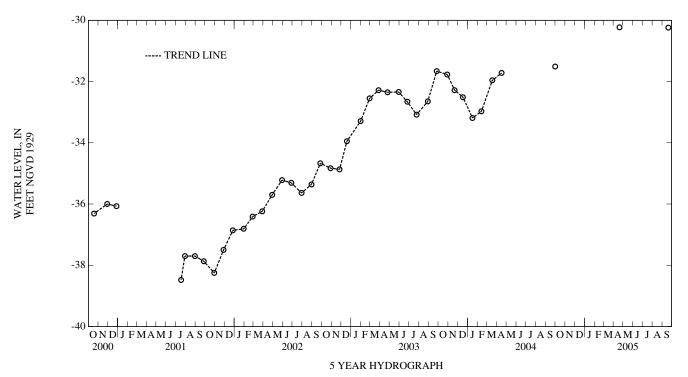
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- March and April 1952, August 1953 to April 2004.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.35 ft below sea level, April 18, 1952; lowest measured, 53.33 ft below sea level, August 12, 14, 1989 (recorder).

### WATER SURFACE ELEVATION IN FEET NGVD 1929

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 01, 2004	-31.51	APR 20, 2005	-30.23	SEP 20, 2005	-30.24
		ST -31.51 OCT 01, 2 ST -30.23 APR 20.7			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

### WELL NUMBER.--CH Cc 31. SITE ID.--383455077074401. PERMIT NUMBER.--CH-73-1416.

LOCATION.--Lat 38°34'55", long 77°07'44", Hydrologic Unit 02070011, at Mattawoman Natural Environment Area, approximately 2,000 ft west of the intersection of MD Rts. 224 and 425. Owner: Maryland Department of Natural Resources.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 559 ft; casing diameter 6 in., to 200 ft; casing diameter 4 in., from 200 to 438 ft., 453 to 480 ft, 505 to 540 ft, and 554 to 559 ft; screen diameter 4 in., from 438 to 453 ft, 480 to 505 ft, and 540 to 554 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with a digital water-level recorder from July 2001 to November 2004.

DATUM.--Elevation of land surface is 35.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 3.75 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

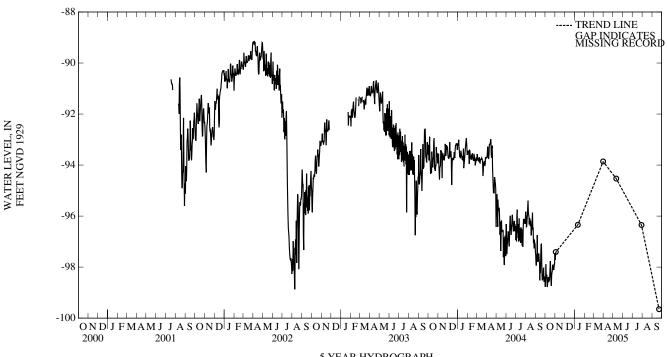
PERIOD OF RECORD .-- July 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 84.23 ft below sea level, July 14, 1998; lowest measured, 98.87 ft below sea level, August 9, 2002 (recorder).

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-97.41	MAR 31, 2005	-93.86	JUL 29, 2005	-96.35
JAN 11, 2005	-96.34	MAY 11	-94.53	SEP 22	-99.65

LOWEST -99.65 SEP 22, 2005 HIGHEST -93.86 MAR 31, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Cc 34. SITE ID.--383441077063901. PERMIT NUMBER.--CH-94-0897.

LOCATION.--Lat 38°34'41", long 77°06'39", Hydrologic Unit 02070011, at Mattawoman Water Treatment Plant. Owner: Maryland Geological Survey.

AQUIFER .-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 975 ft; casing diameter 4 in., to 874 ft, 884 to 945 ft, and 965 to 975 ft; screen diameter 4 in., from 874 to 884 ft, and 945 to 955 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 41.82 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 3.0 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal. A ground-water pumping test began on September 21, 1999, at a nearby production well with the deepest drawdown recorded as 24.16 ft below sea level on October 1, 1999.

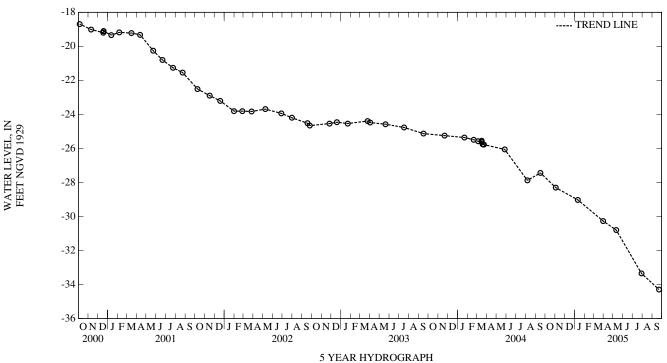
PERIOD OF RECORD .-- August 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.80 ft below sea level (recorder), October 8, 1996; lowest measured, 34.30 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-28.31	MAR 31, 2005	-30.27	JUL 29, 2005	-33.35
JAN 11, 2005	-29.03	MAY 11	-30.80	SEP 22	-34.30

LOWEST -34.30 SEP 22, 2005 HIGHEST -28.31 NOV 03, 2004



3 IEAR HIDROGRAPI

# WELL NUMBER.--CH Ce 56. SITE ID.--383251076583901. PERMIT NUMBER.--CH-94-1111

LOCATION.--Lat 38°32"51", long 76°58"39", Hydrologic Unit 02070011, Heritage Green, LaPlata. Owner: Town of La Plata.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,268 ft; casing diameter 6 in., to 475 ft; 4 in., from 475 to 896 ft, 906 to 945 ft, 950 to 957 ft, 962 to 993 ft, 1,008 to 1,024 ft, 1,029 to 1,037 ft, 1,042 to 1,094 ft, 1,134 to 1,166 ft, 1,186 to 1,204 ft, 1,214 to 1,248 ft and 1,258 to 1,268 ft; Screen diameter 4 in. from 896 to 906 ft, 945 to 950 ft, 957 to 962 ft, 993 to 1,008 ft, 1,024 to 1,029 ft, 1,037 to 1,042 ft, 1,094 to 1,134 ft, 1,166 to 1,186 ft, 1,204 to 1,214 ft and 1,248 to 1,258 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval, August 1997 to November 2004.

DATUM.--Elevation of land surface is 196.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform 2.85 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal

PERIOD OF RECORD .-- March 1997 to current year.

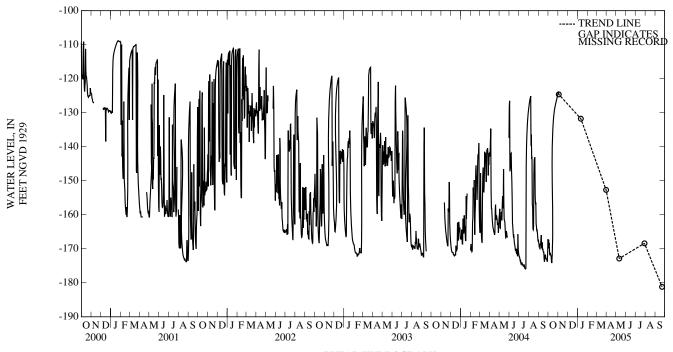
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.67 ft below sea level, July 15, 1997; lowest measured, 180.41 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 2004	-123.82	MAR 31, 2005	-151.93	JUL 29, 2005	-167.61
JAN 11, 2005	-130.98	MAY 11	-172.09	SEP 22	-180.41

LOWEST -180.41 SEP 22, 2005 HIGHEST -123.82 NOV 03, 2004

### Daily Low Water Levels



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Ce 57. SITE ID.--383250076584001. PERMIT NUMBER.--CH-94-1112

LOCATION .-- Lat 38°32'50", long 76°58'40", Hydrologic Unit 02070011, Heritage Green, LaPlata. Owner: Town of La Plata.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,703 ft; casing diameter 6 in., to 400 ft; 4 in., from 400 to 1,406 ft, 1,421 to 1,500 ft, 1,515 to 1,668 ft, and 1,698 to 1,703 ft. Screen diameter 4 in., from 1,406 to 1,421 ft, 1,500 to 1,515 ft, and 1,668 to 1,698 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, March 1997 to July 1998.

DATUM.--Elevation of land surface is 193.47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder platform, 5.0 ft above land surface.

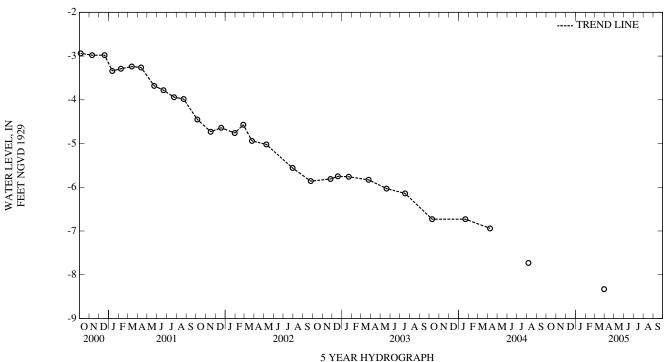
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD .-- March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.13 ft above sea level, May 1, 1997 (recorder); lowest measured, 8.33 ft below sea level, March 31, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE WATER LEVEL MAR 31, 2005 -8.33



WELL NUMBER.--CH Cg 24. SITE ID.--383254076481401. PERMIT NUMBER.--CH-94-4194.

LOCATION.--Lat 38°32'54", long 76°48'14", Hydrologic Unit 02070011, at Hughesville Pond. Owner: Maryland Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 835 ft; casing diameter 12 in., to 41 ft, casing diameter 4 in., from +3.7 to 795 ft, and 825 to 835 ft; screen diameter 4 in., from 795 to 825 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, April 2002 to August 2005.

DATUM.--Elevation of land surface is 171.04 ft above North American Vertical Datum of 1988. Measuring point: Top of 4 in. coupling, 3.75 ft above land surface.

REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--January 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.80 ft below sea level, April 3, 2002 (recorder); lowest measured, 52.11 ft below sea level, August 19, 2005 (recorder).

# WATER SURFACE ELEVATION IN FEET NAVD 1988

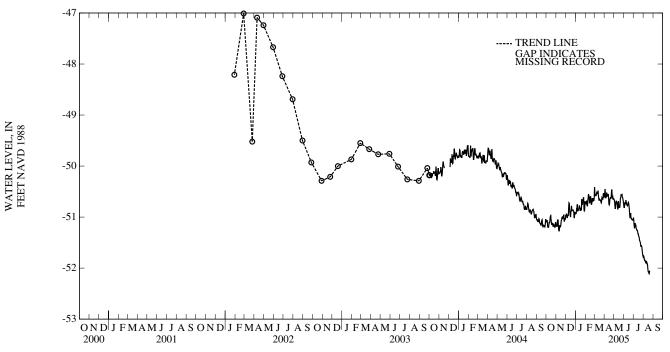
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	-51.07	JAN 20, 2005	-50.62	APR 20, 2005	-50.52	JUL 26, 2005	-51.53
NOV 23	-50.99	FEB 16	-50.50	MAY 17	-50.81	AUG 22	-52.06
DEC 15	-50.97	MAR 24	-50.59	JUN 22	-50.91	SEP 20	-52.77

LOWEST -52.77 SEP 20, 2005 HIGHEST -50.50 FEB 16, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	-51.07 -51.03 -51.05 -51.03 -51.05	-51.09 -51.08 -51.07 -51.07 -51.16	-51.12 -51.10 -51.10 -50.93 -50.93	-51.17 -51.18 -51.18 -51.18 -51.05	-50.78 -50.88 -50.88 -50.93 -50.93	-50.96 -50.98 -50.93 -50.96 -51.01	-50.86 -50.91 -50.81 -50.78 -50.75	-50.91 -50.94 -50.91 -50.83 -50.82	-50.71 -50.73 -50.66 -50.64 -50.68	-50.74 -50.74 -50.73 -50.68 -50.75	-50.40 -50.41 -50.52 -50.57 -50.54	-50.41 -50.52 -50.58 -50.58 -50.58
6 7 8 9 10	-51.16 -51.19 -51.16 -51.09 -51.08	-51.20 -51.20 -51.20 -51.16 -51.10	-51.01 -51.01 -51.02 -51.19 -51.24	-51.07 -51.05 -51.19 -51.26 -51.28	-50.94 -50.79 -50.80 -50.81 -50.63	-51.01 -50.95 -50.97 -50.97 -50.81	-50.65 -50.72 -50.73 -50.84 -50.75	-50.75 -50.88 -50.88 -50.87 -50.85	-50.74 -50.67 -50.59 -50.51 -50.48	-50.78 -50.78 -50.67 -50.63 -50.55	-50.51 -50.42 -50.30 -50.52 -50.50	-50.58 -50.54 -50.52 -50.54 -50.54
11 12 13 14 15	-51.09 -51.02 -50.98 -50.94 -50.90	-51.12 -51.09 -51.02 -50.98 -50.97	-51.14 -51.01 -51.02 -51.17 -51.11	-51.25 -51.16 -51.18 -51.19 -51.18	-50.63 -50.72 -50.68 -50.82 -50.93	-50.72 -50.73 -50.82 -50.93 -50.97	-50.76 -50.76 -50.68 -50.62 -50.81	-50.83 -50.78 -50.78 -50.81 -50.87	-50.55 -50.54 -50.60 -50.56 -50.56	-50.57 -50.60 -50.72 -50.72 -50.64	-50.41 -50.41 -50.48 -50.56 -50.63	-50.51 -50.48 -50.56 -50.63 -50.67
16 17 18 19 20	-50.96 -51.05 -51.10 -51.09 -51.09	-51.05 -51.10 -51.15 -51.12 -51.12	-51.05 -51.05 -51.00 -51.00 -50.98	-51.12 -51.07 -51.05 -51.01 -51.00	-50.89 -50.88 -50.78 -50.69 -50.73	-51.00 -50.89 -50.89 -50.78 -50.87	-50.72 -50.72 -50.82 -50.65 -50.61	-50.87 -50.82 -50.87 -50.85 -50.65	-50.48 -50.56 -50.60 -50.71 -50.70	-50.60 -50.60 -50.71 -50.75 -50.75	-50.65 -50.63 -50.63 -50.66 -50.63	-50.67 -50.65 -50.66 -50.67 -50.67
21 22 23 24 25	-51.11 -51.14 -51.13 -51.09 -51.11	-51.14 -51.18 -51.18 -51.13 -51.15	-50.99 -50.98 -50.97 -50.81 -50.73	-51.03 -51.03 -51.00 -51.00 -50.95	-50.82 -50.85 -50.65 -50.81 -50.85	-50.87 -50.86 -50.86 -50.89	-50.63 -50.47 -50.50 -50.59 -50.56	-50.75 -50.75 -50.70 -50.70 -50.62	-50.56 -50.56 -50.63 -50.57 -50.58	-50.70 -50.63 -50.69 -50.69 -50.63	-50.64 -50.70 -50.44 -50.49 -50.60	-50.70 -50.72 -50.70 -50.62 -50.63
26 27 28 29 30 31	-51.15 -51.16 -51.19 -51.10 -51.03 -51.04	-51.18 -51.19 -51.20 -51.19 -51.10 -51.12	-50.95 -50.94 -50.84 -51.02 -50.96	-51.08 -51.08 -51.02 -51.04 -51.04	-50.79 -50.83 -50.90 -50.84 -50.88	-50.89 -51.01 -51.01 -50.90 -50.92 -50.93	-50.49 -50.62 -50.85 -50.69 -50.60	-50.62 -50.85 -50.88 -50.87 -50.69 -50.71	-50.63 -50.63 -50.41 	-50.66 -50.68 -50.63 	-50.61 -50.57 -50.28 -50.30 -50.53 -50.59	-50.65 -50.65 -50.57 -50.53 -50.59 -50.61
MONTH	-50.90	-51.20	-50.73	-51.28	-50.63	-51.01	-50.47	-50.94	-50.41	-50.78	-50.28	-50.72

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	ΛY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	-50.51 -50.26 -50.27 -50.45 -50.56	-50.60 -50.51 -50.45 -50.56 -50.63	-50.56 -50.62 -50.66 -50.72 -50.80	-50.65 -50.67 -50.72 -50.80 -50.84	-50.74 -50.78 -50.68 -50.68 -50.70	-50.80 -50.82 -50.78 -50.71 -50.74	-50.99 -51.00 -51.08 -51.17 -51.10	-51.01 -51.08 -51.17 -51.22 -51.19	-51.75 -51.74 -51.74 -51.79 -51.82	-51.79 -51.77 -51.79 -51.83 -51.86	  	  
7 8 9 10	-50.48 -50.44 -50.52 -50.54	-50.57 -50.52 -50.58 -50.57	-50.63 -50.63 -50.68 -50.70	-50.70 -50.68 -50.71 -50.73	-50.62 -50.66 -50.69 -50.74	-50.67 -50.69 -50.74 -50.76	-51.12 -51.07 -51.13 -51.20	-51.19 -51.15 -51.20 -51.24	-51.84 -51.87 -51.86 -51.86	-51.87 -51.89 -51.90 -51.86	  	  
11 12 13 14 15	-50.54 -50.54 -50.52 -50.55 -50.63	-50.58 -50.59 -50.55 -50.63 -50.74	-50.71 -50.71 -50.81 -50.68 -50.66	-50.72 -50.81 -50.85 -50.81 -50.69	-50.75 -50.76 -50.71 -50.71 -50.70	-50.77 -50.78 -50.76 -50.72 -50.71	-51.24 -51.25 -51.26 -51.26 -51.29	-51.25 -51.26 -51.26 -51.29 -51.33	-51.86 -51.88 -51.90 -51.91 -51.94	-51.88 -51.90 -51.91 -51.94 -52.03	  	  
16 17 18 19 20	-50.74 -50.65 -50.62 -50.60 -50.54	-50.76 -50.74 -50.65 -50.64 -50.61	-50.68 -50.76 -50.78 -50.75 -50.55	-50.76 -50.81 -50.81 -50.81 -50.75	-50.69 -50.73 -50.79 -50.85 -50.95	-50.73 -50.79 -50.85 -50.95 -51.02	-51.31 -51.33 -51.35 -51.37 -51.40	-51.33 -51.37 -51.38 -51.41 -51.46	-52.03 -52.03 -52.06 -52.04 -52.04	-52.07 -52.07 -52.10 -52.11 -52.07	  	  
21 22 23 24 25	-50.54 -50.51 -50.38 -50.41 -50.46	-50.63 -50.63 -50.51 -50.46 -50.56	-50.60 -50.55 -50.53 -50.51 -50.54	-50.63 -50.62 -50.56 -50.56 -50.57	-50.90 -50.90 -50.92 -51.00 -51.02	-50.97 -50.92 -51.01 -51.03 -51.03	-51.45 -51.45 -51.48 -51.53 -51.53	-51.47 -51.49 -51.53 -51.58 -51.56	-52.04   	-52.05   	  	  
26 27 28 29 30 31	-50.56 -50.54 -50.60 -50.64 -50.55	-50.61 -50.60 -50.65 -50.65 -50.64	-50.53 -50.56 -50.61 -50.62 -50.65 -50.68	-50.56 -50.61 -50.62 -50.65 -50.69 -50.74	-51.03 -51.05 -51.05 -51.02 -51.01	-51.05 -51.05 -51.06 -51.06 -51.04	-51.53 -51.55 -51.58 -51.66 -51.70 -51.74	-51.56 -51.58 -51.66 -51.70 -51.74 -51.78	   	   	   	   
MONTH YEAR	-50.26 -50.26	-50.76 -52.11	-50.51	-50.85	-50.62	-51.06	-50.99	-51.78	-51.74	-52.11		

# Daily Low Water Levels



5 YEAR HYDROGRAPH

# WELL NUMBER.--CH Da 18. SITE ID.--382654077152501. PERMIT NUMBER.--CH-73-0586

LOCATION.--Lat 38°26′54", long 77°15′25", Hydrologic Unit 02070011, near Douglas Point, 0.6 mi. southwest of Rt. 224. Owner: U.S. Bureau of Land Management.

AQUIFER.--Upper Patuxent aquifer in the Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled observation, artesian well, depth 740 ft; casing diameter 8 in., to 684 ft; and 694 to 730 ft; screen diameter 8 in., from 684 to 694 ft, and 730 to 740 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from April 1996 to June 1998.

DATUM.--Elevation of land surface is 89.90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 3.10 ft above land surface.

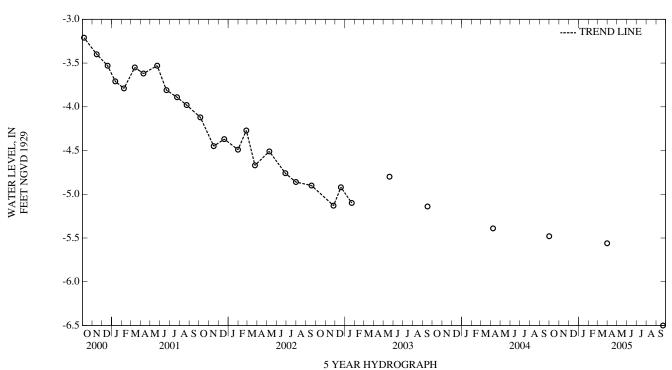
REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--September 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.79 ft above sea level, September 21, 1976; lowest measured, 6.50 ft below sea level, September 22, 2005.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	-5.48	MAR 31, 2005	-5.56	SEP 22, 2005	-6.50
		-6.50 SEP 22, 20 -5.48 OCT 01, 2			



WELL NUMBER.--CH Da 20. SITE ID.--382654077152701. PERMIT NUMBER.--CH-73-0590.

LOCATION.--Lat 38°26'54", long 77°15'27", Hydrologic Unit 02070011, near Douglas Point, 0.6 mi. southwest of Rt. 224. Owner: U.S. Bureau of Land Management.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 522 ft; casing diameter 6 in., to 420 ft; 425 to 444 ft; 449 to 481 ft, and 486 to 517 ft; screen diameter 6 in., from 420 to 425 ft, 444 to 449 ft, 481 to 486 ft, and 517 to 522 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Charles County Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

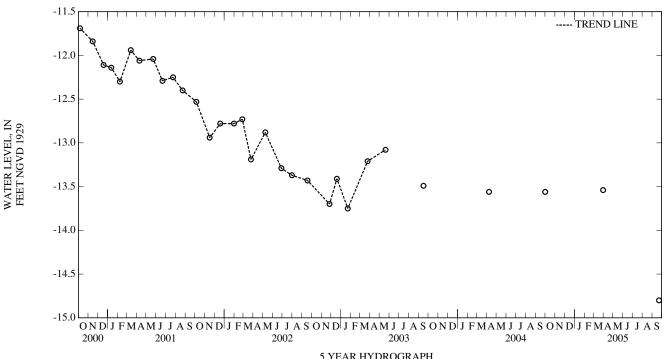
PERIOD OF RECORD.--September 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.86 ft below sea level, March 22, 1979 and March 25, 1980; lowest measured, 14.80 ft below sea level, September 22, 2005.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	-13.56	MAR 31, 2005	-13.54	SEP 22, 2005	-14.80

LOWEST -14.80 SEP 22, 2005 HIGHEST -13.54 MAR 31, 2005



5 YEAR HYDROGRAPH

Charles County—Continued

WELL NUMBER.--CH Da 21. SITE ID.--382659077152401.--PERMIT NUMBER.--CH-73-0592

LOCATION.--Lat 38 26'59", long 77°15'24", Hydrologic Unit 02070011. Near Douglas Point, 0.6 mi. southwest of route 224. Owner: U.S. Bureau of Land Management.

AQUIFER.--Upper Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, artesian well, depth 381 ft; casing diameter 6 in., to 366 ft; casing diameter 6 in., from 366 to 381 ft; screen diameter 6 in. from 366 to 381 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 88 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: 6 in. casing, 2.0 ft above land surface.

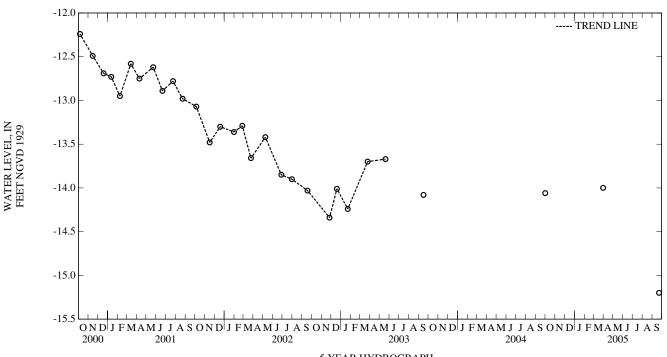
REMARKS.--Charles County Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- April 24, 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.19 ft below sea level, March 25, 1980; lowest measured, 15.20 ft below sea level, September 22, 2005.

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	-14.06	MAR 31, 2005	-14.00	SEP 22, 2005	-15.20
		ST -15.20 SEP 22, 20 ST -14.00 MAR 31,			



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Dd 33. SITE ID.--382607077002601. PERMIT NUMBER.--CH-02-6769.

LOCATION.--Lat 38°25'09", long 77°00'00", Hydrologic Unit 02070011, 1.8 mi southwest of Faulkner off Popes Creek Rd. Owner: Jesuit Order (Loyola Retreat House).

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, institution, artesian well, depth 694 ft; casing diameter 6 in., to 564 ft; casing diameter 4 in., from 532 to 688 ft; screen diameter 4 in., from 687 to 694 ft.

INSTRUMENTATION .-- Periodic water-level measurements with steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 99.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation and production well. Water level reported 104 ft below land surface, June 27, 1957. Water levels are affected by local and regional ground-water withdrawal. The May 30, 2001, water level of 134.17 ft below land surface resulted from an extended period of ground-water withdrawal from this well.

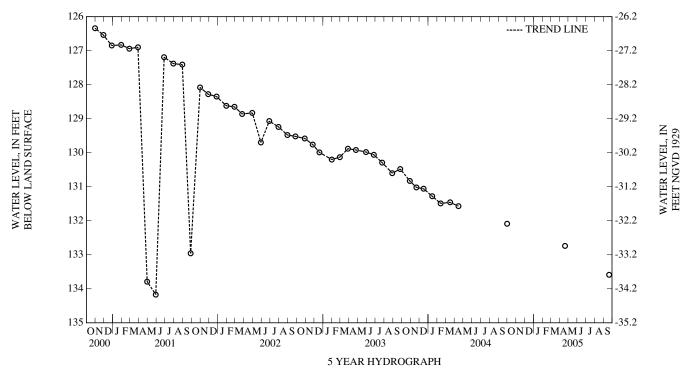
PERIOD OF RECORD .-- March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.28 ft below land surface, March 14, 1962; lowest measured, 133.59 ft below land surface, September 20, 2005 (See REMARKS).

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	132.09	APR 20, 2005	132.74	SEP 20, 2005	133.59
	HIGHE	EST 132.09 OCT 01.	2004		

HIGHEST 132.09 OCT 01, 2004 LOWEST 133.59 SEP 20, 2005



FEET NGVD 1929

# CHARLES COUNTY—Continued

WELL NUMBER.--CH De 45. SITE ID.--382927076552301. PERMIT NUMBER.--CH-81-0604.

LOCATION.--Lat 38°29'27", long 76°55'23", Hydrologic Unit 02070011, north side of MD Rt. 6, 4.1 mi southeast of La Plata. Owner: U.S. Geological Survey.

AQUIFER .-- Alluvium of Pleistocene age and Nanjemoy Formation of Lower Eocene age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well; depth 25.5 ft; casing diameter 4 in., to 15.5 ft, casing diameter 2 in., from 20.5 to 25.5 ft; screen diameter 2 in., from 15.5 to 20.5 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 44.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

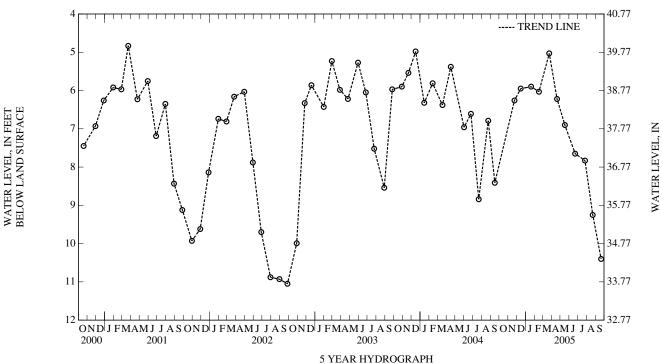
PERIOD OF RECORD .-- August 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.83 ft below land surface, May 30, 1990 and March 23, 2001; lowest measured, 11.65 ft below land surface, December 9, 1998.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23, 2004 DEC 15 JAN 20, 2005	6.26 5.95 5.90	FEB 16, 2005 MAR 24 APR 20	6.03 5.03 6.22	MAY 17, 2005 JUN 22 JUL 26	6.90 7.65 7.83	AUG 22, 2005 SEP 20	9.25 10.40

HIGHEST 5.03 MAR 24, 2005 LOWEST 10.40 SEP 20, 2005



WELL NUMBER.--CH Ee 70. SITE ID.--382154076574801. PERMIT NUMBER.--CH-67-0081.

LOCATION.--Lat 38°21'54", long 76°57'48", Hydrologic Unit 02070011, at the Morgantown Power Plant, 1.5 mi. north of Morgantown. Owner: Mirant.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,132 ft; casing diameter 2 in., to 1,090 ft, 1,100 to 1,105 ft, and 1,115 to 1,132 ft; screen diameter 2 in., from 1,090 to 1,100 ft, and 1,105 to 1,115 ft.

INSTRUMENTATION.—Periodic water-level measurements with electric tape by U.S. Geological Survey. Equipped with graphic water-level recorder from May 1982 to January 1983. Equipped with digital water-level recorder—15 and 30-minute recorder intervals from June 1978 to October 1986. Equipped with electronic water level recorder (transducer)—15-minute recorder interval from October 1986 to October 1992, and from May 1995 to current year.

DATUM.--Elevation of land surface is 22.83 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.43 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.64 ft below sea level, January 6, 1985; lowest measured, 130.24 ft below sea level, January 17, 1990.

### WATER SURFACE ELEVATION IN FEET NGVD 1929

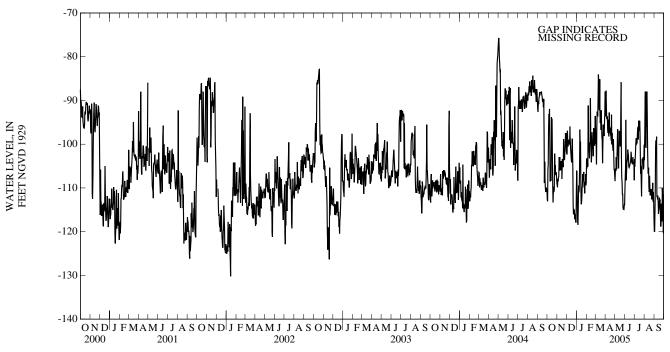
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-93.68	JAN 25, 2005	-101.15	APR 14, 2005	-93.87	JUL 06, 2005	-88.97
DEC 08	-88.89	MAR 04	-99.08	MAY 26	-112.96	AUG 18	-104.62

LOWEST -112.96 MAY 26, 2005 HIGHEST -88.89 DEC 08, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1 2 3 4 5	-96.54 -98.14 -95.74 -96.44 -90.84	-112.64 -113.04 -105.54 -104.74 -96.44	-92.74 -96.04 -94.34 -94.94 -93.94	-109.34 -109.84 -107.94 -108.44 -107.64	-88.74 -87.04 -85.34 -85.64 -87.24	-102.24 -102.24 -96.94 -99.44 -100.54		-106.04 -109.44 -113.64 -117.44 -118.44	-88.04 -87.64	-103.24 -105.54 -103.44 -104.64 -105.14	-82.54 -86.34 -85.04 -89.94 -83.54	-96.54 -99.84 -99.94 -104.64 -96.04
6 7 8 9 10	-89.44 -90.14 -89.44 -88.44 -87.54	-93.14 -93.64 -91.94 -100.24 -108.54	-91.84 -89.94 -87.74 -89.14 -90.84	-107.44 -102.94 -103.84 -102.94 -106.04	-86.34 -88.44 -87.34 -85.24 -88.24	-99.14 -99.84 -98.94 -99.94 -99.84	-99.64 -97.04 -101.14 -98.04 -94.44	-114.34 -109.44 -111.04 -110.14 -105.84	-87.34 -84.54 -88.04 -88.04 -90.44	-91.14 -99.84 -99.64 -101.84 -103.24	-80.44 -79.74 -83.04 -78.74	-92.54 -93.44 -93.64 -89.44 -84.04
11 12 13 14 15	-90.14 -90.84 -93.64 -90.84 -92.24	-105.44 -107.64 -108.34 -93.84 -94.34	-92.54 -94.14 -90.84 -88.74 -89.44	-103.94 -105.74 -105.74 -103.84 -104.34	-85.44 -84.54 -90.44 -89.74 -89.44	-95.94 -99.24 -101.34 -102.04 -103.24	-93.54 -92.04 -89.54 -89.44 -98.74	-96.64 -100.34 -99.44 -108.74 -113.64	-86.44 -88.34 -84.54 -83.74 -86.64	-100.64 -99.44 -89.44 -97.74 -99.24	-75.94 -78.74 -75.94 -78.04 -76.84	-85.84 -89.94 -92.24 -85.14 -93.24
16 17 18 19 20	-91.44 -90.34 -90.84 -93.94 -97.94	-94.34 -102.64 -109.24 -113.34 -110.94	-94.64 -92.94 -90.14 -93.24 -91.84	-107.94 -103.44 -103.64 -104.14 -105.24	-90.14 -88.24 -85.94 -85.94 -91.44	-104.14 -102.04 -98.74 -101.54 -105.54	-99.94 -96.54 -95.14 -99.14 -91.64	-113.64 -112.44 -110.14 -109.14 -106.84	-84.94 -90.24 -87.34 -84.94 -88.74	-104.14 -102.34 -97.24 -99.14 -100.64	-83.24 -84.24 -84.24 -81.14 -81.84	-95.14 -94.14 -96.74 -92.24 -96.04
21 22 23 24 25	-96.44 -96.74 -97.94 -89.84 -91.74	-109.74 -110.94 -110.24 -102.14 -106.14	-89.14 -87.04 -93.24 -91.84 -89.84	-98.84 -100.34 -103.14 -103.64 -101.94		-113.94 -116.04 -115.24 -115.04 -115.24	-90.14 -94.74 -92.84 -90.14 -89.74	-108.24 -108.44 -106.34 -109.84 -108.64	-84.04 -88.34 -86.44 -84.54 -82.34	-101.14 -102.74 -96.34 -97.74 -96.64	-85.84 -83.74 -89.14 -83.54 -81.14	-98.44 -99.14 -104.34 -100.14 -95.54
26 27 28 29 30 31	-91.24 -91.04 -91.54 -89.84 -92.54 -94.64	-104.74 -106.94 -106.94 -106.44 -107.44 -108.84	-89.64 -86.64 -85.34 -84.04 -86.54	-100.84 -97.44 -100.14 -97.44 -101.74	-102.24 -99.84 -106.84	-117.14 -116.04 -116.74 -117.74 -117.94 -110.84	-96.64 -90.84 -90.44 -93.74 -95.44 -90.84	-111.24 -108.74 -109.44 -106.84 -109.44 -108.74	-85.94 -84.54 -82.54 	-100.34 -97.74 -93.54 	-77.34 -78.34 -79.44 -76.44 -77.64 -76.64	-96.54 -96.74 -98.14 -95.14 -92.94 -87.94
MONTH	-87.54	-113.34	-84.04	-109.84	-84.54	-117.94	-89.44	-118.44	-82.34	-105.54	-75.94	-104.64

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	AY	JU	NE	JU	LY	AUG	JUST	SEPTE	MBER
1	-74.74	-93.64		-108.44	-97.24	-110.34	-91.84	-103.44	-85.44	-103.64		-119.94
$\frac{2}{3}$	-75.94 -74.94	-91.54 -87.74	-89.14 -92.04	-106.24 -105.74	-94.84 -92.74	-107.64 -105.14	-92.04 -89.64	-105.14 -103.44	-90.84 -87.04	-98.14 -91.14	-106.44 -98.44	-119.94 -115.54
4	-74.74	-91.54	-90.34	-105.84	-92.74	-94.44	-87.74	-102.04	-84.94	-87.94	-99.64	-110.04
5	-74.54	-94.14	-87.04	-102.94	-89.44	-108.24	-87.04	-99.84	-85.44	-100.14	-98.44	-100.54
6	-78.54	-94.14	-89.14	-105.74	-93.74	-106.54	-86.84	-98.64	-87.24	-100.84	-96.74	-99.14
7	-78.34	-93.64	-90.14	-103.44	-92.34	-104.34	-84.24	-99.44	-84.24	-88.04	-96.04	-101.24
8	-77.34	-96.74	-84.64	-100.34	-89.64	-103.84	-88.74	-99.84	-84.04	-96.04	-93.64	-98.24
9	-78.74	-97.44	-81.64	-96.54	-88.94	-103.44	-83.94	-99.64	-83.94	-87.94	-97.44	-111.94
10	-79.74	-94.34	-82.14	-102.64	-89.64	-101.24	-82.14	-97.74	-86.34	-94.14	-101.04	-111.94
11	-79.04	-97.44	-85.84	-100.34	-88.44	-102.04	-83.24	-96.24	-89.14	-101.54	-99.84	-112.64
12	-81.14	-98.24	-87.24	-105.54	-87.74	-102.54	-82.54	-96.04	-92.54	-105.34	-99.64	-111.74
13	-80.84	-92.74	-85.44	-100.84	-86.34	-105.14	-84.94	-98.94	-92.54	-106.74	-101.54	-113.14
14	-78.34	-97.44	-81.84	-96.94	-88.54	-105.34	-80.84	-94.64	-90.14		-106.04	-115.94
15	-81.54	-96.24	-80.94	-97.94	-86.34	-105.14	-87.04	-96.74	-97.04	-109.74	-104.34	-115.04
16	-79.74	-96.34	-81.34	-100.04	-88.74	-104.84	-83.54	-96.94	-96.34	-110.94	-102.44	-114.74
17	-79.04	-97.74	-83.94	-100.14	-89.64	-104.44	-81.84	-94.64	-93.24		-102.64	-112.24
18	-81.34	-98.14	-83.94	-100.54	-88.94	-104.34	-83.94	-96.54	-98.14	-109.54	-101.34	-113.64
19	-78.94	-99.14	-81.64	-93.74	-86.84	-103.64	-86.34	-101.24		-111.74	-100.84	-112.64
20	-81.34	-93.24	-75.64	-85.84	-90.34	-101.74	-94.14	-106.74	-100.74	-111.04	-104.64	-115.94
21	-79.44	-100.04	-75.64	-102.64	-89.64	-102.44		-105.04		-110.94	-108.84	-118.84
22	-82.14	-97.44	-100.74	-107.74	-89.74	-103.94	-101.74	-108.44	-99.84	-110.24	-106.44	-118.54
23	-80.84	-99.34	-92.54	-108.44	-89.64	-104.34	-100.14	-111.94	-93.64	-110.94	-104.54	-113.64
24	-86.64	-100.84	-108.44	-111.44	-90.64	-104.34	-91.84	-106.54	-100.84		-103.64	
25	-79.94	-101.54	-97.44	-111.44	-88.74	-104.44	-89.44	-103.34	-98.64	-111.64	-100.54	-117.64
26	-80.84	-98.84	-111.24	-114.54	-89.24	-102.94	-93.94	-103.94	-98.24	-110.54	-98.84	-110.04
27	-81.64	-102.64	-99.34	-114.84	-88.94	-104.34	-88.44	-103.94	-98.14	-108.84	-98.84	-111.24
28	-87.94	-105.74	-111.74	-114.74	-89.64	-104.14	-88.74	-102.94	-98.84	-113.14	-98.14	-111.94
29	-85.34	-105.74	-100.84	-114.84	-88.24	-104.14	-92.94	-105.74	-97.74	-110.94	-98.84	-120.24
30	-88.04	-107.14	-99.64	-113.84	-89.44	-108.24		-105.24	-100.14		-105.74	-120.24
31			-101.54	-113.84			-84.74	-100.14	-104.64	-117.44		
MONTH	-74.54	-107.14	-75.64	-114.84	-86.34	-110.34	-80.84	-111.94	-83.94	-117.44	-93.64	-120.24
YEAR	-74.54	-120.24										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

WELL NUMBER.--CH Ee 78. SITE ID.--382240076582801. PERMIT NUMBER.--CH-73-1965.

LOCATION.--Lat 38°22'40", long 76°58'28", Hydrologic Unit 02070011, at Clifton on the Potomac, on the east side of Ingleside Road, 0.3 mi north of Clifton Drive. Owner: Charles County Department of Public Works.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, used, artesian well, depth 1,220 ft; casing diameter 7 in., to 1,148 ft, and 1,168 to 1,189 ft, and 1,199 to 1,220 ft; screen diameter 7 in., from 1,148 to 1,168 ft, and 1,189 to 1,199 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey or Maryland Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from August 1993 to July 2004.

DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder platform, 2.60 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

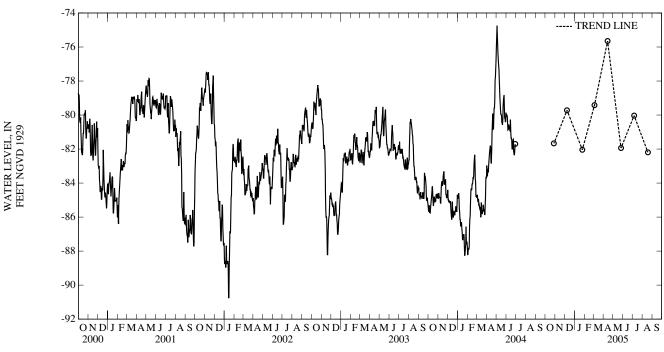
PERIOD OF RECORD .-- April 8, 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.87 ft below sea level, April 3, 1986; lowest measured, 90.74 ft below sea level, January 14 and 15, 2002 (recorder).

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-81.67	JAN 25, 2005	-82.04	APR 14, 2005	-75.65	JUL 06, 2005	-80.03
DEC 08	-79.72	MAR 04	-79.42	MAY 26	-81.94	AUG 18	-82.19

LOWEST -82.19 AUG 18, 2005 HIGHEST -75.65 APR 14, 2005



5 YEAR HYDROGRAPH

# DORCHESTER COUNTY

WELL NUMBER.--DO Bg 59. SITE ID.--383708075503801. PERMIT NUMBER.--DO-73-0612.

LOCATION.--Lat 38°37'08" long 75°50'38", Hydrologic Unit 02060008, at Hurlock Sewage Treatment Plant. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 537 ft; casing diameter 6 in., to 65 ft; casing diameter 2 in., from 65 to 527 ft; screen diameter 2 in., from 527 to 537 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Prior to the November 20, 2000 water-level measurement, the Hurlock Water Municipality increased their ground-water withdrawal for a 3 month period. Water levels are affected by local and regional ground-water withdrawal.

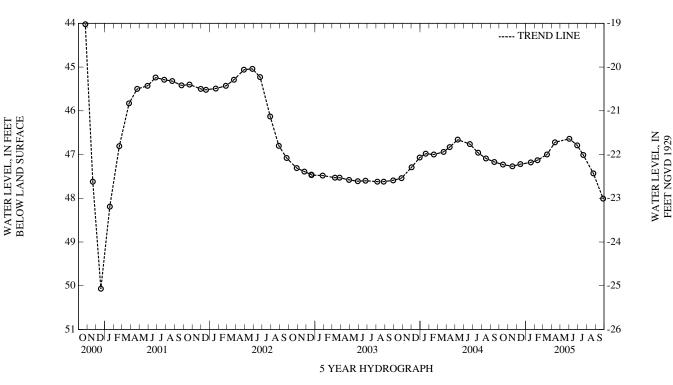
PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.79 ft below land surface, August 2, 1978; lowest measured, 47.62 ft below land surface, August 5, and 27, 2003 (See REMARKS).

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	47.23	JAN 19, 2005	47.18	APR 13, 2005	46.72	JUL 20, 2005	47.01
NOV 16	47.27	FEB 11	47.13	JUN 02	46.64	AUG 24	47.43
DEC 14	47.22	MAR 16	47.00	29	46.79	SEP 27	48.01

HIGHEST 46.64 JUN 02, 2005 LOWEST 47.27 NOV 16, 2004



### DORCHESTER COUNTY—Continued

WELL LOCATION.--DO Ce 15. SITE ID.--383408076042402. PERMIT NUMBER.--DO-00-1220.

LOCATION.--Lat 38°34′08", long 76°04′23", Hydrologic Unit 02060005, near Cambridge Creek, near Trenton St., Cambridge. Owner: Carroll W. Thomas & Sons., Inc.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 970.5 ft; casing diameter 10 in., to 25 ft.; casing diameter 8 in., from +1.5 to 236.5 ft; casing diameter 6 in., from 230 to 513.5 ft; casing diameter 4 in., from 468 to 911.5 ft; casing diameter 3 in., from 902.3 to 950.5 ft; screen diameter 3 in., from 950.5 to 970.5 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey.

DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water level reported 68 ft below land surface Aug. 30, 1947. The drop in water level in June 2001 is the result of increased ground-water withdrawal by Municipal Utilities. Water levels are affected by local ground-water withdrawal

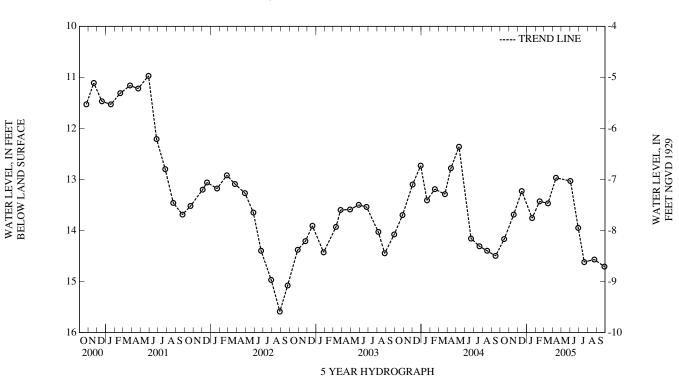
PERIOD OF RECORD .-- June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.41 ft below land surface, March 1, 1960; lowest measured, 41.12 ft below land surface, August 7, 1959 (see remarks).

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	14.17	JAN 20, 2005	13.76	APR 13, 2005	12.97	JUL 20, 2005	14.62
NOV 17	13.69	FEB 15	13.43	JUN 02	13.03	AUG 24	14.57
DEC 15	13.23	MAR 16	13.47	29	13.95	SEP 28	14.71

HIGHEST 12.97 APR 13, 2005 LOWEST 14.17 OCT 15, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Ce 85. SITE ID.--383256076035301. PERMIT NUMBER.--DO-73-0281.

LOCATION.--Lat 38°32'56", long 76°03'53", Hydrologic Unit 02060005, at Woods Rd. water tower, Cambridge. Owner: U.S. Geological Survey.

AQUIFER.--Cheswold aquifer in the Calvert Formation of lower middle Miocene age. Aquifer code: 122CSLD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 230 ft; casing diameter 4 in., to 220 ft; screen diameter 4 in., from 220 to 230 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Reported incorrectly as DO Ce 78 in this series of reports, prior to the 1997 Water Year, Water Resources Data report. Water levels are affected by local ground-water withdrawal.

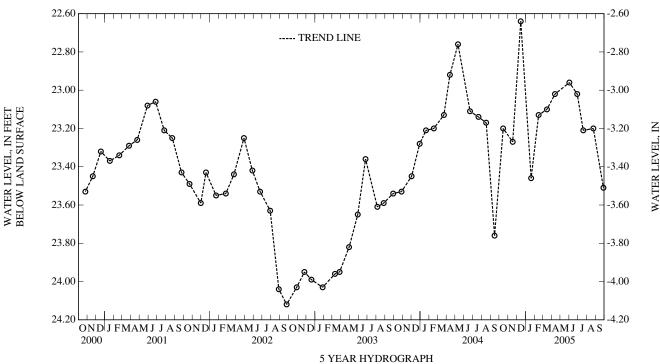
PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.74 ft below land surface, June 3, 1993; lowest measured, 26.76 ft below land surface, September 10, 1974.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	23.20	JAN 20, 2005	23.46	APR 13, 2005	23.02	JUL 20, 2005	23.21
NOV 17	23.27	FEB 15	23.13	JUN 02	22.96	AUG 24	23.20
DEC 15	22.64	MAR 16	23.10	29	23.02	SEP 28	23.51

HIGHEST 22.64 DEC 15, 2004 LOWEST 23.46 JAN 20, 2005



FEET NGVD 1929

FEET NGVD 1929

# DORCHESTER COUNTY—Continued

WELL NUMBER.--DO Db 17. SITE ID.--382800076180701. PERMIT NUMBER.--DO-73-0557.

LOCATION.--Lat 38°28'00", long 76°18'07", Hydrologic Unit 02060005, off MD Rt. 16, near Old Taylors Island School, Taylor Island. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 6 in., to 55 ft; casing diameter 2 in., from 55 to 270 ft; screen diameter 2 in., from 270 to 280 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.65 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

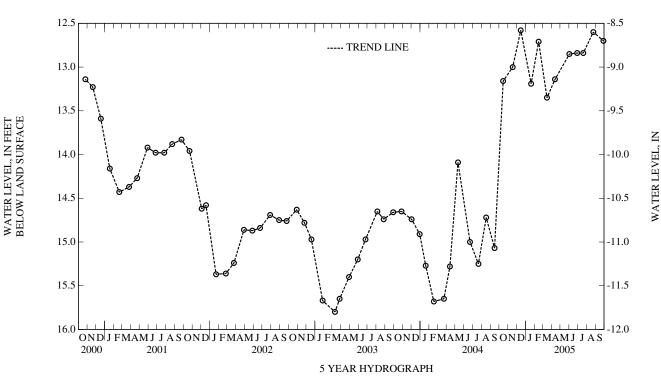
PERIOD OF RECORD .-- April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.77 ft below land surface, October 4, 1979; lowest measured, 15.80 ft below land surface, March 11, 2003.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004 NOV 17 DEC 15	13.16 13.00 12.58	JAN 20, 2005 FEB 15 MAR 16	13.19 12.71 13.35	APR 13, 2005 JUN 02 29	13.14 12.85 12.84	JUL 20, 2005 AUG 24 SEP 28	12.84 12.60 12.70
	HIGHE	ST 12.58 DEC 15.7	2004				

LOWEST 13.35 MAR 16, 2005



WATER LEVEL, IN FEET BELOW LAND SURFACE

# DORCHESTER COUNTY—Continued

WELL NUMBER.--DO Db 19. SITE ID.--382847076190901. PERMIT NUMBER.--DO-81-1164.

LOCATION.--Lat 38°28'47", long 76°19'09", Hydrologic Unit 02060005, Taylors Island, off Bay Shore Road. Owner: Private Residence.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, depth 540 ft; casing diameter 4 in., to 140 ft; casing diameter 2 in., from 140 to 520 ft; screen diameter 2 in., from 520 to 540 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey.

DATUM.--Elevation of land surface is 1.5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

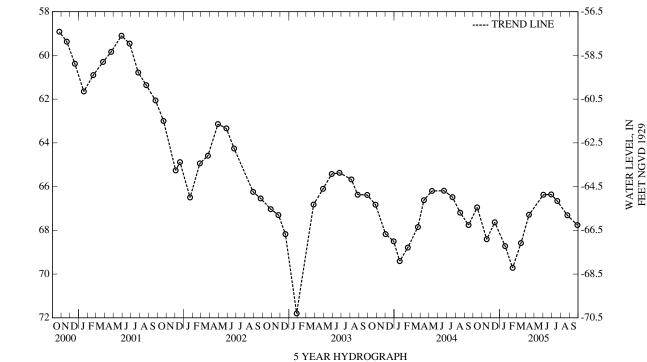
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water-levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD .-- November 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.50 ft below land surface, August 2, 1989; lowest measured, 71.80 ft below land surface, January 27, 2003.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	66.95	JAN 20, 2005	68.72	APR 13, 2005	67.29	JUL 20, 2005	66.66
NOV 17	68.41	FEB 15	69.72	JUN 02	66.37	AUG 24	67.31
DEC 15	67.63	MAR 16	68.58	29	66.36	SEP 28	67.76

HIGHEST 66.36 JUN 29, 2005 LOWEST 69.72 FEB 15, 2005



### DORCHESTER COUNTY—Continued

WELL NUMBER.--DO Dh 27. SITE ID.--382916075491702. PERMIT NUMBER.--DO-71-0001.

LOCATION.--Lat 38°29'16", long 75°49'17", Hydrologic Unit 02060008, Vienna power plant. Owner: Vienna Power LLC.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 63 ft; casing diameter 12 in., to 20 ft; casing diameter 8 in., to 33 ft; screen diameter 6 in., from 33 to 63 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from May 1990 to June 2004.

DATUM.--Elevation of land surface is 9.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.69 ft above land surface.

REMARKS.-- Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal at the Vienna power plant. The April 1, 1997 low water level is due to an extended period of pumping to fill the storage tank, which was drained for maintenance. Missing data due to recorder malfunction.

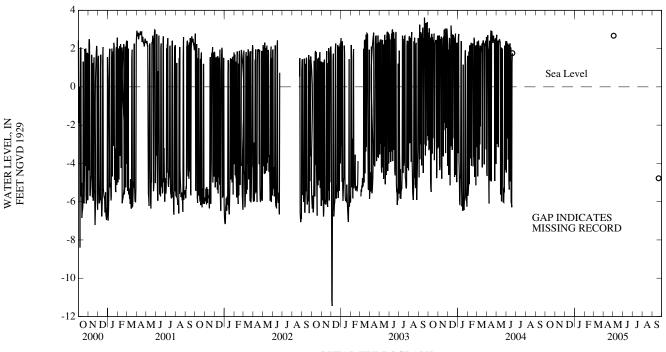
PERIOD OF RECORD .-- April 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 4.94 ft above sea level, September 19, 2003 (recorder) (See REMARKS); lowest measured, 11.45 ft below sea level, December 4, 2002 (recorder).

# WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 03, 2005	2.67	SEP 21, 2005	-4.78
		-4.78 SEP 21, 20 2.67 MAY 03,	

Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# GROUND-WATER LEVELS IN MARYLAND--Continued

### FREDERICK COUNTY

WELL NUMBER.--FR Bd 96. SITE ID.--393733077274801.

LOCATION.--Lat 39°37'33", long 77°27'48", Hydrologic Unit 02070009, 0.4 mi west of Hunting Creek Lake, Cunningham Falls State Park. Owner: State of Maryland.

AQUIFER.--Catoctin Metabasalt of Precambrian age. Aquifer code: 400CTCN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 189 ft; casing diameter 6 in., to 22 ft; open hole.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder April 1982 to February 1984. Equipped with a digital water-level recorder--15-minute recorder interval from June 1991 to May 1993 and August 2003 to current year.

DATUM--Elevation of land surface is 1,150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface previous to July 2003, when the casing was extended for an instrumentation shelter. Current measuring point is 3.00 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- April 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.05 ft below land surface, March 28, 2005; lowest measured, 47.21 ft below land surface, December 16, 1998.

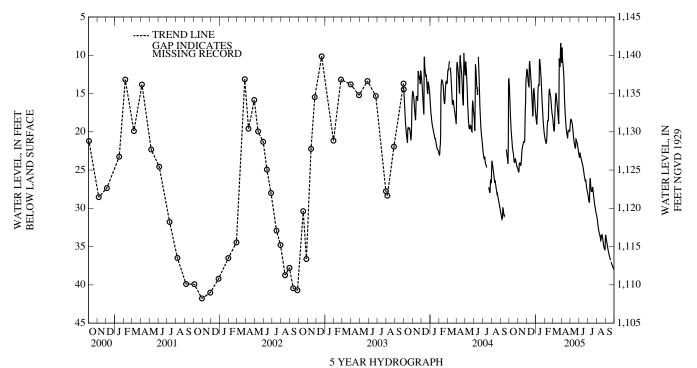
### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 2004 JAN 31, 2005	23.85 20.22	APR 22, 2005 JUL 28	20.91 30.21	SEP 19, 2005	36.90
		T 20.22 JAN 31, 2 Γ 36.90 SEP 19, 20			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1	13.93	13.32	25.11	24.93	12.65	11.66	17.89	17.34	20.68	20.36	18.26	17.94
2	14.69	13.93	25.18	25.11	11.85	11.70	18.32	17.89	20.93	20.68	18.72	18.26
3	15.90	14.69	25.39	25.18	12.29	11.85	18.67	18.32	21.12	20.93	19.19	18.72
4	17.08	15.90	25.40	24.41	12.69	12.29	19.10	18.67	21.30	21.12	19.55	19.19
5	18.08	17.08	24.41	24.15	13.34	12.69	19.20	18.71	21.46	21.30	19.88	19.55
6	18.85	18.08	24.15	24.06	13.79	13.34	18.71	17.48	21.55	21.45	20.03	19.88
7	19.56	18.85	24.08	24.03	13.95	13.58	17.48	17.10	21.53	21.44	20.00	19.25
8	20.11	19.56	24.25	24.08	14.20	13.62	17.10	15.39	21.44	21.01	19.25	17.87
9	20.59	20.11	24.37	24.24	14.50	12.64	15.39	14.26	21.01	20.04	17.87	16.88
10	21.16	20.59	24.41	24.37	12.64	10.37	14.26	13.97	20.04	19.15	16.88	16.06
11	21.66	21.16	24.39	24.36	11.14	10.41	13.99	13.79	19.15	18.66	16.06	15.23
12	22.08	21.66	24.39	23.47	11.51	11.14	13.95	13.78	18.66	18.48	15.23	14.88
13	22.43	22.08	23.47	22.80	12.06	11.51	14.10	13.95	18.61	18.49	15.11	14.88
14	22.74	22.43	22.80	22.45	12.57	12.06	14.06	9.56	18.62	17.98	15.52	15.11
15	22.76	22.63	22.45	22.17	13.08	12.57	10.90	9.84	17.98	16.03	16.03	15.52
16	23.16	22.76	22.17	21.93	13.54	13.08	11.26	10.90	16.03	14.88	16.44	16.03
17	23.65	23.16	21.93	21.74	14.35	13.54	11.76	11.26	14.88	14.38	16.85	16.44
18	23.95	23.65	21.74	21.56	15.10	14.35	12.21	11.76	14.45	14.34	17.35	16.85
19	24.00	23.95	21.56	21.44	15.98	15.10	12.53	12.21	14.93	14.45	17.81	17.35
20	24.03	23.96	21.44	21.30	16.95	15.98	13.26	12.53	15.24	14.93	18.19	17.81
21	23.96	23.70	21.31	21.28	17.67	16.95	14.36	13.26	15.22	15.05	18.72	18.19
22	23.70	23.48	21.35	21.30	18.26	17.67	15.11	14.36	15.54	15.07	19.20	18.72
23	23.64	23.48	21.48	21.35	18.35	15.91	16.31	15.11	16.16	15.54	19.24	10.36
24	23.85	23.64	21.48	20.07	15.91	14.50	17.00	16.31	16.57	16.16	10.89	10.10
25	24.07	23.85	20.07	17.81	14.50	14.39	17.57	17.00	17.00	16.57	11.27	10.89
26 27 28 29 30 31	24.29 24.46 24.62 24.67 24.72 24.93	24.07 24.29 24.46 24.61 24.67 24.72	17.81 16.50 15.68 12.95 12.78	16.50 15.68 12.95 12.74 12.65	14.48 15.22 15.75 16.34 16.93 17.34	14.34 14.48 15.22 15.75 16.34 16.93	18.13 18.90 19.46 19.74 20.03 20.36	17.57 18.13 18.90 19.46 19.74 20.03	17.44 17.78 17.94 	17.00 17.44 17.78 	11.47 11.63 10.94 9.08 10.29 10.79	11.27 10.94 8.05 8.07 9.08 10.29
MONTH	24.93	13.32	25.40	12.65	18.35	10.37	20.36	9.56	21.55	14.34	20.03	8.05

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΛY	JU:	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	11.12 11.08 9.85 10.59 10.99	10.79 8.10 8.16 9.85 10.59	19.28 18.79 18.44 18.44 18.56	18.79 18.44 18.32 18.34 18.44	23.30 23.47 23.51 22.80 23.14	23.06 23.30 22.76 22.69 22.80	28.17 28.47 28.69 28.94 29.20	27.96 28.17 28.47 28.69 28.94	31.06 31.31 31.62 31.91 32.19	30.92 31.06 31.31 31.62 31.91	33.55 33.80 34.06 34.32 34.56	33.41 33.55 33.80 34.06 34.32
6 7 8 9 10	11.39 11.83 12.52 13.55 14.75	10.99 11.39 11.80 12.52 13.55	18.64 18.81 19.14 19.48 19.77	18.56 18.64 18.81 19.14 19.48	23.37 23.35 23.60 23.78 23.92	23.14 23.24 23.35 23.60 23.78	29.30 29.30 29.29 26.19 26.72	29.15 29.24 26.02 25.98 26.19	32.50 32.80 33.07 33.18 33.27	32.19 32.50 32.80 33.07 33.18	34.81 35.01 35.22 35.46 35.66	34.56 34.81 35.01 35.22 35.46
11 12 13 14 15	15.95 16.81 17.56 18.27 18.93	14.75 15.95 16.81 17.56 18.27	20.27 20.73 21.07 21.36 21.60	19.77 20.27 20.73 21.07 21.36	24.10 24.24 24.40 24.61 24.85	23.92 24.10 24.24 24.40 24.61	27.17 27.54 27.84 27.94 27.68	26.72 27.17 27.54 27.68 27.63	33.45 33.64 33.86 34.09 34.29	33.27 33.45 33.64 33.86 34.09	35.83 35.98 36.13 36.30 36.43	35.66 35.83 35.98 36.13 36.30
16 17 18 19 20	19.40 19.71 20.01 20.27 20.52	18.93 19.40 19.71 20.01 20.27	21.80 21.97 22.13 22.35 22.44	21.60 21.80 21.96 22.13 21.02	25.11 25.36 25.65 25.92 26.11	24.85 25.11 25.36 25.65 25.92	27.78 27.77 27.35 27.71 28.06	27.65 27.20 27.20 27.35 27.71	34.38 33.54 33.67 33.74 33.65	33.54 33.41 33.53 33.45 33.46	36.56 36.70 36.86  37.10	36.43 36.56 36.70  36.97
21 22 23 24 25	20.78 20.88 20.76 19.94 19.85	20.52 20.76 19.94 19.83 19.82	21.02 21.11 21.30 21.41 21.49	20.92 20.95 21.11 21.29 21.38	26.29 26.48 26.48 26.46 26.85	26.11 26.29 26.41 26.34 26.46	28.46 28.80 29.15 29.42 29.67	28.06 28.46 28.80 29.15 29.42	33.92 34.22 34.48 34.74 34.94	33.65 33.92 34.22 34.48 34.74	37.21 37.31 37.42 37.53 37.62	37.10 37.21 37.31 37.42 37.53
26 27 28 29 30 31	19.85 19.81 19.88 19.94 19.94	19.79 19.78 19.79 19.88 19.28	21.76 22.06 22.27 22.53 22.75 23.06	21.49 21.76 22.06 22.27 22.53 22.75	27.15 27.42 27.66 27.83 27.96	26.85 27.15 27.42 27.66 27.82	29.89 30.14 30.34 30.58 30.79 30.92	29.67 29.89 30.14 30.34 30.58 30.79	35.12 35.29 35.36 35.43 35.50 35.47	34.94 35.12 35.29 35.36 35.43 33.42	37.70 37.79 37.88 37.97 38.07	37.62 37.70 37.79 37.88 37.97
MONTH	20.88	8.10	23.06	18.32	27.96	22.69	30.92	25.98	35.50	30.92	38.07	33.41
YEAR	38.07	8.05										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# FREDERICK COUNTY

WELL NUMBER.--FR Df 35. SITE ID.--392517077190401. PERMIT NUMBER.--FR-73-0852.

LOCATION.--Lat 39°25'17", long 77°19'04", Hydrologic Unit 02070009, north of Eaglehead Drive, near Lake Linganore. Owner: Lake Linganore Association.

AQUIFER.--Urbana Formation of Paleozoic age. Aquifer code: 300URBN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 302 ft, casing diameter 6 in., to 26 ft; open hole.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from July 2003 to current year.

DATUM.—Elevation of land surface is 570 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface previous to July 2003, when the casing was extended for an instrumentation shelter. Current measuring point is 3.25 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.09 ft below land surface, May 14, 1998; lowest measured, 64.86 ft below land surface, September 26, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

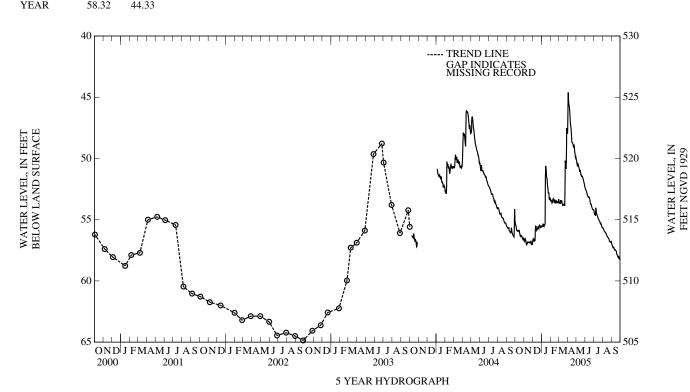
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 2004 JAN 31, 2005	56.30 53.35	APR 22, 2005 MAY 04	49.16 50.49	JUL 28, 2005 SEP 22	55.50 58.00
	HICHE	CT 40.16 ADD 22.6	2005		

HIGHEST 49.16 APR 22, 2005 LOWEST 58.00 SEP 22, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	OCTOBER		NOVEMBER		DECE	DECEMBER		JANUARY		FEBRUARY		MARCH	
1	55.32	55.17	56.74	56.66	56.95	56.71	55.62	55.51	53.45	53.37	53.36	53.30	
2	55.42	55.32	56.75	56.65	56.71	56.56	55.67	55.59	53.49	53.45	53.53	53.36	
3	55.49	55.42	56.83	56.66	56.64	56.54	55.59	55.44	53.46	53.39	53.66	53.53	
4	55.58	55.48	56.82	56.49	56.67	56.62	55.52	55.43	53.49	53.39	53.70	53.62	
5	55.76	55.58	56.64	56.49	56.78	56.65	55.50	55.41	53.61	53.49	53.69	53.61	
6	55.85	55.76	56.67	56.61	56.79	56.72	55.41	55.29	53.67	53.60	53.69	53.58	
7	55.92	55.85	56.72	56.66	56.74	56.56	55.60	55.36	53.66	53.54	53.62	53.38	
8	55.95	55.89	56.96	56.72	56.79	56.57	55.59	55.43	53.55	53.45	53.59	53.30	
9	55.91	55.86	57.05	56.95	56.78	56.36	55.59	55.51	53.47	53.28	53.65	53.59	
10	55.95	55.86	57.08	57.02	56.36	55.53	55.51	55.39	53.35	53.25	53.64	53.55	
11	55.99	55.93	57.02	56.95	55.60	55.44	55.50	55.40	53.42	53.35	53.58	53.40	
12	55.96	55.87	56.97	56.80	55.66	55.60	55.43	55.39	53.48	53.37	53.57	53.44	
13	55.90	55.85	56.87	56.75	55.72	55.55	55.42	55.26	53.67	53.48	53.71	53.57	
14	55.92	55.84	56.93	56.87	55.86	55.71	55.26	49.92	53.68	53.49	53.81	53.71	
15	55.93	55.82	56.90	56.86	55.89	55.86	50.79	50.25	53.57	53.46	53.87	53.81	
16	56.09	55.93	56.87	56.82	55.89	55.74	50.83	50.76	53.46	53.33	53.85	53.77	
17	56.26	56.09	56.85	56.83	55.77	55.74	51.21	50.81	53.48	53.42	53.78	53.73	
18	56.31	56.26	56.84	56.79	55.77	55.59	51.64	51.21	53.62	53.47	53.77	53.72	
19	56.33	56.25	56.83	56.81	55.59	55.49	51.64	51.55	53.68	53.60	53.82	53.76	
20	56.37	56.33	56.87	56.81	55.72	55.59	51.87	51.57	53.69	53.52	53.77	53.72	
21	56.37	56.28	56.92	56.87	55.74	55.67	52.37	51.87	53.52	53.38	53.87	53.76	
22	56.39	56.32	56.92	56.87	55.76	55.72	52.40	52.25	53.55	53.45	53.93	53.85	
23	56.41	56.35	56.90	56.87	55.72	55.47	52.82	52.29	53.62	53.53	53.85	50.05	
24	56.39	56.32	56.89	56.69	55.48	55.44	52.87	52.79	53.63	53.51	50.42	49.99	
25	56.48	56.38	56.89	56.62	55.55	55.46	52.88	52.82	53.60	53.54	50.50	50.41	
26 27 28 29 30 31	56.57 56.61 56.65 56.63 56.55 56.66	56.47 56.53 56.60 56.53 56.47 56.50	57.04 57.05 56.99 57.05 57.04	56.89 56.91 56.81 56.99 56.95	55.55 55.71 55.71 55.54 55.60 55.60	55.43 55.50 55.54 55.47 55.54 55.50	53.02 53.36 53.43 53.40 53.24 53.37	52.75 53.02 53.36 53.20 53.15 53.24	53.67 53.71 53.59 	53.58 53.59 53.34 	50.76 50.89 50.85 47.70 47.85 47.91	50.50 50.76 47.68 47.41 47.70 47.85	
MONTH	56.66	55.17	57.08	56.49	56.95	55.43	55.67	49.92	53.71	53.25	53.93	47.41	

# FREDERICK COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	APRIL		MAY		JU	JUNE		JULY		AUGUST		SEPTEMBER	
1 2 3 4 5	48.03 47.94 44.96 45.26 45.58	47.91 44.35 44.33 44.96 45.26	   50.62	   50.56	52.49 52.53 52.56 52.65 52.72	52.38 52.49 52.50 52.55 52.65	54.23 54.41 54.54 54.59 54.59	54.17 54.23 54.41 54.54 54.52	55.72 55.72 55.75 55.83 55.88	55.66 55.66 55.69 55.75 55.81	57.00 57.06 57.14 57.23 57.30	56.90 57.00 57.06 57.13 57.23	
6 7 8 9 10	45.72 45.78 46.21 46.68 46.94	45.57 45.71 45.78 46.21 46.68	50.60 50.50 50.56 50.66 50.74	50.50 50.39 50.42 50.56 50.66	52.79 52.85 52.95 53.04 53.10	52.71 52.79 52.85 52.95 53.04	54.64 54.72 54.71 54.31 54.46	54.54 54.64 53.72 53.96 54.31	55.93 55.97 56.02 56.03 56.03	55.88 55.92 55.97 56.00 56.00	57.32 57.31 57.27 57.35 57.44	57.27 57.25 57.23 57.27 57.35	
11 12 13 14 15	47.29 47.44 47.69 48.06 48.55	46.94 47.29 47.41 47.69 48.06	50.80 51.06 51.13 51.06 51.03	50.74 50.80 51.06 50.92 50.92	53.15 53.18 53.15 53.15 53.20	53.10 53.15 53.11 53.12 53.14	54.55 54.62 54.68 54.75 54.86	54.46 54.55 54.62 54.68 54.75	56.11 56.13 56.16 56.23 56.33	56.03 56.10 56.13 56.16 56.23	57.48 57.48 57.46 57.49 57.54	57.44 57.41 57.42 57.44 57.48	
16 17 18 19 20	48.73 48.73 48.77 48.84 48.88	48.55 48.66 48.67 48.77 48.81	51.23 51.33 51.41 51.46 51.43	51.03 51.23 51.33 51.41 51.38	53.27 53.39 53.55 53.71 53.77	53.15 53.27 53.39 53.55 53.70	54.92 54.96 55.01 55.05 55.14	54.86 54.92 54.95 54.99 55.05	56.41 56.46 56.49 56.52	56.31 56.36 56.40 56.43 56.45	57.58 57.62 57.77 57.85 57.92	57.50 57.53 57.61 57.77 57.82	
21 22 23 24 25	49.13 49.16 49.03 49.08 49.46	48.86 49.03 48.75 48.83 49.08	51.50 51.50 51.53 51.66 51.70	51.42 51.45 51.49 51.53 51.65	53.76 53.82 53.92 54.01 54.06	53.67 53.69 53.82 53.92 54.01	55.16 55.20 55.32 55.35 55.31	55.10 55.13 55.20 55.29 55.27	56.52 56.60 56.68 56.78 56.80	56.46 56.51 56.60 56.68 56.78	58.02 58.02 58.08 58.14 58.15	57.92 57.96 57.99 58.08 58.10	
26 27 28 29 30 31	49.57 49.74 49.91 49.97 49.97	49.46 49.55 49.74 49.91 49.83	51.81 51.94 52.02 52.14 52.23 52.38	51.70 51.81 51.94 52.02 52.14 52.23	54.14 54.19 54.20 54.20 54.23	54.06 54.14 54.15 54.16 54.19	55.34 55.42 55.53 55.60 55.66 55.70	55.31 55.33 55.42 55.53 55.60 55.66	56.80 56.80 56.84 56.87 56.88 56.90	56.77 56.78 56.77 56.84 56.79 56.77	58.10 58.18 58.23 58.25 58.32	58.00 58.05 58.17 58.14 58.24	
MONTH	49.97	44.33	52.38	50.39	54.23	52.38	55.70	53.72	56.90	55.66	58.32	56.90	
YEAR	58.32	44.33											



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

# GARRETT COUNTY

WELL NUMBER.--GA Eb 78. SITE ID.--392439079231801. PERMIT NUMBER.--GA-88-0611.

LOCATION.--Lat 39°24'39", long 79°23'18", Hydrologic Unit 05020006, at Southern Pines, near Broadford Road, and Southern Pines Drive, Mountain Lake Park. Owner: Private Residence.

AQUIFER.--Foreknobs Formation of Upper Devonian age. Aquifer code: (code in review).

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 307 ft; casing diameter 6 in., to 40 ft; open hole from 40 to 307 ft.

INSTRUMENTATION.--Monthly water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- March 1992 to current year.

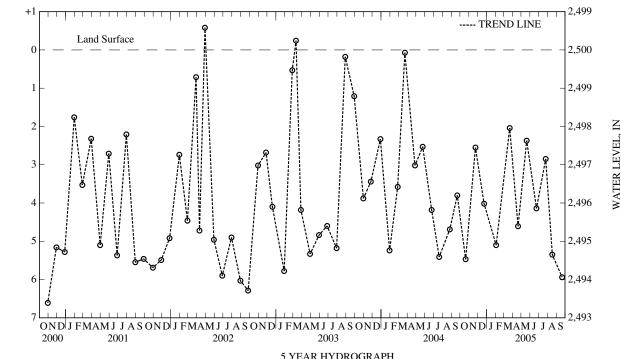
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing (measuring point is 1.0 ft above land surface) on March 29, 1993, and March 30, 1994; lowest measured, 9.12 ft below land surface, August 30, 1993.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 2004 NOV 23 DEC 23	5.47 2.55 4.02	FEB 03, 2005 MAR 22 APR 20	5.10 2.04 4.61	MAY 20, 2005 JUN 23 JUL 25	2.37 4.14 2.85	AUG 17, 2005 SEP 20	5.35 5.94

2.04 MAR 22, 2005 5.94 SEP 20, 2005 HIGHEST LOWEST



5 YEAR HYDROGRAPH

### GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 28. SITE ID.--391512079270901. PERMIT NUMBER.--GA-73-1697.

LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Road, 0.6 mi west from the intersection with Kempton Road, 2.6 mi west of Wilson. Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 341 ft; casing diameter 6 in., to 317 ft; open hole from 317 to 341 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.50 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. Water level measurements could not be measured from July 2000 through November 2000, and March 27, 2002 because of an obstruction in the well. A well depth of 337.35 ft below land surface was measured on April 30, 2002.

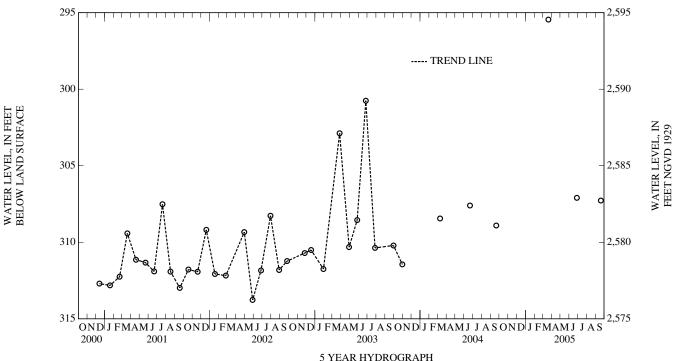
PERIOD OF RECORD .-- June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.60 ft below land surface, December 14, 1978; lowest measured dry at 332.43 ft below land surface, May 16, 1985.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
MAR 21, 2005 295.45		JUN 28, 2005	307.10	SEP 19, 2005	307.28				
HIGHEST 295.45 MAR 21, 2005									

LOWEST 307.28 SEP 19, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--GA Fa 29. SITE ID.--391512079270902. PERMIT NUMBER.--GA-73-1698.

LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Road, 0.9 mi west from intersection with Kempton Road, 2.6 mi west of Wilson. Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 226 ft; casing diameter 6 in., to 203 ft; open hole from 203 to 226 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 211.0 ft below land surface was measured on April 30, 2002.

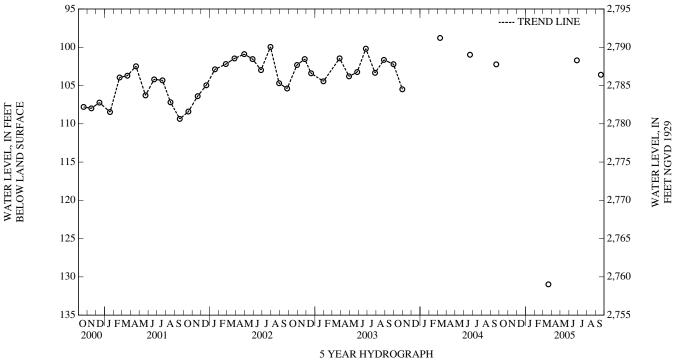
PERIOD OF RECORD .-- June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 98.78 ft below land surface, March 10, 2004; lowest water level measured, dry on November 17, 18, 1982, December 28, 1982, February 18, 1983.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
MAR 21, 2005	130.97	JUN 28, 2005	101.72	SEP 19, 2005	103.60	
HIGHEST 101.72 JUN 28, 2005						

LOWEST 130.97 MAR 21, 2005



WELL NUMBER.--GA Fa 31. SITE ID.--391539079254601. PERMIT NUMBER.--GA-73-2142.

LOCATION.--Lat 39°15'37", long 79°25'45", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Allegheny Formation of Middle Pennsylvanian age. Aquifer code: 324ALGN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 606 ft; casing diameter 8 in., to 25.5 ft; casing diameter 4 in., to 470 ft; open hole from 470 to 606 ft.

INSTRUMENTATION .-- Periodic water-level measurements with steel or electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.60 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

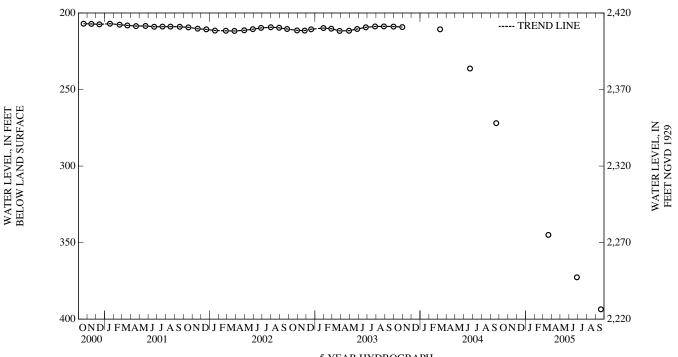
PERIOD OF RECORD .-- April 1980 to to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.31 ft below land surface, April 8, 1980; lowest measured, 393.57 ft below land surface, September 19, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	344.97	JUN 28, 2005	372.70	SEP 19, 2005	393.57

HIGHEST 344.97 MAR 21, 2005 LOWEST 393.57 SEP 19, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--GA Fa 32. SITE ID.--391539079254602. PERMIT NUMBER.--GA-73-2143.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 473 ft; casing diameter 8 in., to 23 ft; casing diameter 4 in., to 430 ft; open hole from 430 to 473 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 1980 to April 1981.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.15 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 470.35 ft below land surface was measured on April 30, 2002.

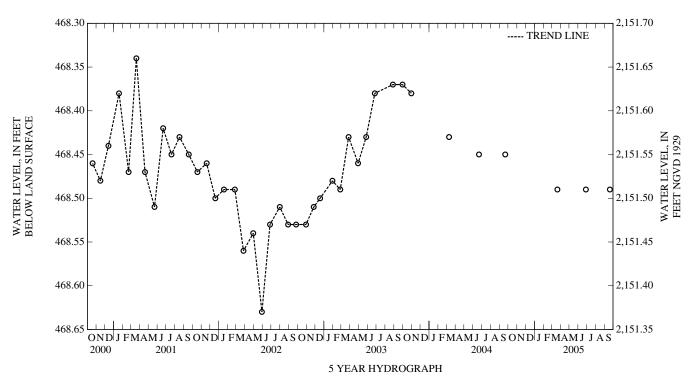
PERIOD OF RECORD .-- February 1980 to to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.55 ft below land surface, February 27, 1980; lowest measured, 474.80 ft below land surface, July 16, 1992.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	468.49	JUN 28, 2005	468.49	SEP 19, 2005	468.49

HIGHEST 468.49 MAR 21, 2005 JUN 28, 2005 SEP 19, 2005 LOWEST 468.49 MAR 21, 2005 JUN 28, 2005 SEP 19, 2005



WATER LEVEL, IN FEET BELOW LAND SURFACE

#### GARRETT COUNTY—Continued

WELL NUMBER.--GA Fa 33. SITE ID.--391539079254603. PERMIT NUMBER.--GA-73-2144.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 391 ft; measured depth, 324 ft on December 15, 1995, (see REMARKS); casing diameter 8 in., to 23 ft; casing diameter 4 in., to 318 ft; open hole from 318 to 391 ft.

INSTRUMENTATION .-- Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital recorder-60-minute recorder interval from July 1980 to October 1982.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. Prior to December 15, 1995, the well was undermined and collapsed, the depth of the well is now 324 ft.

PERIOD OF RECORD .-- February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.31 ft below land surface, February 27, 1980; lowest measured, dry at 324 ft below land surface on December 15, 1995, January 18 and June 13, 1996.

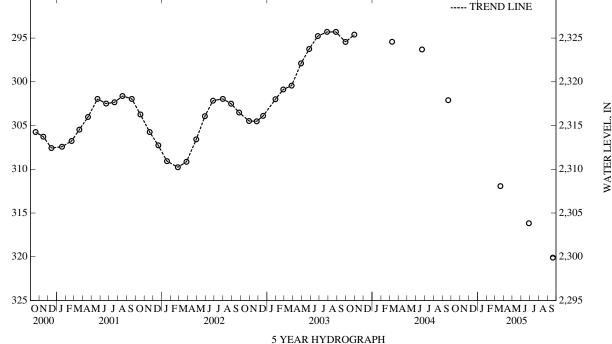
# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	311.92	JUN 28, 2005	316.17	SEP 19, 2005	320.10
	HIGHE	EST 311.92 MAR 21,	2005		

2.330

FEET NGVD 1929

LOWEST 320.10 SEP 19, 2005 290 295



WELL NUMBER.--GA Fa 34. SITE ID.--391539079254604. PERMIT NUMBER.--GA-73-2145.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Road, 1.7 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 115 ft; casing diameter 8 in., to 23.5 ft; casing diameter 4 in., to 96 ft; open hole from 96 to 115 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from July 1980 to October 1990.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well.

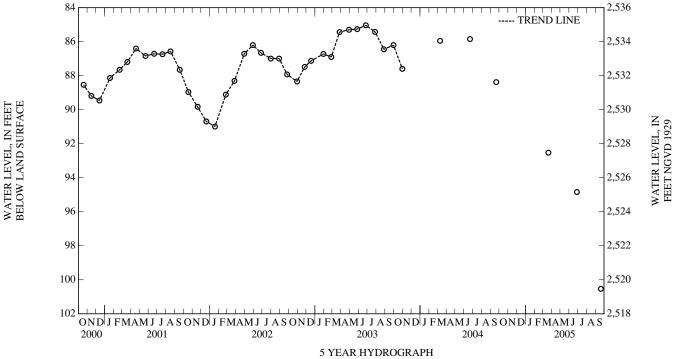
PERIOD OF RECORD .-- February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.05 ft below land surface, February 26, 1980; lowest measured, 100.53 ft below land surface, September 19, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	92.53	JUN 28, 2005	94.84	SEP 19, 2005	100.53
		ST 92.53 MAR 21,			

LOWEST 100.53 SEP 19, 2005



WELL NUMBER.--GA Fa 38. SITE ID.--391501079260001. PERMIT NUMBER.--GA-73-2125.

LOCATION.--Lat 39°15′01", long 79°26′00", Hydrologic Unit 02070002, at intersection of Kempton Road and Dobbin Road, 3.6 mi south of Table Rock. Owner: Private Residence.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, domestic, water-table well, depth 118 ft, casing diameter 6 in., to 39 ft; open hole from 39 to 118 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,680 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by nearby coal mining operations.

PERIOD OF RECORD .-- February 1988 to current year.

2000

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.46 ft below land surface, March 30, 1993; lowest measured, 59.72 ft below land surface, October 14, 1992.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	38.80	JUN 27, 2005	39.88	SEP 19, 2005	40.01

36 2,644 ---- TREND LINE 0 37 2,643 38 2,642 WATER LEVEL, IN FEET BELOW LAND SURFACE 0 39 2,641 FEET NGVD 1929 WATER LEVEL, 0 O 40 **e** 2,640 41 2,639 42 2,638 43 2,637

OND|J FMAMJ JA SOND|J FMAMJ JA SOND|J FMAMJ JA SOND|J FMAMJ JA SOND|J FMAMJ JA S

5 YEAR HYDROGRAPH OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

2003

WELL NUMBER.--GA Fb 22. SITE ID.--391530079244401. PERMIT NUMBER.--GA-73-2146.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Allegheny Formation of Middle Pennsylvanian age. Aquifer code: 324ALGN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 640 ft; casing diameter 4 in., to 517 ft; open hole from 517 tp 640 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from May 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.0 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 530 ft below land surface was measured on April 30, 2002.

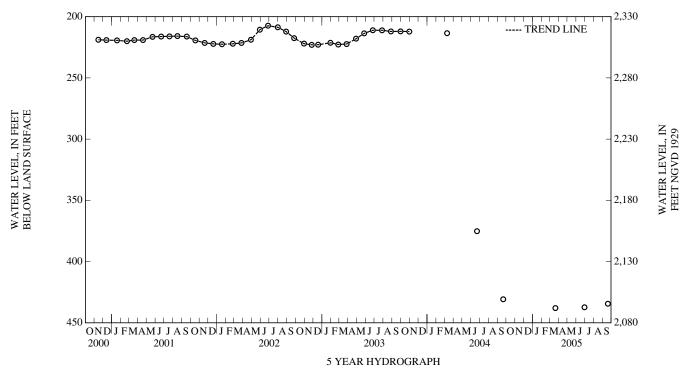
PERIOD OF RECORD .-- April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.59 ft below land surface, April 8, 1980; lowest measured, 437.97 ft below land surface, March 21, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
MAR 21, 2005	437.97	JUN 30, 2005	437.38	SEP 19, 2005	434.40	
HIGHEST 434.40 SEP 19, 2005						

LOWEST 437.97 MAR 21, 2005



WELL NUMBER.--GA Fb 24. SITE ID.--391530079244403. PERMIT NUMBER.--GA-73-2177.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 400 ft; casing diameter 4 in., to 340 ft; open hole from 340 to 400 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder-60-minute recorder interval, from May 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 394 ft below land surface was measured on April 30, 2002.

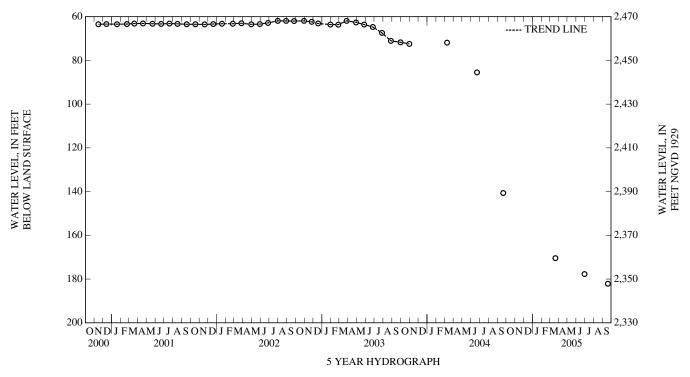
PERIOD OF RECORD .-- April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.08 ft below land surface, January 12, 1981; lowest measured, 182.18 ft below land surface, September 19, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	170.45	JUN 30, 2005	177.72	SEP 19, 2005	182.18
	HIGHE	ST 170.45 MAR 21	2005		

HIGHEST 170.45 MAR 21, 2005 LOWEST 182.18 SEP 19, 2005



FEET NGVD 1929

# GARRETT COUNTY—Continued

# WELL NUMBER.--GA Fb 25. SITE ID.--391530079244404. PERMIT NUMBER.--GA-73-2178.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Road, 500 ft west of the intersection with Wilson-Coronna Road, 0.4 mi northwest of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 180 ft; casing diameter 4 in., to 120 ft; open hole from 120 to 180 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from June 1980 to October 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 121 ft below land surface was measured on April 30, 2002.

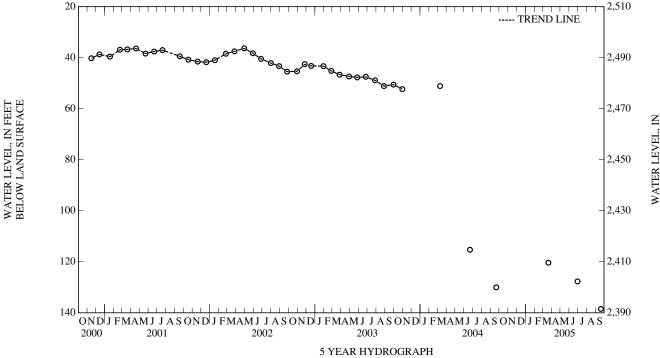
PERIOD OF RECORD .-- April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.89 ft below land surface, May 11, 1981; lowest measured, 138.50 ft below land surface, September 19, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	120.35	JUN 30, 2005	127.73	SEP 19, 2005	138.50
		ST 120.35 MAR 21,			

LOWEST 138.50 SEP 19, 2005



WELL NUMBER.--GA Fb 27. SITE ID.--391513079243602. PERMIT NUMBER.--GA-73-2182.

LOCATION .-- Lat 39°15'13", long 79°24'36", Hydrologic Unit 02070002, 0.6 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 656 ft; casing diameter 4 in., to 590 ft; open hole from 590 to 656 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval, from June 1980 to July 1990.

DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations. A well depth of 610 ft below land surface was measured on April 30, 2002.

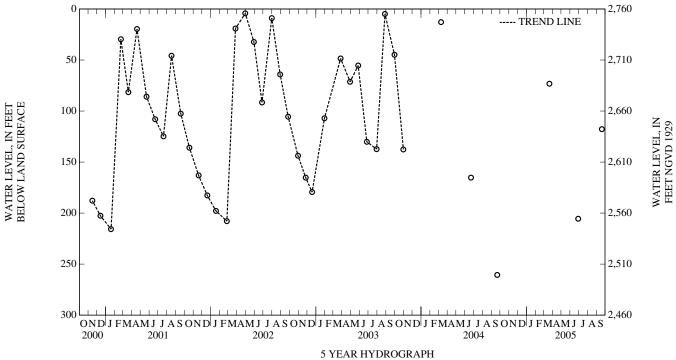
PERIOD OF RECORD .-- June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.27 ft below land surface, February 9, 1994; lowest measured, 274.12 ft below land surface, December 1, 1993.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	73.23	JUN 29, 2005	205.50	SEP 19, 2005	117.70
	HIGHES	T 73.23 MAR 21,	2005		

LOWEST 205.50 JUN 29, 2005



WELL NUMBER.--GA Fb 30. SITE ID.--391513079243605. PERMIT NUMBER.--GA-73-2185.

LOCATION,--Lat 39°15'13", long 79°24'36", Hydrologic Unit 02070002, 0.6 mi west of Wilson. Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 85 ft; casing diameter 4 in., to 82 ft, casing perforated from 77 to 82 ft; open hole from 82 to 85 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from September 1984 to October 1990.

DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

PERIOD OF RECORD .-- June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.90 ft below land surface, February 25, 1981; lowest measured, 45.00 ft below land surface, November 6, 1991.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	31.96	JUN 29, 2005	37.12	SEP 19, 2005	38.88
	HIGHES LOWES				

30 2.730 ---- TREND LINE 32 0 2,728 0 WATER LEVEL, IN FEET BELOW LAND SURFACE 34 2,726 WATER LEVEL, IN FEET NGVD 1929 36 2,724 0 38 2,722 0 Ć 40 2,720 OND'J FMAMJ J A S 2000 2001 2003 2004 2005 2002 5 YEAR HYDROGRAPH

WELL NUMBER.--GA Fb 36. SITE ID.--391715079223102. PERMIT NUMBER.--GA-81-1342.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 631 ft; casing diameter 6 in., to 620 ft depth; open hole from 620 to 631 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.60 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

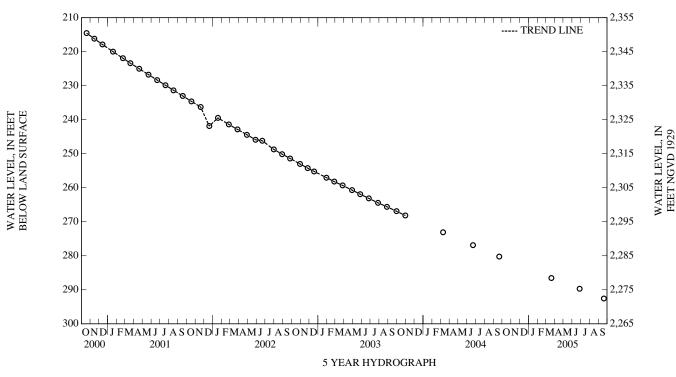
PERIOD OF RECORD .-- April 1988 to current year.

DATE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.95 ft below land surface, June 3, 1988; lowest measured, 292.55 ft below land surface, September 19, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER WATER WATER LEVEL DATE DATE LEVEL MAR 21, 2005 286.55 JUN 27, 2005 289.70 SEP 19, 2005 292.55

HIGHEST 286.55 MAR 21, 2005 LOWEST 292.55 SEP 19, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--GA Fb 37. SITE ID.--391715079223103. PERMIT NUMBER.--GA-81-1341.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 470 ft; casing diameter 6 in., to 430 ft; open hole from 430 to 470 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.20 ft above land surface.

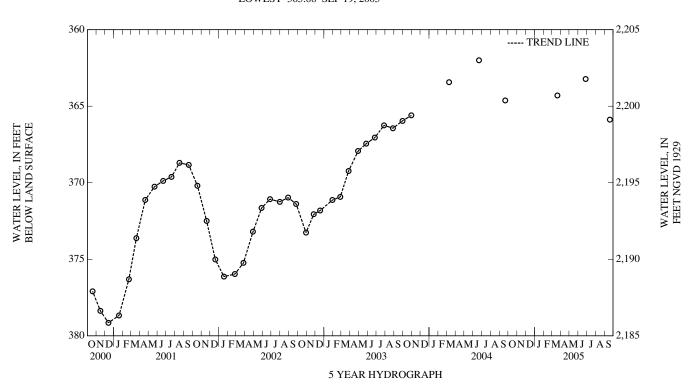
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD .-- April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.70 ft below land surface, November 7, 1989; lowest measured, 379.15 ft below land surface, December 13, 2000.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
MAR 21, 2005	364.30	JUN 27, 2005	363.22	SEP 19, 2005	365.88
		ST 363.22 JUN 27, 2 ST 365.88 SEP 19.2			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--GA Fb 38. SITE ID.--391715079223104. PERMIT NUMBER.--GA-81-1340.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002. Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artisian well, depth 230 ft., casing diameter 6 in., to 215 ft; open hole from 215 to 230 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.20 ft above land surface.

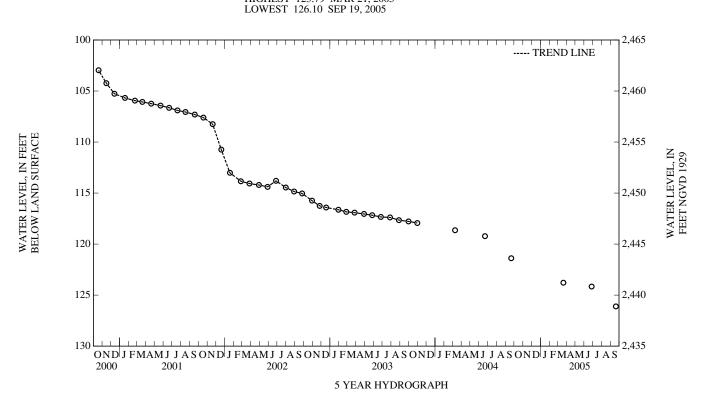
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby pumping.

PERIOD OF RECORD .-- April 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 91.76 ft below land surface, September 23, 1997 and October 28, 1997; lowest measured, 126.10 ft below land surface, September 19, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	123.79	JUN 27, 2005	124.16	SEP 19, 2005	126.10
	HIGHE	EST 123.79 MAR 21.	2005		



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--GA Ga 16. SITE ID.--391420079264901. PERMIT NUMBER.--GA-81-0953.

LOCATION.--Lat 39°14'20", long 79°26'49", Hydrologic Unit 02070002, east of Kempton Road, 100 ft north of Laurel Run, 2.8 mi southwest of Wilson. Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 147 ft; casing diameter 6 in., to 110 ft, open hole from 110 to 147 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder-60-minute recorder interval from March 1988 to January 2003.

DATUM.--Elevation of land surface is 2,690 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter floor, 3.20 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels are affected by coal mining operations.

PERIOD OF RECORD.--November 1986 to current year.

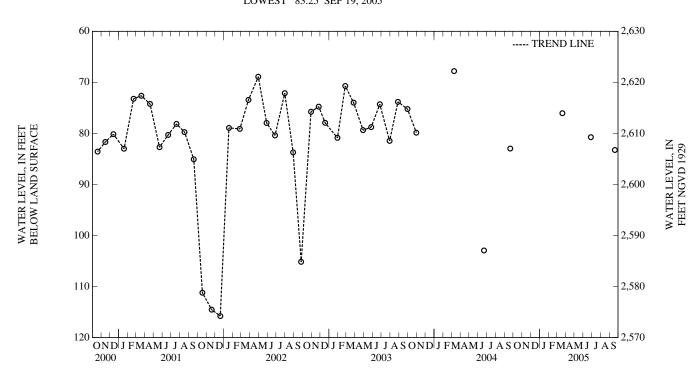
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.80 ft below land surface, March 10, 2004; lowest measured, 145.05 ft below land surface, September 22, 1988.

# 5 YEAR HYDROGRAPH

# OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 21, 2005	76.05	JUN 28, 2005	80.75	SEP 19, 2005	83.25
		ST 76.05 MAR 21,			



WATER LEVEL, IN FEET BELOW LAND SURFACE

# HARFORD COUNTY

WELL NUMBER.--HA Bd 31. SITE ID.--393902076160001.

LOCATION.--Lat 39°39'02", long 76°16'00", Hydrologic Unit 02050306, at Dublin. Owner: Private Residence.

AQUIFER.--Baltimore Gabbro Complex of Paleozoic age. Aquifer code: 300BLMR.

WELL CHARACTERISTICS.--Dug, stone-lined, water-table well, measured depth 25.9 ft; approximate diameter 36 in.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from July 1954 to August 1958.

DATUM.--Elevation of land surface is 460 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of wood floor, 0.10 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

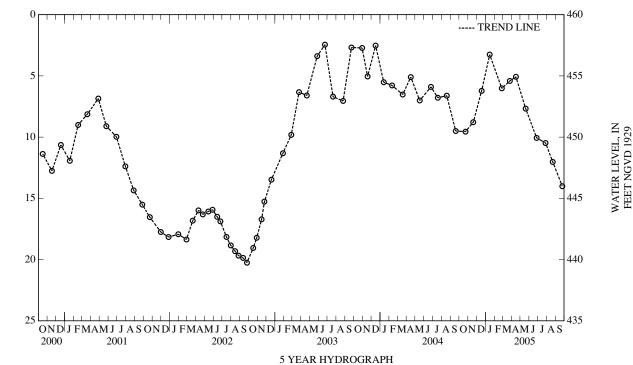
PERIOD OF RECORD .-- May 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land surface, May 7, 1958; lowest measured, 20.25 ft below land surface, September 25, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 2004	9.55	JAN 15, 2005	3.26	APR 16, 2005	5.08	JUL 28, 2005	10.48
NOV 19	8.78	FEB 26	6.02	MAY 20	7.68	AUG 22	12.02
DEC 18	6.22	MAR 26	5.41	JUN 27	10.06	SEP 24	14.01

HIGHEST 3.26 JAN 15, 2005 LOWEST 14.01 SEP 24, 2005



# HARFORD COUNTY—Continued

WELL NUMBER.--HA Ca 23. SITE ID.--393158076302601. PERMIT NUMBER.--HA-73-1630.

LOCATION.--Lat 39°31'58", long 76°30'26", Hydrologic Unit 02060003, at Gunpowder State Park, Hess. Owner: U.S. Geological Survey.

AQUIFER .-- Loch Raven Formation of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 200 ft; casing diameter 6 in., to 24 ft; open hole.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from July 1974 to September 1976.

DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

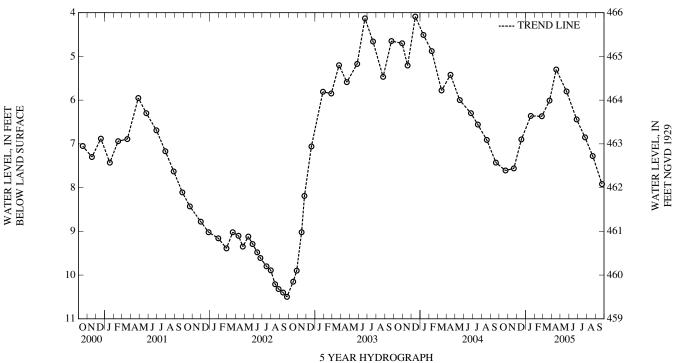
PERIOD OF RECORD .-- July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.59 ft below land surface, September 27, 1975; lowest measured, 10.50 ft below land surface, September 25, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 2004	7.61	JAN 19, 2005	6.36	APR 17, 2005	5.30	JUL 26, 2005	6.85
NOV 21	7.56	FEB 26	6.37	MAY 23	5.80	AUG 22	7.28
DEC 17	6.90	MAR 25	6.01	JUN 27	6.44	SEP 23	7.92

5.30 APR 17, 2005 7.92 SEP 23, 2005 HIGHEST LOWEST



#### HARFORD COUNTY—Continued

WELL NUMBER.--HA De 198. SITE ID.--392819076130902. PERMIT NUMBER.--HA-81-4141.

LOCATION.—Lat 39°28'19", long 76°13'09", Hydrologic Unit 02060003, northwest end of Fords Lane, Perryman. Owner: Private Residence (formerly Maryland Geological Survey).

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 4 in., to 9 ft; screen diameter 4 in. from 9 to 19 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from January 1989 to July 1989, and from January 1991 to February 2003.

DATUM.--Elevation of land surface is 18.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.50 ft above land surface.

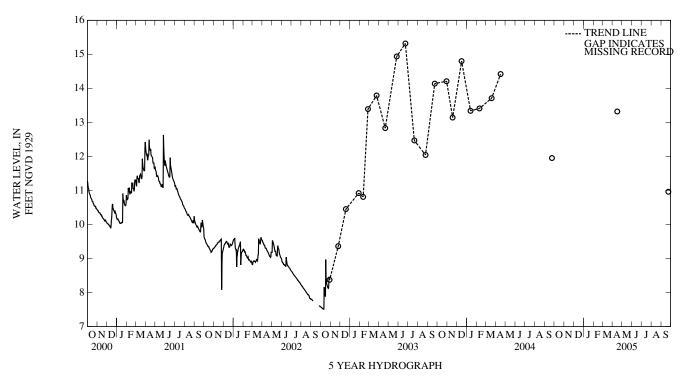
REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.57 ft above sea level, September 16, 1999 (recorder); lowest measured, 7.59 ft above sea level, September 25, 2002.

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16, 2005	13.32	SEP 23, 2005	10.96
		10.96 SEP 23, 20 13.32 APR 16, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

# HARFORD COUNTY—Continued

WELL NUMBER.--HA Ed 49. SITE ID.--392455076192103. PERMIT NUMBER.--HA-81-4129.

LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of the intersection of MD Rt. 152 and Trimble Road, Edgewood Park. Owner: Maryland Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 28 ft; casing diameter 4 in., to 13 ft, and 23 to 28 ft; screen diameter 4 in., from 13 to 23 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from June 1988 to July 1989.

DATUM.--Elevation of land surface is 91.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.19 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

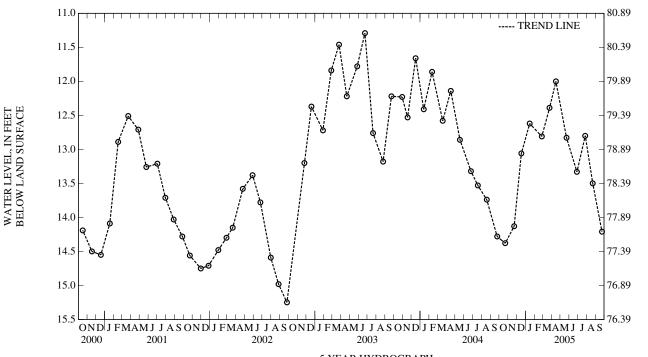
PERIOD OF RECORD.--May 1988 to July 1995, January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.29 ft below land surface, June 23,2003; lowest measured, 15.25 ft below land surface, September 25, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 2004	14.38	JAN 15, 2005	12.62	APR 16, 2005	12.00	JUL 27, 2005	12.80
NOV 22	14.13	FEB 26	12.81	MAY 23	12.83	AUG 22	13.50
DEC 17	13.06	MAR 25	12.39	JUN 28	13.33	SEP 23	14.21

HIGHEST 12.00 APR 16, 2005 LOWEST 14.38 OCT 22, 2004



5 YEAR HYDROGRAPH

# HOWARD COUNTY

WELL NUMBER.--HO Bd 1. SITE ID.--391910076565701.

LOCATION.--Lat 39°19'10", long 76°56'57", Hydrologic Unit 02060006, Slacks Corner near MD Rt. 32 and MD Rt. 99. Owner: Maryland State Highway Administration.

AQUIFER.--Morgan Run Formation of Ordovician age. Aquifer code: 360MRGR.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, measured depth 48 ft; diameter 60 in.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 630 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Hole in center of steel plate well cover, 0.40 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

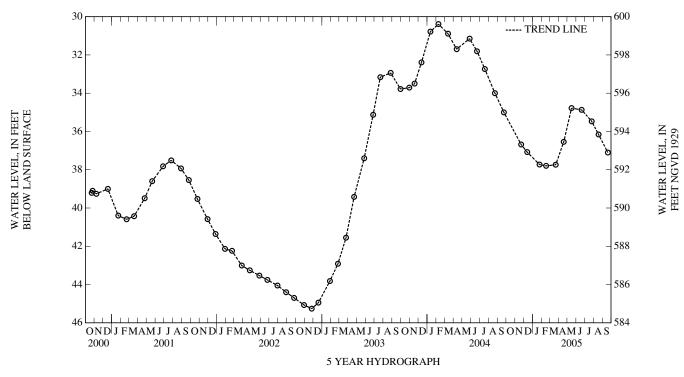
PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.76 ft below land surface, July 3, 1972; lowest measured, 46.88 ft below land surface, September 10, 1966.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22, 2004 DEC 13	36.68 37.08	FEB 17, 2005 MAR 22	37.80 37.74	MAY 16, 2005 JUN 20	34.78 34.87	AUG 18, 2005 SEP 19	36.16 37.10
JAN 25, 2005	37.73	APR 19	36.54	IUL 25	35.47		

HIGHEST 34.78 MAY 16, 2005 LOWEST 37.80 FEB 17, 2005



# HOWARD COUNTY—Continued

WELL NUMBER.--HO Cd 79. SITE ID.--391445076555101. PERMIT NUMBER.--HO-81-2387.

LOCATION.--Lat 39°14'45", long 76°55'51", Hydrologic Unit 02060006, at University of Maryland Central Farm. Owner: U.S. Geological Survey.

AQUIFER.--Loch Raven Formation (saprolite) of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 54 ft; casing diameter 3 in., to 44 ft; screen diameter 3 in., from 44 to 54 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 452.37 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.05 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

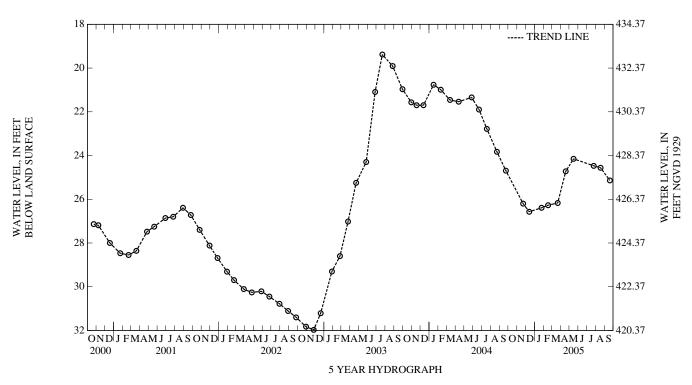
PERIOD OF RECORD.--January 1988 to May 1993, November 1995, January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.20 ft below land surface, April 10, 1997; lowest measured, 31.97 ft below land surface, November 26, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22, 2004 DEC 13 JAN 25, 2005	26.20 26.57 26.39	FEB 17, 2005 MAR 22 APR 19	26.27 26.17 24.72	MAY 16, 2005 JUL 25 AUG 18	24.15 24.47 24.56	SEP 19, 2005	25.14

HIGHEST 24.15 MAY 16, 2005 LOWEST 26.57 DEC 13, 2004



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### KENT COUNTY

WELL NUMBER.--KE Ac 20. SITE ID.--392007076075501. PERMIT NUMBER.--KE-73-0658.

LOCATION.--Lat 39°20′07", long 76°07′55", Hydrologic Unit 02060001, at U.S. Coast Guard Station at end of Still Pond Neck Road. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 582 ft; casing diameter 10 in., to 73 ft; casing diameter 4 in., to 550 ft, and 560 to 582 ft; screen diameter 4 in., from 550 to 560 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

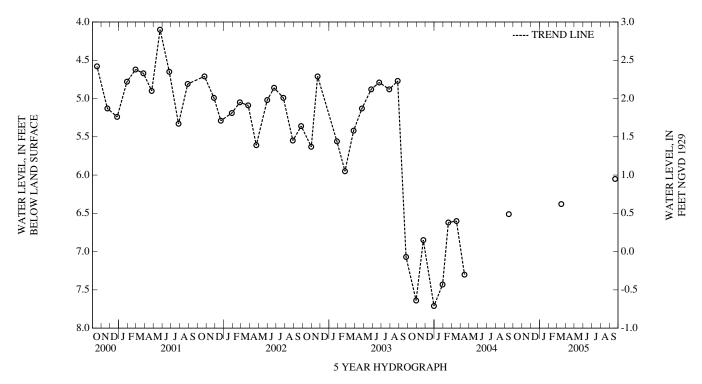
DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.30 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--December 1977 to December 1978, March 1981, December 1985, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.50 ft below land surface, April 13, 1978, May 5, 1978, and December 11, 1985; lowest measured, 7.71 ft below land surface, December 31, 2003.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	6.38	SEP 20, 2005	6.05
		6.05 SEP 20, 200 6.38 MAR 17, 200	



FEET NGVD 1929

# KENT COUNTY—Continued

WELL NUMBER.--KE Bc 185. SITE ID.--391650076050402. PERMIT NUMBER.--KE-88-0255.

LOCATION.--Lat 39°16'50", long 76°05'04", Hydrologic Unit 02060002, at Worton Regional Park, Worton. Owner: Maryland Geological Survey.

AQUIFER.--Pensauken Formation (Columbia aquifer) of Upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 55 ft; casing diameter 4 in., to 40 ft, and 50 to 55 ft; screen diameter 4 in., from 40 to 50 ft.

INSTRUMENTATION .-- Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 82.09 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.41 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

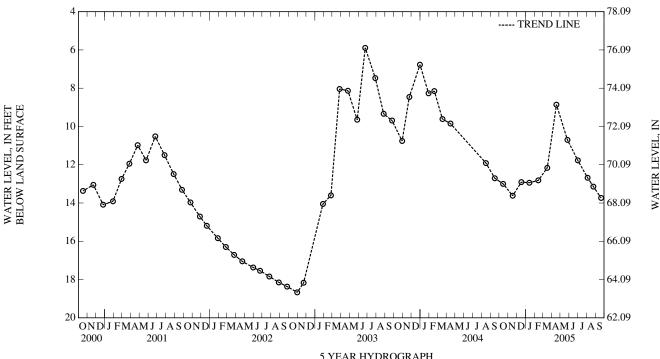
PERIOD OF RECORD .-- October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.89 ft below land surface, June 24, 2003; lowest measured, 20.23 ft below land surface, December 12-14, 1992 (recorder).

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	13.00	JAN 14, 2005	12.94	APR 18, 2005	8.86	AUG 04, 2005	12.68
NOV 17	13.62	FEB 14	12.82	MAY 26	10.70	24	13.14
DEC 17	12.91	MAR 17	12.16	JUL 01	11.77	SEP 20	13.74

HIGHEST 8.86 APR 18, 2005 LOWEST 13.74 SEP 20, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 151. SITE ID.--391657076003901.

LOCATION.--Lat 39°16′57", long 76°00′39", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 9.2 ft; casing diameter 1 in., to 8.7 ft; screen diameter 1 in., from 8.7 to 9.2 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.26 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.40 ft above land surface.

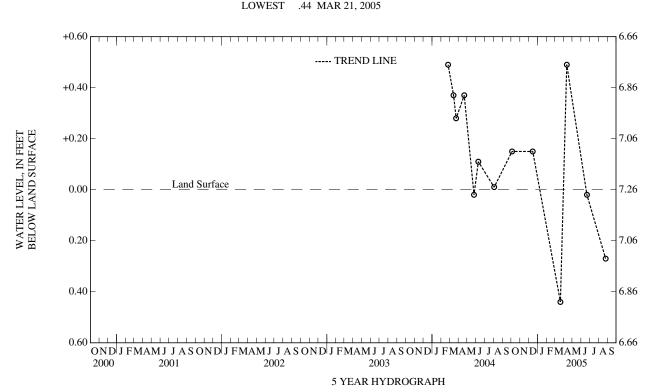
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-2A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.49 ft above land surface, February 25, 2004, April 12, 2005; lowest measured, 0.44 ft below land surface, March 21, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.15 +.15	MAR 21, 2005 APR 12	.44 +.49	JUN 21, 2005 AUG 25	.02 .27
	HIGHES'	T +.49 APR 12, 2 Γ .44 MAR 21, 20			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NAVD 1988

WELL NUMBER.--KE Bd 152. SITE ID.--391657076003801.

LOCATION.--Lat 39°16′57", long 76°00′38", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.7 ft; casing diameter 1 in., to 8.2 ft; screen diameter 1 in., from 8.2 to 8.7 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.13 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.50 ft above land surface.

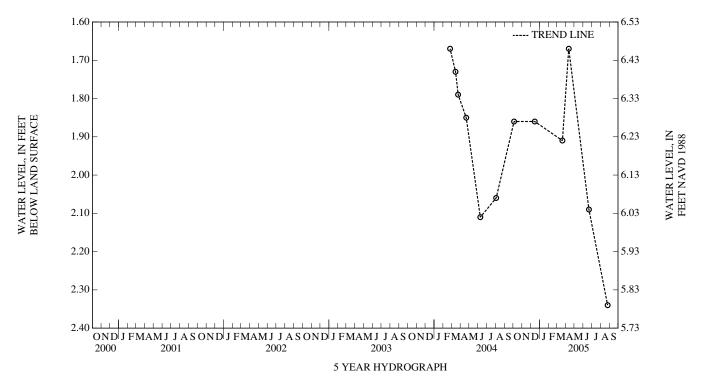
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-3A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.67 ft below land surface, February 25, 2004; lowest measured, 2.34 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	1.86 1.86	MAR 21, 2005 APR 12	1.91 1.67	JUN 21, 2005 AUG 25	2.09 2.34
		Γ 1.67 APR 12, 2			



WELL NUMBER.--KE Bd 153. SITE ID.--391657076003701.

LOCATION.--Lat 39°16′57", long 76°00′37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.5 ft; casing diameter 1 in., to 8.0 ft; screen diameter 1 in., from 8.0 to 8.5 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.92 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.02 ft above land surface.

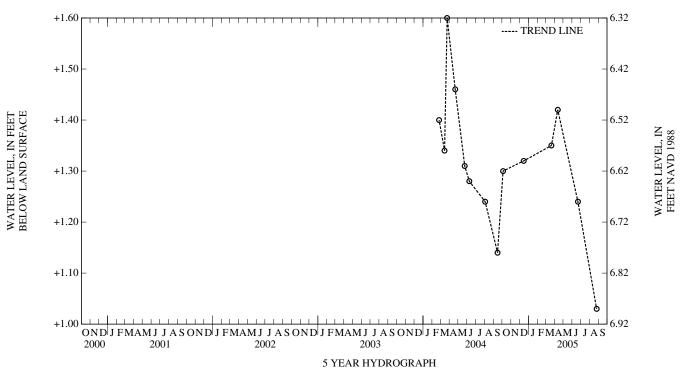
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-4A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft above land surface, March 24, 2004; lowest measured, 1.03 ft above land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 04, 2004 DEC 15	+1.30 +1.32	MAR 21, 2005 APR 12	+1.35 +1.42	JUN 21, 2005 AUG 25	+1.24 +1.03
	HIGHES LOWES				



WELL NUMBER.--KE Bd 154. SITE ID.--391657076003601.

LOCATION.--Lat 39°16′57", long 76°00′37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Bi-monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.03 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.00 ft above land surface.

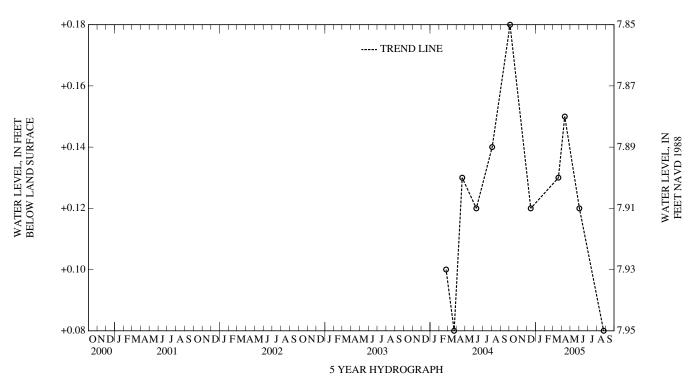
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-5A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft above land surface, October 4, 2004; lowest measured, 0.08 ft above land surface, March 24, 2004, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.18 +.12	MAR 21, 2005 APR 12	+.13 +.15	JUN 02, 2005 AUG 25	+.12 +.08
	HIGHES	ST +.18 OCT 04, 2			



WELL NUMBER.--KE Bd 155. SITE ID.--391702076003901.

LOCATION.--Lat 39°17'02", long 76°00'38", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.9 ft; casing diameter 1 in., to 8.4 ft; screen diameter 1 in., from 8.4 to 8.9 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.47 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.50 ft above land surface.

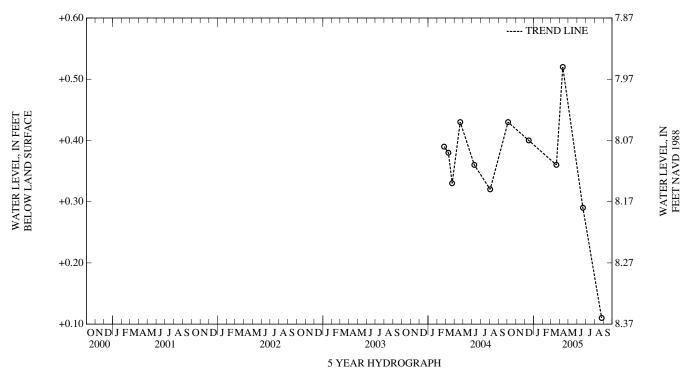
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-1A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft above land surface, April 12, 2005; lowest measured, 0.11 ft above land surface, August 25, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.43 +.40	MAR 21, 2005 APR 12	+.36 +.52	JUN 21, 2005 AUG 25	+.29 +.11
HIGHEST +.52 APR 12, 2005 LOWEST +.11 AUG 25, 2005					



WELL NUMBER.--KE Bd 156. SITE ID.--391702076003801.

LOCATION.--Lat 39°17'02", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.9 ft; casing diameter 1 in., to 8.4 ft; screen diameter 1 in., from 8.4 to 8.9 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.44 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.50 ft above land surface.

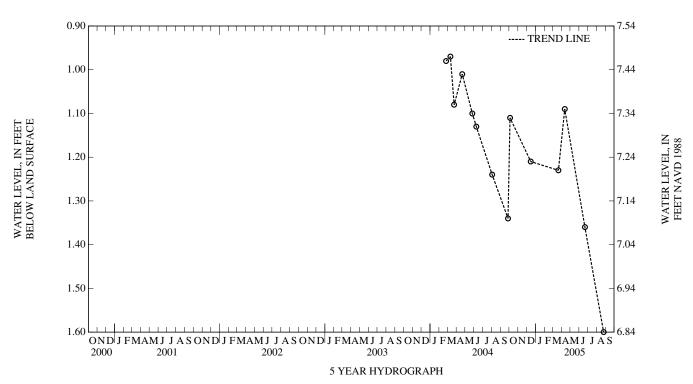
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-2A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, March 11, 2004; lowest measured, 1.60 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	1.11 1.21	MAR 21, 2005 APR 12	1.23 1.09	JUN 21, 2005 AUG 25	1.36 1.60
	HIGHES LOWES	ST 1.09 APR 12, 2 T 1.60 AUG 25, 2			



WELL NUMBER.--KE Bd 157. SITE ID.--391702076003701.

LOCATION.--Lat 39°17'02", long 76°00'37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.4 ft; casing diameter 1 in., to 7.9 ft; screen diameter 1 in., from 7.9 to 8.4 ft. INSTRUMENTATION.--Periodic measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.05 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.90 ft above land surface.

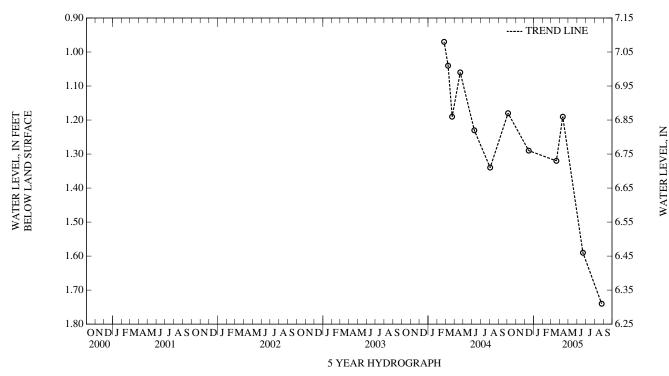
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-3A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, February 25, 2004; lowest measured, 1.74 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	1.18 1.29	MAR 21, 2005 APR 12	1.32 1.19	JUN 21, 2005 AUG 25	1.59 1.74
		T 1.18 OCT 04, 2 T 1.74 AUG 25, 2			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NAVD 1988

WELL NUMBER.--KE Bd 158. SITE ID.--391701076003701.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 4.2 ft; casing diameter 1 in., to 3.7 ft; screen diameter 1 in., from 3.7 to 4.2 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.65 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.20 ft above land surface.

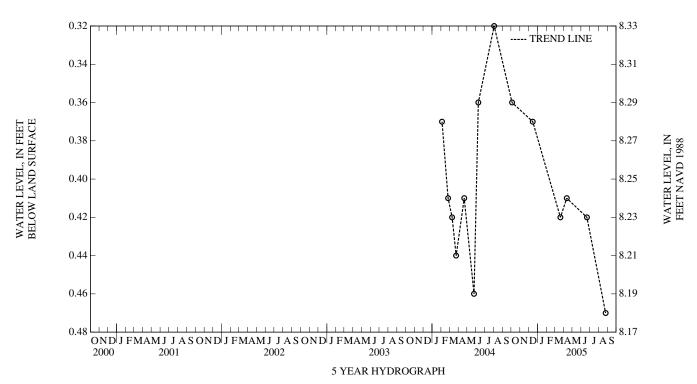
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-4A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, August 3, 2004; lowest measured, 0.47 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.36 .37	MAR 21, 2005 APR 12	.42 .41	JUN 21, 2005 AUG 25	.42 .47
	HIGHEST LOWEST	.36 OCT 04, 20			



WELL NUMBER.--KE Bd 159. SITE ID.--391701076003601.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.63 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.00 ft above land surface

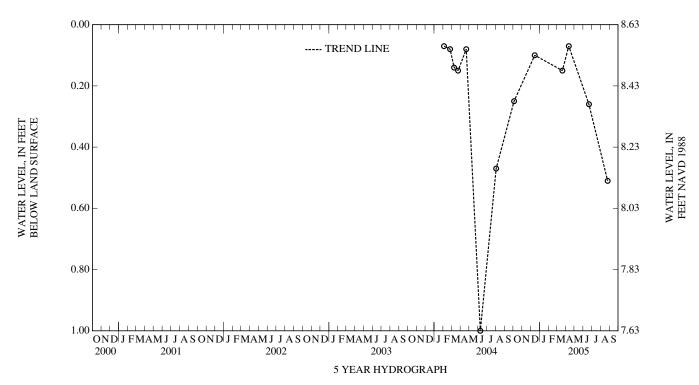
REMARKS .-- NAWQA ACT study observation well. Local well name is ACT-TR1-2-5A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.07 ft below land surface, February 4, 2004; April 12, 2005; lowest measured, 1.00 ft below land surface, June 9, 2004.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.25 .10	MAR 21, 2005 APR 12	.15 .07	JUN 21, 2005 AUG 25	.26 .51
	HIGHEST LOWEST	.07 APR 12, 20			



WELL NUMBER.--KE Bd 160. SITE ID.--391701076003602.

LOCATION.--Lat 39°17'01", long 76°00'36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 4.3 ft; casing diameter 2 in., to 3.8 ft; screen diameter 2 in., from 3.8 to 4.3 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.64 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.20 ft above land surface.

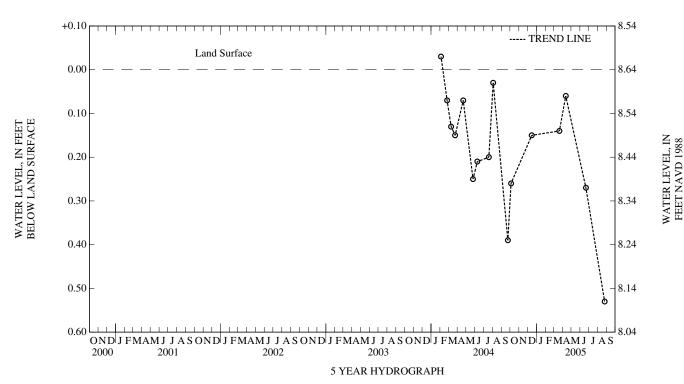
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-2-5B.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft below land surface, February 4, 2004; lowest measured, 0.53 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.26 .15	MAR 21, 2005 APR 12	.14 .06	JUN 21, 2005 AUG 25	.27 .53
	HIGHEST LOWEST	.06 APR 12, 20 .53 AUG 25, 20			



WELL NUMBER.--KE Bd 161. SITE ID.--391703076003701.

LOCATION.--Lat 39°17′03", long 76°00′36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 9.7 ft; casing diameter 1 in., to 9.2 ft; screen diameter 1 in., from 9.2 to 9.7 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 9.82 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.90 ft above land surface.

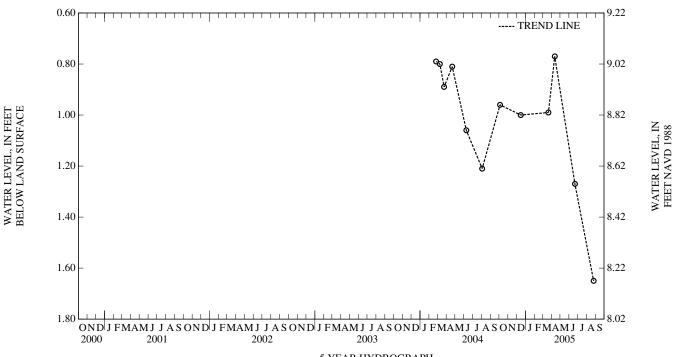
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-1A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.77 ft below land surface, April 12, 2005; lowest measured, 1.65 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.96 1.00	MAR 21, 2005 APR 12	.99 .77	JUN 21, 2005 AUG 25	1.27 1.65
		ST .77 APR 12, 20			



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 162. SITE ID.--391703076003601.

LOCATION.--Lat 39°17′03", long 76°00′36", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.7 ft; casing diameter 1 in., to 8.2 ft; screen diameter 1 in., from 8.2 to 8.7 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.57 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.80 ft above land surface.

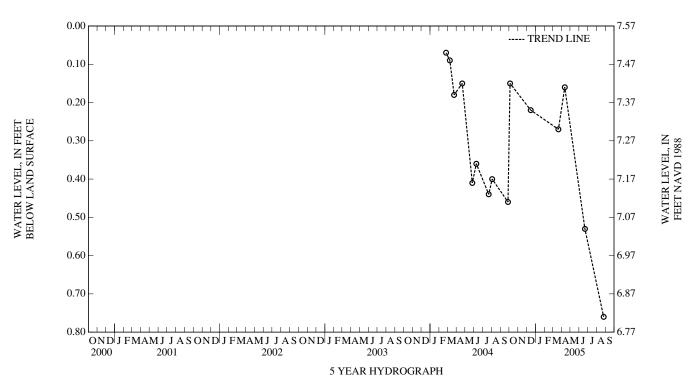
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-2A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.07 ft below land surface, February 25, 2004; lowest measured, 0.76 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.15 .22	MAR 21, 2005 APR 12	.27 .16	JUN 21, 2005 AUG 25	.53 .76
	HIGHES LOWES	T .15 OCT 04, 20 T .76 AUG 25, 20			



WELL NUMBER.--KE Bd 163. SITE ID.--391703076003501.

LOCATION.-Lat 39°17'03", long 76°00'35", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 9.7 ft; casing diameter 1 in., to 9.2 ft; screen diameter 1 in., from 9.2 to 9.7 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.80 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.00 ft above land surface.

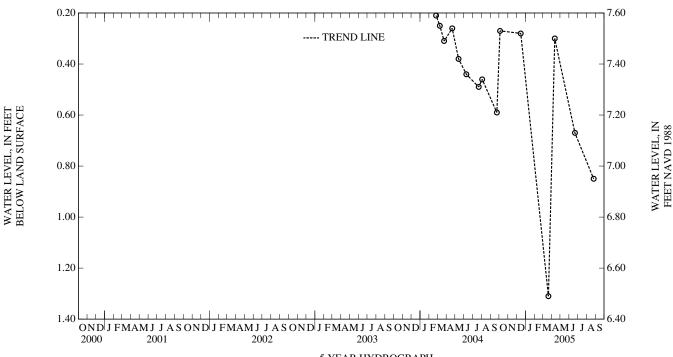
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-3A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.21 ft below land surface, February 25, 2004; lowest measured, 1.31 ft below land surface, March 31, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.27 .28	MAR 21, 2005 APR 12	1.31 .30	JUN 21, 2005 AUG 25	.67 .85
		T .27 OCT 04, 20 Γ 1.31 MAR 21, 2			



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 164. SITE ID.--391703076003401.

LOCATION.--Lat 39°17'02", long 76°00'35", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 7.9 ft; casing diameter 1 in., to 7.4 ft; screen diameter 1 in., from 7.4 to 7.9 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.90 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.50 ft above land surface.

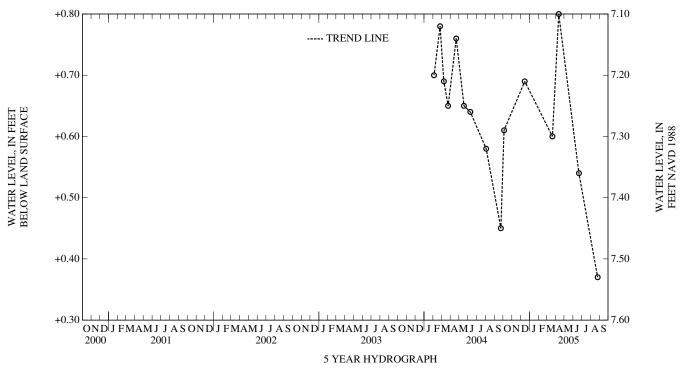
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-4A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft above land surface, April 12, 2005; lowest measured, 0.37 ft above land surface, August 25, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.61 +.69	MAR 21, 2005 APR 12	+.60 +.80	JUN 21, 2005 AUG 25	+.54 +.37
		ST +.80 APR 12, 2 T +.37 AUG 25, 2			



WELL NUMBER.--KE Bd 165. SITE ID.--391702076003401.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to 1.8 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.38 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.00 ft above land surface.

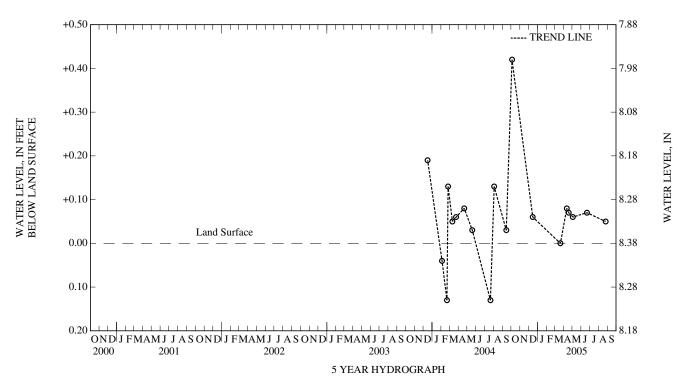
REMARKS .-- NAWQA ACT study observation well. Local well name is ACT-TR1-3-5A.

PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.42 ft above land surface, October 4, 2004; lowest measured, 0.13 ft below land surface, February 21, 2004 and July 21, 2004.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.42 +.06	MAR 21, 2005 APR 12	.00 +.08	APR 19, 2005 MAY 03	+.07 +.06	JUN 21, 2005 AUG 25	+.07 +.05
	HIGHES LOWES	T +.42 OCT 04, 2 T .00 MAR 21, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NAVD 1988

WELL NUMBER.--KE Bd 166. SITE ID.--391702076003402.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 5.6 ft; casing diameter 2 in., to 5.1 ft; screened from 5.1 to 5.6 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.37 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.00 ft above land surface.

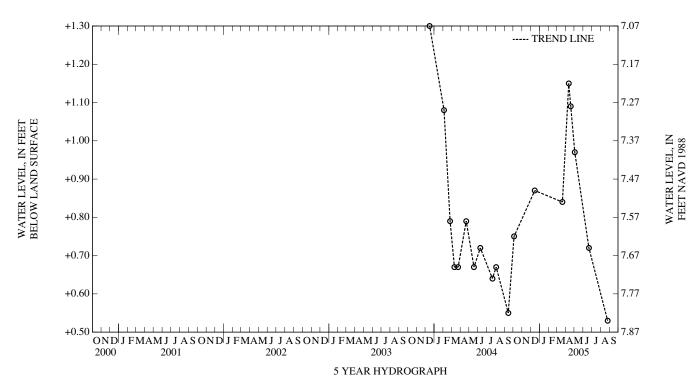
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5B.

PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.30 ft above land surface, December 16, 2003; lowest measured, 0.53 ft above land surface, August 25, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.75 +.87	MAR 21, 2005 APR 12	+.84 +1.15	APR 19, 2005 MAY 03	+1.09 +.97	JUN 21, 2005 AUG 25	+.72 +.53
		ST +1.15 APR 12, 2 T +.53 AUG 25, 2					



WELL NUMBER.--KE Bd 167. SITE ID.--391702076003403.

LOCATION.--Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.2 ft; casing diameter 2 in., to 7.7 ft; screened diameter 2 in., from 7.7 to 8.2 ft. INSTRUMENTATION.--Periodic water-level measuremets with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.31 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.20 ft above land surface.

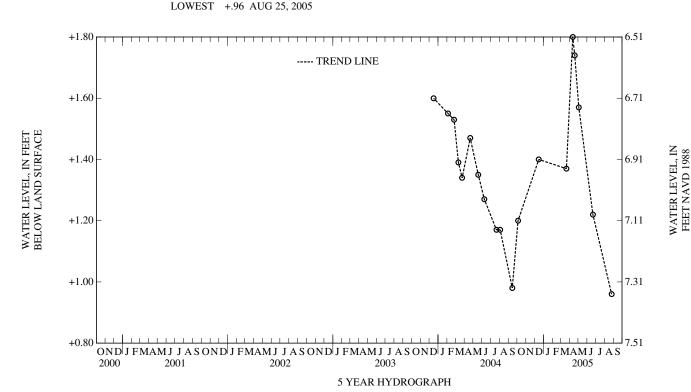
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5C.

PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft above land surface, April 12, 2005; lowest measured, 0.96 ft above land surface, August 25, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+1.20 +1.40	MAR 21, 2005 APR 12	+1.37 +1.80	APR 19, 2005 MAY 03	+1.74 +1.57	JUN 21, 2005 AUG 25	+1.22 +.96
	HIGHE	ST +1.80 APR 12, 2	2005				



WATER LEVEL, IN FEET NAVD 1988

### KENT COUNTY—Continued

WELL NUMBER.--KE Bd 168. SITE ID.--391702076003404.

LOCATION.-Lat 39°17'02", long 76°00'34", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 10.6 ft; casing diameter 2 in., to 10.1 ft; screen diameter 2 in., from 10.1 to 10.6 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.47 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.50 ft above land

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-3-5D.

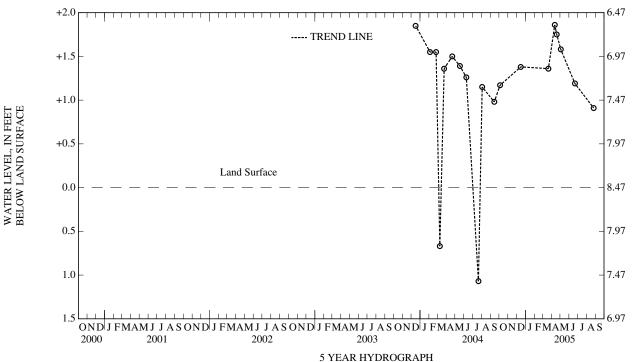
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.86 ft above land surface, April 12,2005; lowest measured, 1.07 ft below land surface, July 21, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+1.17 +1.38	MAR 21, 2005 APR 12	+1.36 +1.86	APR 19, 2005 MAY 03	+1.75 +1.58	JUN 21, 2005 AUG 25	+1.19 +.91
	HIGHE	OT . 1.06 ADD 12.6	2005				

+1.86 APR 12, 2005 +.91 AUG 25, 2005 LOWEST



WELL NUMBER.--KE Bd 169. SITE ID.--391704076003401.

LOCATION.-Lat 39°17'03", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, water-table well, depth 1.8 ft; casing diameter 2 in., to 1.2 ft; screen diameter 2 in., from 1.2 to

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 8.94 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.00 ft above land

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-4-1A.

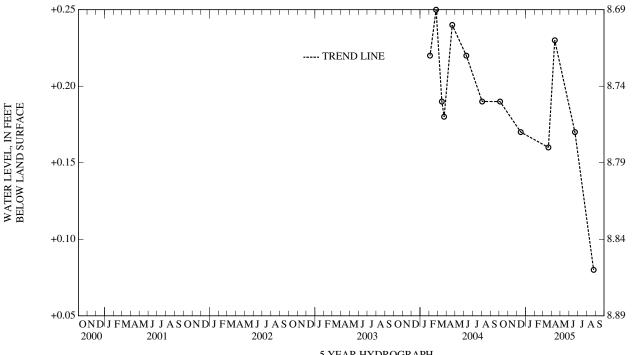
PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft above land surface, February 25, 2004; lowest measured, 0.08 ft above land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.19 +.17	MAR 21, 2005 APR 12	+.16 +.23	JUN 21, 2005 AUG 25	+.17 +.08
	HIGHES	ST +.23 APR 12, 2	005		

LOWEST +.08 AUG 25, 2005



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET NAVD 1988

WELL NUMBER.--KE Bd 170. SITE ID.--391704076003402.

LOCATION.--Lat 39°17′03", long 76°00′33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 6.2 ft; casing diameter 2 in., to 5.7 ft; screen diameter 2in., from 5.7 to 6.2 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 9.01 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.70 ft above land surface.

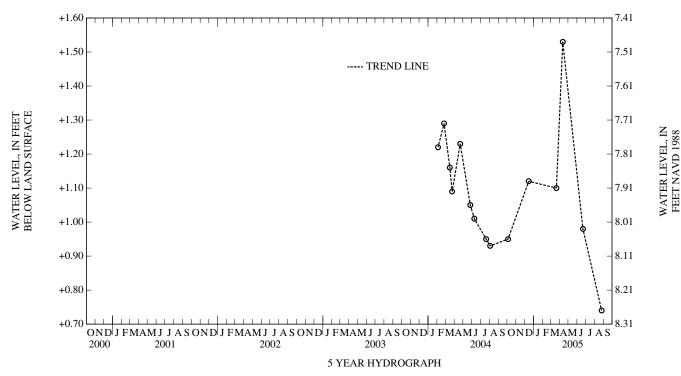
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-4-1B.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.53 ft above land surface, April 12, 2005; lowest measured, 0.74 ft above land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 04, 2004 DEC 15	+.95 +1.12	MAR 21, 2005 APR 12	+1.10 +1.53	JUN 21, 2005 AUG 25	+.98 +.74
		ST +1.53 APR 12, 2 ST +.74 AUG 25, 2			



WELL NUMBER.--KE Bd 171. SITE ID.--391659076001701. PERMIT NUMBER.--KE-94-1320

LOCATION.--Lat 39°16′59", long 76°00′17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 39 ft; casing diameter 2 in., to 34 ft; screen diameter 2 in., from 34 to 39 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.71 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.43 ft above land

surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1A.

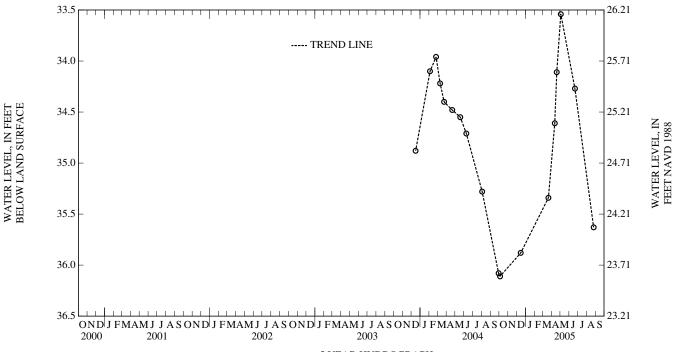
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.54 ft below land surface, May 3, 2005; lowest measured, 36.11 ft below land surface, October 4, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	36.11 35.88	MAR 21, 2005 APR 12	35.34 34.61	APR 19, 2005 MAY 03	34.11 33.54	JUN 21, 2005 AUG 25	34.27 35.63
	HIGHES	ST 33.54 MAY 03.	2005				

LOWEST 36.11 OCT 04, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 172. SITE ID.--391659076001702. PERMIT NUMBER.--KE-94-1319

LOCATION.--Lat 39°16′59", long 76°00′17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., from 47 to 50 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.80 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.35 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1B.

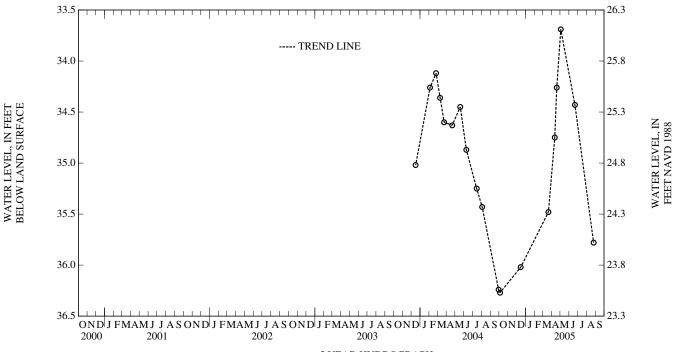
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.69 ft below land surface, May 03, 2005; lowest measured, 36.27 ft below land surface, October 4, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004	36.27	MAR 21, 2005	35.48	APR 19, 2005	34.26	JUN 21, 2005	34.43
DEC 15	36.02	APR 12	34.75	MAY 03	33.69	AUG 25	35.78

HIGHEST 33.69 MAY 03, 2005 LOWEST 36.27 OCT 04, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 173. SITE ID.--391659076001703. PERMIT NUMBER.--KE-94-1318

LOCATION.--Lat 39°16′59", long 76°00′17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 61.5 ft; casing diameter 2 in., to 58.5 ft; screen diameter 2 in., from 58.5 to 61.5 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.62 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.34 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-1C.

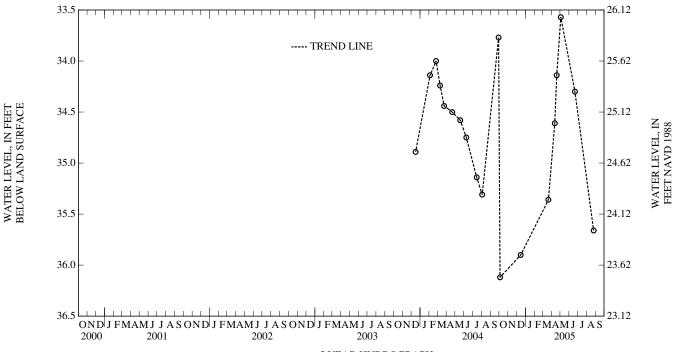
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.57 ft below land surface, May 03, 2005; lowest measured, 36.12 ft below land surface, October 4, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	36.12 35.90	MAR 21, 2005 APR 12	35.36 34.61	APR 19, 2005 MAY 03	34.14 33.57	JUN 21, 2005 AUG 25	34.30 35.66
	HICHE	CE 22.57 MAN 02	2005				

HIGHEST 33.57 MAY 03, 2005 LOWEST 36.12 OCT 04, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 174. SITE ID.--391700076002401. PERMIT NUMBER.--KE-94-1317

LOCATION.--Lat 39°17′00", long 76°00′24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 27 ft; casing diameter 2 in., to 24 ft; screen diameter 2 in., from 24 to 27 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.17 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.32 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2A.

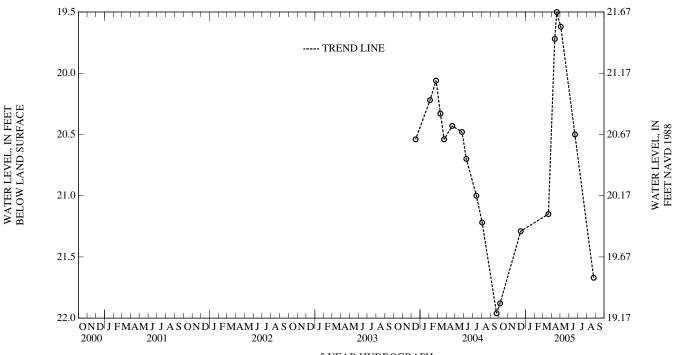
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.50 ft below land surface, April 19, 2005; lowest measured, 21.96 ft below land surface, September 22, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004	21.88	MAR 21, 2005	21.15	APR 19, 2005	19.50	JUN 21, 2005	20.50
DEC 15	21.29	APR 12	19.72	MAY 03	19.62	AUG 25	21.67

HIGHEST 19.50 APR 19, 2005 LOWEST 21.88 OCT 04, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 175. SITE ID.--391700076002402. PERMIT NUMBER.--KE-94-1316

LOCATION.--Lat 39°17′00", long 76°00′24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., from 32 to 35 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.75 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.25 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2B.

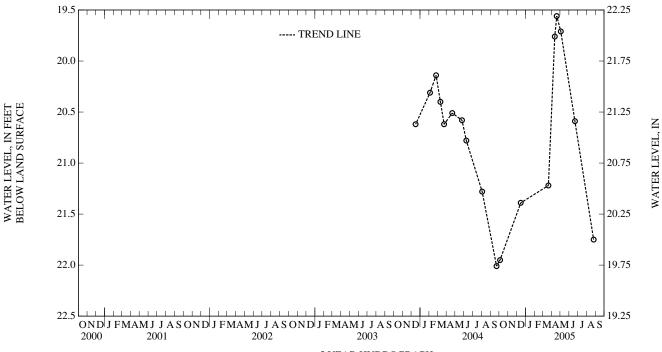
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.56 ft below land surface, April 19, 2005; lowest measured, 22.01 ft below land surface, September 22, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004	21.95	MAR 21, 2005	21.22	APR 19, 2005	19.56	JUN 21, 2005	20.59
DEC 15	21.39	APR 12	19.76	MAY 03	19.71	AUG 25	21.75

HIGHEST 19.56 APR 19, 2005 LOWEST 21.95 OCT 04, 2004



5 YEAR HYDROGRAPH

FEET NAVD 1988

WELL NUMBER.--KE Bd 176. SITE ID.--391700076002403. PERMIT NUMBER.--KE-94-1315

LOCATION.—Lat 39°17′00", long 76°00′24", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 46 ft; casing diameter 2 in., to 43 ft; screen diameter 2 in., from 43 to 46 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 41.82 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.18 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-2C.

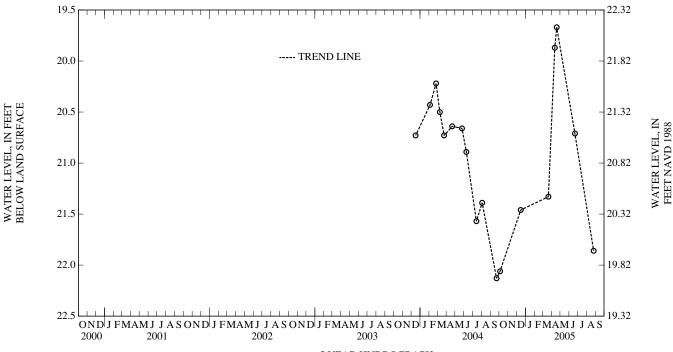
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.67 ft below land surface, April 19, 2005; lowest measured, 22.13 ft below land surface, September 22, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	22.06 21.46	MAR 21, 2005 APR 12	21.33 19.87	APR 19, 2005 JUN 21	19.67 20.71	AUG 25, 2005	21.86

HIGHEST 19.67 APR 19, 2005 LOWEST 22.06 OCT 04, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 177. SITE ID.--391702076003301. PERMIT NUMBER.--KE-94-1314

LOCATION.—Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 2 in., to 16 ft; screen diameter 2 in., from 16 to 19 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.70 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.15 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3A.

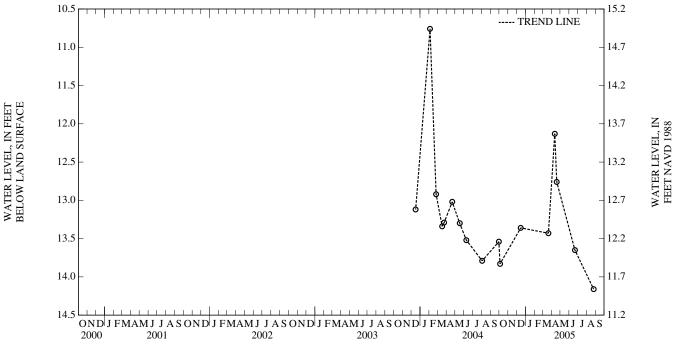
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.76 ft below land surface, February 4, 2004; lowest measured, 14.16 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	13.83 13.36	MAR 21, 2005 APR 12	13.43 12.13	APR 19, 2005 JUN 21	12.76 13.65	AUG 25, 2005	14.16

HIGHEST 12.13 APR 12, 2005 LOWEST 14.16 AUG 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 178. SITE ID.--391702076003302. PERMIT NUMBER.--KE-94-1313

LOCATION.--Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 36 ft; casing diameter 2 in., to 33 ft; screen diameter 2 in., from 33 to 36 ft.

INSTRUMENTATION.--Peroiodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.73 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.08 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3B.

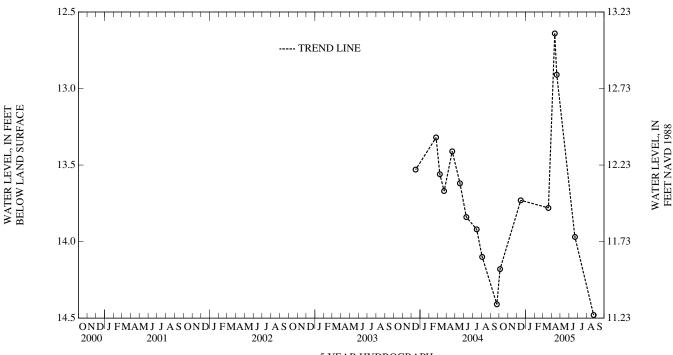
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.64 ft below land surface, April 12, 22005; lowest measured, 14.48 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	14.18 13.73	MAR 21, 2005 APR 12	13.78 12.64	APR 19, 2005 JUN 21	12.91 13.97	AUG 25, 2005	14.48
	HIGHE	OT 10.64 ADD 10.6	2005				

HIGHEST 12.64 APR 12, 2005 LOWEST 14.48 AUG 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 179. SITE ID.--391702076003303. PERMIT NUMBER.--KE-94-1312

LOCATION.--Lat 39°17'02", long 76°00'33", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Hornerstown Formation. Aquifer code: 125HRRS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 50 ft; casing diameter 2 in., to 47 ft; screen diameter 2 in., from 47 to 50 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 25.58 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 2.26 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is ACT-FS1-3C.

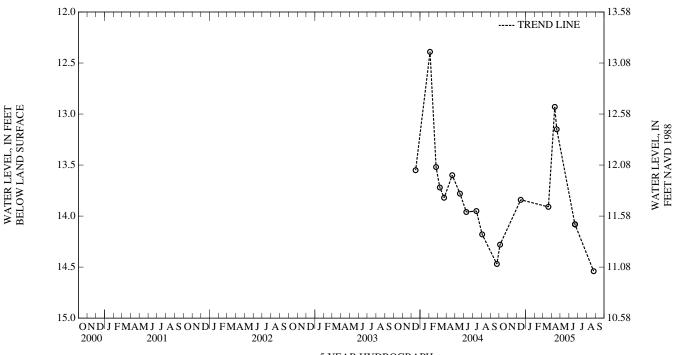
PERIOD OF RECORD .-- December 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.39 ft below land surface, February 4, 2004; lowest measured, 14.54 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	14.28 13.84	MAR 21, 2005 APR 12	13.91 12.93	APR 19, 2005 JUN 21	13.15 14.08	JUN 21, 2005 AUG 25	14.08 14.54
	HICHE	CT 1202 ADD 12 C	2005				

LOWEST 14.54 AUG 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 180. SITE ID.--391657076003602.

LOCATION.--Lat 39°16′57", long 76°00′37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 8.7 ft; casing diameter 2 in., to 8.2 ft; screen diameter 2 in., from 8.2 to 8.7 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 7.87 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 3.60 ft above land surface.

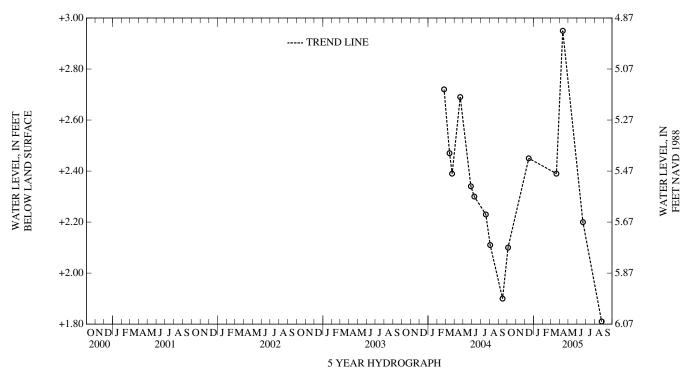
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-TR1-1-5B.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.95 ft above land surface, April 12, 2005; lowest measured, 1.81 ft above land surface, August 25, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+2.10 +2.45	MAR 21, 2005 APR 12	+2.39 +2.95	JUN 21, 2005 AUG 25	+2.20 +1.81
		ST +2.95 APR 12, 2 ST +1.81 AUG 25, 2			



WELL NUMBER.--KE Bd 181. SITE ID.--391643076002101. PERMIT NUMBER.--KE-94-1210.

LOCATION.-Lat 39°16'43", long 76°00'21", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 41 ft; casing diameter 1 in., to 36 ft; screen diameter 1 in., from 36 to 41 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 62.87 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.45 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-10.

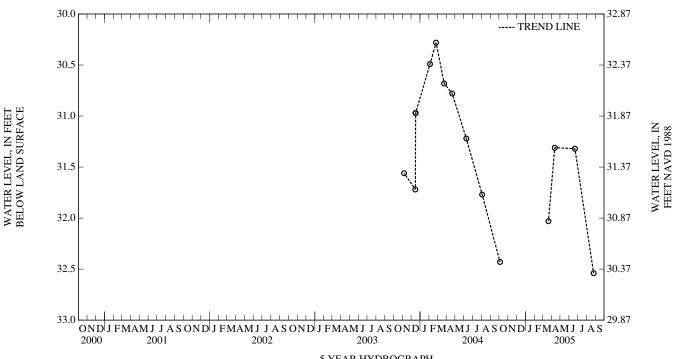
PERIOD OF RECORD .-- April 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.28 ft below land surface, February 25, 2004; lowest measured, 32.54 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 MAR 21, 2005	32.43 32.03	APR 12, 2005 JUN 21	31.31 31.32	AUG 25, 2005	32.54
		T 31.31 APR 12, 2			

LOWEST 32.54 AUG 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 182. SITE ID.--391654076000901. PERMIT NUMBER.--KE-94-1211.

LOCATION.-Lat 39°16'54", long 76°00'09", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 28 ft; casing diameter 1 in., to 23 ft; screen diameter i in., from 23 to 28 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 49.84 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.30 ft above land surface.

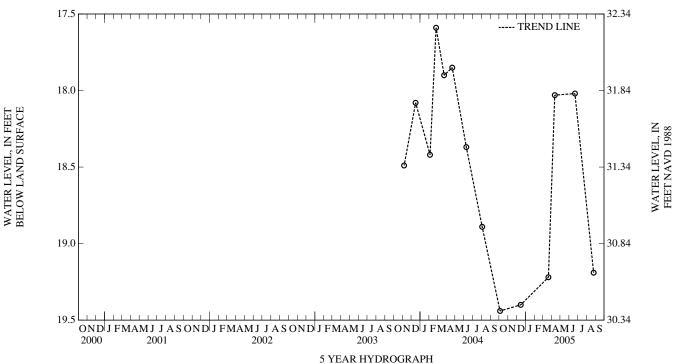
REMARKS.--NAWQA ACT study observation well. Local well name is GP-11.

PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.59 ft below land surface, February 25, 2004; lowest measured, 19.44 ft below land surface, October 4, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	19.44 19.40	MAR 21, 2005 APR 12	19.22 18.03	JUN 21, 2005 AUG 25	18.02 19.19
		ST 18.02 JUN 21, 2 T 19.44 OCT 04, 2			



WELL NUMBER.--KE Bd 183. SITE ID.--391700076001701. PERMIT NUMBER.--KE-94-1212.

LOCATION.--Lat 39°17′00", long 76°00′17", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 44 ft; casing diameter 1 in., to 39 ft; screen diameter 1 in., from 39 to 44 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 59.68 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.25 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-12.

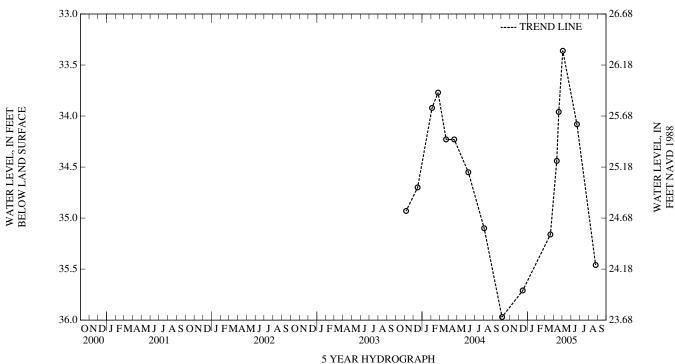
PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.36 ft below land surface, May 03, 2005; lowest measured, 35.97 ft below land surface, October 4, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004	35.97	MAR 21, 2005	35.16	APR 19, 2005	33.96	JUN 21, 2005	34.08
DEC 15	35.71	APR 12	34.44	MAY 03	33.36	AUG 25	35.46

HIGHEST 33.36 MAY 03, 2005 LOWEST 35.97 OCT 04, 2004



3 TEAR II I DROGRAI II

WELL NUMBER.--KE Bd 184. SITE ID.--391711076001901. PERMIT NUMBER.--KE-94-1212.

LOCATION.-Lat 39°17'11", long 76°00'19", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 28 ft; casing diameter 1 in., to 23 ft; screen diameter 1 in., from 23 to 28 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 36.31 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.35 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-13.

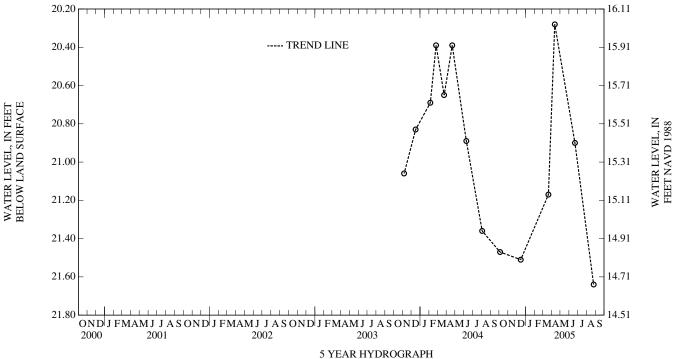
PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.28 ft below land surface, April 12, 2005; lowest measured, 21.64 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	21.47 21.51	MAR 21, 2005 APR 12	21.17 20.28	JUN 21, 2005 AUG 25	20.90 21.64
	HOLE	CT 20.20 ADD 12.0	2005		

HIGHEST 20.28 APR 12, 2005 LOWEST 21.64 AUG 25, 2005



WELL NUMBER.--KE Bd 185. SITE ID.--391703076003201. PERMIT NUMBER.--KE-94-1214.

LOCATION.--Lat 39°17′03", long 76°00′32", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 25 ft; casing diameter 1 in., to 20 ft; screen diameter 1 in., from 20 to 25 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 30.03 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.24 ft above land surface.

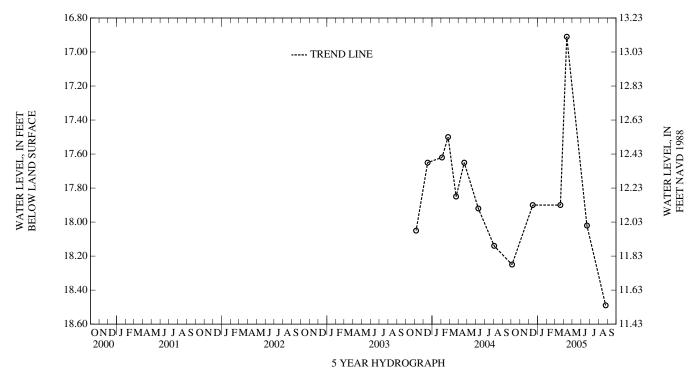
REMARKS.--NAWQA ACT study observation well. Local well name is GP-14.

PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.91 ft below land surface, April 12, 2005; lowest measured, 18.49 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	18.25 17.90	MAR 21, 2005 APR 12	17.90 16.91	JUN 21, 2005 AUG 25	18.02 18.49
		ST 16.91 APR 12, 2 T 18.49 AUG 25, 2			



WELL NUMBER.--KE Bd 186. SITE ID.--391653076003701. PERMIT NUMBER.--KE-94-1215.

LOCATION.--Lat 39°16′53", long 76°00′37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 21 ft; casing diameter 1 in., to 16 ft; screen diameter 1 in., from 16 to 21 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 26.27 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.24 ft above land surface.

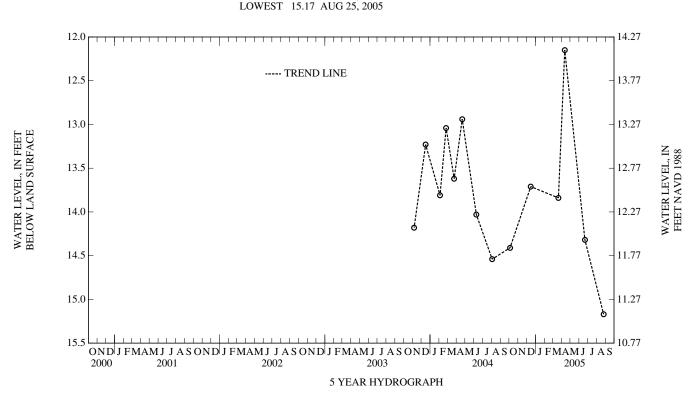
REMARKS.--NAWQA ACT study observation well. Local well name is GP-15.

PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.15 ft below land surface, April 12, 2005; lowest measured, 15.17 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	14.41 13.71	MAR 21, 2005 APR 12	13.84 12.15	JUN 21, 2005 AUG 25	14.32 15.17
	HIGHE	ST 12.15 APR 12, 2	2005		



WELL NUMBER.--KE Bd 187. SITE ID.--391651076002901. PERMIT NUMBER.--KE-94-1222.

LOCATION.-Lat 39°16'51", long 76°00'29", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 19 ft; casing diameter 1 in., to 14 ft; screen diameter 1 in., from 14 to 19 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 35.84 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.25 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-16.

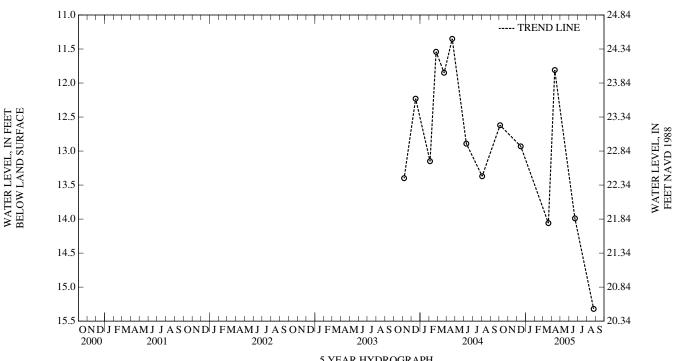
PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.35 ft below land surface, April 21, 2004; lowest measured, 15.32 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	12.62 12.93	MAR 21, 2005 APR 12	14.06 11.81	JUN 21, 2005 AUG 25	13.99 15.32
	HIGHE	ST 11.81 APR 12. 2	2005		

LOWEST 15.32 AUG 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--KE Bd 188. SITE ID.--391654076000902. PERMIT NUMBER.--KE-94-1223.

LOCATION.-Lat 39°16'54", long 76°00'10", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125 AQUI.

WELL CHARACTERISTICS.--Driven, observation, artesian well, depth 39 ft; casing diameter 1 in., to 36 ft; screen diameter 1 in., from 36 to 39 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 50.13 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.20 ft above land surface.

REMARKS.--NAWQA ACT study observation well. Local well name is GP-17.

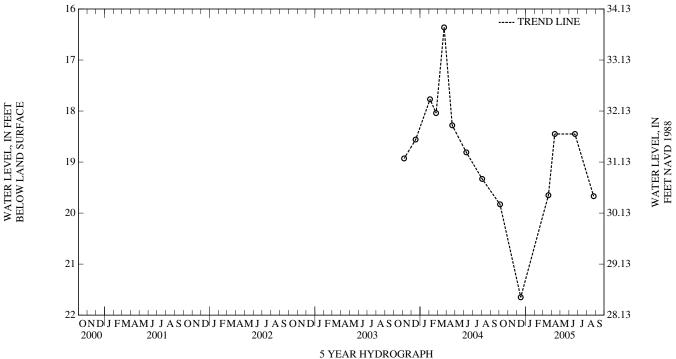
PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.36 ft below land surface, March 24, 2004; lowest measured, 21.65 ft below land surface, December 15, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004	19.83	MAR 21, 2005	19.65	JUN 21, 2005	18.45
DEC 15	21.65	APR 12	18.45	AUG 25	19.67

HIGHEST 18.45 APR 12, 2005 JUN 21, 2005 LOWEST 21.65 DEC 15, 2004



WELL NUMBER.--KE Bd 189. SITE ID.--391707076002801. PERMIT NUMBER.--KE-94-1224.

LOCATION.--Lat 39°17'07", long 76°00'28", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 5 ft; casing diameter 1 in., to 3 ft; screen diameter 1 in., from 3 to 5 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 10.34 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 1.13 ft above land surface.

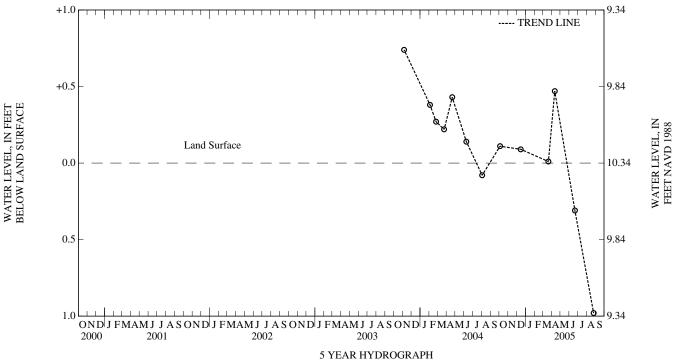
REMARKS.--NAWQA ACT study observation well. Local well name is DP-1.

PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft above land surface, November 6, 2003; lowest measured, 0.98 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	+.11 +.09	MAR 21, 2005 APR 12	+.01 +.47	JUN 21, 2005 AUG 25	.31 .98
		T +.47 APR 12, 2 T .98 AUG 25, 20			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--KE Bd 190. SITE ID.--391652076004301. PERMIT NUMBER.--KE-94-1216.

LOCATION.--Lat 39°16′53", long 76°00′43", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 7 ft; casing diameter 1 in., to 5 ft; screen diameter 1 in., from 5 to 7 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 6.88 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 3.40 ft above land surface.

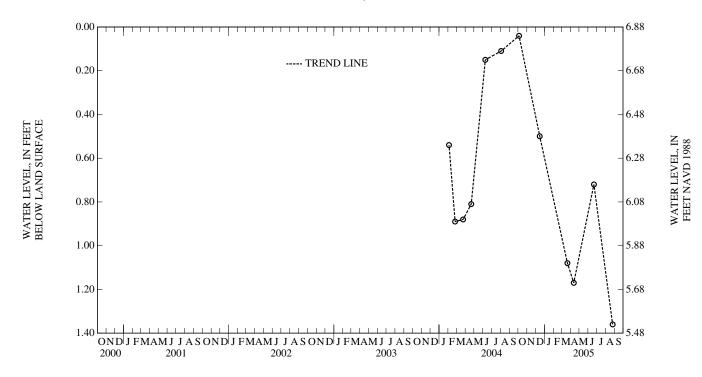
REMARKS.--NAWQA ACT study observation well. Local well name is DP-2.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land surface, October 4, 2004; lowest measured, 1.36 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.04 .50	MAR 21, 2005 APR 12	1.08 1.17	JUN 21, 2005 AUG 25	.72 1.36
		T .04 OCT 04, 20 T 1.36 AUG 25, 2			



WELL NUMBER.--KE Bd 191. SITE ID.--391658076003701. PERMIT NUMBER.--KE-94-1247.

LOCATION.--Lat 39°16′58", long 76°00′37", Hydrologic Unit 02060002, 1.6 mi southwest of Kennedyville, 0.4 mi north of Wallis Road. Owner: U.S. Geological Survey.

AQUIFER .-- Quaternary Alluvium. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Hand-augered, observation, artesian well, depth 6 ft; casing diameter 1 in., to 4 ft; screen diameter 1 in., from 4 to 6 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 6.53 ft, surveyed, above North American Vertical Datum 0f 1988. Measuring point: Top of casing, 0.75 ft above land surface.

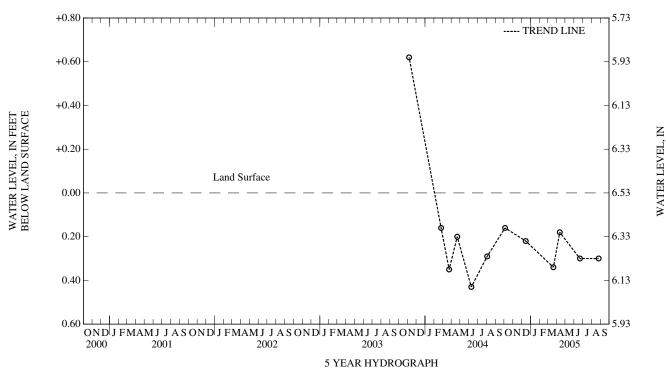
REMARKS.--NAWQA ACT study observation well. Local well name is DP-4.

PERIOD OF RECORD .-- November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.62 ft above land surface, November 6, 2003; lowest measured, 0.43 ft below land surface, June 9, 2004.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	.16 .22	MAR 21, 2005 APR 12	.34 .18	JUN 21, 2005 AUG 25	.30 .30
	HIGHEST LOWEST	.16 OCT 04, 20			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NAVD 1988

WELL NUMBER.--KE Be 43. SITE ID.--391823075594701. PERMIT NUMBER.--KE-73-0659.

LOCATION .-- Lat 39°18'23", long 75°59'45", Hydrologic Unit 02060002, at Kennedyville. Owner: U.S. Geological Survey.

AQUIFER .-- Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 297 ft; casing diameter 10 in., to 171 ft; casing diameter 4 in., to 275 ft, and 285 to 297 ft; screen diameter 4 in., from 275 to 285 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to April 1991.

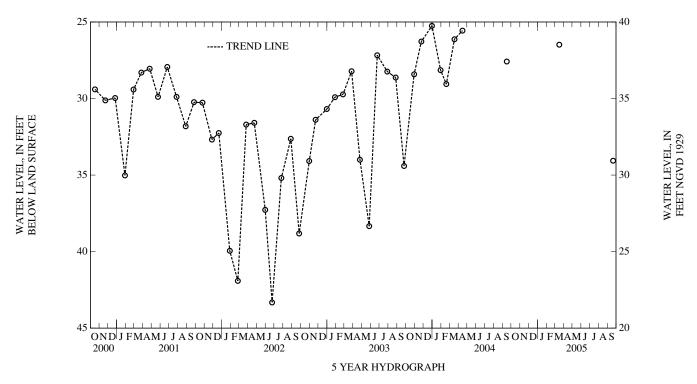
DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.60 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--February 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.31 ft below land surface, June 5, 1979; lowest measured, 43.32 ft below land surface, June 24, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	26.48	SEP 20, 2005	34.06
		ST 26.48 MAR 17, T 34.06 SEP 20, 20	



WELL NUMBER.--KE Be 218. SITE ID.--391710075584001. PERMIT NUMBER.--KE-94-1346.

LOCATION.—Lat 39°17'10", long 75°58'40", Hydrologic Unit 02060002, 1.6 miles southeast of Kennedyville on Kennedyville Road, opposite intersection with Comegeys Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 14.5 ft; casing diameter 2 in., to 11.5 ft; screen diameter 2 in., from 11.5 to 14.5 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 44.60 ft above North American Vertical Datum of 1988, estimated from LIDAR. Measuring point: Top of casing, 0.25 ft below land surface.

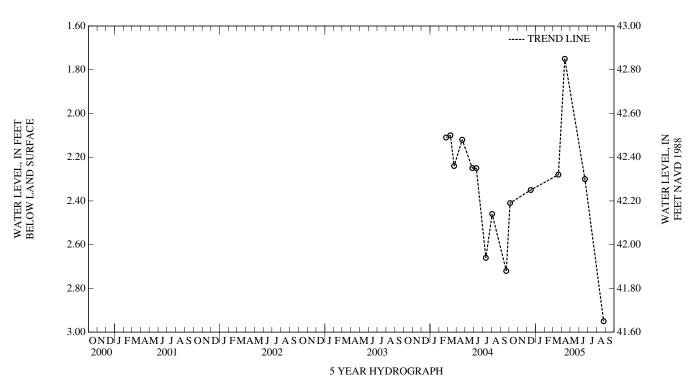
REMARKS .-- NAWQA ACT study observation well. Local well name is ACT-AS1-1A.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.75 ft below land surface, April 12, 2005; lowest measured, 2.95 ft below land surface, August 25, 2005.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	2.41 2.35	MAR 21, 2005 APR 12	2.28 1.75	JUN 21, 2005 AUG 25	2.30 2.95
		T 1.75 APR 12, 2 T 2.95 AUG 25, 2			



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--KE Be 219. SITE ID.--391710075584002. PERMIT NUMBER.--KE-94-1345.

LOCATION.—Lat 39°17'10", long 75°58'40", Hydrologic Unit 02060002, 1.6 miles southeast of Kennedyville on Kennedyville Road, opposite intersection with Comegeys Road. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 33.0 ft; casing diameter 2 in., to 30.0 ft; screen diameter 2 in., from 30.0 to 33.0 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 44.60 ft above North American Vertical Datum of 1988, estimated from LIDAR. Measuring point: Top of casing, 0.17 ft below land surface.

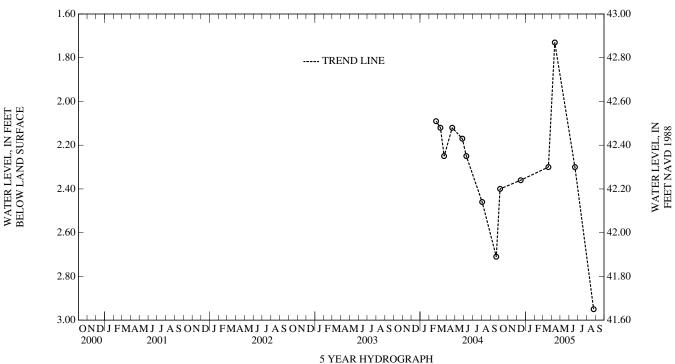
REMARKS.--NAWQA ACT study observation well. Local well name is ACT-AS1-1B.

PERIOD OF RECORD .-- February 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.73 ft below land surface, April 12, 2005; lowest measured, 2.95 ft below land surface, August 25, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 2004 DEC 15	2.40 2.36	MAR 21, 2005 APR 12	2.30 1.73	JUN 21, 2005 AUG 25	2.30 2.95
		ST 1.73 APR 12, 2 T 2.95 AUG 25, 2			



3 TEAR III DROOKAI II

WELL NUMBER.--KE Bg 33. SITE ID.--391815075472101. PERMIT NUMBER.--KE-73-0670.

LOCATION.--Lat 39°18'15", long 75°47'21", Hydrologic Unit 02060002, 2 mi east of Massey, at Millington Wildlife Management Area. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 705 ft; casing diameter 4 in., to 695 ft; screen diameter 4 in., from 695 to 705 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to April 1994.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.50 ft above land surface.

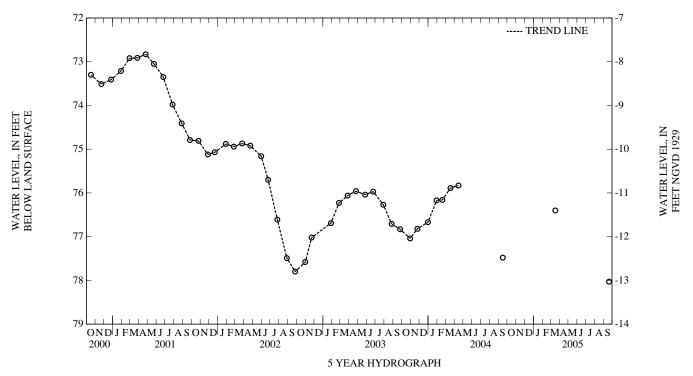
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD .-- March 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.62 ft below land surface, June 5, 1979; lowest measured, 78.03 ft below land surface, September 20, 2005.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	76.40	SEP 20, 2005	78.03
		ST 76.40 MAR 17, T 78.03 SEP 20, 20	



WELL NUMBER.--KE Bg 34. SITE ID.--391815075472102. PERMIT NUMBER.--KE-73-0686.

LOCATION.--Lat 39°18'15", long 75°47'22", Hydrologic Unit 02060002, 2 mi east of Massey, at Millington Wildlife Management Area. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 186 ft; casing diameter 6 in., to 124 ft; screen diameter 6 in., from 124 to 186 ft.

INSTRUMENTATION.—Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1986 to October 1994.

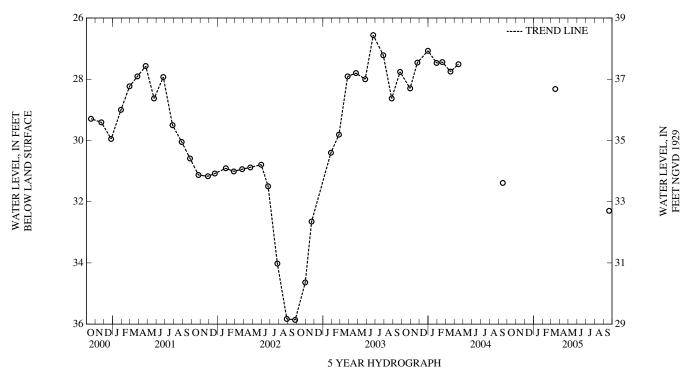
DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water-levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.37 ft below land surface, April 11, 1979; lowest measured, 36.23 ft below land-surface, September 2, 1981.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	28.32	SEP 20, 2005	32.30
		T 28.32 MAR 17, Γ 32.30 SEP 20, 20	



WELL NUMBER.--KE Cb 36. SITE ID.--391400076101401. PERMIT NUMBER.--KE-73-0660.

LOCATION.--Lat 39°14'00", long 76°10'14", Hydrologic Unit 02060002, 0.75 mi north of Fairlee. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 650 ft; casing diameter 10 in., to 114 ft; casing diameter 4 in., to 595 ft, and 605 to 650 ft; screen diameter 4 in., from 595 to 605 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Measured twice yearly from October 1986 to April 1991. Equipped with digital water-level recorder--30-minute recorder interval from July 1991 to October 1993. Measured twice yearly from October 1993 to January 2002. Monthly water level measurements from January 2003 to present.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.38 ft above land surface.

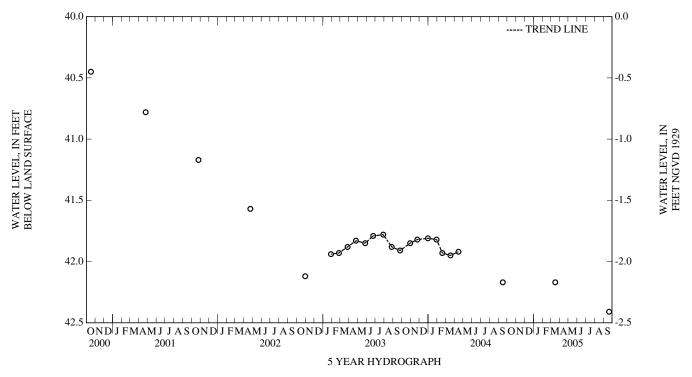
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD .-- June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.84 ft below land surface, September 15, 1982; lowest measured, 42.41 ft below land surface, September 20, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	42.17	SEP 20, 2005	42.41
		42.17 MAR 17, 42.41 SEP 20, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--KE Cb 97. SITE ID.--391124076101001. PERMIT NUMBER.--KE-88-0251.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of the Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 285 ft; casing diameter 4 in., to 270 ft; screen diameter 4 in., from 270 to 280 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.30 ft above land surface.

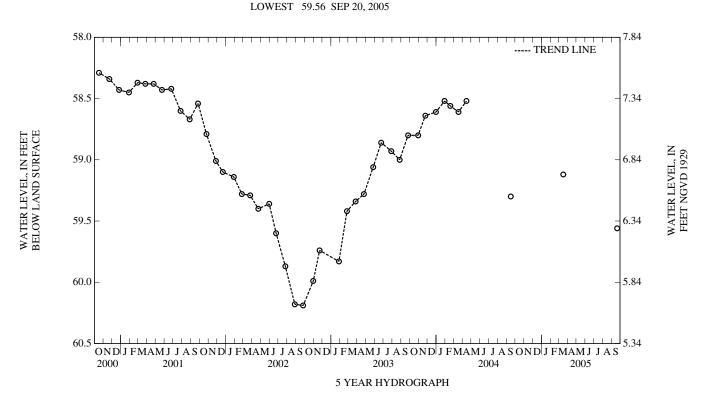
 $REMARKS. -- Maryland\ Ground-Water-Level\ Monitoring\ Network\ observation\ well.\ Water\ levels\ are\ affected\ by\ local\ and\ regional\ ground-water\ withdrawal.$ 

PERIOD OF RECORD.--October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.40 ft below land surface, October 24, 1991; lowest measured, 60.19 ft below land surface, September 26, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	59.12	SEP 20, 2005	59.56
	HIGHEST	59.12 MAR 17,	2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--KE Cb 100. SITE ID.--391124076101004. PERMIT NUMBER.--KE-88-0253.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corners, at Remington Farms. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 67 ft; casing diameter 4 in., to 52 ft, and 62 to 67 ft; screen diameter 4 in., from 52 to 62 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from October 1993 to October 1999. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to October 1993.

DATUM.--Elevation of land surface is 65.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.56 ft above land surface.

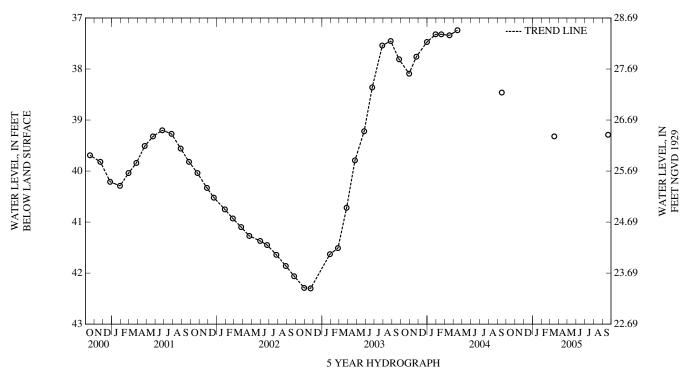
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.63 ft below land surface, April 15, 1997; lowest measured, 42.30 ft below land surface, November 22, 2002.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	39.32	SEP 20, 2005	39.29
		T 39.29 SEP 20, 2 Γ 39.32 MAR 17.	



#### KENT COUNTY—Continued

WELL NUMBER.--KE Cd 44. SITE ID.--391432076015501. PERMIT NUMBER.--KE-03-6139.

LOCATION.--Lat 39°14'32", long 76°01'55", Hydrologic Unit 02060002, MD Rt. 291, 2.6 mi northeast of Chestertown. Owner: Chestertown Foods.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 84 ft; casing diameter 4 in., to 79 ft; screen diameter 5 in., from 79 to 84 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.20 ft above land surface.

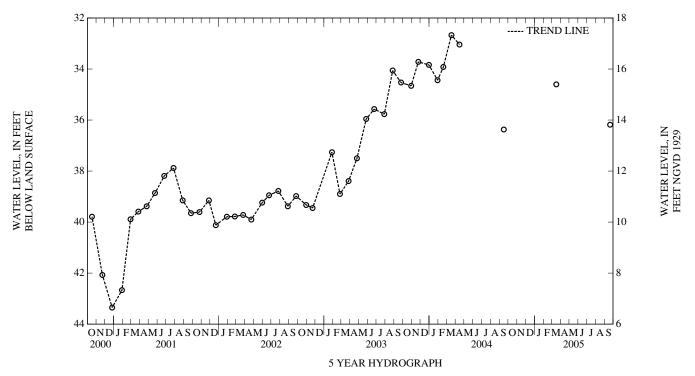
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels measured by plant personnel with an electric tape, September 18, 1959 to April 18, 1963. Food processing plant closed from August 31, 1995 to September 30, 1996. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD .-- July 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.92 ft below land surface, September 6, 1996; lowest measured, 54.46 ft below land surface, August 4, 1966.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	34.60	SEP 20, 2005	36.18
		ST 34.60 MAR 17, T 36.18 SEP 20, 20	



## KENT COUNTY—Continued

WELL NUMBER.--KE Db 40. SITE ID.--390837076140401. PERMIT NUMBER.--KE-73-0805.

LOCATION .-- Lat 39°08'37", long 76°14'04", Hydrologic Unit 02070002, near Rock Hall. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,030 ft; casing diameter 4 in., to 1,019 ft; screen diameter 4 in., from 1,019 to 1,030 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice monthly measurements prior to January 2003.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.65 ft above land surface.

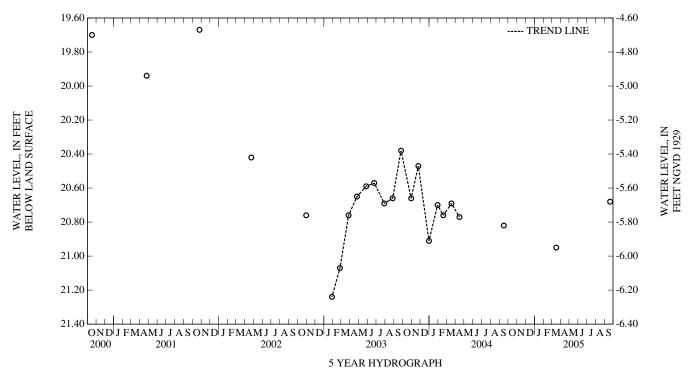
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.08 ft below land surface, October 30, 1980; lowest measured, 21.24 ft below land surface, January 28, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17, 2005	20.95	SEP 20, 2005	20.68
		T 20.68 SEP 20, 2	



#### MONTGOMERY COUNTY

WELL NUMBER.--MO Cb 26. SITE ID.--391142077280601. PERMIT NUMBER.--MO-72-0191.

LOCATION.--Lat 39°11'42", long 77°28'06", Hydrologic Unit 02070008, 2 mi southwest of Dickerson, at Dickerson Regional Park. Owner: U.S. Geological Survey.

AQUIFER.--Manassas Sandstone, Poolesville Member of Upper Triassic age. Aquifer code: 231MNSS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 885 ft; casing diameter 6 in., to 38 ft; open hole.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 220 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 8.60 ft above land surface.

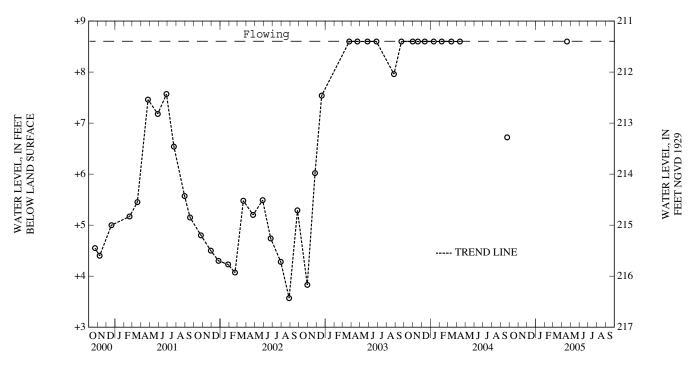
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- February 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing on January 3, 1991, April 3, 1991, April 5, 1993, May 3, 1993, March 7, 1994, April 5, 1994, May 10, 1994, January 29, 1996, February 15, 1996, March 12, 1996, April 11, 1996, May 6, 1996, June 5, 1996, July 2, 1996, August 1, 1996, October 10, 1996, November 4, 1996, December 3, 1996, January 2, 1997, February 3, 1997, March 13, 1997, April 10, 1997, February 3, 1998, March 2, 1998, April 2, 1998, May 11, 1998, April 13, 2000, March 25, 2003, April 22, 2003, May 27, 2003, June 27, 2003, September 22, 2003, October 31, 2003, November 18, 2003, December 12, 2003, January 12, 2004, February 9, 2004, March 13, 2004, April 12, 2004,, and April 19, 2005; lowest measured, 3.57 ft above land surface, August 28, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE WATER LEVEL APR 19, 2005 Flowing



5 YEAR HYDROGRAPH

## MONTGOMERY COUNTY—Continued

WELL NUMBER.--MO Cc 14. SITE ID.--391314077224201. PERMIT NUMBER.-- None.

LOCATION.--Lat 39°13'14", long 77°22'42", Hydrologic Unit 02070008, at Barnesville. Owner: Private owner.

AQUIFER .-- Ijamsville Formation of Paleozoic age. Aquifer code: 300IJMV.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, depth 46 ft; casing diameter 60 in.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of wooden well cover, 3.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

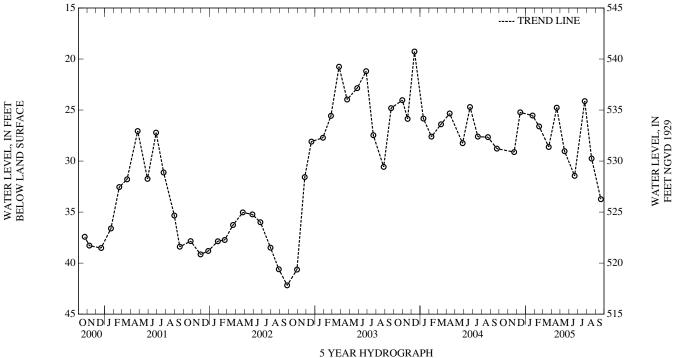
PERIOD OF RECORD .-- November 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.00 ft below land surface, April 5, 1993; lowest measured, dry, on December 2, 1957, December 7, 1964, December 6, 1965, January 3, 1966, February 2, 1966 (well depth 46 ft).

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER DATE LEVEL DA		WATER LEVEL	DATE	WATER DATE LEVEL DATE			
NOV 22, 2004	29.12	FEB 17, 2005	26.61	MAY 16, 2005	29.03	AUG 18, 2005	29.75	
DEC 13	25.23	MAR 22	28.62	JUN 20	31.45	SEP 19	33.73	
IAN 25, 2005	25.54	APR 19	24.76	JUL 25	24.12			

HIGHEST 24.12 JUL 25, 2005 LOWEST 33.73 SEP 19, 2005



## MONTGOMERY COUNTY—Continued

WELL NUMBER.--MO Eh 20. SITE ID.--390434076573002. PERMIT NUMBER.-- None.

 $LOCATION. --Lat\ 39^{\circ}04'34", long\ 76^{\circ}57'30", Hydrologic\ Unit\ 02070010, at\ MD\ Rt.\ 196\ and\ Fairland\ Rd., Fairland.\ Owner:\ Liberty\ Fairland\ Auto\ Service.$ 

AQUIFER .-- Loch Raven Formation of Cambrian age. Aquifer code: 370LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 102.9 ft; casing diameter 6 in., to 50 ft; open hole from 50 to 102.9 ft.

INSTRUMENTATION .-- Monthly water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 405 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land-surface datum.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

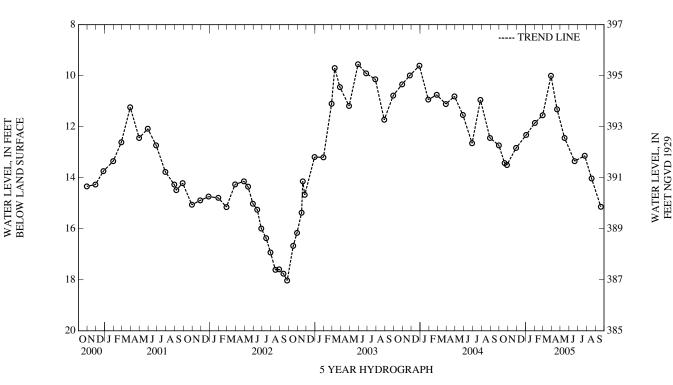
PERIOD OF RECORD .-- March 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.39 ft below land surface, June 25, 1972; lowest measured, 18.03 ft below land surface, September 26, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 2004 28	13.43 13.50	FEB 02, 2005 MAR 01	11.85 11.55	MAY 16, 2005 JUN 20	12.44 13.35	SEP 19, 2005	15.14
NOV 29	12.83	30	10.00	JUL 25	13.14		
JAN 03, 2005	12.32	APR 20	11.32	AUG 18	14.03		

HIGHEST 11.32 APR 20, 2005 LOWEST 15.14 SEP 19, 2005



## PRINCE GEORGES COUNTY

WELL NUMBER .-- PG Bc 16. SITE ID .-- 390151076561501.

LOCATION.--Lat 39°01'51", long 76°56'15", Hydrologic Unit 02070010, at National Agricultural Research Center, Beltsville. Owner: U.S. Department of Agriculture.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Dug, brick-lined, obsevation, water-table well, measured depth 27.4 ft; casing diameter 40 in.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with water-level recorder from October 1962 to February 1965.

DATUM.--Elevation of land surface is 190 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of steel cover, 0.10 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

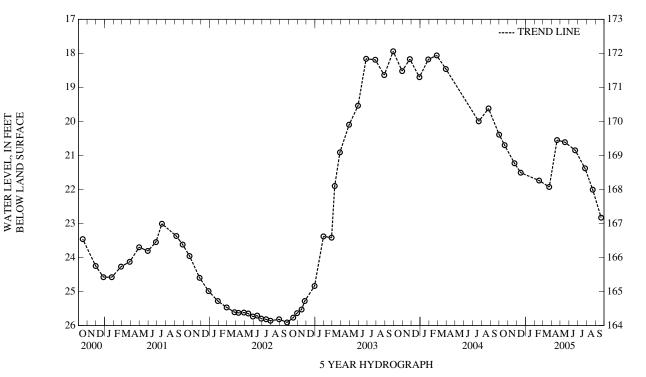
PERIOD OF RECORD.--September 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.26 ft below land surface, July 6, 1972; lowest measured, 26.46 ft below land surface, July 8, 1981.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 2004	20.39	DEC 15, 2004	21.51	APR 20, 2005	20.55	JUL 26, 2005	21.38
20	20.70	FEB 17, 2005	21.74	MAY 17	20.61	AUG 22	22.01
NOV 23	21.23	MAR 24	21.93	JUN 22	20.85	SEP 20	22.83

HIGHEST 20.39 OCT 01, 2004 LOWEST 22.83 SEP 20, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--PG De 21. SITE ID.--385130076465501. PERMIT NUMBER.--PG-02-2875.

LOCATION.--Lat 38°51'30", long 76°46'55", Hydrologic Unit 02060006, Agricultural Experiment Station, Southern Maryland Research and Educational Facility, at Oak Grove. Owner: University of Maryland.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 155 ft; casing diameter 6 in., to 150 ft; screen diameter 6 in., from 150 to 155 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from May 1958 to January 1965.

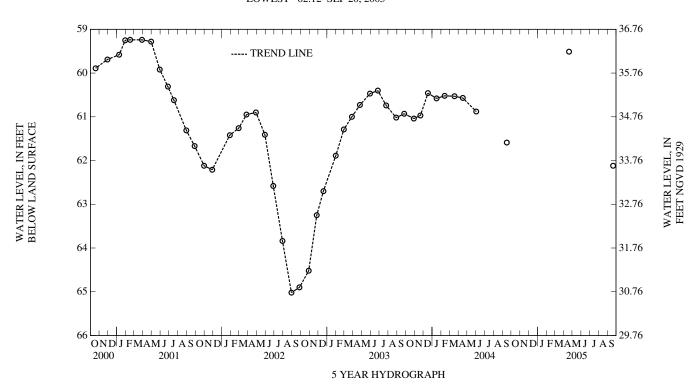
DATUM.--Elevation of land surface is 95.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.34 ft below land surface, May 29, 1958; lowest measured, 65.02 ft below land surface, August 30, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 2005	59.51	SEP 20, 2005	62.12
		ST 59.51 APR 20, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET BELOW LAND SURFACE

## PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Fd 41. SITE ID.--384131076533301. PERMIT NUMBER.--PG-01-8058.

LOCATION.--Lat 38°41'31", long. 76°53'33", Hydrologic Unit 02070010, south side of MD Rt. 373, 1.14 mi west of intersection with MD Rt. 5. Owner: Colonial Investment Corp.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 362 ft; casing diameter 4 in., to 352 ft; screen diameter 2.5 in., from 352 to 362 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 196.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported as 146 ft below land surface on March 11, 1955. Water levels are affected by local and regional ground-water withdrawal.

PERIOD OF RECORD .-- May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 157.24 ft below land surface, March 4, 1968; lowest measured, 226.81 ft below land surface, August 30, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

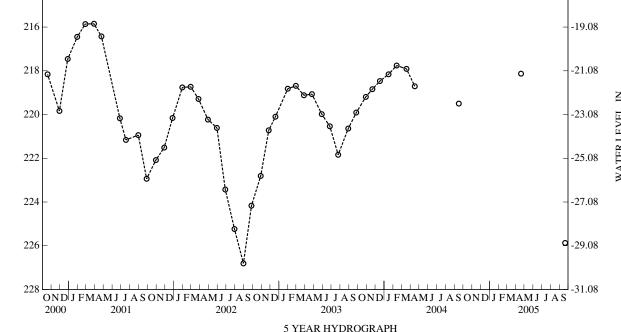
-17.08

FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 2005	218.13	SEP 20, 2005	225.87
	HIGHE	ST 218 13 APR 20	2005

214 ····· TREND LINE 216

LOWEST 225.87 SEP 20, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

# WELL NUMBER.--PG Fd 62. SITE ID.--384309076511401.--PERMIT NUMBER.-- None

LOCATION.--Lat 38°43'09", long 76°51'14", Hydrologic Unit 02070011 Located on the west side of Missouri Avenue, 0.3 mi north of Dyson Road. Owner: Brandywine Sand and Gravel.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1580 ft; casing of unknown diameter to 1580 ft, the bottom 35 feet of which is gun perforated, such that the interval from 1545 to 1580 ft serves as a screen.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 228.60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of Steel Plate, 2.4 ft above land surface.

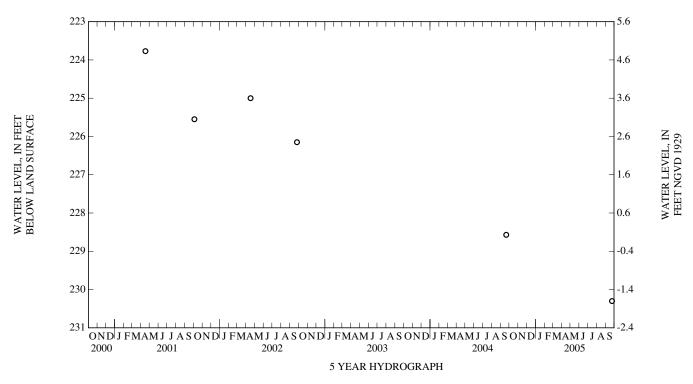
REMARKS.--Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- August 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 184 ft below land surface, August 1956; lowest measured, 230.30 ft below land surface, September 23, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE WATER LEVEL SEP 23, 2005 230.30



Prince Georgés County—Continued

WELL NUMBER.--PG Fe 30. SITE ID.--384453076482101.--PERMIT NUMBER.--PG-04-5589

LOCATION.--Lat 38°44′53", long 76°48′21". Located at Mattaponi Elementary School, on the southwest corner of Duley Station and Cheltenham Roads.Owner: Prince Georgés County Board of Education.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 456 ft; casing diameter 6 in. to 442 ft; screen diameter 6 in from 439 to 456 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 237.59 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of Steel Plate, 3.64 ft above land surface.

REMARKS .-- Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

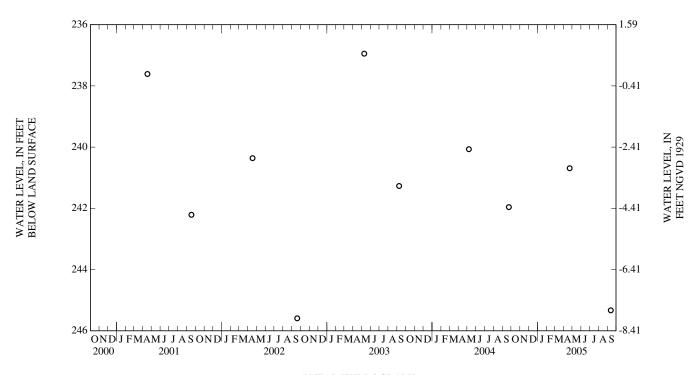
PERIOD OF RECORD .-- January 12, 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 207.51 ft below land surface, April 26, 1974; lowest measured, 245.59 ft below land surface, September 19, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	240.69	SEP 12, 2005	245.33
	HICHE	CT 240.60 ADD 22	2005

HIGHEST 240.69 APR 22, 2005 LOWEST 245.33 SEP 12, 2005



 $\begin{array}{c} 5~\rm{YEAR}~\rm{HYDROGRAPH} \\ \rm{OCTOBER}~1,2000~\rm{THROUGH}~\rm{SEPTEMBER}~30,2005 \end{array}$ 

# WELL NUMBER.--PG Hf 32 SITE ID.--383250076405303. PERMIT NUMBER.--PG-73-0065

LOCATION.--Lat 38°32'50", long 76°40'53", Hydrologic Unit 02060006, at Chalk Point Power Plant, on east side of canal. Owner: Mirant Corp..

AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1545 ft; casing diameter 1 in., to 1030 ft, and casing diameter 2 in., from 1030 to 1525 ft, and 1530 to 1545 ft; screen diameter 3 in., from 1525 to 1530 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 10.48 ft above National Geodetic Vertical Datum of 1929, Measuring point: Top of 1 in. casing, 5.10 ft above land surface.

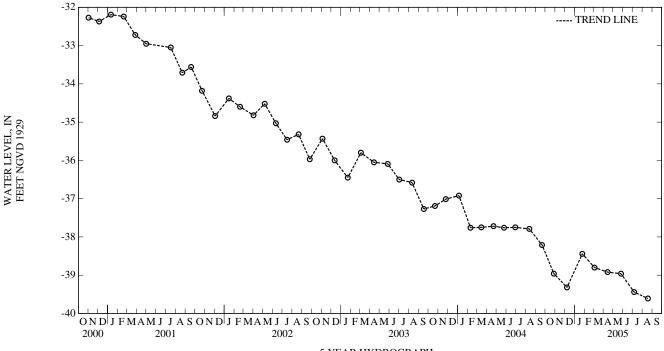
REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. This well is inside well PG Hf 44, screens separated by a packer. PERIOD OF RECORD.--June 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.78 ft above sea level, June 24, 1973; lowest measured, 39.61 ft below sea level, August 18, 2005.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL DATE		WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-38.96	JAN 25, 2005	-38.44	APR 14, 2005	-38.92	JUL 06, 2005	-39.44
DEC 08	-39.32	MAR 04	-38.80	MAY 26	-38.96	AUG 18	-39.61

LOWEST -39.61 AUG 18, 2005 HIGHEST -38.44 JAN 25, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--PG Hf 40. SITE ID.--383348076411301. PERMIT NUMBER.--PG-73-0298.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 870 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 860 ft; screen diameter 4 in., from 860 to 870 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1974 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to current year.

DATUM.--Elevation of land surface is 27.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.59 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.64 ft above sea level, January 11, 1975 (recorder); lowest measured, 42.19 ft below sea level, January 31, 2005 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

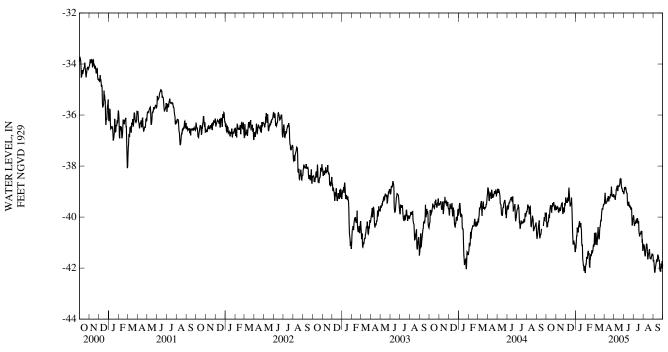
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-39.68	JAN 25, 2005	-41.75	APR 14, 2005	-39.11	JUL 06, 2005	-40.14
DEC 08	-39.04	MAR 04	-40.64	MAY 26	-38.88	AUG 18	-41.26

LOWEST -41.75 JAN 25, 2005 HIGHEST -38.88 MAY 26, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	-39.53 -39.69 -40.11 -39.92 -39.97	-39.83 -40.11 -40.40 -40.25 -40.38	-39.51 -39.34 -39.39 -39.04 -39.08	-39.72 -39.68 -39.61 -39.68 -39.59	-38.84 -39.15 -39.14 -39.00 -39.02	-39.23 -39.44 -39.35 -39.34 -39.36	-40.97 -40.92 -40.54 -40.52 -40.36	-41.16 -41.18 -40.97 -40.74 -40.74	-41.68 -41.68 -41.44 -41.44 -41.30	-41.96 -41.84 -41.84 -41.61 -41.56	-40.38 -40.49 -40.87 -40.47 -40.40	-40.62 -40.96 -41.08 -40.93 -40.61
6 7 8 9 10	-40.04 -40.04 -39.85 -39.73 -39.69	-40.20 -40.19 -40.16 -39.94 -39.96	-39.45 -39.45 -39.46 -39.62 -39.51	-39.60 -39.63 -39.80 -39.81 -39.78	-39.11 -38.83 -38.83 -38.97 -38.66	-39.44 -39.24 -39.32 -39.38 -39.03	-40.09 -40.12 -40.12 -40.22 -39.94	-40.41 -40.48 -40.51 -40.60 -40.36	-41.36 -41.20 -41.04 -40.98 -40.91	-41.64 -41.58 -41.39 -41.34 -41.34	-40.44 -40.57 -40.44 -40.71 -40.52	-40.67 -40.90 -41.08 -41.08 -40.86
11 12 13 14 15	-39.74 -39.51 -39.30 -39.18 -38.99	-40.04 -39.76 -39.65 -39.55 -39.55	-39.42 -39.33 -39.42 -39.48 -39.42	-39.68 -39.63 -39.70 -39.76 -39.68	-38.52 -38.77 -38.77 -39.15 -39.34	-38.85 -39.07 -39.27 -39.47 -39.58	-39.96 -39.91 -39.72 -39.66 -40.11	-40.36 -40.23 -40.16 -40.34 -40.40	-41.20 -41.10 -41.39 -41.45	-41.50 -41.42 -41.90 -41.98 -41.68	-40.16 -40.11 -40.14 -40.44 -40.62	-40.70 -40.39 -40.62 -40.75 -40.87
16 17 18 19 20	-39.26 -39.54 -39.49 -39.41 -39.31	-39.55 -39.80 -39.81 -39.59 -39.58	-39.30 -39.28 -39.14 -39.17 -39.17	-39.59 -39.54 -39.47 -39.45 -39.44	-39.12 -39.14 -39.12 -38.92 -39.13	-39.49 -39.47 -39.52 -39.24 -39.66	-39.85 -39.89 -40.22 -40.32 -40.44	-40.29 -40.23 -40.43 -40.49 -41.04	-41.28 -41.18 -41.28 -41.28	-41.63 -41.49 -41.51 -41.51 -41.36	-40.42 -40.29 -40.18 -40.08 -39.96	-40.83 -40.52 -40.38 -40.37 -40.16
21 22 23 24 25	-39.23 -39.26 -39.33 -39.13 -39.14	-39.45 -39.54 -39.51 -39.41 -39.48	-39.17 -39.63 -39.56 -39.26 -39.06	-39.76 -39.88 -39.82 -39.69 -39.62	-39.50 -39.81 -40.35 -40.72 -40.78	-39.81 -40.52 -40.72 -41.08 -41.00	-40.92 -40.62 -40.62 -41.46 -41.49	-41.13 -41.08 -41.64 -41.74 -41.89	-41.06 -41.17 -41.12 -40.90 -40.85	-41.30 -41.42 -41.37 -41.30 -41.14	-39.98 -39.87 -39.39 -39.49 -39.43	-40.13 -40.16 -39.88 -39.76 -39.66
26 27 28 29 30 31	-39.24 -39.41 -39.45 -39.29 -39.28 -39.36	-39.57 -39.68 -39.71 -39.64 -39.56 -39.58	-39.55 -39.34 -38.99 -39.28 -39.11	-39.81 -39.71 -39.45 -39.55 -39.46	-40.57 -40.75 -40.42 -40.40 -41.05 -40.98	-40.92 -41.05 -41.00 -41.06 -41.34 -41.37	-41.55 -41.78 -41.78 -41.71 -41.74 -41.90	-41.89 -42.09 -42.09 -41.92 -42.13 -42.19	-40.79 -40.87 -40.50 	-41.07 -41.16 -41.04 	-39.47 -39.47 -38.85 -38.88 -39.26 -39.20	-39.69 -39.69 -39.58 -39.51 -39.52 -39.50
MONTH	-38.99	-40.40	-38.99	-39.88	-38.52	-41.37	-39.66	-42.19	-40.50	-41.98	-38.85	-41.08

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	SUST	SEPTE	MBER
1 2 3 4	-39.17 -38.56 -38.57 -39.01	-39.45 -39.26 -39.05 -39.27	-38.87 -38.89 -38.89 -38.91	-39.21 -39.20 -39.17 -39.27	-38.84 -38.82 -38.65 -38.64	-39.10 -38.96 -38.83 -38.92	-39.58 -39.55 -39.76 -40.05	-39.93 -40.01 -40.21 -40.35	-40.96 -40.85 -40.83 -40.82	-41.16 -41.08 -41.09 -41.15	-41.40 -41.46 -41.47 -41.55	-41.74 -41.68 -41.77 -41.96
5	-39.16	-39.47	-39.03	-39.32	-38.69	-38.88	-40.04	-40.24	-40.98	-41.42	-41.82	-42.16
6 7 8 9 10	-39.16 -39.06 -38.93 -39.10 -38.96	-39.47 -39.41 -39.40 -39.40 -39.31	-38.88 -38.76 -38.55 -38.65 -38.57	-39.15 -39.12 -38.91 -38.90 -38.81	-38.66 -38.56 -38.68 -38.78 -38.85	-38.84 -38.86 -38.97 -39.02 -39.06	-39.84 -40.04 -39.70 -39.85 -39.93	-40.23 -40.24 -40.16 -40.13 -40.22	-41.23 -41.19 -41.08 -40.90 -40.86	-41.52 -41.52 -41.35 -41.24 -41.12	-41.86 -41.76 -41.64 -41.62 -41.48	-42.16 -42.06 -41.93 -41.85 -41.80
11 12 13 14 15	-38.96 -38.95 -38.89 -38.93 -39.16	-39.34 -39.32 -39.18 -39.23 -39.39	-38.54 -38.63 -38.74 -38.55 -38.63	-38.79 -38.94 -38.98 -38.80 -38.79	-38.88 -39.07 -39.35 -39.38 -39.26	-39.07 -39.46 -39.52 -39.56 -39.48	-39.94 -39.86 -39.79 -39.82 -39.86	-40.22 -40.12 -40.04 -40.08 -40.21	-40.83 -40.85 -40.88 -41.14 -41.31	-41.04 -41.09 -41.24 -41.54 -41.66	-41.47 -41.48 -41.49 -41.21 -41.16	-41.70 -41.73 -41.76 -41.64 -41.47
16 17 18 19 20	-39.07 -39.06 -39.10 -38.90 -38.88	-39.23 -39.22 -39.27 -39.22 -39.10	-38.59 -38.64 -38.55 -38.50 -38.14	-38.77 -38.79 -38.77 -38.71 -38.50	-39.19 -39.22 -39.34 -39.38 -39.39	-39.40 -39.54 -39.58 -39.62 -39.56	-40.00 -39.99 -39.99 -40.36 -40.39	-40.19 -40.16 -40.56 -40.66 -40.76	-41.18 -41.12 -41.14 -40.97 -40.93	-41.52 -41.44 -41.42 -41.30 -41.26	-41.22 -41.22 -41.27 -41.38 -41.32	-41.52 -41.53 -41.68 -41.71 -41.68
21 22 23 24 25	-38.84 -38.76 -38.57 -38.64 -38.84	-39.16 -39.02 -38.81 -39.04 -39.18	-38.36 -38.19 -38.17 -38.23 -38.58	-38.67 -38.50 -38.51 -38.79 -38.86	-39.32 -39.32 -39.42 -39.38 -39.36	-39.59 -39.67 -39.71 -39.64 -39.66	-40.40 -40.34 -40.34 -40.32 -40.21	-40.66 -40.64 -40.66 -40.54	-40.98 -41.31 -41.36 -41.35	-41.52 -41.62 -41.62 -41.64 -41.64	-41.56 -41.82 -41.83 -41.88 -41.70	-42.01 -42.12 -42.02 -42.14 -41.90
26 27 28 29 30 31	-38.88 -38.80 -38.92 -38.89 -38.81	-39.18 -39.13 -39.19 -39.19 -39.10	-38.62 -38.62 -38.76 -38.78 -38.82 -38.82	-38.86 -38.93 -39.00 -39.00 -39.00 -39.05	-39.58 -40.05 -39.88 -39.79 -39.77	-40.05 -40.33 -40.26 -40.07 -40.03	-40.34 -40.36 -40.44 -40.70 -40.83 -41.07	-40.62 -40.55 -40.95 -40.93 -41.32 -41.29	-41.32 -41.30 -41.26 -41.26 -41.14	-41.55 -41.51 -41.43 -41.52 -41.47 -41.48	-41.61 -41.55 -41.43 -41.66	-41.82 -42.01 -41.92 -41.72 -41.92
MONTH	-38.56	-39.47	-38.14	-39.32	-38.56	-40.33	-39.55	-41.32	-40.82	-41.66	-41.16	-42.16
YEAR	-38.14	-42.19										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

N

#### PRINCE GEORGES COUNTY—Continued

WELL NUMBER.--PG Hf 41. SITE ID.--383348076411302. PERMIT NUMBER.--PG-73-0297.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 654 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 644 ft, and 654 to 665 ft; screen diameter 4 in., from 644 to 654 ft.

INSTRUMENTATION.--Periodic water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from December 1974 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to current year.

DATUM.--Elevation of land surface is 28.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.65 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.85 ft below sea level, January 1, 1975 (recorder); lowest measured, 52.00 ft below sea level, August 22, 2004 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

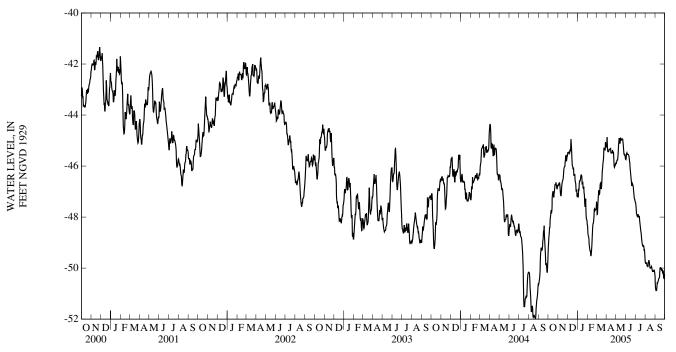
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-46.84	JAN 25, 2005	-47.34	APR 14, 2005	-45.25	JUL 06, 2005	-47.84
DEC 08	-45.24	MAR 04	-47.72	MAY 26	-45.52	AUG 18	-49.86

LOWEST -49.86 AUG 18, 2005 HIGHEST -45.24 DEC 08, 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	-49.05 -48.74 -48.63 -48.40 -48.39	-49.15 -49.05 -48.74 -48.63 -48.42	-46.74 -46.63 -46.63 -46.49	-46.77 -46.76 -46.68 -46.73 -46.64	-45.26 -45.26 -45.46 -45.39 -45.36	-45.48 -45.49 -45.48 -45.48 -45.43	-47.03 -47.07 -46.90 -46.85 -46.68	-47.07 -47.23 -47.20 -46.92 -46.93	-48.30 -48.34 -48.62 -48.73 -48.77	-48.34 -48.62 -48.73 -48.77 -48.82	-47.21 -47.21 -47.60 -47.53 -47.32	-47.40 -47.60 -47.90 -47.89 -47.53
6 7 8 9 10	-48.08 -47.98 -47.85 -47.66 -47.62	-48.41 -48.08 -47.98 -47.85 -47.73	-46.64 -46.71 -46.85 -47.06 -47.04	-46.71 -46.87 -47.06 -47.16	-45.43 -45.26 -45.21 -45.32 -44.95	-45.51 -45.49 -45.35 -45.42 -45.32	-46.42 -46.42 -46.50 -46.49 -46.33	-46.68 -46.57 -46.61 -46.55 -46.49	-48.82 -49.08 -49.17 -49.29 -49.30	-49.08 -49.17 -49.29 -49.33 -49.33	-47.10 -46.95 -46.78 -46.94 -47.05	-47.32 -47.10 -46.95 -47.12
11 12 13 14 15	-47.73 -47.40 -47.13 -47.01 -46.83	-47.85 -47.77 -47.40 -47.13 -47.03	-46.80 -46.68 -46.62 -46.54 -46.50	-47.04 -46.80 -46.68 -46.62 -46.57	-44.77 -44.85 -45.14 -45.38 -45.72	-44.95 -45.14 -45.38 -45.72 -45.97	-46.31 -46.29 -46.28 -46.18 -46.42	-46.37 -46.35 -46.35 -46.42 -46.68	-49.33 -49.33 -49.23 -48.97 -48.63	-49.51 -49.51 -49.33 -49.23 -48.97	-46.78 -46.68 -46.62 -46.62 -46.66	-47.05 -46.78 -46.68 -46.66 -46.85
16 17 18 19 20	-46.83 -46.98 -47.11 -46.97 -46.88	-46.98 -47.13 -47.23 -47.11 -47.01	-46.45 -46.27 -46.09 -46.05 -45.93	-46.53 -46.45 -46.27 -46.10 -46.05	-45.97 -45.97 -46.06 -45.90	-46.00 -46.06 -46.13 -46.06 -46.36	-46.51 -46.51 -46.65 -46.70	-46.66 -46.65 -46.86 -46.87 -46.81	-48.39 -48.26 -48.23 -48.15 -47.98	-48.63 -48.39 -48.26 -48.24 -48.15	-46.78 -46.52 -46.20 -46.09 -45.90	-46.90 -46.78 -46.52 -46.20 -46.09
21 22 23 24 25	-46.65 -46.64 -46.72 -46.64 -46.58	-46.88 -46.73 -46.73 -46.72 -46.64	-45.93 -45.82 -45.68 -45.58 -45.34	-46.02 -46.01 -45.82 -45.72 -45.58	-46.20 -46.16 -46.23 -46.24 -46.57	-46.36 -46.33 -46.57 -46.64	-46.81 -47.04 -47.01 -47.43 -47.27	-47.04 -47.13 -47.45 -47.60 -47.43	-47.69 -47.61 -47.58 -47.67 -47.70	-47.98 -47.69 -47.67 -47.75 -47.73	-45.81 -45.68 -45.29 -45.26 -45.24	-45.90 -45.81 -45.68 -45.30 -45.30
26 27 28 29 30 31	-46.59 -46.72 -46.79 -46.77 -46.70 -46.71	-46.73 -46.81 -46.89 -46.89 -46.77 -46.75	-45.43 -45.71 -45.37 -45.39 -45.48	-45.77 -45.81 -45.71 -45.58 -45.59	-46.64 -46.69 -46.79 -46.72 -46.92 -47.07	-46.69 -46.98 -46.98 -46.92 -47.18 -47.21	-47.24 -47.26 -47.83 -48.05 -48.04 -48.12	-47.28 -47.83 -48.05 -48.10 -48.12 -48.30	-47.55 -47.55 -47.40 	-47.70 -47.69 -47.69 	-45.25 -45.31 -45.06 -44.94 -45.06 -45.21	-45.32 -45.37 -45.37 -45.06 -45.21 -45.25
MONTH	-46.58	-49.15	-45.34	-47.16	-44.77	-47.21	-46.18	-48.30	-47.40	-49.51	-44.94	-47.90

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	-45.15 -44.68 -44.65 -44.87 -45.22 -45.42 -45.43	-45.22 -45.15 -44.87 -45.22 -45.42 -45.44	-45.77 -45.83 -45.77 -45.72 -45.74 -45.62 -45.42	-45.87 -45.91 -45.83 -45.77 -45.77 -45.76 -45.62	-45.66 -45.51 -45.38 -45.38 -45.44 -45.53 -45.50	-45.75 -45.66 -45.51 -45.48 -45.54 -45.54	-47.41 -47.38 -47.50 -47.66 -47.86 -47.86	-47.42 -47.50 -47.66 -47.86 -47.90 -47.95 -47.98	-49.70 -49.76 -49.77 -49.78 -49.78 -49.80 -49.91	-49.80 -49.79 -49.81 -49.81 -49.80 -49.91 -49.93	-50.28 -50.67 -50.81 -50.86 -50.73 -50.58 -50.57	-50.67 -50.81 -50.88 -50.88 -50.87 -50.73 -50.58
8 9 10	-45.33 -45.34 -45.29	-45.43 -45.36 -45.36	-45.15 -45.01 -44.89	-45.42 -45.17 -45.01	-45.51 -45.54 -45.56	-45.54 -45.56 -45.59	-47.79 -47.82 -47.89	-47.96 -47.89 -47.95	-49.91 -49.78 -49.74	-49.94 -49.94 -49.79	-50.54 -50.50 -50.44	-50.59 -50.54 -50.51
11 12 13 14 15	-45.29 -45.31 -45.30 -45.26 -45.28	-45.34 -45.34 -45.32 -45.31 -45.48	-44.83 -44.83 -45.04 -44.88 -44.88	-44.90 -45.04 -45.12 -45.08 -44.89	-45.58 -45.66 -45.79 -45.86 -46.09	-45.66 -45.79 -45.86 -46.09 -46.21	-47.95 -47.96 -47.96 -47.96 -48.08	-47.99 -47.97 -47.97 -48.08 -48.30	-49.65 -49.65 -49.67 -49.75 -49.84	-49.74 -49.69 -49.76 -49.85 -49.97	-50.40 -50.39 -50.36 -50.13 -49.90	-50.44 -50.41 -50.39 -50.37 -50.13
16 17 18 19 20	-45.46 -45.47 -45.37 -45.29	-45.48 -45.47 -45.49 -45.49 -45.37	-44.89 -44.95 -44.93 -44.92 -44.73	-44.95 -44.98 -44.95 -44.93	-46.21 -46.29 -46.47 -46.64 -46.68	-46.29 -46.47 -46.64 -46.76 -46.76	-48.30 -48.43 -48.44 -48.53 -48.67	-48.43 -48.46 -48.54 -48.67 -48.84	-49.97 -49.93 -49.92 -49.94 -49.90	-50.00 -49.98 -49.98 -49.98 -49.94	-49.89 -49.97 -49.98 -50.00 -49.95	-49.97 -50.00 -50.02 -50.04 -50.02
21 22 23 24 25	-45.30 -45.44 -45.37 -45.42 -45.70	-45.48 -45.48 -45.44 -45.70 -45.99	-44.75 -44.89 -44.90 -45.07 -45.22	-44.96 -44.96 -45.08 -45.22 -45.40	-46.59 -46.60 -46.71 -46.74 -46.78	-46.68 -46.71 -46.77 -46.81 -46.97	-48.84 -48.96 -49.02 -49.12 -49.07	-48.96 -49.05 -49.12 -49.14 -49.15	-49.92 -49.99 -50.06 -50.10	-49.99 -50.06 -50.12 -50.11 -50.13	-49.96 -50.05 -50.01 -50.01 -50.09	-50.10 -50.10 -50.05 -50.18 -50.16
26 27 28 29 30 31	-45.99 -45.87 -45.87 -45.89 -45.77	-46.05 -46.02 -45.92 -45.98 -45.89	-45.40 -45.52 -45.52 -45.52 -45.55 -45.66	-45.54 -45.56 -45.54 -45.55 -45.68 -45.74	-46.97 -47.10 -47.23 -47.29 -47.31	-47.11 -47.24 -47.30 -47.32 -47.41	-49.07 -49.11 -49.14 -49.25 -49.27 -49.46	-49.12 -49.14 -49.30 -49.29 -49.46 -49.70	-50.12 -50.06 -50.02 -50.02 -50.10 -50.20	-50.13 -50.12 -50.06 -50.10 -50.20 -50.28	-50.10 -50.14 -50.34 -50.16 -50.16	-50.14 -50.38 -50.40 -50.34 -50.24
MONTH	-44.65	-46.05	-44.73	-45.91	-45.38	-47.41	-47.38	-49.70	-49.65	-50.28	-49.89	-50.88
YEAR	-44.65	-50.88										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

WELL NUMBER.--PG Hf 42. SITE ID.--383348076411303. PERMIT NUMBER.--PG-73-0294.

LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant, 0.4 mi. south of Eagle Harbor. Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 386 ft; casing diameter 6 in., to 150 ft; casing diameter 4 in., from 150 to 366 ft, and 376 to 386 ft; screen diameter 4 in., from 366 to 376 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from January 1975 to July 1976. Equipped with digital water-level recorder--60-minute recorder interval from July 1976 to September 1999.

DATUM.--Elevation of land surface is 27.76 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.71 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

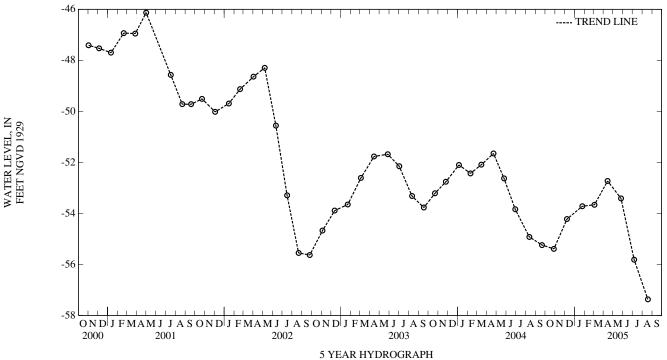
PERIOD OF RECORD .-- January 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.84 ft above sea level, April 22, 1975; lowest measured, 57.37 ft below sea level, August 18, 2005.

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004	-55.39	JAN 25, 2005	-53.72	APR 14, 2005	-52.73	JUL 06, 2005	-55.81
DEC 08	-54.22	MAR 04	-53.66	MAY 26	-53.41	AUG 18	-57.37

LOWEST -57.37 AUG 18, 2005 HIGHEST -52.73 APR 14, 2005



3 TEAR HIDROGRAPH

WELL NUMBER.--PG Hf 44. SITE ID.--383250076405304. PERMIT NUMBER.--PG-73-0065.

LOCATION.--Lat 38°32'50", long 76°40'53", Hydrologic Unit 02060006, at Chalk Point Power Plant, on east side of canal. Owner: Mirant Corp.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,545 ft; casing diameter 3 in., to 1,025 ft; screen diameter 3 in., from 1,025 to 1,030 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from June 1995 to June 2004.

DATUM.--Elevation of land surface is 10.48 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 5.10 ft above land surface.

REMARKS.--Southern Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. This well has a 1 in. diameter well inside the 3 in. casing, separated by a packer and screened in the Lower Patapsco Formation as well PG Hf 32.

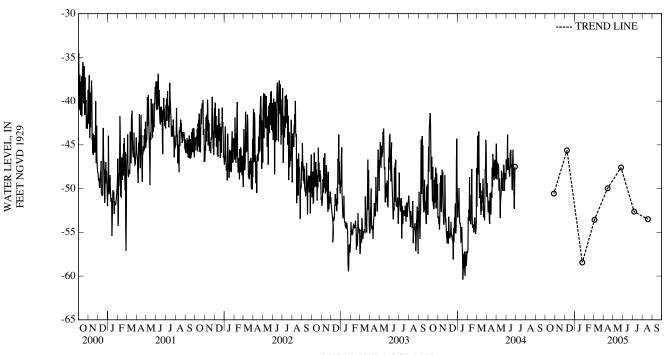
PERIOD OF RECORD.--June 1973, July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.85 ft above sea level, June 24, 1973; lowest measured, 61.60 ft below sea level, January 23 and 24, 2004 (recorder).

#### WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 08	-50.56 -45.62	JAN 25, 2005 MAR 04	-58.45 -53.56	APR 14, 2005 MAY 26	-49.96 -47.59	JUL 06, 2005 AUG 18	-52.64 -53.49
	LOWEC	T 50 45 TANIOS O	005				

LOWEST -58.45 JAN 25, 2005 HIGHEST -45.62 DEC 08, 2004



5 YEAR HYDROGRAPH

## QUEEN ANNES COUNTY

WELL NUMBER.--QA Be 15. SITE ID.--391203076024301. PERMIT NUMBER.--QA-70-0130.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,171 ft; casing diameter 4 in., to 1,161 ft; screen diameter 4 in., from 1,161 to 1,171 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.52 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

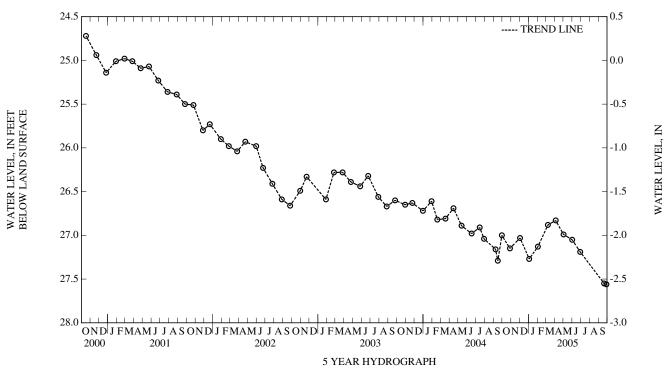
PERIOD OF RECORD.--March 1971 to October 1972, July 1977 to December 1978, March 1981 to September 1982, and October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.52 ft below land surface, October 10, 1971; lowest measured, 27.56 ft below land surface, September 28, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	27.15 27.03 27.27	FEB 02, 2005 MAR 09 APR 05	27.13 26.88 26.83	MAY 02, 2005 JUN 01 29	26.99 27.05 27.19	SEP 20, 2005 28	27.55 27.56

HIGHEST 26.83 APR 05, 2005 LOWEST 27.56 SEP 28, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

WELL NUMBER.--QA Be 16. SITE ID.--391203076024302. PERMIT NUMBER.--QA-70-0130.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 495 ft; casing diameter 6 in., to 475 ft; screen diameter 6 in., from 475 to 495 ft.

INSTRUMENTATION.—Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Twice yearly water level measurements from February 1988 to April 1991.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.70 ft above land surface.

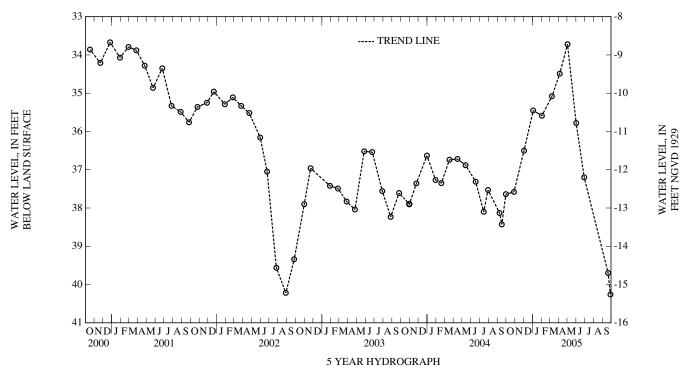
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--March 1971 to September 1972, July 1977 to May 1979, January 1981 to September 1982, and October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.41 ft below land surface, September 11, 1971; lowest measured, 40.26 ft below land surface, September 28, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	37.58 36.50 35.45	FEB 02, 2005 MAR 09 APR 05	35.59 35.08 34.49	MAY 02, 2005 JUN 01 29	33.72 35.78 37.20	SEP 20, 2005 28	39.70 40.26

HIGHEST 33.72 MAY 02, 2005 LOWEST 40.26 SEP 28, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--QA Be 17. SITE ID.--391203076024303.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown, off MD Rt. 213. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 120 ft; casing diameter 6 in., to 100 ft; screen diameter 6 in., from 100 to 120 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

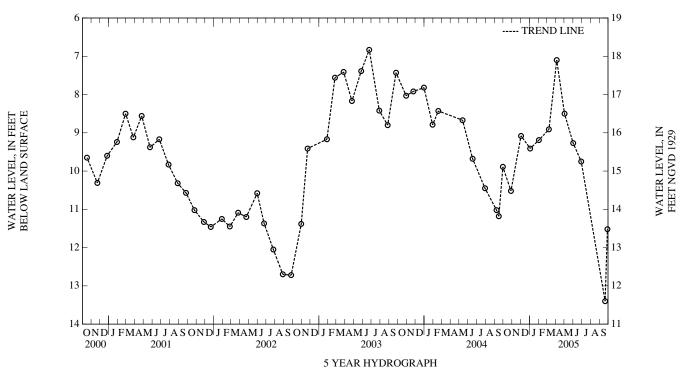
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.83 ft below land surface, June 24, 2003; lowest measured, 13.40 ft below land surface, September 20, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	10.52 9.08 9.41	FEB 02, 2005 MAR 09 APR 05	9.19 8.91 7.10	MAY 02, 2005 JUN 01 29	8.50 9.27 9.75	SEP 20, 2005 28	13.40 11.52

HIGHEST 7.10 APR 05, 2005 LOWEST 13.40 SEP 20, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--QA Cg 69. SITE ID.--390839075515001. PERMIT NUMBER.--QA-94-2072.

LOCATION.--Lat 39°08'39", long 75°51'50", Hydrologic Unit 02060002. Owner: Town of Barclay.

AQUIFER.--Pensauken Formation of upper Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, water table well, depth 69 ft; casing diameter 6 in., to 29 ft; screen diameter 4 in., from 29 to 69 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 65.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of elbow pipe, 2.70 ft above land surface.

REMARKS .-- Maryland Water-Level Network observation well.

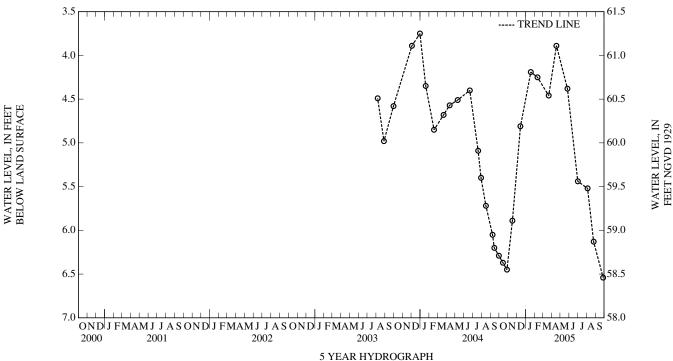
PERIOD OF RECORD .-- August 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.75 ft below land surface, December 31, 2003; lowest measured, 6.54 ft below land surface, September 27, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004 28 NOV 16 DEC 14	6.37 6.45 5.89 4.81	JAN 19, 2005 FEB 11 MAR 22 APR 18	4.19 4.25 4.46 3.89	MAY 26, 2005 JUL 01 AUG 04 25	4.38 5.44 5.52 6.13	SEP 27, 2005	6.54

HIGHEST 3.89 APR 18, 2005 LOWEST 6.45 OCT 28, 2004



WELL NUMBER.--QA Db 30. SITE ID.--390201076182701. PERMIT NUMBER.--QA-81-0473.

LOCATION.--Lat 39°02'01", long 76°18'27", Hydrologic Unit 02060002, north side of Pier Avenue, 0.5 mi south of Love Point. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well (seni-confined), depth 220 ft; casing diameter 4 in., to 210 ft; screen diameter 4 in., from 210 to 220 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 17.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

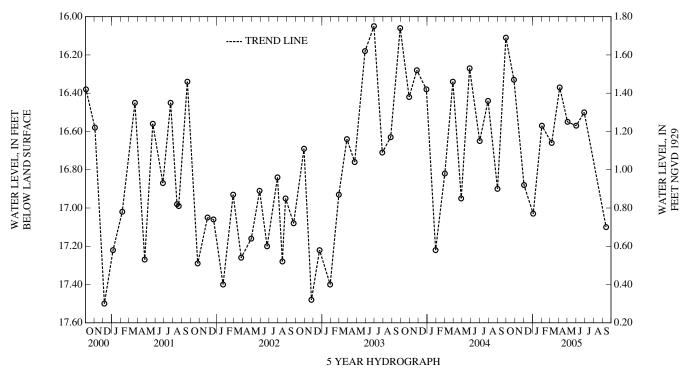
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.59 ft below land surface, April 9, 1993; lowest measured, 18.37 ft below land surface, March 3, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	16.33 16.88 17.03	FEB 02, 2005 MAR 08 APR 05	16.57 16.66 16.37	MAY 02, 2005 JUN 01 29	16.55 16.57 16.50	SEP 13, 2005	17.10

HIGHEST 16.33 OCT 28, 2004 LOWEST 17.10 SEP 13, 2005



FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Db 32. SITE ID.--390201076182703. PERMIT NUMBER.--QA-81-0473.

LOCATION.--Lat 39°02'01", long 76°18'27", Hydrologic Unit 02060002, north side of Pier Avenue, 0.5 mi south of Love Point. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, water-table well (semi-confined), depth 116 ft; casing diameter 4 in., to 106 ft; screen diameter 4 in., from 106 to 116 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 18.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.10 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

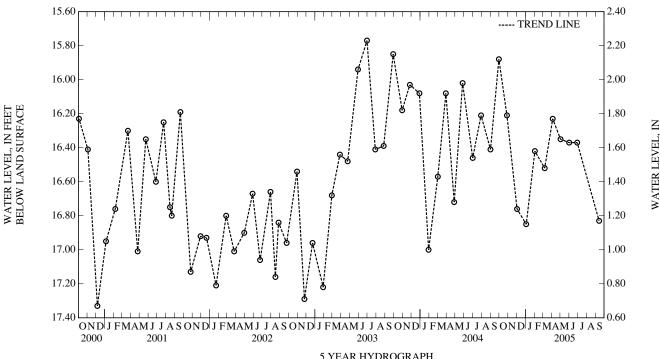
PERIOD OF RECORD .-- May 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.77 ft below land surface, June 30, 2003; lowest measured, 17.83 ft below land surface, December 8, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	16.21 16.76 16.85	FEB 02, 2005 MAR 08 APR 05	16.42 16.52 16.23	MAY 02, 2005 JUN 01 29	16.35 16.37 16.37	SEP 13, 2005	16.83

HIGHEST 16.21 OCT 28, 2004 LOWEST 16.85 JAN 03, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--QA Db 34. SITE ID.--390023076174301. PERMIT NUMBER.--QA-81-0471.

LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, near Cloverfields community park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 4 in., to 170 ft; screen diameter 4 in., from 170 to 180 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 7.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

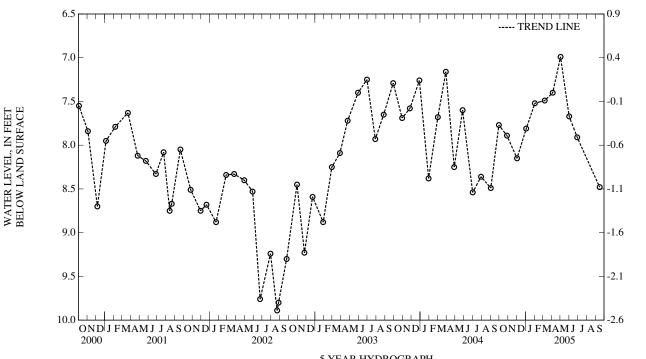
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.99 ft below land surface, May 2, 2005; lowest measured, 9.89 ft below land surface, August 22, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	7.89 8.15 7.81	FEB 02, 2005 MAR 08 APR 05	7.52 7.49 7.40	MAY 02, 2005 JUN 01 29	6.99 7.67 7.91	SEP 15, 2005	8.48
	HIGHES	T 6.99 MAY 02,	2005				

LOWEST 8.48 SEP 15, 2005



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Db 35. SITE ID.--390119076191001. PERMIT NUMBER.--QA-81-0472.

LOCATION.--Lat 39°01'19", long 76°19'10", Hydrologic Unit 02060002, 0.5 mi west of MD Rt. 18, at Mylander Farms, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in., from 190 to 200 ft. INSTRUMENTATION.--Periodic water level measurements with electric tape Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 7.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- August 1984 to current year.

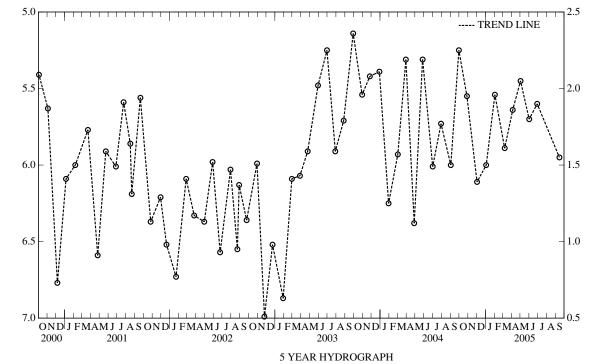
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.93 ft below land surface, December 16, 1996; lowest measured, 7.65 ft below land surface, December 8, 1992.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	5.55 6.11 6.00	FEB 02, 2005 MAR 08 APR 05	5.54 5.89 5.64	MAY 02, 2005 JUN 01 29	5.45 5.70 5.60	SEP 14, 2005	5.95
	HIGHES	ST 5.45 MAY 02,	2005				

LOWEST 6.11 DEC 02, 2004



WELL NUMBER.--QA Db 37. SITE ID.--390023076174302. PERMIT NUMBER.--QA-81-0471.

LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, near Cloverfield community park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 240 ft; screen diameter 4 in., from 240 to 250 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 7.10 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

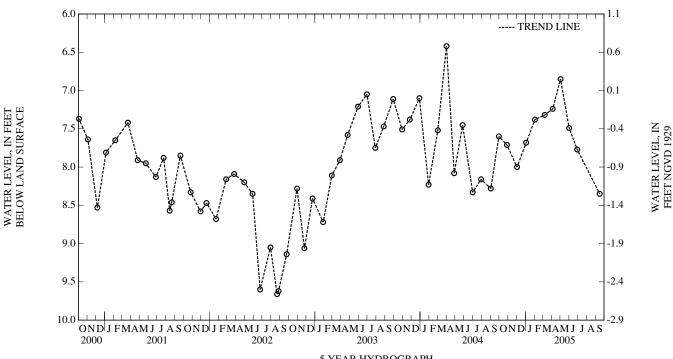
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.28 ft below land surface, April 9, 1993, and December 16, 1996; lowest measured, 9.74 ft below land surface, January 11, 1994.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	7.71 8.00 7.68	FEB 02, 2005 MAR 08 APR 05	7.38 7.32 7.24	MAY 02, 2005 JUN 01 29	6.85 7.49 7.77	SEP 15, 2005	8.35

6.85 MAY 02, 2005 LOWEST 8.35 SEP 15, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--QA De 27. SITE ID.--390251076034401. PERMIT NUMBER.--QA-94-1853.

LOCATION.--Lat 39°02'51", long 76°03'44", Hydrologic Unit 02060002, at Sheriff's Office, Centreville. Owner: Town of Centreville.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, artesian well, drilled depth 665 ft, measured depth 370 ft; casing diameter 4 in., to 315 ft; screen diameter 4 in., from 315 to 365 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, September 1999 to July 2000.

DATUM.--Elevation of land surface is 10.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of concrete base, 1.49 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

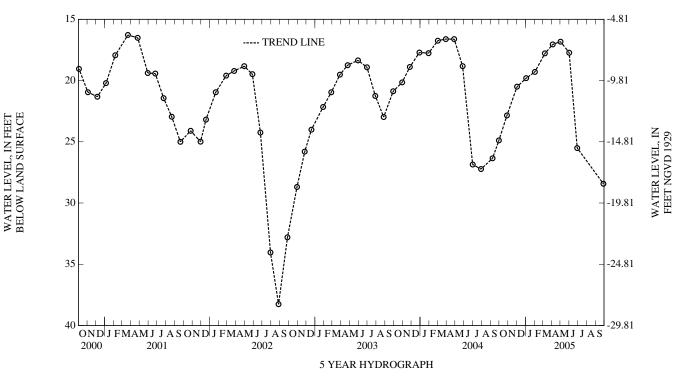
PERIOD OF RECORD.--September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.28 ft below land surface, March 22, 2001; lowest measured, 38.27 ft below land surface, August 27, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	22.85 20.50 19.81	FEB 02, 2005 MAR 09 APR 05	19.29 17.78 17.05	MAY 02, 2005 JUN 01 29	16.82 17.72 25.51	SEP 28, 2005	28.43

HIGHEST 16.82 MAY 02, 2005 LOWEST 28.43 SEP 28, 2005



Queen Annés County-Continued

WELL NUMBER.--QA Ea 27. SITE ID.--385718076205501.--PERMIT NUMBER.--None

LOCATION.--Lat 38°57'18", long 76°20'55", Hydrologic Unit 02060002, at the former Chesapeake Bay Model, Rt. 8. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 661 ft; casing diameter 8 in. to 243 ft; casing diameter 6 in. from 243 to 605 ft; casing diameter 5 in. from 605 ft. to 625 ft; casing diameter 6 in. screened from 625 ft. to 661 ft.

INSTRUMENTATION.--Periodic water-level measurements with steel tape by Maryland Geological Survey personnel.

DATUM.--Altitude of land surface is 18.27 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of  $\frac{1}{2}$  in. coupling, 1.7 ft above land surface.

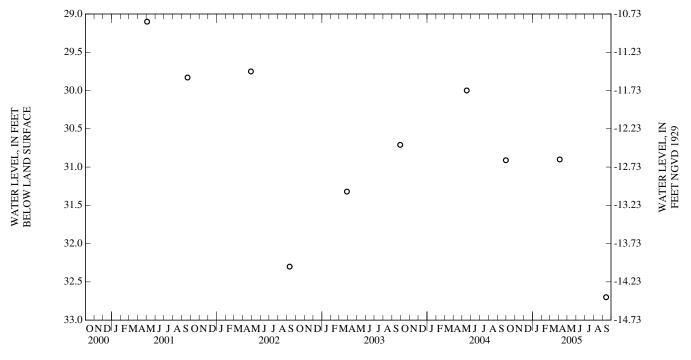
REMARKS.--Owner: Production Well #1. Drilled to replace well QA-Ea 26. Another pumping test was run on QA-Ea 27 on April 12, 1972. Ground-Water-Level Monitoring Network and Maryland Water-Level Network observation well.

PERIOD OF RECORD .-- April 10, 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.97 ft below land surface, May 10, 1973; lowest measured, 32.70 ft below land surface, September 13, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 05, 2005	30.90	SEP 13, 2005	32.70
		T 30.90 APR 05, 2	



5 YEAR HYDROGRAPH

FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ea 77. SITE ID.--385718076211501. PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 205 ft; casing diameter 4 in., to 195 ft; screen diameter 4 in., from 195 to 205 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 10.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.24 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

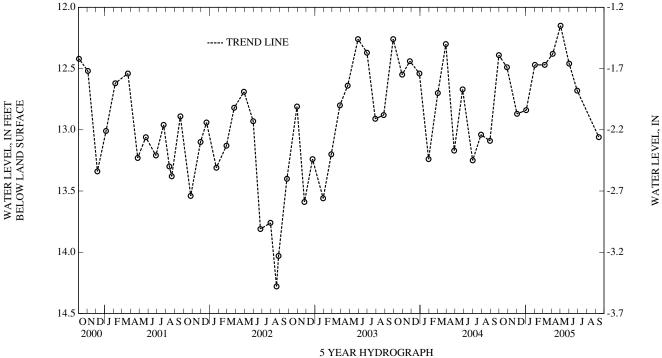
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.07 ft below land surface, December 2, 1985; lowest measured, 14.28 ft below land surface, August 20, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	12.49 12.87 12.84	FEB 02, 2005 MAR 08 APR 05	12.47 12.47 12.38	MAY 02, 2005 JUN 01 29	12.15 12.46 12.68	SEP 12, 2005	13.06

HIGHEST 12.15 MAY 02, 2005 LOWEST 13.06 SEP 12, 2005



WELL NUMBER.--QA Ea 78. SITE ID.--385718076211502 . PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 135 ft; casing diameter 4 in., to 125 ft; screen diameter 4 in., from 125 to 135 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 11.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.91 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

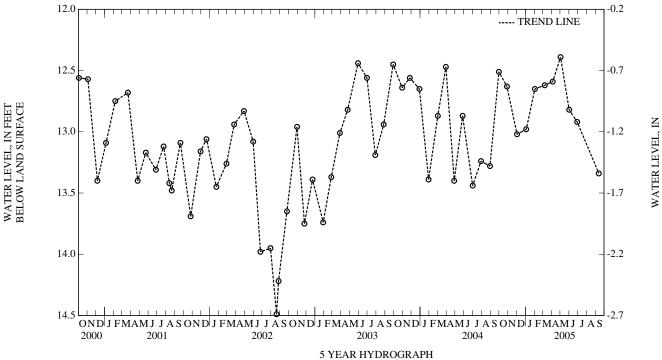
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.45 ft below land surface, June 4, 1992; lowest measured, 14.49 ft below land surface, August 20, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	12.63 13.02 12.98	FEB 02, 2005 MAR 08 APR 05	12.65 12.62 12.59	MAY 02, 2005 JUN 01 29	12.39 12.82 12.92	SEP 12, 2005	13.34

HIGHEST 12.39 MAY 02, 2005 LOWEST 13.34 SEP 12, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ea 79. SITE ID.--385757076200101. PERMIT NUMBER.--QA-81-0469.

LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

 $WELL\ CHARACTERISTICS. -- Drilled,\ observation,\ artesian\ well,\ depth\ 298\ ft;\ casing\ diameter\ 4\ in.,\ to\ 288\ ft;\ screen\ diameter\ 4\ in.,\ from\ 288\ to\ 298\ ft.$ 

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 8.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.30 ft above land surface.

REMARKS.--Kent Island ground-water monitoring network observation well. Water levels are affected by local ground-water withdrawal.

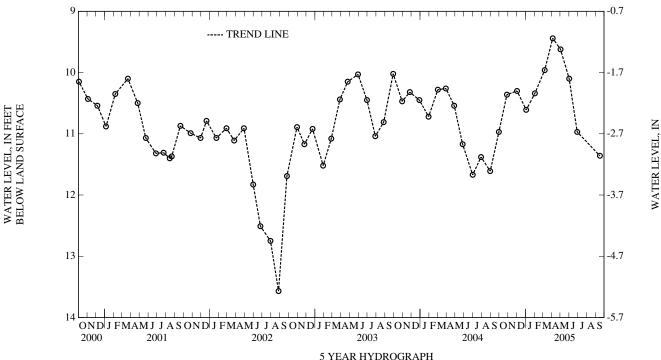
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.30 ft below land surface, December 2, 1985; lowest measured, 13.57 ft below land surface, August 27, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	10.36 10.30 10.61	FEB 02, 2005 MAR 08 APR 05	10.34 9.96 9.44	MAY 02, 2005 JUN 01 29	9.62 10.10 10.97	SEP 16, 2005	11.36
	HICHE	ET 0.44 ADD 05.2	005				

HIGHEST 9.44 APR 05, 2005 LOWEST 11.36 SEP 16, 2005



WELL NUMBER.--QA Ea 80. SITE ID.--385757076200102. PERMIT NUMBER.--QA-81-0469.

LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

 $WELL\ CHARACTERISTICS. -- Drilled,\ observation,\ artesian\ well,\ depth\ 130\ ft;\ casing\ diameter\ 4\ in.,\ to\ 120\ ft;\ screen\ diameter\ 4\ in.,\ from\ 120\ to\ 130\ ft.$ 

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 8.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.51 ft above land surface.

REMARKS.--Kent Island ground-water monitoring network observation well. Water levels are affected by local ground-water withdrawal.

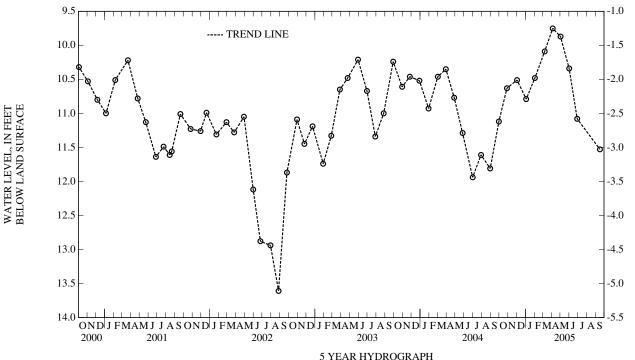
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.45 ft below land surface, December 2, 1985; lowest measured, 13.61 ft below land surface, August 27, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	10.63 10.51 10.79	FEB 02, 2005 MAR 08 APR 05	10.48 10.09 9.75	MAY 02, 2005 JUN 01 29	9.87 10.34 11.08	SEP 16, 2005	11.53

HIGHEST 9.75 APR 05, 2005 LOWEST 11.53 SEP 16, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--QA Ea 81. SITE ID.--385718076211503. PERMIT NUMBER.--QA-81-0474.

LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 4 in., from 300 to 310 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.16 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

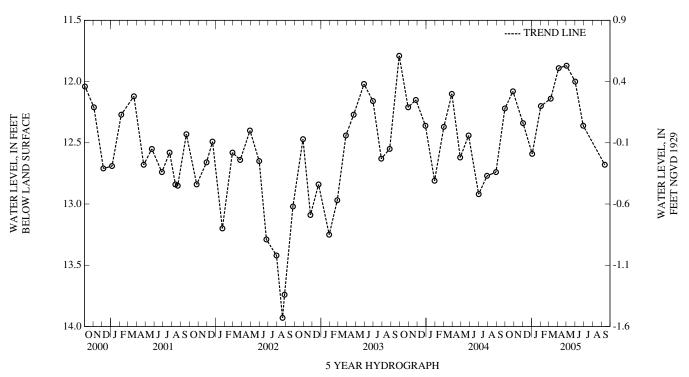
PERIOD OF RECORD .-- April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.54 ft below land surface, December 2, 1985; lowest measured, 13.93 ft below land surface, August 20, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	12.08 12.34 12.59	FEB 02, 2005 MAR 08 APR 05	12.20 12.14 11.89	MAY 02, 2005 JUN 01 29	11.87 12.00 12.36	SEP 12, 2005	12.68

HIGHEST 11.87 MAY 02, 2005 LOWEST 12.68 SEP 12, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--QA Eb 110. SITE ID.--385751076171603. PERMIT NUMBER.--QA-73-2979.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER .-- Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 2,485 ft; casing diameter 4 in., to 2,413 ft, 2,423 to 2,465 ft, and 2,475 to 2,485 ft; screen diameter 4 in., from 2,413 to 2,423 ft, and 2,465 to 2,475 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by or Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 13.98 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.36 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

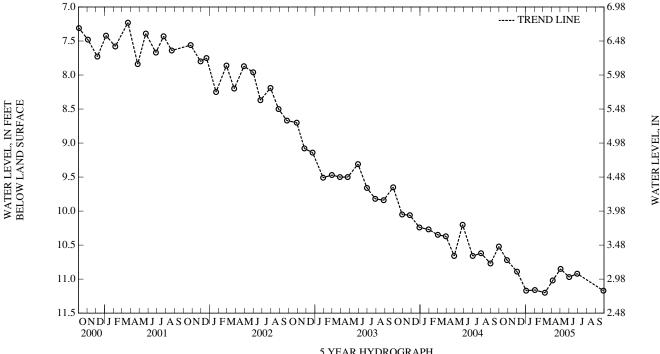
PERIOD OF RECORD .-- January 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.99 ft above land surface, January 21, 1980; lowest measured, 11.20 ft below land surface, March 9, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	10.72 10.89 11.17	FEB 02, 2005 MAR 09 APR 05	11.16 11.20 11.02	MAY 02, 2005 JUN 01 29	10.85 10.97 10.92	SEP 28, 2005	11.17

HIGHEST 10.72 OCT 28, 2004 LOWEST 11.20 MAR 09, 2005



5 YEAR HYDROGRAPH

FEET NGVD 1929

WELL NUMBER.--QA Eb 111. SITE ID.--385751076171601. PERMIT NUMBER.--QA-73-3122.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 985 ft; casing diameter 4 in., to 955 ft, and 965 to 975 ft; screen diameter 4 in., from 955 to 965 ft, and 975 to 985 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 14.03 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.41 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal.

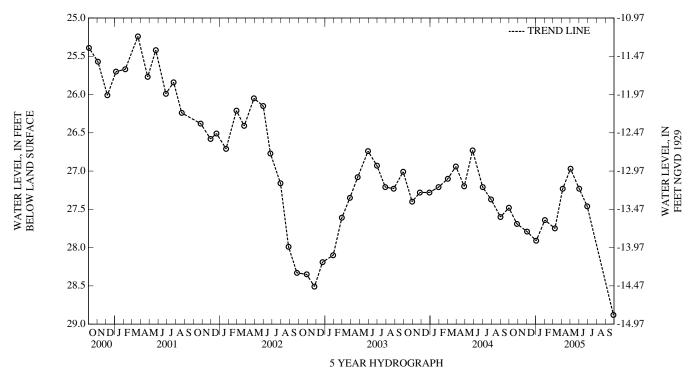
PERIOD OF RECORD.--December 1979 to April 1984, March 1985 to April 1989, and September 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.02 ft below land surface, January 21, 1980; lowest measured, 28.88 ft below land surface, September 28, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	27.69 27.79 27.91	FEB 02, 2005 MAR 09 APR 05	27.64 27.75 27.23	MAY 02, 2005 JUN 01 29	26.97 27.23 27.46	SEP 28, 2005	28.88

HIGHEST 26.97 MAY 02, 2005 LOWEST 28.88 SEP 28, 2005



WELL NUMBER.--QA Eb 112. SITE ID.--385751076171602. PERMIT NUMBER.--QA-73-3123.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,679 ft; casing diameter 4 in., to 1,652 ft, and 1,662 to 1,669 ft; screen diameter 4 in., from 1,652 to 1,662 ft, and 1,669 to 1,679 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 13.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.36 ft above land surface.

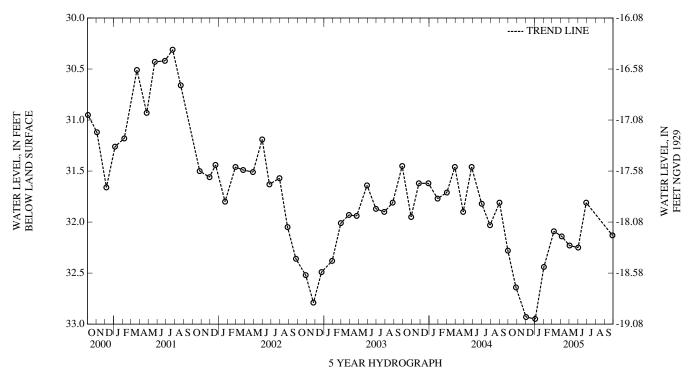
REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawals. PERIOD OF RECORD.--January 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.69 ft below land surface, January 21, 1980; lowest measured, 32.95 ft below land surface, January 3, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	32.64 32.93 32.95	FEB 02, 2005 MAR 09 APR 05	32.44 32.09 32.14	MAY 02, 2005 JUN 01 29	32.23 32.25 31.81	SEP 28, 2005	32.13

HIGHEST 31.81 JUN 29, 2005 LOWEST 32.95 JAN 03, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 113. SITE ID.--385748076172001. PERMIT NUMBER.--QA-73-3172.

LOCATION.--Lat 38°57'48", long 76°17'20", Hydrologic Unit 02060001, near Chester, Kent Island. Owner: U.S. Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 216 ft; casing diameter 6 in., to 176 ft; screen diameter 6 in., from 176 to 216 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel. Equipped with graphic water-level recorder from June 1986 to October 1994.

DATUM.--Elevation of land surface is 11.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 1.65 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

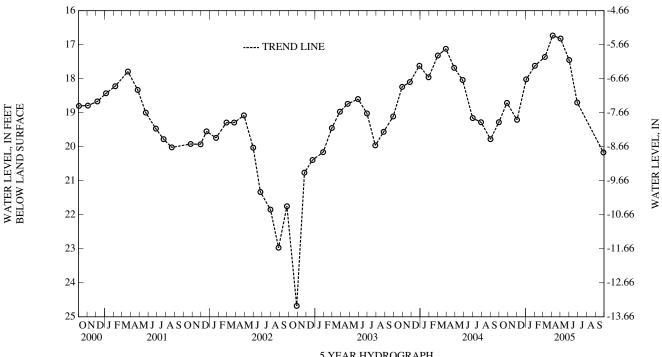
PERIOD OF RECORD .-- October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.28 ft below land surface, April 1, 1983; lowest measured, 24.68 ft below land surface, October 29, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	18.71 19.21 18.02	FEB 02, 2005 MAR 09 APR 05	17.62 17.36 16.73	MAY 02, 2005 JUN 01 29	16.82 17.45 18.70	SEP 28, 2005	20.17

HIGHEST 16.73 APR 05, 2005 LOWEST 20.17 SEP 28, 2005



5 YEAR HYDROGRAPH

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 155. SITE ID.--385843076155302. PERMIT NUMBER.--QA-81-0470.

LOCATION.--Lat 38°58'43", long 76°15'53", Hydrologic Unit 02060002, at north end of Piney Creek Rd., Kent Island. Owner: Maryland Geological Survey. AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 245 ft; casing diameter 4 in., to 235 ft; screen diameter 4 in., from 235 to 245 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 3.90 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

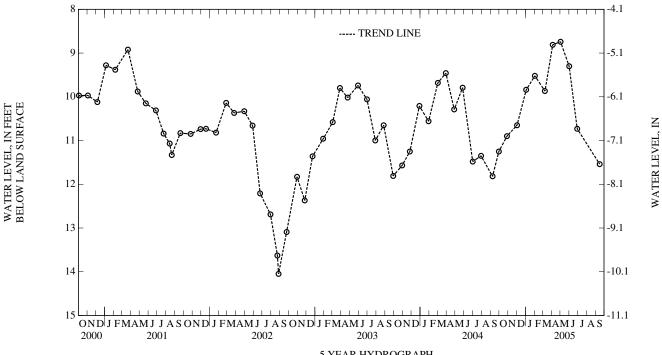
PERIOD OF RECORD.--October 1984, April 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.60 ft below land surface, December 2, 1985; lowest measured, 14.05 ft below land surface, August 27, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	10.90 10.65 9.84	FEB 02, 2005 MAR 09 APR 05	9.52 9.87 8.81	MAY 02, 2005 JUN 01 29	8.74 9.30 10.73	SEP 15, 2005	11.54
	HIGHES	ST 874 MAY 02	2005				

LOWEST 11.54 SEP 15, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 156. SITE ID.--385852076195201. PERMIT NUMBER.--QA-81-0475.

LOCATION.--Lat 38°58'52", long 76°19'52", Hydrologic Unit 02060002, north of US Rt. 50, at Terrapin Beach Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 220 ft; casing diameter 4 in., to 210 ft; screen diameter 4 in., from 210 to 220 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 12.01 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

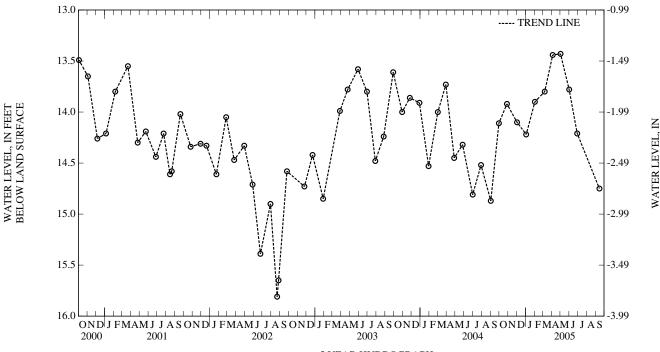
PERIOD OF RECORD .-- October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.97 ft below land surface, August 1, 1990; lowest measured, 15.81 ft below land surface, August 22, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	13.92 14.10 14.22	FEB 02, 2005 MAR 08 APR 05	13.90 13.80 13.44	MAY 02, 2005 JUN 01 29	13.43 13.78 14.21	SEP 14, 2005	14.75

HIGHEST 13.43 MAY 02, 2005 LOWEST 14.75 SEP 14, 2005



5 YEAR HYDROGRAPH

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Eb 157. SITE ID.--385852076195202. PERMIT NUMBER.--QA-81-0475.

LOCATION.--Lat 38°58'52", long 76°19'52", Hydrologic Unit 02060002, north of US Rt. 50, Terrapin Beach Park, Kent Island. Owner: Maryland Geological Survey.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 120 ft; casing diameter 4 in., to 110 ft; screen diameter 4 in., from 110 to 120 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 11.92 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Kent Island Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

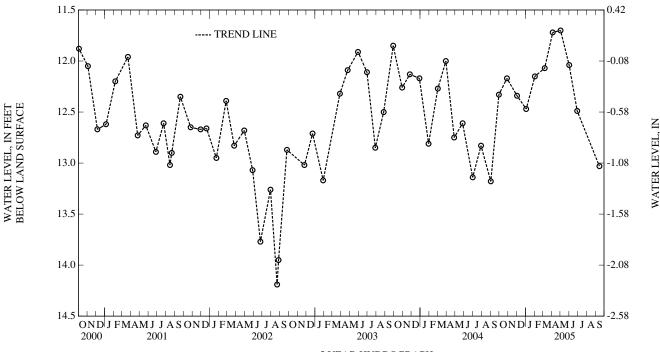
PERIOD OF RECORD.--October 1984, April 1985 to June 1986, March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.40 ft below land surface, December 2, 1985; lowest measured, 14.19 ft below land surface, August 22, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	12.17 12.34 12.47	FEB 02, 2005 MAR 08 APR 05	12.15 12.07 11.72	MAY 02, 2005 JUN 01 29	11.70 12.04 12.49	SEP 14, 2005	13.03

HIGHEST 11.70 MAY 02, 2005 LOWEST 13.03 SEP 14, 2005



5 YEAR HYDROGRAPH

FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

# QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Ec 1. SITE ID.--385756076105301.

LOCATION.--Lat 38°57'56", long 76°10'53", Hydrologic Unit 02060002, near Grasonville, south side of MD Rt. 18, 0.1 mi. northeast of intersection with Nesbit Rd. Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 21 ft; casing diameter 1.25 in., to 21 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. coupling, 0.27 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response.

PERIOD OF RECORD.--September 1949 to current year.

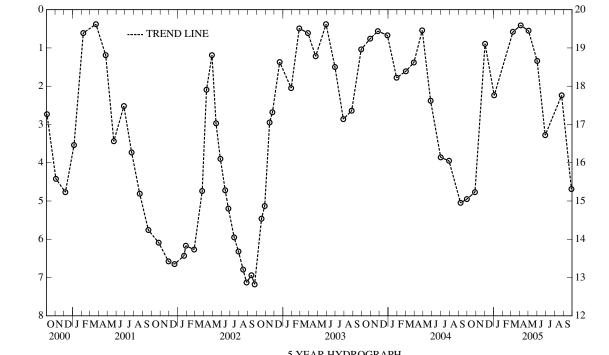
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft below land surface, August 2, 1996; lowest measured, 8.46 ft below land surface, January 7, 1988.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	4.77 .89 2.24	MAR 09, 2005 APR 05 MAY 02	.58 .41 .55	JUN 01, 2005 29 AUG 25	1.34 3.28 2.24	SEP 28, 2005	4.69

.41 APR 05, 2005 4.77 OCT 28, 2004 HIGHEST LOWEST



5 YEAR HYDROGRAPH

#### QUEEN ANNES COUNTY-Continued

WELL NUMBER.--QA Ef 29. SITE ID.-- 385534075573601. PERMIT NUMBER.--QA-81-1593.

LOCATION.--Lat 38°55'38", long 75°57'40", Hydrologic Unit 02060005, off east side of MD Rt. 309, 0.2 mi. north of intersection with MD Rt. 404, Tuckahoe State Park. Owner: Md. Dept. of Natural Resources, Fisheries Division.

AQUIFER.--Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,325 ft; casing diameter 14 in., to 500 ft, and 8 in., from 500 to 1,110 ft, 1,120 to 1,135 ft, 1,180 to 1,195 ft, 1,210 to 1,230 ft, 1,270 to 1,285 ft, and 1,315 to 1,325 ft; screen diameter 8 in., from 1,110 to 1,120 ft, 1,135 to 1,180 ft, 1,195 to 1,210 ft, 1,230 to 1,270 ft, and 1,285 to 1,315 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 61.69 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2 in. pipe, 3.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

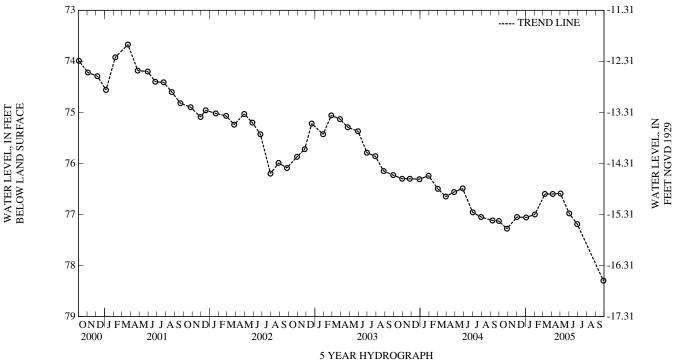
PERIOD OF RECORD .-- June 1986 to December 1986, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.30 ft below land surface, August 27, 1986; lowest measured, 78.30 ft below land surface, September 28, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	77.28 77.05 77.06	FEB 02, 2005 MAR 09 APR 05	77.00 76.60 76.60	MAY 02, 2005 JUN 01 29	76.59 76.98 77.19	SEP 28, 2005	78.30

HIGHEST 76.59 MAY 02, 2005 LOWEST 78.30 SEP 28, 2005



FEET NGVD 1929

## QUEEN ANNES COUNTY—Continued

WELL NUMBER.--QA Fc 7. SITE ID.--385429076120201. PERMIT NUMBER.--QA-73-2191.

LOCATION.--Lat 38°54'29", long 76°12'02", Hydrologic Unit 02060002, off Greenwood Shoals, at Prospect Plantation. Owner: Maryland Community Developers Incorporated.

AQUIFER .-- Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 356 ft; casing diameter 4 in., to 336 ft; screen diameter 2 in., from 336 to 356 ft. INSTRUMENTATION.-- Periodic water-level measurements with electric tape by Maryland Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

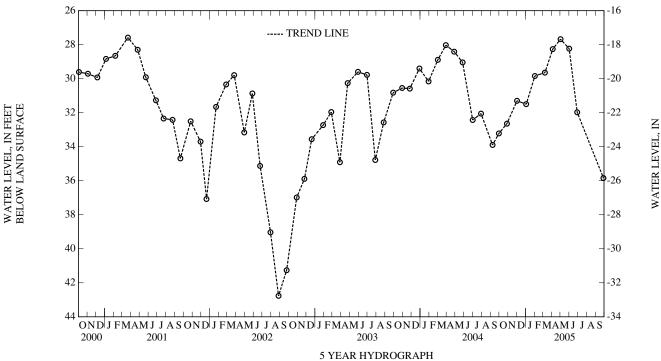
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawals. PERIOD OF RECORD .-- February 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.77 ft below land surface, March 3, 1983; lowest measured, 42.77 ft below land surface, August 27, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 2004 DEC 02 JAN 03, 2005	32.64 31.30 31.50	FEB 02, 2005 MAR 09 APR 05	29.84 29.64 28.26	MAY 02, 2005 JUN 01 29	27.68 28.23 31.98	SEP 28, 2005	35.84

HIGHEST 27.68 MAY 02, 2005 LOWEST 35.84 SEP 28, 2005



## ST. MARYS COUNTY

WELL NUMBER.--SM Bb 22. SITE ID.--382838076470102. PERMIT NUMBER.--SM-73-3787.

LOCATION.--Lat 38°28'38", long 76°47'01", Hydrologic Unit 02070011, at Charlotte Hall Veterans Home. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 218 ft; casing diameter 4 in., to 210 ft; screen diameter 2 in., from 210 to 218 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 165.21 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.55 ft above land surface.

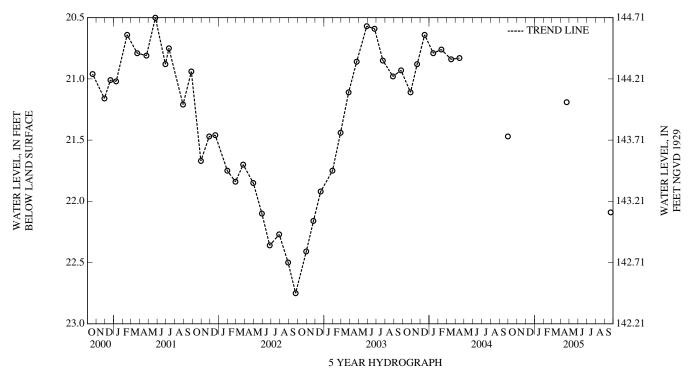
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. On July 12, 1989, the water-level measured 27.95 ft below land surface; this decline was due to a nearby production well pump test.

PERIOD OF RECORD .-- July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.27 ft below land surface, July 9, 1980; lowest measured, 22.75 ft below land surface, September 24, 2002--See REMARKS.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	21.19	SEP 22, 2005	22.09
		ST 21.19 APR 22, 2 T 22.09 SEP 22, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

St. Marys County--continued

WELL NUMBER.--SM BC 39. SITE ID.--382605076430201.--PERMIT NUMBER.--SM-94-3921

LOCATION.--Lat 38°26'05", long 76°43'02", Hydrologic Unit 02060006, at Persimmon Hills Estate. Owner: Maryland Geological Survey.

AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.—Drilled, observation, artesian well, depth 1532 ft; casing diameter 12 in., to 39 ft; casing diameter 4 in., from +2.5 to 1492,1512 to 1522 ft and 1532 to 1542 ft; screen diameter 4 in., from 1492 to 1512 ft and 1522 to 1532 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval, from April 2002 to November 2004.

DATUM.--Altitude of land surface is 161.54 ft above North American Vertical Datum of 1988, leveled. Measuring point: Top of shelter platform, 2.50 ft above land surface.

REMARKS .-- Southern Maryland Patapsco Aquifer Well Drilling Project observation well.

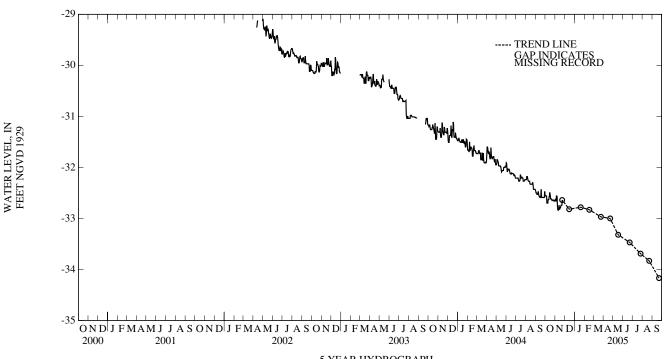
PERIOD OF RECORD .-- March 27, 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.99 ft below sea level, May 2, 2002; lowest measured, 34.17 ft below sea level, September 22, 2005.

## WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23, 2004 DEC 15 JAN 20, 2005	-32.64 -32.82 -32.78	FEB 16, 2005 MAR 24 APR 22	-32.83 -32.97 -33.00	MAY 17, 2005 JUN 22 JUL 26	-33.32 -33.47 -33.69	AUG 22, 2005 SEP 22	-33.83 -34.17

LOWEST -34.17 SEP 22, 2005 HIGHEST -32.64 NOV 23, 2004



5 YEAR HYDROGRAPH

WELL NUMBER.--SM Dd 46. SITE ID.--381616076364701. PERMIT NUMBER.--SM-73-1990.

LOCATION.--Lat 38°16'16", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 296 ft; casing diameter 6 in., to 150 ft; casing diameter 2 in., from 150 to 286 ft; screen diameter 2 in., from 286 to 296 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

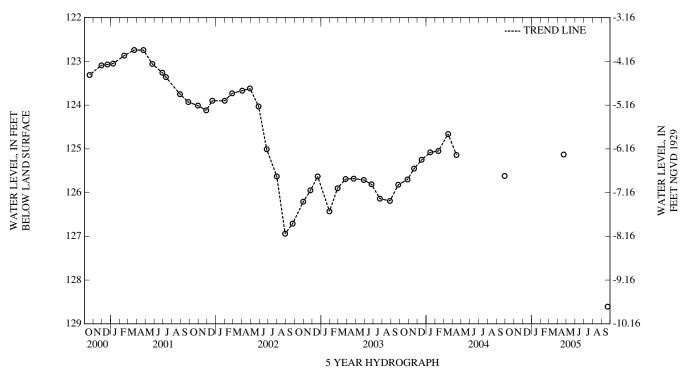
DATUM.--Elevation of land surface is 118.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.90 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.36 ft below land surface, July 9, 1979; lowest measured, 128.61 ft below land surface, September 22, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL				
APR 22, 2005	125.13	SEP 22, 2005	128.61				
HIGHEST 125.13 APR 22, 2005 LOWEST 128.61 SEP 22, 2005							



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--SM Dd 49. SITE ID.--381616076364702. PERMIT NUMBER.--SM-73-3081.

LOCATION.--Lat 38°16'16", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate. Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 619 ft; casing diameter 6 in., to 46 ft; casing diameter 4 in., to 279 ft; casing diameter 1.5 in., from 279 to 534 ft, and 544 to 619 ft; screen diameter 3 in., from 534 to 544 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 118.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.40 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. The November 29, 2000, water level measured at 205.21 ft below land surface was the result of a nearby production well pumping for more than 24 hours.

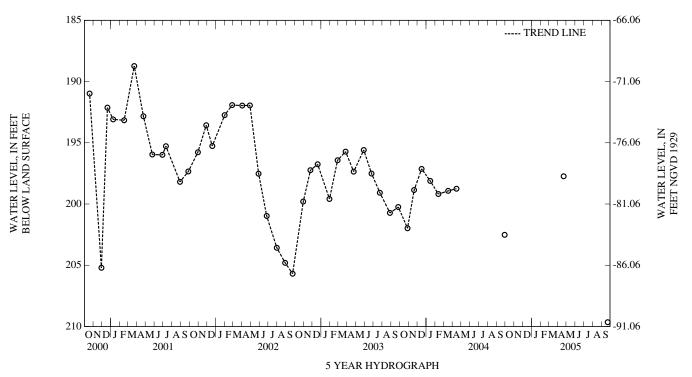
PERIOD OF RECORD .-- December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 138.95 ft below land surface, April 5, 1979; lowest measured, 209.65 ft below land surface, September 22, 2005 (See REMARKS).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	197.74	SEP 22, 2005	209.65

HIGHEST 197.74 APR 22, 2005 LOWEST 209.65 SEP 22, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--SM Dd 72. SITE ID.--381626076393401. PERMIT NUMBER.--SM-94-3616.

LOCATION.--Lat 38°16′26", long 76°39′34", Hydrologic Unit 02070011, at Paw Paw Hollow Lane, 1.5 mi southwest of Leonardtown. Owner: U.S. Geological Survey.

AQUIFER.--Lower Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCL.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,340 ft; casing diameter 8 in., to 60 ft; casing diameter 4 in., from +2.52 to 1,300 ft, and 1,330 to 1,340 ft; screen diameter 4 in., from 1,300 to 1,330 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 2001 to August 2005.

DATUM.--Elevation of land surface is 109.99 ft above North American Vertical Datum of 1988. Measuring point: Top of shelter platform, 2.69 ft above land surface.

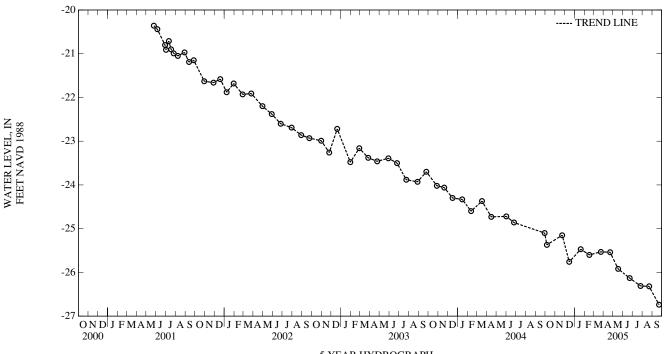
REMARKS.--Southern Maryland Patapsco Aquifer Well Drilling Project observation well. Water levels are affected by regional ground-water withdrawal. PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.43 ft below sea level (recorder), May 25, 2001; lowest measured, 26.74 ft below sea level, September 22, 2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 2004	-25.37	JAN 20, 2005	-25.47	APR 22, 2005	-25.54	JUL 26, 2005	-26.31
NOV 23	-25.15	FEB 16	-25.60	MAY 17	-25.92	AUG 22	-26.32
DEC 15	-25.76	MAR 24	-25.53	JUN 22	-26.13	SEP 22	-26.74

LOWEST -26.74 SEP 22, 2005 HIGHEST -25.15 NOV 23, 2004



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## ST. MARYS COUNTY

WELL NUMBER.--SM Df 66. SITE ID.--381841076284401. PERMIT NUMBER.--SM-73-1990.

LOCATION.--Lat 38°18'41", long 76°28'44", Hydrologic Unit 02060006, 0.8 mi south of Town Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 258 ft; casing diameter 6 in., to 84 ft; casing diameter 2 in., from 84 to 248 ft; screen diameter 2 in., from 248 to 258 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

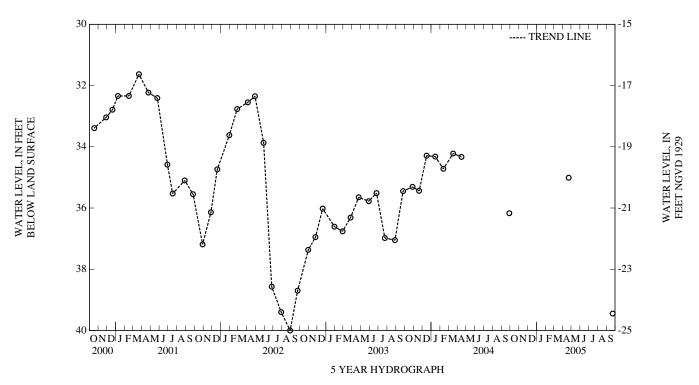
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- July 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.79 ft below land surface, April 5, 1979; lowest measured, 49.66 ft below land surface, July 9, 1986.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	35.01	SEP 22, 2005	39.45
		ST 35.01 APR 22, 2	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--SM Df 71. SITE ID.--381527076283101. PERMIT NUMBER.--SM-73-3431.

LOCATION.--Lat 38°15'27", long 76°28'31", Hydrologic Unit 02070011, at Cheryl Dr. and Great Mills Rd., Lexington Park. Owner: U.S. Geological Survey. AQUIFER.--Aquia Formation of Upper Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 560 ft; casing diameter 4 in., to 420 ft; casing diameter 2 in., from 420 to 550 ft; screen diameter 2 in., from 550 to 560 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

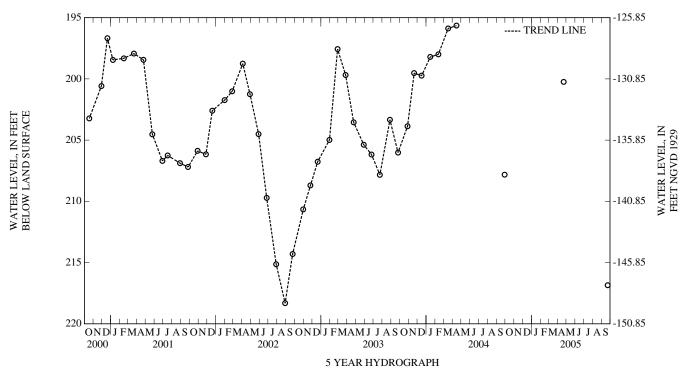
DATUM.--Elevation of land surface is 69.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.80 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 119.19 ft below land surface, May 1, 1980; lowest measured, 218.32 ft below land surface, August 29, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL		
APR 22, 2005	200.24	SEP 22, 2005	216.85		
HIGHEST 200.24 APR 22, 2005 LOWEST 216.85 SEP 22, 2005					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--SM Df 84. SITE ID.--381548076272102. PERMIT NUMBER.--SM-81-0119.

LOCATION.--Lat 38°15'48", long 76°27'21", Hydrologic Unit 0207011, at Lexington Park. Owner: Maryland Geological Survey.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 912 ft; casing diameter 6 in., to 246 ft; casing diameter 4 in., from 246 ft to 831 ft, 856 to 862 ft, and 867 to 897 ft; screen diameter 4 in., from 831 to 856 ft, 862 to 867 ft, and 897 to 912 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60 minute recorder interval from February 2000 to June 2004.

DATUM.--Elevation of land surface is 108.39 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.80 ft above land surface.

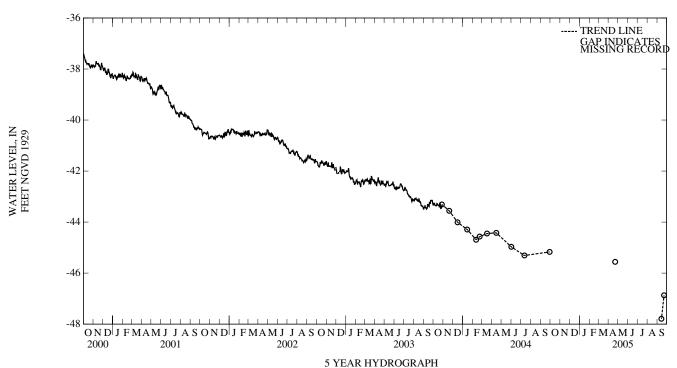
REMARKS.--Maryland Ground-Water-Level Monitoring Network and Naval Air Station Patuxent River Ground Water Hydrology project observation well. Water levels are affected by regional ground-water withdrawal. Missing data due to recorder malfunction.

PERIOD OF RECORD .-- January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.29 ft below sea level, February 3, 1983; lowest measured, 47.79 ft below sea level, September 22, 2005.

## WATER SURFACE ELEVATION IN FEET NGVD 1929

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	-45.56	SEP 14, 2005	-47.79	SEP 22, 2005	-46.87
	LOWES HIGHES				



WELL NUMBER.--SM Eg 27. SITE ID.--381213076222801. PERMIT NUMBER.--SM-73-1993.

LOCATION.--Lat 38°12'13", long 76°22'28", Hydrologic Unit 02060004, 1.6 miles east of St. James, at the St. Marys Co. Environmental Studies Area. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 6 in., to 70 ft; casing diameter 2 in., from 70 to 310 ft; screen diameter 2 in., from 310 to 320 ft.

INSTRUMENTATION .-- Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

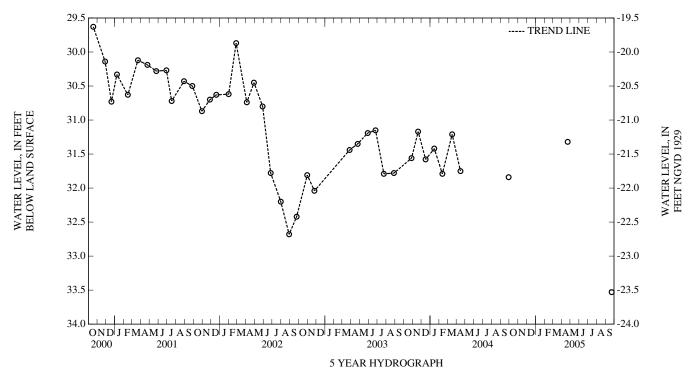
DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.84 ft below land surface, May 12, 1978; lowest measured, 33.53 ft below land surface, September 22, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	31.32	SEP 22, 2005	33.53
		T 31.32 APR 22, 2	



WELL NUMBER.--SM Fe 30. SITE ID.--380834076303401. PERMIT NUMBER.--SM-73-1917.

LOCATION.--Lat 38°08'34", long 76°30'34", Hydrologic Unit 02070011, St. Mary's Co. Metropolitan Commission Facility, Piney Point. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 270 ft; casing diameter 6 in., to 67 ft; casing diameter 2 in., from 67 to 260 ft; screen diameter 2 in., from 260 to 270 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from October 1988 to October 1994.

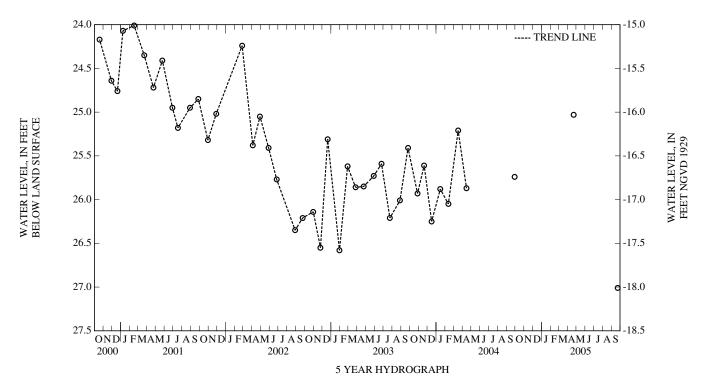
DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.7 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.24 ft below land surface, October 6, 1976; lowest measured, 27.01 ft below land surface, September 22, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	25.03	SEP 22, 2005	27.01
		T 25.03 APR 22, 2	



WELL NUMBER.--SM Ff 36. SITE ID.--380724076251901. PERMIT NUMBER.--SM-73-1478.

LOCATION.--Lat 38°07'23", long 76°25'20", Hydrologic Unit 02070011, near Kitts Point. Owner: Jesuit Order.

AQUIFER .-- Upper Patapsco aquifer in the Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSCU.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 618 ft; casing diameter 8 in., to 545 ft, and casing diameter 6 in., from 545 to 594 ft; screen diameter 6 in., from 594 to 618 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5.50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land surface.

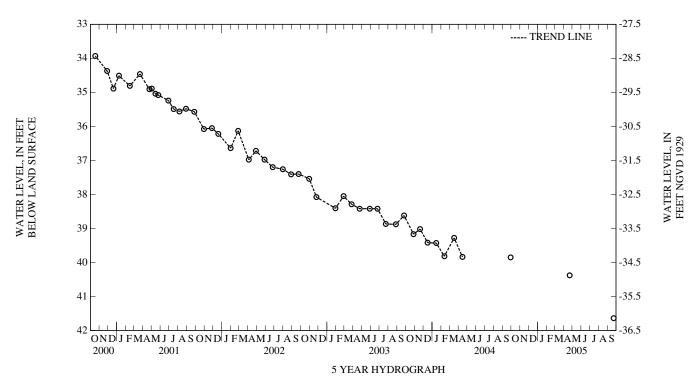
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--November 1978, September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.80 ft below land surface, November 14, 1978; lowest measured, 41.64 ft below land surface, September 22, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	40.38	SEP 22, 2005	41.64
		40.38 APR 22, 2	



WELL NUMBER.--SM Fg 45. SITE ID.--380711076222201. PERMIT NUMBER.--SM-04-5190.

LOCATION.--Lat 38°07'11", long 76°22'22", Hydrologic Unit 02070011, in Ridge Volunteer Fire Department pumphouse, at Ridge. Owner: Ridge Volunteer Fire Department.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 436 ft; casing diameter 6 in., to 386 ft; casing diameter 4 in., from 415 to 436 ft; screen diameter 5 in., from 386 to 415 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

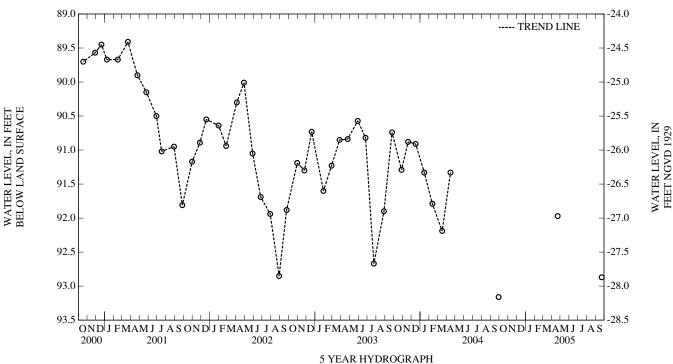
DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Hole in sanitary seal, 0.55 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.83 ft below land surface, May 16, 1967; lowest measured, 93.16 ft below land surface, September 29, 2004.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22, 2005	91.97	SEP 22, 2005	92.87
		T 91.97 APR 22, 2	



3 TEAR HIDROGRAFH

## SOMERSET COUNTY

WELL NUMBER.--SO Be 42. SITE ID.--381156075412501.

LOCATION.--Lat 38°11'56", long 75°41'25", Hydrologic Unit 02060009, 0.1 mi northeast of US Rt. 13 and Hampton Ave., Princess Anne. Owner: Private Residence.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, measured depth 184 ft; casing diameter 2 in., to unknown depth.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

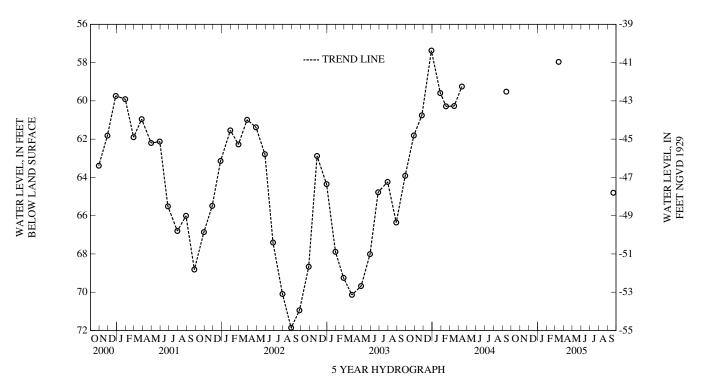
DATUM.--Elevation of land surface is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.28 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.15 ft below land surface, May 1, 1953; lowest measured, 71.86 ft below land surface, August 29, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2005	57.96	SEP 21, 2005	64.80
		Γ 57.96 MAR 15,	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## SOMERSET COUNTY—Continued

WELL NUMBER .-- SO Cf 2. SITE ID .-- 380616075380701.

LOCATION.--Lat 38°06′16″, long 75°38′07″, Hydrologic Unit 02060009, on U.S. Rt. 13, 4.5 mi west of intersection of U.S. Rt. 13, and MD Rt. 364, near Costen. Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 15 ft; casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by natural climatic response.

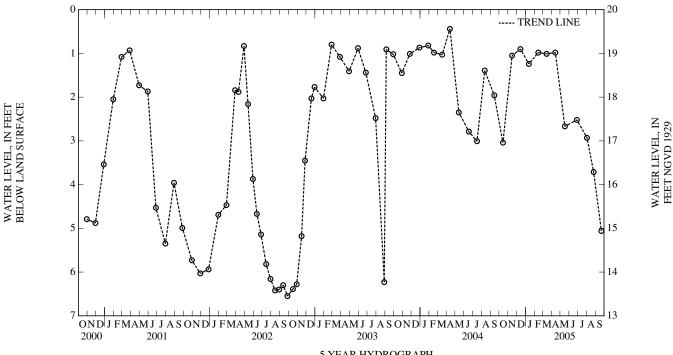
PERIOD OF RECORD .-- August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft below land surface, May 9, 1958; lowest measured, 6.55 ft below land surface, September 27, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	3.04	JAN 12, 2005	1.24	APR 14, 2005	.98	AUG 02, 2005	2.93
NOV 15	1.05	FEB 14	.98	MAY 17	2.67	25	3.71
DEC 14	.90	MAR 15	1.01	JUN 28	2.52	SEP 21	5.06

HIGHEST .90 DEC 14, 2004 5.06 SEP 21, 2005 LOWEST



5 YEAR HYDROGRAPH

## TALBOT COUNTY

WELL NUMBER.--TA Bf 73. SITE ID.--385242075593101. PERMIT NUMBER.--TA-02-1641.

LOCATION .-- Lat 38°52'42", long 75°59'31", Hydrologic Unit 02060005, in Cordova. Owner: Allen Foods.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 288 ft; casing diameter 4 in., to 276 ft; casing diameter 2 in., from 276 to 283 ft; screen diameter 3 in., from 283 to 288 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 42 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.50 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. A water level was reported by the driller as 26 ft below land surface on December 16, 1955. A water level was measured at 26.64 ft below land surface on March 10, 1956. Water levels are affected by local ground-water withdrawal

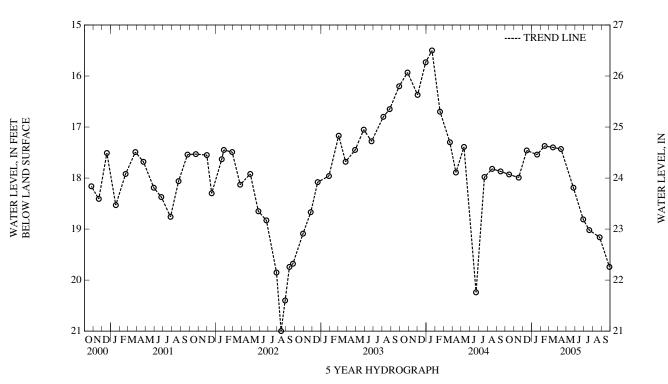
PERIOD OF RECORD.--March 1956, December 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.29 ft below land surface, May 4, 1961; lowest measured, 76.57 ft below land surface, December 6, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	17.93	JAN 20, 2005	17.54	APR 13, 2005	17.43	JUL 20, 2005	19.02
NOV 17	17.99	FEB 15	17.37	MAY 26	18.19	AUG 25	19.16
DEC 15	17.46	MAR 16	17.40	JUN 29	18.81	SEP 28	19.74

HIGHEST 17.37 FEB 15, 2005 LOWEST 18.81 JUN 29, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

## TALBOT COUNTY—Continued

WELL NUMBER.--TA Cc 35. SITE ID.--384923076100601. PERMIT NUMBER.--TA-73-0767.

LOCATION.--Lat 38°49'23", long 76°10'06", Hydrologic Unit 02060002, in Tunis Mills. Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 6 to 2 in.; screened from 170 to 180 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.28 ft above land surface.

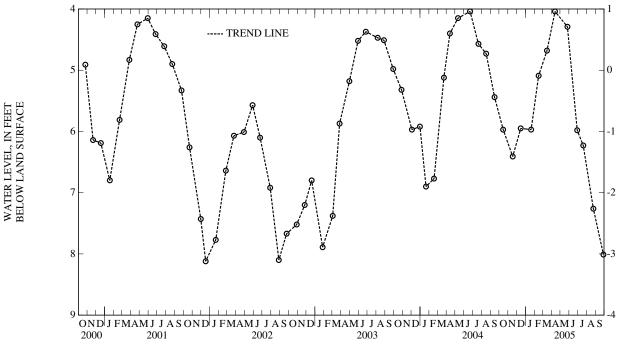
REMARKS.--Maryland Ground-Water-Level Moitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, April 2, 1980; lowest measured, 8.12 ft below land surface, December 17, 2001.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	5.97	JAN 20, 2005	5.97	APR 13, 2005	4.04	JUL 20, 2005	6.23
NOV 17	6.41	FEB 15	5.09	MAY 26	4.29	AUG 24	7.26
DEC 15	5.95	MAR 16	4.68	JUN 29	5.98	SEP 28	8.01

HIGHEST 4.04 APR 13, 2005 LOWEST 6.41 NOV 17, 2004



5 YEAR HYDROGRAPH

## TALBOT COUNTY---Continued

WELL NUMBER.--TA Cc 50. SITE ID.--384707076133202. PERMIT NUMBER.--TA-81-2002.

LOCATION.--Lat 38°47'08", long 76°13'37", Hydrologic Unit 02060005.

AQUIFER .-- Aquia Formation. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 485 ft; casing diameter 2 in., to 400 ft; screened from 400 to 485 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 8 ft above National Geodetic Vertical Datum of 1929. Measuring Point: Top of casing, 1.45 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Water level measurements of 63.74 ft below land surface on December 31, 2003 and 65.23 below land surface on July 21, 2004 were caused by nearby pumpage.

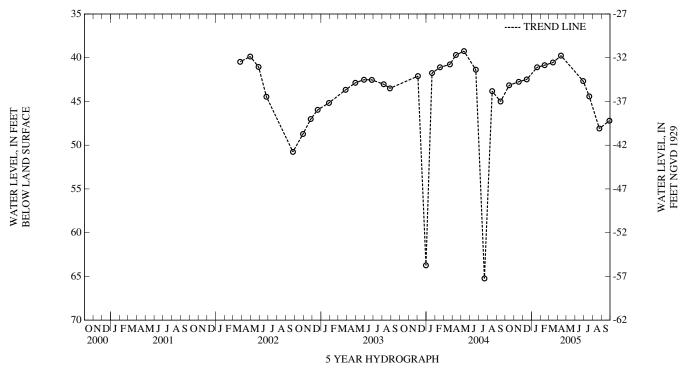
PERIOD OF RECORD .-- February 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.53 ft below land surface, May 4, 1998; lowest measured, 65.23 ft below land surface, July 21, 2004.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	43.15	JAN 20, 2005	41.10	APR 13, 2005	39.76	AUG 24, 2005	48.10
NOV 17	42.75	FEB 15	40.85	JUN 29	42.67	SEP 28	47.20
DEC 15	42.48	MAR 16	40.55	JUL 20	44.42		

HIGHEST 39.76 APR 13, 2005 LOWEST 43.15 OCT 15, 2004



## TALBOT COUNTY—Continued

WELL NUMBER.--TA Ce 7. SITE ID.--384643076043801.

LOCATION.--Lat 38°46'43", long 76°04'38", Hydrologic Unit 02060005, off Washington St., in Easton. Owner: Easton Utilities Commission.

AQUIFER.--Cheswold aquifer in the Calvert Formation of Lower Miocene age. Aquifer code: 122CSLD.

WELL CHARACTERISTICS.--Drilled, obsevation, artesian well, measured depth 104 ft; casing diameter 4 in., to 95 ft; screen diameter 4 in., from 95 to 102 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.40 ft above land surface.

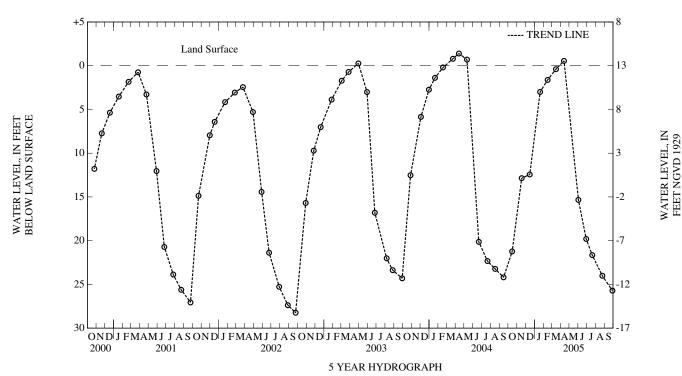
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by local ground-water withdrawal. PERIOD OF RECORDS.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +1.40 ft above land surface, April 13, 2004; lowest measured 75.36 ft below land surface, August 2, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15, 2004	21.23	JAN 20, 2005	2.99	APR 13, 2005	+.56	JUL 20, 2005	21.66
NOV 17	12.85	FEB 15	1.62	JUN 02	15.34	AUG 24	24.01
DEC 15	12.44	MAR 16	.39	29	19.81	SEP 28	25.71

HIGHEST +.56 APR 13, 2005 LOWEST 21.23 OCT 15, 2004



WELL NUMBER.--WA Be 2. SITE ID.--393638078001301.

LOCATION.--Lat 39°36'38", long 78°00'13", Hydrologic Unit 02070004, about 1.2 mi southeast of Big Pool, at Fort Frederick State Park. Owner: State of Maryland.

AQUIFER.--Marcellus-Needmore Shale of Middle Devonian age. Aquifer code: 344MRCL and 344NDMR.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, depth 41 ft; diameter 42 in.

INSTRUMENTATION.--Monthly water-level measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of inside edge of wooden access hatch, 0.90 ft above land surface.

REMARKS.--Collection of Basic Records (CBR) observation well.

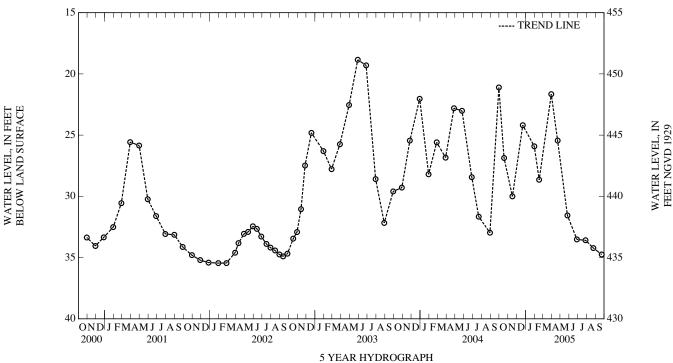
PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.72 ft below land surface, April 28, 1993; lowest measured, 36.92 ft below land surface, January 11, 1965.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 2004	26.87	JAN 31, 2005	25.92	APR 22, 2005	25.45	JUL 28, 2005	33.59
NOV 16	30.01	FEB 17	28.65	MAY 26	31.56	AUG 24	34.22
DEC 22	24.19	MAR 31	21.66	JUN 28	33.52	SEP 22	34.75

HIGHEST 21.66 MAR 31, 2005 LOWEST 34.75 SEP 22, 2005



WELL NUMBER.--WA Bk 25. SITE ID.--393851077343001. PERMIT NUMBER.--WA-70-0235.

LOCATION.--Lat 39°38'51", long 77°34'30", Hydrologic Unit 02070004, 0.5 mi south of Smithsburg, at William M. Breichner Water Treatment Plant. Owner: U.S. Geological Survey.

AQUIFER.--Tomstown Formation of Lower Cambrian age. Aquifer code: 377TMSN.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 200 ft; casing diameter 6 in., to 128 ft; open hole from 128 to 200 ft.

INSTRUMENTATION.--Monthly water-level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from April 27, 1970 to current year.

DATUM.--Elevation of land surface is 790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of shelter platform, 3.50 ft above land surface.

REMARKS .-- Maryland Ground-Water-Level Monitoring Network observation well.

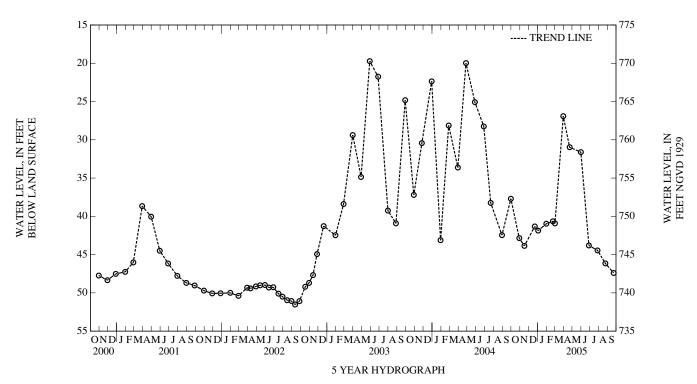
PERIOD OF RECORD .-- April 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.74 ft below land surface, April 6, 1993; lowest measured, 51.53 ft below land surface September 12, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 2004	42.85	JAN 31, 2005	40.97	APR 22, 2005	30.98	AUG 24, 2005	46.15
NOV 16	43.86	FEB 23	40.65	MAY 31	31.61	SEP 22	47.4
DEC 22	41.32	MAR 02	40.93	JUN 28	43.81		
JAN 03, 2005	41.86	31	26.92	JUL 28	44.45		

HIGHEST 26.92 MAR 31, 2005 LOWEST 47.4 SEP 22, 2005



WELL NUMBER.--WA Ci 82. SITE ID.--393402077434201. PERMIT NUMBER.--WA-73-2101.

LOCATION.--Lat 39°34'02", long 77°43'42", Hydrologic Unit 02070004, at Maryland Correction Institution, near Lappans. Owner: U.S. Geological Survey.

AQUIFER.--Conococheague Limestone (middle member) of Upper Cambrian age. Aquifer code: 371CCCG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 84 ft; casing diameter 6 in., to 32 ft; open hole from 32 to 84 ft.

INSTRUMENTATION.--Periodic water-level measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from August 2003 to current year.

DATUM.--Elevation of land surface is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.30 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- February 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.95 ft below land surface, April 6, 1993; lowest measured, 59.28 ft below land surface, February 1, 1981.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

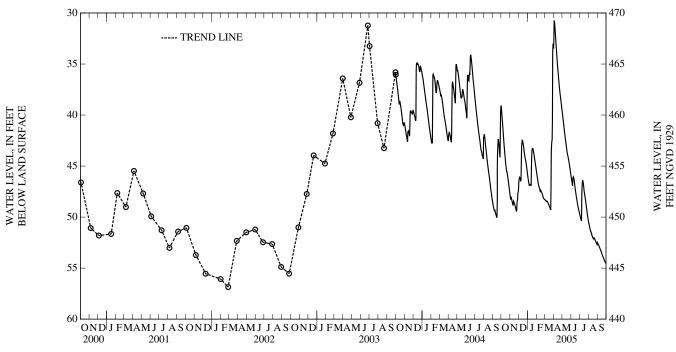
	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 18, 2004	45.02	FEB 23, 2005	48.01	APR 22, 2005	37.58
JAN 31, 2005	45.41	MAR 22	49.36	JUL 28	49.93
FEB 17	47.50	APR 08	32.38	SEP 22	54.10

HIGHEST 32.38 APR 08, 2005 LOWEST 54.10 SEP 22, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	39.14 39.44 39.83 40.25 40.70 41.15	39.03 39.14 39.44 39.83 40.25	47.95 48.14 48.33 48.41 48.15	47.75 47.95 48.14 47.79 47.79	47.31 46.53 46.28 46.13 46.20 46.33	46.47 46.28 46.13 46.09 46.10	45.99 46.22 46.44 46.70 46.75	45.75 45.99 46.22 46.44 46.62	45.72 45.91 46.11 46.27 46.44 46.63	45.52 45.72 45.91 46.11 46.27	48.31 48.31 48.33 48.37 48.41	48.26 48.26 48.29 48.33 48.37
7 8 9 10	41.57 41.98 42.36 42.75	41.15 41.57 41.98 42.36	48.39 48.53 48.67 48.81	48.27 48.39 48.53 48.67	46.40 46.53 46.61 45.40	46.26 46.31 45.40 43.43	46.98 46.98 46.82 46.82	46.85 46.67 46.80 46.80	46.79 46.93 47.06 47.13	46.63 46.79 46.93 46.97	48.48 48.48 48.46 48.49	48.45 48.37 48.40 48.46
11 12 13 14 15	43.10 43.45 43.77 44.08 44.31	42.75 43.10 43.45 43.77 44.08	48.93 48.96 48.52 48.56 48.61	48.81 48.36 48.35 48.52 48.56	43.43 42.91 42.53 42.53 42.67	42.91 42.53 42.45 42.46 42.53	46.84 46.90 46.98 46.97 44.40	46.81 46.82 46.90 44.40 43.75	47.24 47.37 47.52 47.58 47.43	47.13 47.24 47.37 47.24 47.24	48.53 48.59 48.67 48.74 48.81	48.49 48.53 48.59 48.67 48.74
16 17 18 19 20	44.58 44.89 45.16 45.41 45.62	44.31 44.58 44.89 45.16 45.41	48.70 48.81 48.92 49.03 49.12	48.61 48.70 48.81 48.92 49.03	42.82 43.03 43.22 43.46 43.71	42.67 42.82 43.03 43.22 43.46	43.75 43.37 43.28 43.33 43.46	43.37 43.27 43.27 43.28 43.33	47.44 47.50 47.57 47.65 47.73	47.43 47.44 47.50 47.57 47.65	48.87 48.95 49.02 49.10 49.18	48.81 48.87 48.95 49.02 49.10
21 22 23 24 25	45.64 45.80 45.98 46.13 46.36	45.47 45.64 45.80 45.98 46.13	49.25 49.35 49.46 49.47 49.28	49.12 49.25 49.35 49.18 47.95	43.94 44.17 44.27 44.38 44.54	43.71 43.94 44.08 44.11 44.38	43.63 43.76 43.98 44.15 44.32	43.46 43.63 43.76 43.98 44.15	47.81 47.91 48.03 48.13 48.19	47.73 47.81 47.91 48.03 48.13	49.26 49.33 49.34 43.88 43.30	49.18 49.26 43.88 43.30 42.69
26 27 28 29 30 31	46.61 46.86 47.09 47.30 47.52 47.75	46.36 46.61 46.86 47.09 47.30 47.52	48.42 48.37 48.21 47.59 47.45	48.13 48.21 47.45 47.45 47.31	44.70 44.93 45.12 45.33 45.55 45.75	44.54 44.70 44.93 45.12 45.33 45.55	44.50 44.74 44.95 45.13 45.32 45.52	44.32 44.50 44.74 44.95 45.13 45.32	48.22 48.25 48.30	48.12 48.14 48.25 	42.69 42.47 42.19 35.13 33.27 33.28	42.47 42.19 35.13 33.27 33.03 33.04
MONTH	47.75	39.03	49.47	47.31	47.31	42.45	46.98	43.27	48.30	45.52	49.34	33.03

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1	33.66	33.28	39.79	39.55	46.14	45.95	49.81	49.70	50.62	50.49	52.59	52.55
2	33.71	30.90	40.00	39.79	46.34	46.14	49.93	49.81	50.74	50.62	52.64	52.59
3	30.90	30.73	40.25	40.00	46.46	46.33	50.04	49.93	50.86	50.74	52.70	52.64
4	30.95	30.74	40.51	40.25	46.69	46.46	50.15	50.04	51.00	50.86	52.77	52.70
5	31.33	30.95	40.77	40.51	46.90	46.69	50.23	50.15	51.13	51.00	52.83	52.77
6	31.74	31.33	41.02	40.77	47.03	46.49	50.33	50.21	51.26	51.13	52.89	52.83
7	32.16	31.74	41.28	41.02	46.49	46.06	50.42	50.33	51.37	51.26	52.95	52.89
8	32.60	32.16	41.54	41.28	46.19	46.07	50.35	46.47	51.48	51.37	53.02	52.95
9	33.05	32.60	41.77	41.54	46.07	46.05	47.17	46.75	51.50	51.33	53.11	53.02
10	33.46	33.05	42.01	41.77	46.20	46.07	46.75	46.41	51.60	51.50	53.18	53.11
11	33.87	33.46	42.23	42.01	46.41	46.20	46.41	46.39	51.70	51.60	53.24	53.18
12	34.24	33.87	42.47	42.23	46.64	46.41	46.55	46.40	51.80	51.70	53.32	53.24
13	34.63	34.24	42.69	42.47	46.86	46.64	46.77	46.55	51.89	51.80	53.41	53.32
14	35.03	34.63	42.90	42.69	47.08	46.86	47.04	46.77	51.97	51.89	53.50	53.41
15	35.44	35.03	43.11	42.90	47.30	47.08	47.31	47.04	52.08	51.97	53.59	53.50
16	35.80	35.44	43.33	43.11	47.51	47.30	47.55	47.31	52.10	51.89	53.66	53.59
17	36.12	35.80	43.53	43.33	47.71	47.51	47.68	47.46	52.10	51.99	53.73	53.66
18	36.45	36.12	43.75	43.53	47.90	47.71	47.94	47.68	52.16	52.10	53.81	53.73
19	36.76	36.45	43.95	43.75	48.09	47.90	48.09	47.94	52.18	51.91	53.88	53.81
20	37.07	36.76	43.99	43.87	48.26	48.09	48.27	47.96	52.06	52.00	53.94	53.88
21	37.36	37.07	44.12	43.96	48.43	48.26	48.44	48.27	52.12	52.06	54.01	53.94
22	37.70	37.36	44.28	44.12	48.60	48.43	48.68	48.44	52.19	52.12	54.11	54.01
23	37.87	37.70	44.43	44.28	48.76	48.60	48.90	48.68	52.27	52.19	54.17	54.11
24	38.09	37.83	44.58	44.43	48.91	48.76	49.11	48.90	52.35	52.27	54.24	54.17
25	38.34	38.09	44.77	44.58	49.06	48.91	49.31	49.11	52.41	52.35	54.30	54.24
26 27 28 29 30 31	38.59 38.87 39.15 39.43 39.55	38.34 38.59 38.87 39.15 39.43	44.97 45.16 45.35 45.55 45.75 45.95	44.77 44.97 45.16 45.35 45.55 45.75	49.19 49.33 49.45 49.57 49.70	49.06 49.19 49.33 49.45 49.57	49.51 49.65 50.01 50.19 50.34 50.49	49.31 49.51 49.63 50.01 50.19 50.34	52.47 52.52 52.56 52.65 52.72 52.70	52.41 52.47 52.51 52.56 52.65 52.41	54.37 54.43 54.49 54.54 54.57	54.30 54.37 54.43 54.49 54.54
MONTH	39.55	30.73	45.95	39.55	49.70	45.95	50.49	46.39	52.72	50.49	54.57	52.55
YEAR	54.57	30.73										

# Daily Low Water Levels



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET BELOW LAND SURFACE

## WICOMICO COUNTY—Continued

WELL NUMBER.--WI Cg 20. SITE ID.--382329075263701.

LOCATION.--Lat 38°23'29", long 75°26'37", Hydrologic Unit 02060009, 1.45 mi east of Parsonsburg, south of MD Rt. 346. Owner: Maryland State Highway Administration.

AQUIFER.--Parsonsburg Sand (Columbia aquifer) of Pleistocene age. Aquifer code: 112PRBG.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 25 ft, casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 68 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. sleeve, 0.17 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

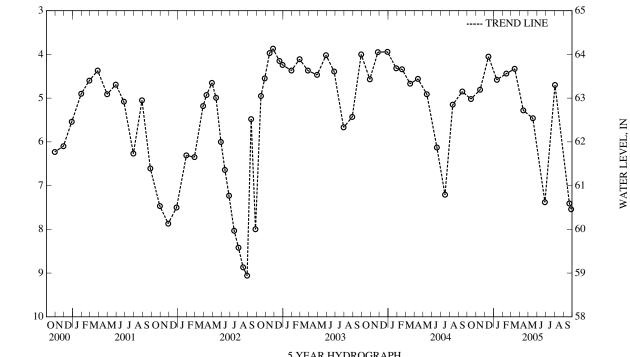
PERIOD OF RECORD .-- August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.84 ft below land surface, January 31, 1950; lowest measured, 9.31 ft below land surface, November 30, 1998.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14, 2004	5.02	JAN 12, 2005	4.58	APR 14, 2005	5.28	AUG 02, 2005	4.70
NOV 15	4.81	FEB 14	4.44	MAY 17	5.46	SEP 21	7.41
DEC 14	4.05	MAR 15	4.33	JUN 28	7.38	27	7.54

HIGHEST 4.05 DEC 14, 2004 LOWEST 7.41 SEP 21, 2005



FEET NGVD 1929

5 YEAR HYDROGRAPH

## WORCESTER COUNTY

WELL NUMBER.--WO Ae 23. SITE ID.--382621075174201. PERMIT NUMBER.--WO-73-0513.

LOCATION.-Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleysville. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 280 ft; casing diameter 4 in., to 270 ft; screen diameter 2 in., from 270 to 280 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 3.52 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

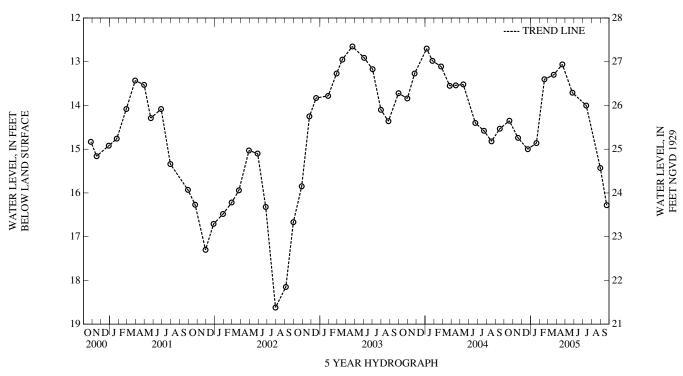
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.85 ft below land surface, December 16, 1975; lowest measured, 20.18 ft below land surface, September 28, 1995.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	14.35	JAN 21, 2005	14.86	APR 21, 2005	13.06	AUG 31, 2005	15.43
NOV 18	14.74	FEB 18	13.40	MAY 26	13.71	SEP 22	16.28
DEC 22	15.00	MAR 22	13.30	JUL 13	14.00		

HIGHEST 13.06 APR 21, 2005 LOWEST 16.28 SEP 22, 2005



WELL NUMBER.--WO Ae 24. SITE ID.--382621075174202. PERMIT NUMBER.--WO-73-0512.

LOCATION.-Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleysville. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 2 in., from 190 to 200 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 4.00 ft above land surface.

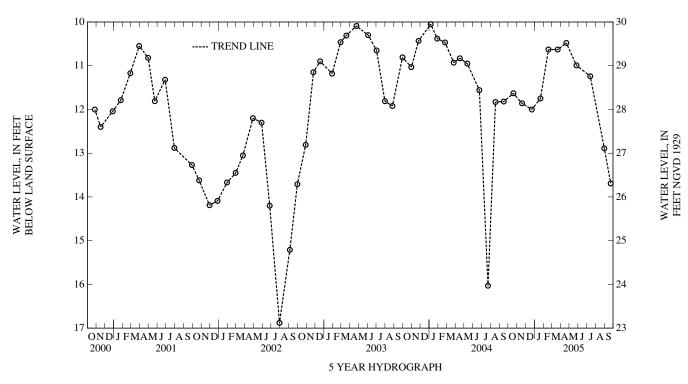
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local and regional ground-water withdrawal. PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.49 ft below land surface, May 31, 1978; lowest measured, 16.88 ft below land surface, July 30, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	11.63	JAN 21, 2005	11.75	APR 21, 2005	10.48	AUG 31, 2005	12.89
NOV 18	11.86	FEB 18	10.63	MAY 26	10.99	SEP 22	13.69
DEC 22	12.00	MAR 22.	10.63	JUL 13	11.24		

HIGHEST 10.48 APR 21, 2005 LOWEST 13.69 SEP 22, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Ae 25. SITE ID.--382621075174203. PERMIT NUMBER.--WO-73-0514.

LOCATION.-Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060009, 2.75 mi north of Whaleysville. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 118 ft; casing diameter 4 in., to 108 ft; screened diameter 2 in., from 108 to 118 ft. INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.20 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

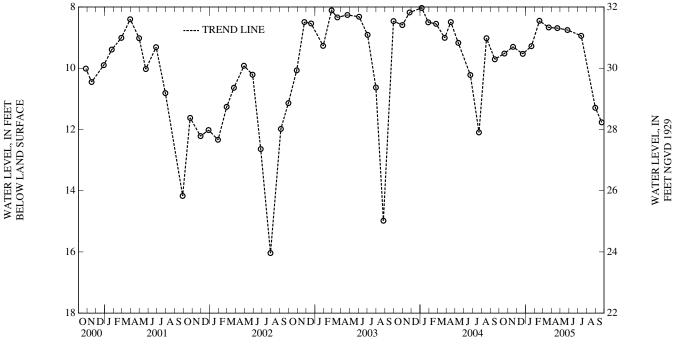
PERIOD OF RECORD .-- October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.78 ft below land surface, February 20, 1998; lowest measured, 16.04 ft below land surface, July 30, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	9.52	JAN 21, 2005	9.28	APR 21, 2005	8.69	AUG 31, 2005	11.29
NOV 18	9.30	FEB 18	8.45	MAY 26	8.75	SEP 22	11.77
DEC 22	9.53	MAR 22	8.67	JUL 13	8.94		

HIGHEST 8.45 FEB 18, 2005 LOWEST 11.77 SEP 22, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--WO Ah 6. SITE ID.--382632075031801. PERMIT NUMBER.--WO-70-0009.

LOCATION.--Lat 38°26'32", long 75°03'18", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 357 ft; casing diameter 6 in., to 347 ft; casing diameter 4 in., from 327 to 347 ft; screen diameter 4 in., from 347 to 357 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recording interval, March 1985 to February 1994.

DATUM.--Elevation of land surface is 6.35 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.27 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

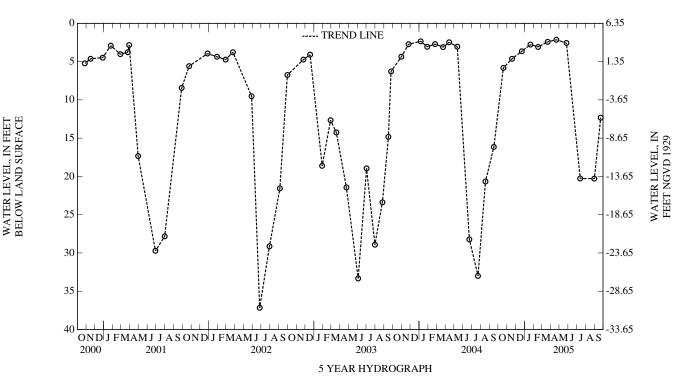
PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.48 ft above land surface, March 27, 1973; lowest measured, 52.46 ft below land surface, July 24, 1989 (recorder).

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	5.83 4.63 3.66	JAN 21, 2005 FEB 17 MAR 22	2.78 3.08 2.42	APR 21, 2005 MAY 26 JUL 13	2.15 2.57 20.28	AUG 31, 2005 SEP 22	20.29 12.33
DEC 22		MAK 22		JUL 13	20.28		

HIGHEST 2.15 APR 21, 2005 LOWEST 20.29 AUG 31, 2005



WATER LEVEL, IN FEET NGVD 1929

## WORCESTER COUNTY—Continued

WELL NUMBER.--WO Ah 35. SITE ID.--382635075030601. PERMIT NUMBER.--WO-73-0516.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--St. Marys Formation of Middle-Upper Miocene age. Aquifer code: 122SMRS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 726 ft; casing diameter 4 in., to 716 ft; screen diameter 2 in., from 716 to 726 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 3.30 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well.

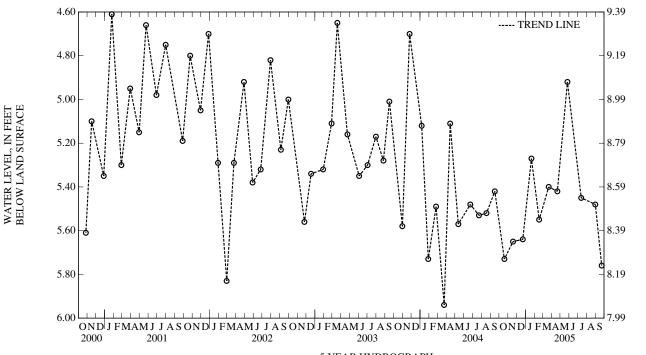
PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.90 ft below land surface, March 10, 1976; lowest measured, 10.26 ft below land surface, October 28, 1975.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	5.73	JAN 21, 2005	5.27	APR 21, 2005	5.42	AUG 31, 2005	5.48
NOV 18	5.65	FEB 17	5.55	MAY 26	4.92	SEP 22	5.76
DEC 22.	5.64	MAR 22.	5.40	JUL 13	5.45		

HIGHEST 4.92 MAY 26, 2005 LOWEST 5.76 SEP 22, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--WO Ah 36. SITE ID.--382635075030602. PERMIT NUMBER.--WO-73-0518.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 430 ft; casing diameter 4 in., to 420 ft; screen diameter 2 in., from 420 to 430 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from May 1994 to May 1997.

DATUM.--Elevation of land surface is 14.32 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 4.09 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

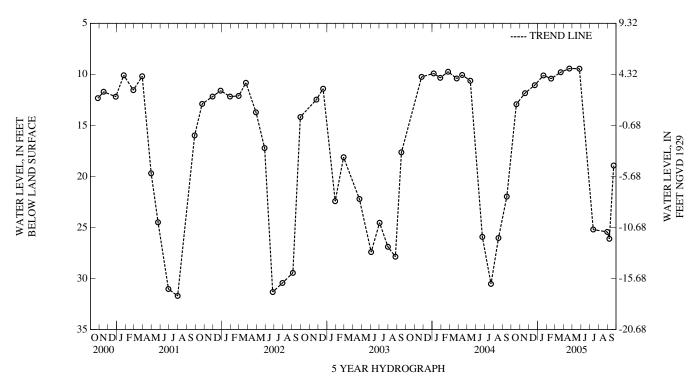
PERIOD OF RECORD .-- October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.23 ft below land surface, February 9, 1997 (recorder); lowest measured, 38.75 ft below land surface, August 30, 1989.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	12.93	JAN 21, 2005	10.10	APR 21, 2005	9.43	AUG 31, 2005	25.44
NOV 18	11.84	FEB 17	10.42	MAY 26	9.44	SEP 07	26.12
DEC 22	11.06	MAR 22	9.79	JUL 13	25.21	22	18.94

HIGHEST 9.43 APR 21, 2005 LOWEST 26.12 SEP 07, 2005



WELL NUMBER.--WO Ah 37. SITE ID.--382635075030603. PERMIT NUMBER.--WO-73-0517.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 478 ft; casing diameter 4 in., to 468 ft; screen diameter 2 in., from 468 to 478 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from May 1997 to current year.

DATUM.--Elevation of land surface is 13.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 4 in. casing, 3.10 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.58 ft below land surface, February 10, 1977; lowest measured, 41.42 ft below land surface, August 30, 1989.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

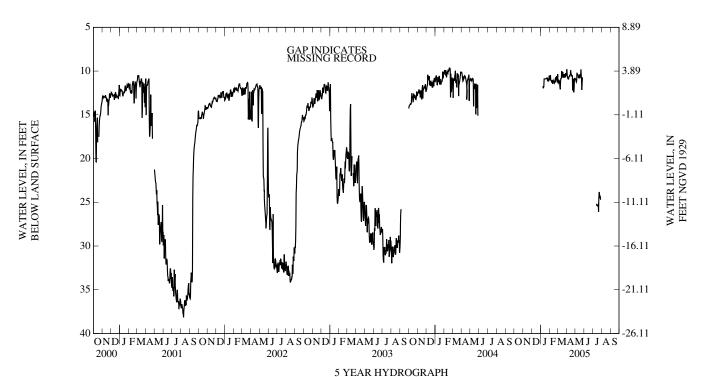
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	13.33	JAN 07, 2005	11.40	MAR 22, 2005	10.10	JUL 13, 2005	25.06
NOV 18	12.13	21	10.38	APR 21	9.71	AUG 31	25.78
DEC 22	11.33	FEB 17	10.72	MAY 26	9.88	SEP 22	19.40

HIGHEST 9.71 APR 21, 2005 LOWEST 25.78 AUG 31, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBRU	UARY	MAI	RCH
1									10.83	9.60	10.35	8.98
2									11.02	9.88	11.33	9.56
3									10.74	9.68	11.38	10.31
4									10.45	9.41	11.14	10.19
5									11.02	9.17	11.08	10.00
6									11.09	9.50	11.20	9.74
7									11.09	9.41	11.08	9.64
8							11.91	10.06	11.17	9.32	11.39	9.51
9							11.91	10.37	11.33	10.13	11.88	9.92
10							11.74	9.63	11.01	9.07	12.08	9.74
11							11.86	9.84	11.19	9.60	11.23	9.18
12							11.80	9.66	11.47	10.03	10.86	9.30
13							10.90	9.67	11.34	10.07	10.86	9.42
14							10.89	10.18	11.22	9.82	10.77	9.43
15							10.90	10.22	11.13	9.82	9.99	9.71
16							10.90	9.88	11.03	10.15	10.78	9.83
17							10.89	9.80	11.17	9.92	10.54	9.79
18							10.88	10.15	11.37	10.13	10.61	9.67
19							10.88	10.50	11.31	10.29	10.13	9.73
20							10.88	10.30	11.24	10.30	10.55	9.71
21							10.88	10.02	11.24	9.86	10.70	9.59
22							10.88	10.00	10.71	9.45	10.72	9.60
23							10.77	9.54	10.81	9.86	10.72	9.45
24							10.79	9.54	11.04	9.32	10.34	9.14
25							11.08	9.80	10.58	9.16	10.48	9.20
26							11.16	9.68	10.79	9.51	10.66	9.25
27							10.84	9.48	11.20	9.97	10.68	9.08
28							11.05	9.76	11.19	8.95	10.38	8.56
29							11.11	9.98			10.24	8.85
30							11.04	9.56			10.53	9.07
31							10.52	9.56			10.48	9.15
MONTH							11.91	9.48	11.47	8.95	12.08	8.56

								-				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	ΑY	JU	NE	JU	LY	AUG	UST	SEPTE	MBER
1	10.32	9.07	10.85	9.50								
2	9.80	8.87	10.94	9.67								
3	10.38	8.66	10.97	9.58								
4	10.68	9.19	11.15	9.70								
5	10.80	9.40	11.25	9.73								
6	10.89	9.37	11.11	9.03								
7	10.90	9.32	10.20	8.70								
8	10.91	9.03	10.40	8.87								
9	10.64	8.93	10.38	9.26								
10	10.63	9.07	10.39	9.24								
11	10.62	9.01	10.56	9.56								
12	10.47	9.19	10.76	9.62								
13	10.44	9.07	10.76	9.66								
14	10.37	9.07	10.78	9.76			25.17	23.66				
15	9.91	9.08	10.55	9.63			25.36	24.30				
16	10.19	9.01	10.38	9.51			25.37	24.04				
17	10.50	9.46	10.54	9.59			25.42	23.86				
18	10.44	9.66	10.70	10.08			25.42	23.25				
19	10.52	9.55	10.64	9.76			25.29	22.91				
20	10.52	9.51	10.33	8.94			25.26	23.68				
21	10.52	9.37	9.81	8.97			26.08	23.34				
22	12.21	9.29	10.53	8.99			24.52	22.10				
23	11.89	9.61	11.09	9.37			23.82	22.66				
24	10.87	9.00	12.16	9.73			24.17	22.47				
25	12.33	9.46	11.43	9.08			24.36	22.34				
26	12.43	9.98	10.72	9.12			24.28	22.76				
27	12.11	9.87					24.36	22.59				
28	11.26	9.99					24.71	22.92				
29	10.78	9.43										
30	10.85	9.43										
31												
MONTH	12.43	8.66	12.16	8.70			26.08	22.10				
YEAR	26.08	8.56										

# Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bg 1. SITE ID.--382022075072401.

LOCATION.--Lat 38°20'22", long 75°07'24", Hydrologic Unit 02060010, 0.4 mi east of Herring Creek on U.S. Rt. 50. Owner: MD State Highway Administration.

AQUIFER.--Sinepuxent Formation (Columbia aquifer) of Pleistocene age. Aquifer code: 112SNPX.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 14 ft; casing diameter 1.25 in., to 14 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.25 ft above land surface.

REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well.

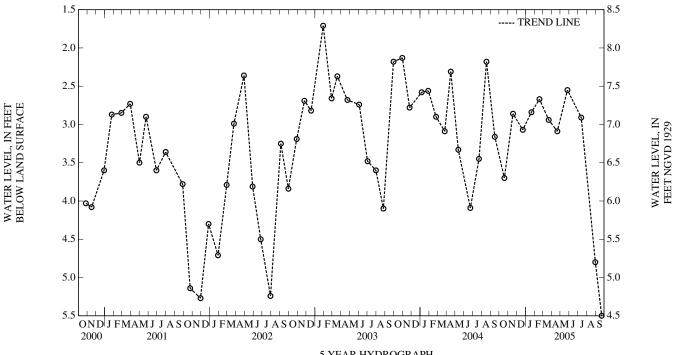
PERIOD OF RECORD .-- August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.41 ft below land surface, March 8, 1962; lowest measured, 8.61 ft below land surface, May 14, 1986.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	3.70	JAN 21, 2005	2.84	APR 21, 2005	3.09	AUG 31, 2005	4.80
NOV 18	2.86	FEB 18	2.67	MAY 26	2.55	SEP 22	5.50
DEC 22	3.07	MAR 22	2.94	JUL 13	2.91		

2.55 MAY 26, 2005 5.50 SEP 22, 2005 HIGHEST LOWEST



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET BELOW LAND SURFACE

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Bg 15. SITE ID.--382359075094501. PERMIT NUMBER.--WO-68-0066.

LOCATION.--Lat 38°23'59", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 318 ft; casing diameter 6 in., to 288 ft; screen diameter 6 in., from 288 to 318 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 6 in. casing, 5.50 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

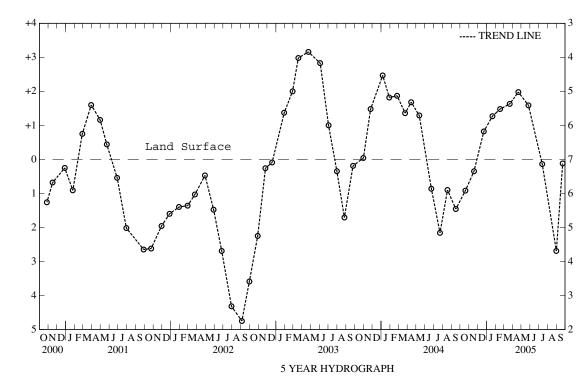
PERIOD OF RECORD.--September 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.13 ft above land surface, February 29, 1972; lowest measured, 4.75 ft below land surface, September 4, 2002.

# WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	.92 .35 +.82	JAN 21, 2005 FEB 17 MAR 22	+1.27 +1.48 +1.63	APR 21, 2005 MAY 26 JUL 13	+1.98 +1.59 .14	AUG 31, 2005 SEP 22	2.69 .12

HIGHEST +1.98 APR 21, 2005 LOWEST 2.69 AUG 31, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

FEET NGVD 1929

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Bg 45. SITE ID.--382358075094501. PERMIT NUMBER.--WO-68-0066.

LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 77 ft; casing diameter 2 in., to 56 ft; screen diameter 3 in., from 56 to 77 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. casing, 1.60 ft above land surface. Measuring point changed to top of casing, 0.69 on June 3, 2003, when the casing was cut lower.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels may be affected by local ground-water withdrawal.

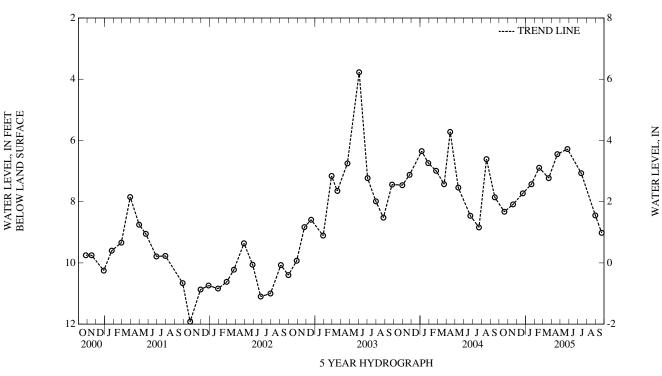
PERIOD OF RECORD .-- October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.77 ft below land surface, June 3, 2003; lowest measured, 11.92 ft below land surface, October 24, 2001.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	8.33	JAN 21, 2005	7.43	APR 21, 2005	6.45	AUG 31, 2005	8.45
NOV 18	8.09	FEB 17	6.89	MAY 26	6.28	SEP 22	9.02
DEC 22	7.73	MAR 22	7.23	JUL 13	7.07		

HIGHEST 6.28 MAY 26, 2005 LOWEST 9.02 SEP 22, 2005



WATER LEVEL, IN FEET BELOW LAND SURFACE

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Bg 46. SITE ID.--382358075094502 PERMIT NUMBER.--WO-68-0066

LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines. Owner: Ocean Pines

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 199.5 ft; casing diameter 6 in., to 53.7 ft; casing diameter 4 in., from 53.7 to 164.2 ft, and 194.5 to 199.5 ft; screen diameter 6 in., from 164.2 to 194.5 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 2 in. coupling, 2.50 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

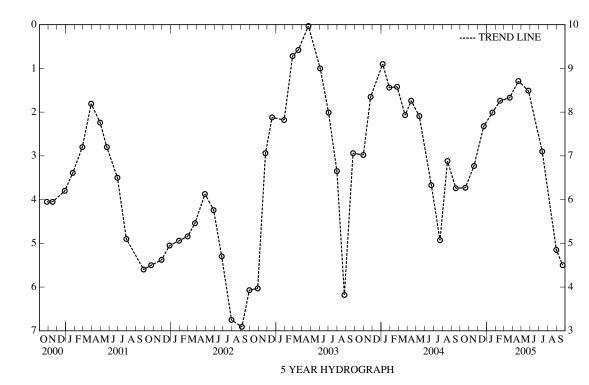
PERIOD OF RECORD .-- October 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.52 ft above land surface, February 10, 1998; lowest measured, 6.91 ft below land surface, September 4, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	3.73	JAN 21, 2005	2.01	APR 21, 2005	1.29	AUG 31, 2005	5.15
NOV 18	3.23	FEB 17	1.74	MAY 26	1.51	SEP 22	5.50
DEC 22	2.32	MAR 22	1.67	JUL 13	2.90		

HIGHEST 1.29 APR 21, 2005 LOWEST 5.50 SEP 22, 2005



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--WO Bg 47. SITE ID.--382325075063301. PERMIT NUMBER.--WO-73-0522.

LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 268 ft; casing diameter 4 in., to 258 ft; screen diameter 2 in., from 258 to 268 ft.

INSTRUMENTATION.--Monthly water level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from July 1985 to current year.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 4.07 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. No data was collected after June 28, 2005 due to damaged casing.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.71 ft below land surface, February 5, 1998 (recorder); lowest measured, 15.42 ft below land surface, August 16, 2002 (recorder).

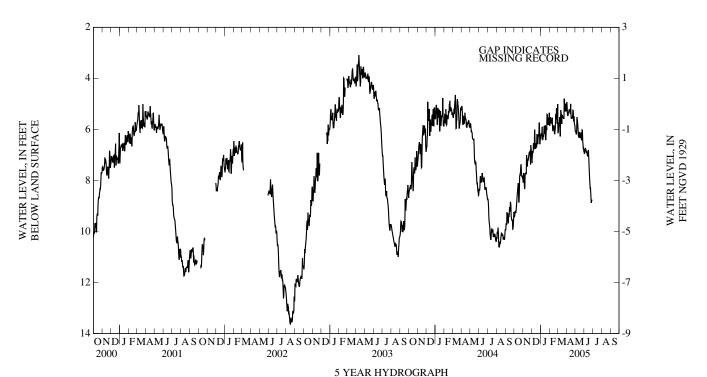
#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18	8.47 7.14	DEC 22, 2004 JAN 21, 2005	6.03 5.31	FEB 17, 2005 MAR 22	5.56 5.04	APR 21, 2005 MAY 26	5.14 5.77
		5.04 MAR 22, 2 8.47 OCT 19, 20					

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBRU	JARY	MAF	RCH
1	9.37	8.80	8.07	7.51	6.93	6.08	6.39	5.86	5.65	4.88	5.01	4.38
2	9.44	8.77	8.07	7.31	7.32	6.86	6.36	5.86	5.86	5.19	6.15	4.70
3	9.38	8.69	7.71	7.25	7.05	6.50	6.16	5.73	5.74	5.04	6.12	5.71
4	9.21	8.69	7.81	7.03	6.85	6.22	6.24	5.85	5.52	4.79	5.97	5.44
5	9.28	8.59	7.98	7.31	6.90	6.45	6.18	5.55	5.58	4.57	5.77	5.09
6	9.19	8.69	8.34	7.95	6.90	6.20	5.90	5.15	5.71	5.01	5.75	5.09
7	9.28	8.71	8.28	7.59	6.54	5.77	6.28	5.17	5.76	4.93	5.76	5.06
8	9.14	8.69	7.80	7.29	6.66	5.91	6.40	5.57	5.69	4.91	5.52	4.61
9	8.98	8.68	7.72	7.29	6.78	6.28	6.39	5.46	5.78	4.99	6.05	5.39
10	8.87	8.28	7.72	7.17	6.68	5.54	6.22	5.25	5.54	4.80	6.28	5.24
11	8.66	8.05	7.73	7.16	6.01	5.22	6.29	5.47	5.85	5.12	5.62	4.63
12	8.48	7.90	7.76	6.75	6.39	5.67	6.16	5.24	6.05	5.47	5.25	4.63
13	8.34	7.77	7.01	6.26	6.63	5.91	5.87	5.13	6.05	5.48	5.34	4.64
14	8.29	7.65	7.25	6.54	6.76	6.05	6.03	5.25	5.86	5.32	5.52	4.57
15	8.11	7.38	7.46	6.70	6.67	5.94	6.17	5.57	5.91	5.09	5.79	5.06
16	8.37	7.65	7.37	6.54	6.55	5.88	5.95	5.27	5.84	5.40	5.57	5.20
17	8.85	8.22	7.23	6.49	6.70	6.22	5.84	5.04	5.94	5.23	5.43	5.02
18	8.85	8.07	7.18	6.51	6.69	5.88	6.40	5.43	6.16	5.38	5.50	4.88
19	8.47	7.68	7.19	6.59	6.19	5.36	6.40	5.71	6.17	5.57	5.53	4.95
20	7.84	7.01	7.07	6.51	6.24	5.52	6.10	5.54	6.04	5.49	5.53	4.93
21	7.79	7.17	7.01	6.52	6.52	5.81	5.91	5.31	5.93	5.10	5.50	4.90
22	7.82	7.19	6.93	6.47	6.58	6.03	6.02	5.17	5.45	4.77	5.59	4.99
23	7.66	6.93	6.94	6.42	6.36	5.61	5.41	5.22	5.47	4.87	5.49	4.27
24	7.43	6.79	6.88	6.15	6.20	5.61	5.42	4.90	5.60	4.66	4.79	4.23
25	7.37	6.82	6.86	5.95	6.27	5.58	5.61	5.10	5.17	4.57	5.07	4.50
26 27 28 29 30 31	7.66 7.79 7.87 7.81 7.93 7.87	7.07 7.23 7.25 7.25 7.33 7.27	7.18 7.38 6.62 6.79 6.88	6.65 6.49 5.74 6.19 6.21	6.12 5.73 5.99 6.58 6.55 6.20	5.35 5.18 5.30 5.99 5.93 5.71	5.82 5.54 5.65 5.83 5.74 5.35	5.07 4.93 5.11 5.29 5.11 4.80	5.43 5.79 5.72 	4.83 5.09 4.63 	5.30 5.25 5.01 5.01 5.30 5.26	4.68 4.52 4.04 4.04 4.40 4.59
MONTH	9.44	6.79	8.34	5.74	7.32	5.18	6.40	4.80	6.17	4.57	6.28	4.04

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1	5.20	4.50	6.06	5.23	6.89	6.36						
2	4.93	3.85	6.09	5.49	6.96	6.37						
3	5.12	3.84	6.09	5.54	6.86	6.00						
4	5.41	4.59	6.14	5.63	6.75	6.07						
5	5.46	4.84	6.20	5.60	6.79	6.03						
6	5.46	4.81	6.09	5.04	6.76	6.00						
7	5.35	4.73	5.52	4.67	6.79	6.06						
8	5.32	4.62	5.65	4.78	6.91	6.12						
9	5.29	4.54	5.69	4.95	6.86	6.18						
10	5.23	4.54	5.80	4.95	6.87	6.16						
11	5.23	4.56	6.07	5.18	6.96	6.25						
12	5.24	4.55	6.27	5.45	7.00	6.39						
13	5.25	4.67	6.24	5.65	7.06	6.43						
14	5.39	4.54	6.33	5.67	7.02	6.56						
15	5.00	4.65	6.14	5.74	6.84	6.35						
16	5.34	4.38	6.13	5.53	6.81	6.22						
17	5.56	4.89	6.26	5.67	7.07	6.52						
18	5.57	5.14	6.29	5.80	7.46	6.88						
19	5.57	5.05	6.34	5.85	7.73	6.94						
20	5.54	5.07	6.25	5.12	7.89	7.15						
21	5.57	5.04	6.12	5.46	8.12	7.35						
22	5.47	4.71	6.32	5.64	8.31	7.45						
23	5.25	4.57	6.43	5.62	8.30	7.47						
24	5.26	4.55	6.32	5.32	8.52	7.50						
25	5.54	4.61	6.03	5.08	8.75	7.77						
26	5.69	4.87	6.05	5.08	8.88	8.09						
27	5.49	4.83	6.45	5.32	8.76	8.11						
28	5.76	4.76	6.59	5.79	8.80	8.21						
29	5.83	5.04	6.75	5.93								
30	5.86	5.12	6.74	6.09								
31			6.87	6.20								
MONTH	5.86	3.84	6.87	4.67	8.88	6.00						
YEAR	9.44	3.84										

# Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bg 48. SITE ID.--382325075063302. PERMIT NUMBER.--WO-73-0521.

LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight. Owner: U.S. Geological Survey.

AQUIFER .-- Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 420 ft; casing diameter 4 in., to 410 ft; screen diameter 2 in., from 410 to 420 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval from July 1985 to current year.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.87 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.54 ft below land surface, February 24, 1998 (recorder); lowest measured, 15.06 ft below land surface, August 16, 2002 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

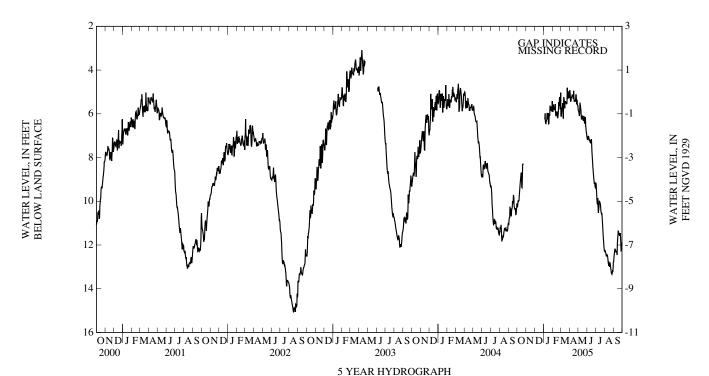
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	8.96 7.50 6.24	JAN 21, 2005 FEB 17 MAR 22	5.49 5.64 5.10	APR 21, 2005 MAY 26 JUL 13	5.07 5.87 9.97	AUG 31, 2005 SEP 22	12.50 11.20
	HIGHES	T 5.07 APR 21. 2	005				

HIGHEST 5.07 APR 21, 2005 LOWEST 12.50 AUG 31, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBRU	JARY	MAI	RCH
1 2	10.21 10.28	9.72 9.69							5.71 5.92	5.02 5.32	5.03 6.10	4.49 4.76
2 3	10.18	9.56							5.79	5.21	6.13	5.75
4 5	9.97 10.04	9.42 9.42					6.25	5.71	5.57 5.68	4.96 4.75	5.97 5.75	5.53 5.17
6	9.95	9.42					5.98	5.34	5.76	5.17	5.73	5.17
7	10.00	9.46					6.36	5.35	5.83	5.12	5.72	5.10
8	9.83	9.22					6.44	5.75	5.74	5.07	5.51	4.67
9	9.60	9.06					6.45	5.67	5.81	5.13	5.99	5.41
10	9.45	8.90					6.30	5.47	5.55	4.94	6.22	5.31
11	9.26	8.65					6.35	5.68	5.89	5.24	5.61	4.70
12	9.08	8.50					6.24	5.46	6.07	5.57	5.24	4.70
13	8.94	8.38					5.96	5.32	6.11	5.60	5.31	4.72
14	8.85	8.26					6.11	5.43	5.94	5.43	5.47	4.67
15	8.69	8.01					6.26	5.74	5.95	5.23	5.75	5.10
16	8.90	8.25					6.06	5.46	5.89	5.51	5.56	5.23
17	9.36	8.79					5.97	5.25	5.96	5.36	5.42	5.08
18	9.38	8.67					6.46	5.60	6.18	5.49	5.49	4.95
19	8.98	8.26					6.45	5.83	6.18	5.67	5.51	5.02
20	8.33	7.58					6.15	5.67	6.08	5.60	5.51	5.00
21	8.28	7.71					6.01	5.45	5.94	5.18	5.49	4.96
22	8.33	7.75					6.08	5.27	5.47	4.90	5.56	5.06
23							5.63	5.07	5.50	4.99	5.46	4.34
24							5.70	5.07	5.63	4.79	4.81	4.32
25							5.75	5.23	5.23	4.72	5.07	4.58
26							5.87	5.21	5.46	4.94	5.31	4.79
27							5.67	5.10	5.79	5.19	5.25	4.61
28							5.77	5.27	5.74	4.73	5.01	4.11
29							5.89	5.42			5.00	4.11
30							5.78	5.20			5.28	4.48
31							5.42	4.96			5.25	4.68
MONTH	10.28	7.58					6.46	4.96	6.18	4.72	6.22	4.11

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	ΑY	JUI	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	5.18 4.92 5.08 5.39 5.43	4.58 3.90 3.90 4.64 4.92	5.83 5.88 5.90 5.99 6.10	5.09 5.35 5.40 5.54 5.61	7.09 7.20 7.12 7.03 7.09	6.62 6.71 6.37 6.45 6.43	9.17 9.18 9.40 9.67 9.92	8.55 8.67 8.84 9.06 9.27	12.24 12.33 12.29 12.34 12.40	11.67 11.77 11.71 11.76 11.80	12.77 12.59 12.43 12.33 12.22	12.20 12.05 11.92 11.84 11.78
6 7 8 9 10	5.42 5.29 5.23 5.22 5.14	4.85 4.74 4.64 4.58 4.59	6.01 5.49 5.60 5.66 5.75	5.08 4.73 4.85 5.02 5.02	7.05 7.08 7.22 7.19 7.20	6.42 6.47 6.53 6.60 6.60	10.11 10.13 9.86 10.28 10.53	9.40 9.45 9.33 9.41 9.90	12.47 12.45 12.50 12.49 12.44	11.92 11.97 11.98 12.06 12.05	12.19 12.21 12.27 12.34 12.30	11.77 11.78 11.81 11.83 11.76
11 12 13 14 15	5.15 5.16 5.16 5.31 4.95	4.57 4.57 4.67 4.56 4.66	6.00 6.22 6.21 6.26 6.10	5.22 5.47 5.71 5.72 5.77	7.29 7.30 7.33 7.32 7.18	6.68 6.79 6.81 6.92 6.75	10.40 10.26 9.98 10.00 10.04	10.05 9.76 9.57 9.56 9.56	12.52 12.67 12.76 12.88 12.96	12.08 12.19 12.27 12.31 12.29	12.32 12.34 12.46 11.92 11.71	11.75 11.78 11.71 11.06 11.01
16 17 18 19 20	5.23 5.43 5.43 5.43 5.40	4.40 4.86 5.08 5.01 5.00	6.10 6.23 6.26 6.32 6.23	5.57 5.71 5.85 5.90 5.20	7.18 7.44 7.79 8.08 8.27	6.65 6.93 7.30 7.42 7.65	10.09 10.13 10.31 10.46 10.54	9.53 9.53 9.69 9.78 9.84	12.77 12.86 13.00 12.87 12.85	12.05 12.22 12.24 12.14 12.20	11.53 11.37 11.39 11.50 11.46	10.86 10.79 10.85 10.95 10.93
21 22 23 24 25	5.44 5.34 5.11 5.15 5.43	4.98 4.65 4.53 4.55 4.62	6.10 6.30 6.45 6.39 6.15	5.54 5.72 5.76 5.52 5.29	8.53 8.66 8.74 8.90 9.07	7.85 7.97 8.02 8.06 8.27	10.57 10.54 10.69 10.89 11.24	9.82 9.85 9.85 10.08 10.39	12.96 13.08 13.17 13.28 13.32	12.26 12.45 12.65 12.76 12.79	11.58 11.53 11.54 11.46 11.66	10.97 10.91 11.02 10.76 11.11
26 27 28 29 30 31	5.57 5.36 5.58 5.61 5.63	4.87 4.78 4.73 4.95 4.99	6.18 6.56 6.69 6.86 6.87 7.04	5.29 5.54 5.98 6.13 6.30 6.41	9.20 9.14 9.26 9.36 9.38	8.53 8.55 8.70 8.90 8.85	11.42 11.66 11.85 11.96 12.19 12.29	10.85 11.08 11.30 11.50 11.69 11.66	13.34 13.28 13.21 13.24 13.08 12.78	12.82 12.72 12.63 12.64 12.40 12.28	11.92 12.29 12.05 11.90 11.93	11.40 11.73 11.43 11.51 11.48
MONTH	5.63	3.90	7.04	4.73	9.38	6.37	12.29	8.55	13.34	11.67	12.77	10.76
YEAR	13.34	3.90										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bg 49. SITE ID.--382038075065901. PERMIT NUMBER.--WO-73-0520.

LOCATION.--Lat 38°20'38", long 75°06'59", Hydrologic Unit 020060010, near Keyser Point Rd., West Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 243 ft; casing diameter 4 in., to 233 ft; screen diameter 2 in., from 233 to 243 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to current year. Periodic water level measurements with chalked steel tape October 1975 to May 1985.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.13 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1975 to current year.

N

EXTREMES FOR PERIOD OF RECORD.—Highest water level measured, 2.42 ft below land surface, March 12, 1993 (recorder); lowest measured, 31.69 ft below land surface, August 21, 2002 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

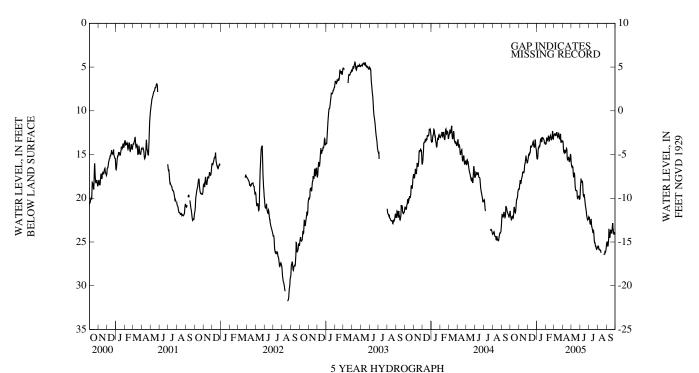
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	21.60 16.93 13.82	JAN 21, 2005 FEB 18 MAR 22	12.89 12.70 13.20	APR 21, 2005 MAY 26 JUL 13	15.34 19.65 23.39	AUG 31, 2005 SEP 22	25.22 22.70

HIGHEST 12.70 FEB 18, 2005 LOWEST 25.22 AUG 31, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
2.11		OBER	NOVE		DECE		JANU		FEBR			RCH
1	21.45	21.23	19.00	18.82	15.78	15.43	15.07	14.50	13.83	13.69	12.90	12.46
2	21.95	21.45	18.85	18.43	15.57	15.37	15.45	15.07	13.81	13.73	12.75	12.43
3	22.10	21.95	18.43	18.23	15.37	15.04	15.51	15.40	13.73	13.38	12.76	12.67
4	22.27	22.06	18.26	17.79	15.04	14.80	15.47	15.29	13.40	13.05	12.73	12.58
5	22.45	22.27	17.93	17.78	15.10	14.90	15.29	14.58	13.07	12.82	12.59	12.40
6	22.39	22.08	18.22	17.93	15.10	14.88	14.58	14.13	13.40	13.04	12.71	12.38
7	22.16	22.07	18.37	18.20	14.90	14.51	14.25	14.07	13.42	13.26	12.83	12.71
8	22.09	21.92	18.20	17.89	14.79	14.40	14.26	14.00	13.30	13.06	12.81	12.38
9	22.06	21.94	17.93	17.69	14.82	14.64	14.09	13.81	13.21	13.11	12.67	12.50
10	22.26	22.01	17.70	17.56	14.66	14.02	14.02	13.84	13.11	12.80	12.71	12.56
11	22.30	22.18	17.57	17.44	14.06	13.88	14.10	14.00	12.85	12.77	12.56	12.14
12	22.18	21.82	17.51	17.12	14.08	13.95	14.04	13.76	13.06	12.85	12.44	12.14
13	21.82	21.33	17.12	16.63	14.08	13.93	13.79	13.32	13.47	13.04	12.77	12.44
14	21.33	20.98	16.98	16.73	14.13	14.01	13.35	13.10	13.44	13.05	12.92	12.69
15	20.99	20.81	17.12	16.95	14.06	13.88	13.23	13.14	13.05	12.96	13.02	12.86
16	21.14	20.91	16.98	16.75	13.93	13.76	13.20	12.95	13.03	12.85	12.94	12.78
17	21.43	21.14	16.95	16.80	13.89	13.78	13.16	12.82	12.91	12.70	12.82	12.48
18	21.62	21.42	17.01	16.85	13.84	13.57	13.53	13.15	12.81	12.66	12.51	12.30
19	21.67	21.49	16.85	16.31	13.57	13.22	13.52	13.24	12.96	12.71	12.67	12.26
20	21.49	21.05	16.31	15.87	13.50	13.21	13.29	13.03	13.31	12.96	13.05	12.67
21	21.11	20.73	16.09	15.89	13.71	13.45	13.06	12.85	13.32	13.22	13.18	13.00
22	20.74	20.23	16.01	15.70	14.05	13.70	13.06	12.90	13.24	13.10	13.21	13.13
23	20.26	19.96	15.70	15.44	14.14	14.01	13.14	12.93	13.10	12.84	13.24	12.73
24	20.08	19.98	15.47	15.07	14.16	14.01	13.16	12.86	12.86	12.31	12.73	12.47
25	20.07	19.91	15.12	14.81	14.01	13.68	13.22	12.91	12.31	12.17	12.64	12.45
26 27 28 29 30 31	19.94 19.67 19.20 19.11 18.97 19.00	19.66 19.20 18.97 18.93 18.83 18.73	15.46 15.65 15.77 15.96 15.94	15.05 15.46 15.44 15.77 15.78	13.70 13.29 13.61 14.18 14.33 14.50	13.23 13.11 13.17 13.61 14.18 14.32	13.27 13.38 13.73 13.66 13.65 13.82	13.17 13.22 13.37 13.52 13.53 13.58	12.49 13.22 13.24 	12.18 12.49 12.90 	13.52 13.65 13.48 13.34 13.47 13.54	12.64 13.48 13.23 13.18 13.20 13.37
MONTH	22.45	18.73	19.00	14.81	15.78	13.11	15.51	12.82	13.83	12.17	13.65	12.14

					WORCESTE	COUNT	1—Commuce	1				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JU	NE	JU	LY	AUG	UST	SEPTE	EMBER
1 2 3 4 5	13.53 13.50 13.71 14.34 14.65	13.36 13.17 13.06 13.71 14.34	15.98 16.20 16.38 16.47 16.43	15.38 15.98 16.15 16.28 16.29	19.62 18.73 18.41 17.74 18.10	18.73 18.41 17.62 17.49 17.74	22.12 22.18 22.19 22.53 22.84	21.93 21.97 22.08 22.13 22.49	25.54 25.48 25.59 25.56 25.82	25.48 25.48 25.33 25.33 25.51	25.13 25.01 25.00 25.35 25.47	24.70 24.69 24.90 24.95 25.31
6 7 8 9 10	14.79 14.83 14.52 14.53 14.71	14.58 14.52 14.38 14.38 14.50	16.37 16.50 17.19 17.53 17.49	16.04 16.09 16.50 17.18 17.13	18.24 18.06 18.09 18.01 18.50	18.05 17.96 17.87 17.81 17.96	22.95 22.96 22.76 22.36 22.71	22.73 22.76 22.20 22.17 22.29	25.87 25.84 25.91 25.92 25.93	25.74 25.79 25.79 25.90 25.89	25.44 25.05 24.59 23.50 24.03	25.05 24.59 23.44 23.33 23.50
11 12 13 14 15	14.84 14.64 14.52 14.37 14.30	14.63 14.52 14.37 14.25 14.10	17.19 17.08 17.36 18.22 18.72	16.98 16.92 16.91 17.36 18.18	19.17 19.68 19.77 19.69 19.55	18.50 19.17 19.59 19.44 19.31	23.20 23.33 23.48 23.67 23.91	22.71 23.14 23.24 23.40 23.63	25.93 26.24  	25.90 25.93 	24.37 24.52 24.27 23.92 23.60	24.02 24.22 23.92 23.48 23.45
16 17 18 19 20	14.48 15.31 15.62 15.62 15.38	13.97 14.48 15.30 15.35 15.20	19.05 19.11 19.09 19.12 19.12	18.69 18.93 18.93 18.98 18.82	19.84 20.11 20.43 20.78 20.99	19.49 19.84 20.08 20.43 20.72	23.93 23.60 23.88 24.25 24.79	23.60 23.42 23.46 23.87 24.25	  	  	23.74 23.89 23.98 23.99 23.55	23.54 23.72 23.79 23.55 23.13
21 22 23 24 25	15.37 15.33 15.43 15.80 15.80	15.30 15.00 15.03 15.43 15.66	19.25 19.83 20.02 20.05 19.87	18.88 19.25 19.79 19.79 19.63	21.18 21.47 21.71 22.02 22.25	20.87 21.09 21.37 21.59 21.89	25.06 25.05 25.21 25.39 25.53	24.73 24.87 24.91 25.09 25.26	26.39  26.39 26.41	26.37  26.28 26.11	23.13 22.85 23.40 23.62 23.93	22.77 22.68 22.83 23.40 23.56
26 27 28 29 30 31	15.71 15.49 15.01 15.00 15.41	15.49 15.01 14.75 14.68 14.97	19.81 19.91 19.75 19.76 20.10 20.07	19.55 19.62 19.34 19.42 19.71 19.62	22.35 22.46 22.37 22.41 22.36	22.15 22.13 22.27 22.28 22.07	25.51 25.74 25.84 25.81 25.73 25.67	25.37 25.42 25.68 25.63 25.57 25.53	26.15 26.21 26.14 26.05 25.72 25.57	25.98 26.04 26.04 25.64 25.57 25.09	24.09 24.07 24.05 23.89 24.19	23.93 23.97 23.79 23.72 23.89
MONTH	15.80	13.06	20.10	15.38	22.46	17.49	25.84	21.93	26.41	25.09	25.47	22.68
YEAR	26.41	12.14										

# Daily Low Water Levels



3 TEAR HIDROGRAFH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bh 31. SITE ID.--382215075041801. PERMIT NUMBER.--WO-04-9586.

LOCATION.--Lat 38°22'15", long 75°04'18", Hydrologic Unit 020060010, at 44th St, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 278 ft; casing diameter 4 in., to 263 ft; screen diameter 3 in., from 263 to 278 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Periodic water level measurements with chalked steel tape September 1970 to May 1985. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to September 2002

DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter platform, 2.49 ft above land surface.

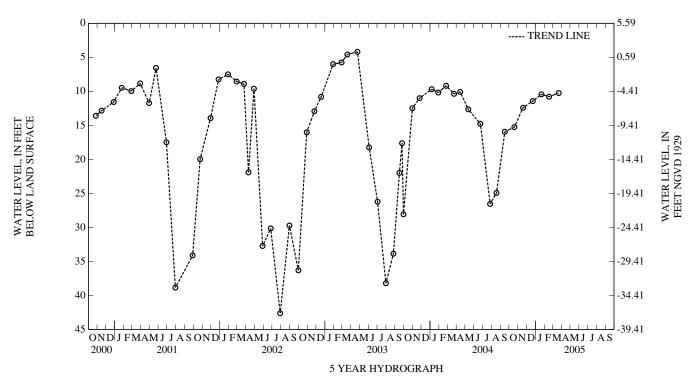
REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--September 1970 to March 2005 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.55 ft below land surface, March 13, 1993 (recorder); lowest measured, 51.44 ft below land surface, August 16, 1998 (recorder).

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18	15.26 12.40	DEC 22, 2004 JAN 21, 2005	11.42 10.43	FEB 17, 2005 MAR 22	10.79 10.24
		T 10.24 MAR 22, Γ 15.26 OCT 19. 2			



WELL NUMBER.--WO Bh 34. SITE ID.--382443075033501. PERMIT NUMBER.--WO-04-9588.

LOCATION.--Lat 38°24'43", long 75°03'35", Hydrologic Unit 02060010, north side of 100th St., 0.2 mi west of MD Rt. 528, Ocean City. Owner: Town of Ocean City.

AQUIFER .-- Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 353 ft; casing diameter 4 in., to 316.2 ft, casing diameter 2.5 in., from 316.2 to 337 ft; screen diameter 3 in., from 337 to 353 ft.

INSTRUMENTATION.—Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder—60-minute recording interval April 1985 to current year. Prior to April 1985, periodic water level measurements with chalked steel tape were collected.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.86 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.54 ft above land surface, March 27, 1973; lowest measured, 19.04 ft below land surface, September 5, 1995 (recorder).

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

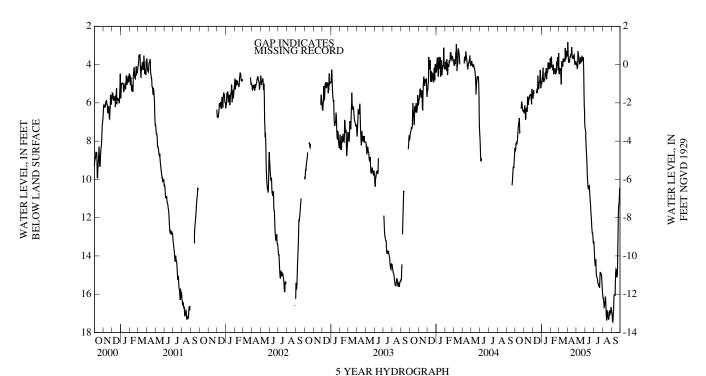
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 20 NOV 18 DEC 22	7.12 5.62 5.64 4.66	JAN 21, 2005 FEB 17 MAR 22 APR 21	3.64 3.92 3.32 3.09	MAY 26, 2005 JUL 13 AUG 31 SEP 07	3.14 15.10 16.37 16.13	SEP 22, 2005	12.87
		ST 3.09 APR 21, 2 ST 16.37 AUG 31, 2					

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBRU	JARY	MAF	RCH
1 2 3 4 5	8.45 8.53 8.37 8.09 8.14	7.48 7.55 7.38 7.26 7.26	6.52 6.51 6.14 6.20 6.45	5.71 5.54 5.45 5.29 5.60	5.53 5.78 5.58 5.33 5.54	4.37 5.22 4.87 4.68 4.89	4.99 4.93 4.70 4.71 4.41	4.25 4.22 4.05 4.15 3.83	3.95 4.15 3.86 3.58 4.07	2.99 3.31 3.14 2.85 2.62	3.40 4.44 4.50 4.25 4.17	2.44 2.81 3.80 3.65 3.29
6 7 8 9 10	8.04 8.18 8.07 7.90 7.69	7.37 7.48 7.26 7.07 6.72	6.88 6.80 6.35 6.31 6.38	6.23 5.91 5.58 5.58 5.43	   	  	4.16 4.87 4.89 4.89 4.73	3.35 3.30 3.64 3.49 3.24	4.14 4.14 4.15 4.30 4.00	3.03 2.96 2.88 3.33 2.68	4.24 4.23 4.27 4.75 5.04	3.24 3.19 2.73 3.48 3.37
11 12 13 14 15	7.41 7.21 7.08 7.02 6.79	6.41 6.20 6.04 5.84 5.56	6.41 6.46 5.67 5.92 6.11	5.40 5.04 4.34 4.69 4.87	5.50 5.36	  4.23 4.18	4.82 4.73 4.42 4.53 4.62	3.48 3.29 3.44 3.46 3.70	4.24 4.50 4.46 4.31 4.28	3.18 3.57 3.57 3.34 3.29	4.25 3.82 3.88 3.88 4.11	2.75 2.81 2.66 2.68 3.14
16 17 18 19 20	7.07 7.56 7.54 	5.83 6.43 6.36	5.99 5.86 5.74 5.76 5.63	4.74 4.72 4.79 4.87 4.80	5.26 5.48 5.28 4.57 4.93	4.21 4.65 4.31 4.02 3.84	4.34 4.18 4.76 4.55 4.42	3.40 3.20 3.55 3.96 3.75	4.19 4.27 4.51 4.45 4.44	3.60 3.41 3.54 3.75 3.74	3.89 3.69 3.76 3.80 3.69	3.31 3.20 3.04 3.10 3.12
21 22 23 24 25	6.30 6.25 6.05 5.94 6.07	5.40 5.35 5.08 4.90 4.99	5.60 5.60 5.60 5.53 5.66	4.81 4.78 4.71 4.47 4.22	5.29 5.26 5.05 4.93 4.89	4.20 4.44 4.01 3.91 3.86	4.39 4.39 3.92 3.91 4.12	3.50 3.39 2.98 3.03 3.25	4.37 3.85 3.89 4.06 3.60	3.35 2.92 3.01 2.81 2.62	3.84 3.84 3.81 3.13 3.44	3.00 3.07 2.33 2.28 2.53
26 27 28 29 30 31	6.24 6.36 6.44 6.39 6.47 6.36	5.22 5.33 5.40 5.41 5.49 5.44	5.88 6.07 5.27 5.37 5.45	4.90 4.91 4.04 4.45 4.51	4.71 4.28 4.66 5.23 5.17 4.86	3.61 3.35 3.61 4.56 4.26 4.08	4.24 3.92 4.09 4.22 4.11 3.66	3.34 3.00 3.24 3.45 3.03 2.95	3.86 4.24 4.22 	2.96 3.38 2.44 	3.68 3.66 3.38 3.28 3.57 3.53	2.71 2.54 2.03 2.10 2.39 2.59
MONTH	8.53	4.90	6.88	4.04	5.78	3.35	4.99	2.95	4.51	2.44	5.04	2.03

WORCESTER COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΛY	JU	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4 5	3.41 2.83 3.43 3.77 3.89	2.52 2.12 1.95 2.57 2.83	3.92 3.96 4.01 4.15 4.22	2.94 3.10 3.07 3.19 3.23	7.39 7.47 7.51 8.08 8.56	6.38 6.68 6.39 7.11 7.52	13.24 13.48 13.75 14.10 14.37	12.32 12.57 12.80 13.12 13.39	16.01 16.20 16.20 16.33 16.49	15.17 15.31 15.29 15.36 15.65	16.94 17.00 17.15 17.41 17.44	16.13 16.16 16.38 16.62 16.64
6 7 8 9 10	3.89 3.85 3.84 3.66 3.57	2.86 2.80 2.59 2.48 2.54	4.10 3.29 3.55 3.50 3.56	2.59 2.16 2.38 2.40 2.63	8.82 8.91 9.64 9.94 10.17	7.81 8.08 8.51 8.92 9.11	14.53 14.38 14.18 14.62 15.04	13.53 13.37 13.37 13.53 14.05	16.68 16.65 16.53 16.38 16.16	15.86 15.85 15.76 15.57 15.27	17.26 16.85 16.79 16.15 16.03	16.17 16.06 15.85 15.17 15.09
11 12 13 14 15	3.58 3.47 3.46 3.49 3.08	2.50 2.60 2.49 2.49 2.48	3.79 3.93 3.90 3.97 3.74	2.78 2.93 3.11 3.18 3.15	10.42 10.48 10.50 10.47 10.34	9.40 9.65 9.75 9.84 9.68	15.06 15.11 15.16 15.25 15.42	14.32 14.40 14.36 14.58 14.64	16.19 16.56 16.94 17.29 17.37	15.42 15.81 16.20 16.41 16.09	16.03 16.04 16.05 15.37 14.86	15.19 15.07 14.84 13.88 13.68
16 17 18 19 20	3.33 3.61 3.59 3.65 3.65	2.36 2.80 3.05 2.96 2.95	3.62 3.73 3.84 3.89 3.80	2.93 3.02 3.17 3.18 2.45	10.33 10.73 11.03 11.21 11.36	9.57 9.85 10.13 10.10 10.23	15.44 15.45 15.57 15.57 15.58	14.54 14.41 14.36 14.29 14.29	16.83 16.94 16.96 17.24 17.18	15.47 15.81 15.58 15.91 15.96	14.69 14.72 14.97 15.12 15.06	13.50 13.56 13.76 13.97 13.87
21 22 23 24 25	3.71 3.57 3.50 3.48 3.75	2.88 2.64 2.44 2.41 2.66	3.54 3.71 3.76 3.78 3.61	2.52 2.60 2.53 2.37 2.27	11.73 12.02 12.06 12.44 12.72	10.50 10.69 10.78 11.04 11.31	15.67 15.28 14.90 14.84 14.99	14.22 13.77 13.63 13.72 13.81	17.28 17.33 17.11 16.90 17.12	16.12 16.08 15.88 15.94 15.90	14.97 14.03 13.03 12.02 11.48	13.57 12.51 11.84 10.85 10.72
26 27 28 29 30 31	4.00 3.95 4.00 3.88 3.85	2.88 2.85 2.87 2.92 2.85	3.69 4.34 5.41 6.22 6.65 7.07	2.43 2.69 3.58 4.61 5.41 5.88	12.84 12.78 13.01 13.25 13.37	11.64 11.80 11.96 12.37 12.45	14.93 14.97 15.02 15.28 15.62 15.85	14.02 14.12 14.15 14.41 14.82 15.00	16.83 17.01 16.97 16.92 16.67 16.79	15.97 16.20 16.23 15.67 15.91 16.00	11.31 11.25 10.78 10.48 10.42	10.46 10.34 9.80 9.78 9.62
MONTH	4.00	1.95	7.07	2.16	13.37	6.38	15.85	12.32	17.37	15.17	17.44	9.62
YEAR	17.44	1.95										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bh 84. SITE ID.--382215075041901. PERMIT NUMBER.--WO-73-0095.

LOCATION.--Lat 38°22'15", long 75°04'20", Hydrologic Unit 02060010, west end of 44th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sand of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 89 ft; casing diameter 4 in., to 84 ft; screen diameter 4 in., from 84 to 89 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.55 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well.

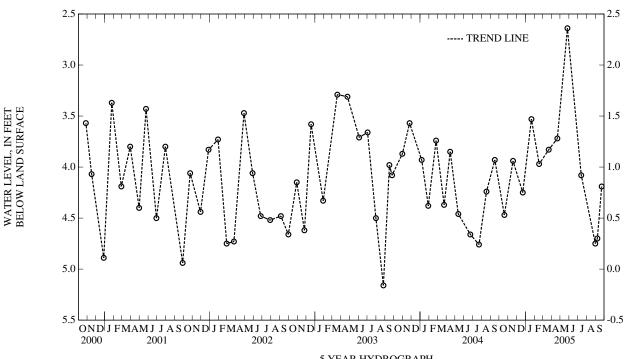
PERIOD OF RECORD .-- April 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.55 ft below land surface, January 11, 1993; lowest measured, 6.34 ft below land surface, September 17, 1991.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	4.47	JAN 21, 2005	3.53	APR 21, 2005	3.72	AUG 31, 2005	4.75
NOV 18	3.94	FEB 17	3.97	MAY 26	2.64	SEP 07	4.70
DEC 22	4.25	MAR 22	3.83	JUL 13	4.08	22	4.19

HIGHEST 2.64 MAY 26, 2005 LOWEST 4.75 AUG 31, 2005



5 YEAR HYDROGRAPH

WATER LEVEL, IN FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Bh 85. SITE ID.--382215075041902. PERMIT NUMBER.--WO-73-0094.

LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 02060010, west end of 44th St., Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 195 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in., from 190 to 195 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 4 in. casing, 1.78 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- April 1973 to current year.

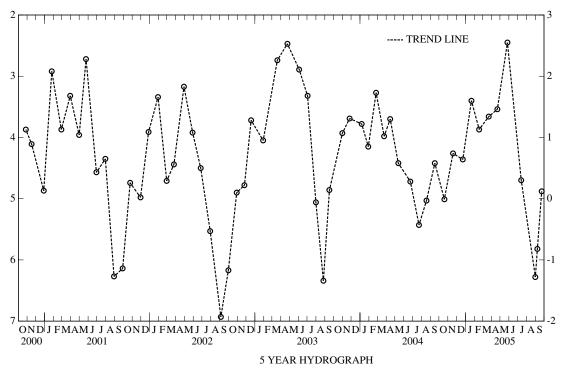
WATER LEVEL, IN FEET BELOW LAND SURFACE

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.43 ft below land surface, January 11, 1993; lowest measured, 7.53 ft below land surface, August 26, 1997.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004	5.01	JAN 21, 2005	3.40	APR 21, 2005	3.54	AUG 31, 2005	6.28
NOV 18	4.26	FEB 17	3.87	MAY 26	2.45	SEP 07	5.82
DEC 22	4.36	MAR 22	3.66	JUL 13	4.70	22	4.88

HIGHEST 2.45 MAY 26, 2005 LOWEST 6.28 AUG 31, 2005



WELL NUMBER.--WO Bh 89. SITE ID.--382215075041903 PERMIT NUMBER.--WO-81-1497.

LOCATION .-- Lat 38°22'15", long 75°04'19", Hydrologic Unit 020060010, at 44th St, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 510 ft; casing diameter 4 in., to 388 ft, 408 to 413 ft, 423 to 433 ft, 443 to 464 ft, and 474 to 495 ft; screen diameter 4 in., from 388 to 408 ft, 413 to 423 ft, 433 to 443 ft, 464 to 474 ft, and 495 to 510 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recording interval, October 1986 to current year.

DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 2.84 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands. Missing data due to recorder malfunction.

PERIOD OF RECORD .-- October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.42 ft below land surface, October 8, 1993 (recorder); lowest recorded, 40.65 ft below land surface, August 17, 1998 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 27 27 NOV 18	14.10 12.15 12.23 11.25	DEC 22, 2004 JAN 21, 2005 FEB 17 MAR 22	10.13 9.10 9.49 8.81	APR 21, 2005 MAY 26 JUL 13 AUG 31	9.35 10.97 17.17 20.89	SEP 07, 2005 22	18.75 22.18

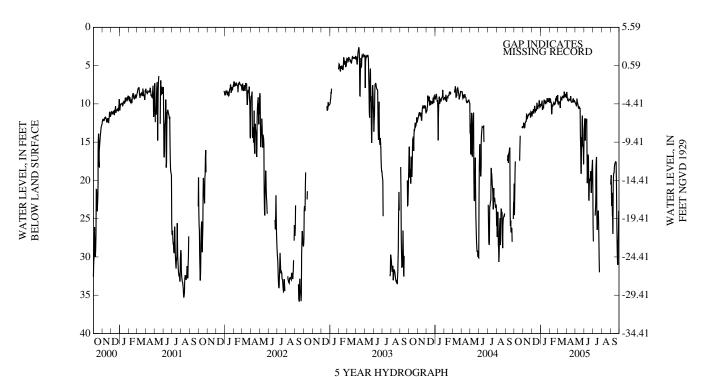
HIGHEST 8.81 MAR 22, 2005 LOWEST 22.18 SEP 22, 2005

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	20.44 24.53 22.03 18.99 17.52	17.99 17.99 18.99 17.35 16.35	13.07 13.01 12.54 12.57 12.73	12.16 11.93 11.76 11.57 11.85	11.28 11.65 11.26 10.95 11.19	10.02 10.89 10.43 10.22 10.48	10.24 10.21 10.07 10.11 9.80	9.44 9.45 9.36 9.49 9.18	9.59 9.85 9.52 9.29 9.71	8.59 8.94 8.78 8.50 8.26	8.84 9.99 10.04 9.77 9.73	7.87 8.26 9.31 9.12 8.76
6 7 8 9 10	   	   	13.11 13.08 12.55 12.39 12.38	12.46 12.07 11.65 11.63 11.40	11.02 10.69 11.27 11.08 10.81	10.21 9.67 9.70 10.10 9.24	9.58 10.73 10.73 10.60 10.46	8.76 8.74 9.38 9.16 8.91	9.82 9.85 11.35 11.17 10.32	8.69 8.69 8.63 9.02 8.87	9.87 9.87 9.72 10.27 10.54	8.79 8.79 8.30 9.02 8.85
11 12 13 14 15	   	  	12.26 12.25 11.27 11.64 11.93	11.20 10.70 10.00 10.43 10.71	10.26 10.54 10.88 11.00 10.83	8.84 9.29 9.56 9.71 9.57	10.59 9.95 9.46 9.80 9.93	8.98 8.27 8.29 8.64 9.00	10.10 10.34 10.16 9.98 9.93	9.06 9.34 9.33 9.02 8.90	9.70 9.17 9.23 9.29 9.55	8.13 8.20 8.01 8.01 8.53
16 17 18 19 20	   17.43	  13.16	11.88 11.70 11.55 11.56 11.40	10.60 10.54 10.58 10.62 10.53	10.68 10.89 10.66 9.86 10.21	9.59 10.03 9.61 9.04 9.04	9.66 9.57 10.04 9.90 9.82	8.71 8.52 8.91 9.23 9.09	9.81 9.89 10.11 10.09 10.00	9.21 8.96 9.10 9.29 9.23	9.31 9.07 9.14 9.16 9.06	8.71 8.56 8.36 8.42 8.41
21 22 23 24 25	15.58 14.16  	13.67 13.00  	11.33 11.33 11.33 11.25 11.32	10.51 10.49 10.42 10.15 9.91	10.63 10.63 10.42 10.27 10.24	9.48 9.74 9.32 9.21 9.15	9.80 9.82 9.33 9.32 9.56	8.84 8.77 8.31 8.40 8.66	9.94 9.35 9.38 9.53 9.00	8.85 8.40 8.46 8.18 8.05	9.20 9.20 9.19 8.39 8.73	8.30 8.38 7.62 7.57 7.85
26 27 28 29 30 31	13.14 13.03 13.08 12.92	12.09 12.06 12.07 11.96	11.56 11.80 11.00 11.04 11.15	10.57 10.60 9.69 10.09 10.28	10.03 9.54 9.85 10.45 10.40 10.05	8.88 8.59 8.82 9.76 9.45 9.26	9.72 9.33 9.52 9.69 9.67 9.23	8.62 8.40 8.65 8.89 8.61 8.51	9.29 9.67 9.68 	8.41 8.81 7.88 	9.01 9.02 8.76 8.75 9.12 9.14	8.04 7.92 7.49 7.52 7.85 8.15
MONTH	24.53	11.96	13.11	9.69	11.65	8.59	10.73	8.27	11.35	7.88	10.54	7.49

WORCESTER COUNTY—Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	API	RIL	MA	AY	JU:	NE	JUI	LY	AUG	UST	SEPTE	MBER
1 2 3 4	9.02 8.44 9.02 9.42	8.10 7.67 7.54 8.15	9.85 9.92 10.00 10.15	8.76 8.98 9.00 9.18	13.36 12.82 12.03 11.89	12.18 11.30 10.88 10.85	20.15 25.71 27.98	15.20 16.68 23.80	  	  	20.54 19.83 19.32 22.26	19.24 18.67 18.23 18.21
5	9.54	8.47	10.23	9.26	14.80	11.23					23.33	20.54
6 7 8 9 10	9.57 9.54 9.59 9.39 9.46	8.52 8.55 8.33 8.26 8.46	10.13 9.30 9.74 9.83 9.96	8.50 8.28 8.65 8.75 9.00	12.40 12.05 12.08 12.00 12.01	11.04 10.98 11.01 10.99 11.02	  24.60 24.04	20.96 20.12	  	  	21.63 24.50 24.91 26.98 20.53	18.97 18.60 22.55 20.49 19.12
11 12 13 14 15	9.49 9.45 9.46 9.50 8.98	8.45 8.51 8.46 8.44 8.37	10.31 10.50 10.51 10.65 10.41	9.17 9.40 9.65 9.75 9.85	16.58 20.36 19.04 16.68 16.67	11.09 13.63 14.20 13.53 13.48	23.25 18.56 17.39 16.94 24.16	18.30 17.00 16.56 16.17 16.10	  	  	19.40 19.01 18.99 18.22 17.98	18.32 18.00 17.71 16.91 16.75
16 17 18 19 20	9.30 9.74 9.79 9.79 9.79	8.22 8.76 9.15 9.09 9.05	10.46 10.56 10.62 14.27 15.76	9.65 9.80 9.93 9.97 11.26	16.96 22.57 22.58 20.38 19.98	13.52 14.35 17.27 18.36 16.72	26.46 26.29 24.42 24.32 23.95	19.43 20.68 20.32 20.21 19.34	  	  	17.76 17.64 17.58 17.64 17.56	16.51 16.46 16.52 16.59 16.49
21 22 23 24 25	9.76 9.63 9.39 9.35 9.64	8.91 8.50 8.30 8.26 8.56	19.07 19.07 14.37 15.58 12.47	12.38 14.28 11.79 11.60 10.49	19.76 20.07 19.25 18.80 20.93	16.61 17.14 16.57 15.69 18.51	24.93 27.20 29.94 32.01	19.14 20.74 26.30 28.70	   	  	19.91 24.71 26.64 29.50 30.97	16.39 18.46 20.97 24.77 29.00
26 27 28 29 30 31	9.80 9.48 9.62 9.65 9.71	8.57 8.33 8.33 8.55 8.61	11.54 15.26 15.48 16.04 17.90 16.12	10.42 10.39 11.85 12.57 13.84 13.14	21.62 20.26 18.68 18.01 17.32	20.02 16.12 15.34 15.40 14.54	   	   	   	   	30.97 28.29 26.97 24.06 23.98	28.29 26.58 23.50 21.70 21.08
MONTH	9.80	7.54	19.07	8.28	22.58	10.85	32.01	15.20			30.97	16.39
YEAR	32.01	7.49										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WO Bh 97. SITE ID.--382127075043803. PERMIT NUMBER.--WO-81-1823.

LOCATION.--Lat 38°21'27", long 75°04'38", Hydrologic Unit 020060010, 28th Street (North well), Ocean City. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 445 ft; casing diameter 4 in., to 370 ft, from 380 to 390 ft, from 400 to 410 ft, and from 420 to 430 ft; screen diameter 4 in., from 370 to 380 ft, from 390 to 400 ft, from 410 to 420 ft, and from 430 to 440 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.15 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

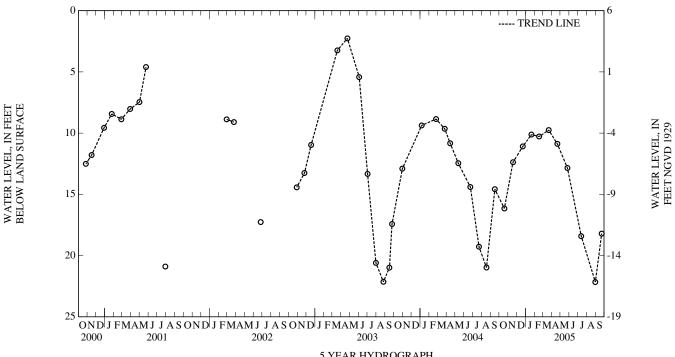
PERIOD OF RECORD.--September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.26 ft below land surface, April 23, 2003; lowest measured, 25.97 ft below land surface, August 23, 2000.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 19, 2004	16.15	JAN 21, 2005	10.12	APR 21, 2005	10.88	AUG 31, 2005	22.16
NOV 18	12.38	FEB 17	10.28	MAY 26	12.85	SEP 22	18.20
DEC 22	11.09	MAR 22	9.75	JUL 13	18.41		

HIGHEST 9.75 MAR 22, 2005 LOWEST 22.16 AUG 31, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--WO Bh 98. SITE ID.--382127075043802. PERMIT NUMBER.--WO-81-1822.

LOCATION.--Lat 38°21'27", long 75°04'38", Hydrologic Unit 02060010, at 28th Street Park, Ocean City. Owner: Town of Ocean City.

AQUIFER.--Ocean City aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 255 ft, 275 to 285 ft, and 290 to 305 ft; screen diameter 4 in., from 255 to 275 ft, 285 to 290 ft, and 305 to 310 ft.

INSTRUMENTATION.--Periodic water-level measurements with an electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder from November 1990 to April 2003.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.52 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demand.

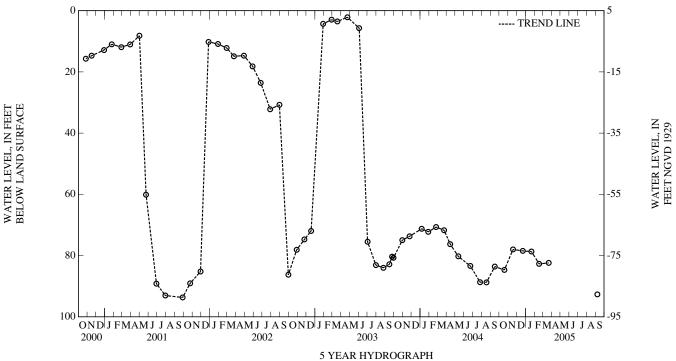
PERIOD OF RECORD .-- January 1988 to September 2005 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.89 ft above land surface, April 2, 1993 (recorder); lowest measured, 100.27 ft below land surface, September 16, 2002 (recorder).

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18	84.71 78.01	DEC 22, 2004 JAN 21, 2005	78.47 78.68	FEB 17, 2005 MAR 22	82.72 82.40	SEP 07, 2005	92.68

HIGHEST 78.01 NOV 18, 2004 LOWEST 92.68 SEP 07, 2005



WATER LEVEL, IN FEET BELOW LAND SURFACE

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Cg 72. SITE ID.--381939075052101. PERMIT NUMBER.--WO-73-1304.

LOCATION.-Lat 38°19'39", long 75°05'21", Hydrologic Unit 02060010, at South Division St., Ocean City. Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.—Drilled, observation, artesian well, depth 450 ft; casing diameter 4 in., to 384 ft, 394 to 404 ft, and 424 to 445 ft; screen diameter 4 in., from 384 to 394 ft, 404 to 424 ft, and 445 to 450 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal, especially during summer peak demands.

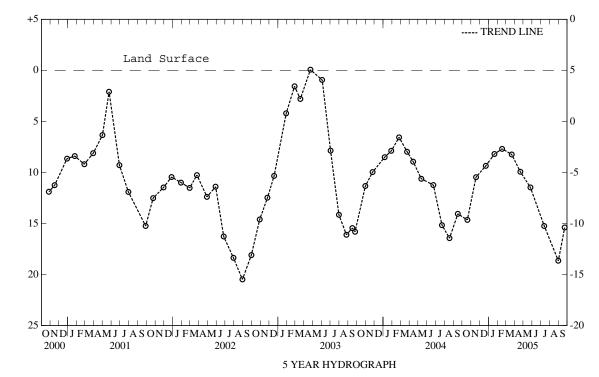
PERIOD OF RECORD .-- January 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.58 ft above land surface, March 30, 1990; lowest measured, 32.49 ft below land surface, September 25, 1996.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	14.66 10.47 9.36	JAN 21, 2005 FEB 17 MAR 22	8.20 7.69 8.24	APR 21, 2005 MAY 26 JUL 13	9.94 11.48 15.25	AUG 31, 2005 SEP 22	18.66 15.40

HIGHEST 7.69 FEB 17, 2005 LOWEST 18.66 AUG 31, 2005



WATER LEVEL, IN FEET NGVD 1929

WELL NUMBER.--WO De 36. SITE ID.--381457075174101. PERMIT NUMBER.--WO-73-0515.

LOCATION.--Lat 38°14'57", long 75°17'41", Hydrologic Unit 02060010, at Newark. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 330 ft; casing diameter 4 in., to 320 ft; screen diameter 2 in., from 320 to 330 ft.

INSTRUMENTATION.--Periodic water-level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.84 ft above land surface.

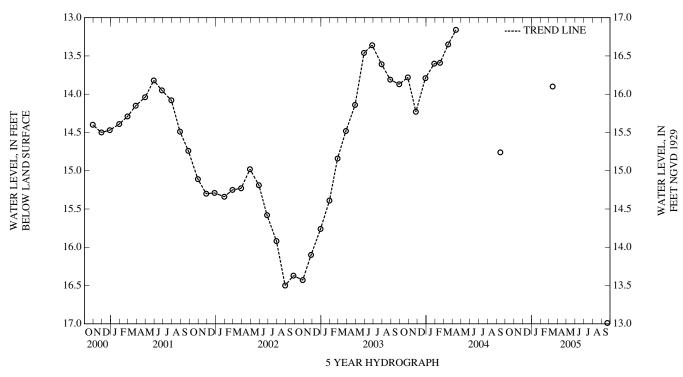
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. Water levels are affected by regional ground-water withdrawal.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.62 ft below land surface, May 20, 1976, lowest measured, 16.99 ft below land surface, September 21, 2005.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2005	13.90	SEP 21, 2005	16.99
		13.90 MAR 15, 16.99 SEP 21, 20	



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET BELOW LAND SURFACE

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Dg 21. SITE ID.--381427075081102. PERMIT NUMBER.--WO-73-0519.

LOCATION.--Lat 38°14'26", long 75°08'11", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer in the Eastover Formation of Upper Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 2 in., from 300 to 310 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from November 1990, to current year. Periodic water level measurements with chalked steel tape from October 1975 to April 1985. Equipped with digital water-level recorder--60-minute recording interval from April 1985 to October 1990.

DATUM.--Elevation of land surface is 5.66 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.98 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

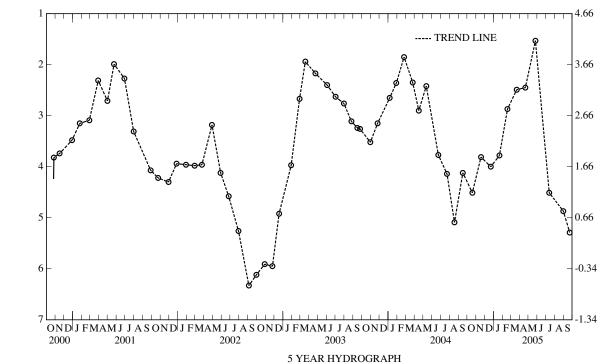
PERIOD OF RECORD .-- October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.37 ft above land surface, April 22, 1991; lowest recorded, 6.33 ft below land surface, September 4, 2002.

#### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	4.51 3.81 4.00	JAN 21, 2005 FEB 18 MAR 22	3.78 2.87 2.49	APR 21, 2005 MAY 26 JUL 13	2.45 1.53 4.51	AUG 31, 2005 SEP 22	4.87 5.29

HIGHEST 1.53 MAY 26, 2005 LOWEST 5.29 SEP 22, 2005



WATER LEVEL, IN FEET NGVD 1929

WATER LEVEL, IN FEET NGVD 1929

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Dg 23. SITE ID.--381428075081401. PERMIT NUMBER.--WO-94-1412.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Beaverdam Sands of Pliocene age. Aquifer code: 121BVDM.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 85 ft; casing diameter 2 in., to 82 ft; screen diameter 2 in., from 82 to 85 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 5.18 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

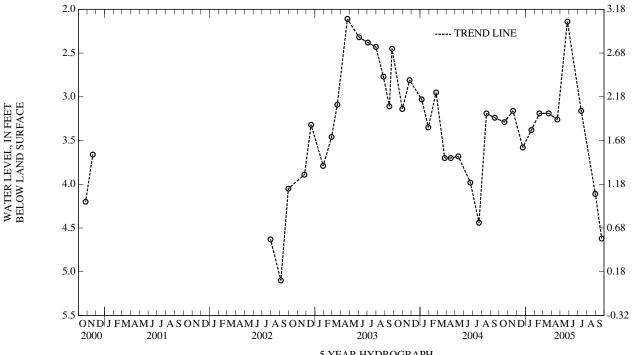
PERIOD OF RECORD .-- October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.11 ft above land surface, April 23, 2003; lowest recorded, 5.10 ft below land surface, September 4, 2002.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	3.29 3.16 3.58	JAN 21, 2005 FEB 18 MAR 22	3.38 3.19 3.19	APR 21, 2005 MAY 26 JUL 13	3.26 2.14 3.16	AUG 31, 2005 SEP 22	4.11 4.62

HIGHEST 2.14 MAY 26, 2005 LOWEST 4.62 SEP 22, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER LEVEL, IN FEET BELOW LAND SURFACE

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Dg 24. SITE ID.--381428075081402. PERMIT NUMBER.--WO-94-1411.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER.--Sinepuxent Formation of Pleistocene age. Aquifer code: 112SNPX.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 35 ft; casing diameter 2 in., to 32 ft; screen diameter 2 in., from 32 to 35 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 5.08 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.70 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

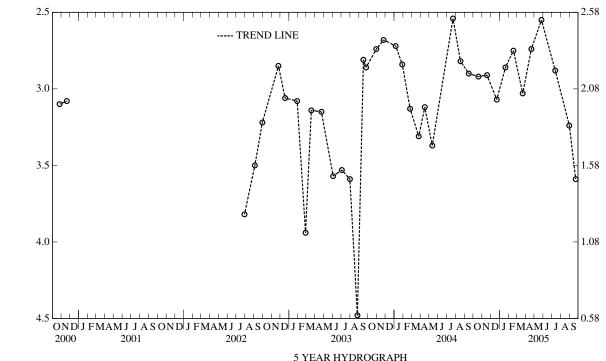
PERIOD OF RECORD .-- October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.54 ft below land surface, June 23, 2004; lowest recorded, 4.48 ft below land surface, August 26, 2003.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 2004 NOV 18 DEC 22	2.92 2.91 3.07	JAN 21, 2005 FEB 18 MAR 22	2.86 2.75 3.03	APR 21, 2005 MAY 26 JUL 13	2.74 2.55 2.88	AUG 31, 2005 SEP 22	3.24 3.59

HIGHEST 2.55 MAY 26, 2005 LOWEST 3.59 SEP 22, 2005



WATER LEVEL, IN FEET NGVD 1929

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

FEET NGVD 1929

#### WORCESTER COUNTY—Continued

WELL NUMBER.--WO Dg 25. SITE ID.--381428075081403. PERMIT NUMBER.--WO-94-1410.

LOCATION.--Lat 38°14'28", long 75°08'10", Hydrologic Unit 020060010, at Assateague Island State Park. Owner: U.S. Geological Survey.

AQUIFER .-- Tidal Marsh Deposit of Pleistocene age. Aquifer code: 111BRRR.

WELL CHARACTERISTICS.--Drilled, observation, water table well, depth 15 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in., from 12 to 15 ft.

INSTRUMENTATION.--Monthly water level measurements with an electric tape by U.S. Geological Survey personnel from October 1999, to current year.

DATUM.--Elevation of land surface is 4.99 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.30 ft above land surface.

REMARKS.--Ocean City Ground-Water Monitoring Network observation well. Water levels are affected by local ground-water withdrawal.

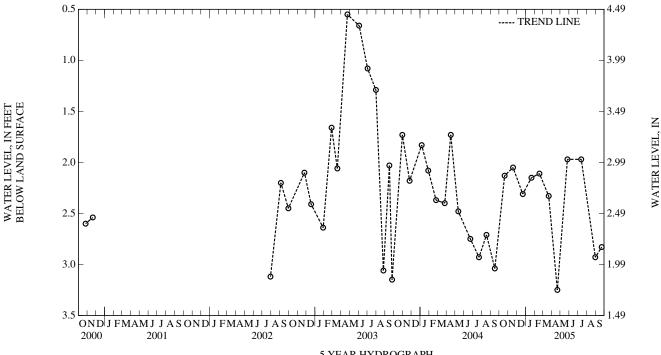
PERIOD OF RECORD .-- October 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.55 ft below land surface, March 19, 2003 and April 23, 2003; lowest recorded, 3.25 ft below land surface, April 21, 2005.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 2004	2.13	JAN 21, 2005	2.15	APR 21, 2005	3.25	AUG 31, 2005	2.93
NOV 18	2.05	FEB 18	2.11	MAY 26	1.97	SEP 22	2.83
DEC 22	2.31	MAR 22	2.33	JUL 13	1.97		

HIGHEST 1.97 MAY 26, 2005 JUL 13, 2005 LOWEST 3.25 APR 21, 2005



5 YEAR HYDROGRAPH

WELL NUMBER.--WO Fb 2. SITE ID.--380408075335701. PERMIT NUMBER.--WO-00-1633.

LOCATION.--Lat 38°04'08", long 75°33'57", Hydrologic Unit 02060009, near 7th and Young St., Pocomoke City. Owner: Pocomoke City.

AQUIFER.--Pocomoke aquifer in the Eastover Formation or Yorktown Formation of Upper Miocene-Pliocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 130 ft; casing diameter 16 in., to 100 ft; casing diameter 10 in., to 100 ft; screen diameter 9.5 in., from 100 to 130 ft.

INSTRUMENTATION.--Periodic water-level measurements with an electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 1.5 in. casing extension, 3.30 ft above land surface.

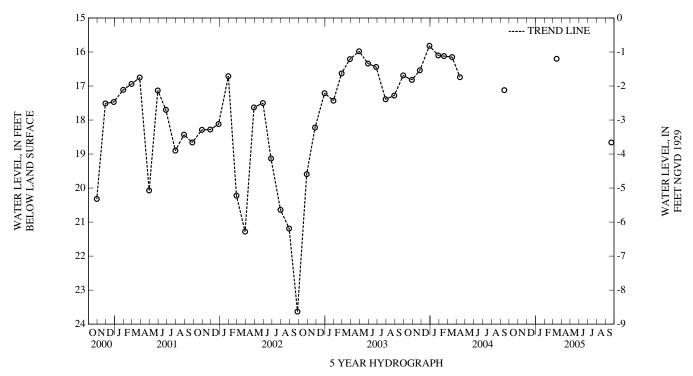
REMARKS.--Maryland Ground-Water-Level Monitoring Network observation well. The well was inaccessible from January 1997 through July 1997 due to construction equipment being parked over the well. Water levels are affected by local ground-water withdrawal.

PERIOD OF RECORD .-- January 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.20 ft below land surface, February 25, 1998; lowest measured, 49.70 ft below land surface, July 1, 1954.

### WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2005	16.20	SEP 21, 2005	18.66
		ST 16.20 MAR 15, T 18.66 SEP 21, 20	



WELL NUMBER.--AC Aa 1. SITE ID.--385225076590101. PERMIT NUMBER.--DCMW001-03.

LOCATION.--Lat 38°52'25", long 75°59'01", Hydrologic Unit 02070010, at the Anacostia Recreation Center. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 30 ft; casing diameter 2 in., to 25 ft; screen diameter 1.25 in., from 25 to 30 ft. INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 5.65 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.12 ft below land surface.

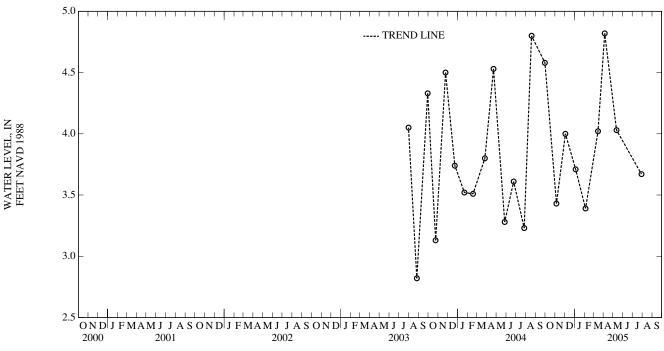
REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

PERIOD OF RECORD .-- July 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.82 ft above sea level, April 5, 2005; lowest measured, 2.82 ft above sea level, August 26, 2003.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 2004 DEC 03	3.43 4.00	JAN 04, 2005 FEB 04	3.71 3.39	MAR 15, 2005 APR 05	4.02 4.82	MAY 12, 2005 JUL 29	4.03 3.67
	LOWEST HIGHEST	3.39 FEB 04, 200 4.82 APR 05, 20					



5 YEAR HYDROGRAPH

## WELL NUMBER.--AX Ac 1. SITE ID.--385219077002201.--PERMIT NUMBER.--DCMW006-04

LOCATION.--Lat 38°52'19", long 77°00'22", Hydrologic Unit 02070010, at Earth Conservation Corps. Owner: Horne Engineering and Hazardous Research Centers - South and Southwest.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 2 in., to 7.5 ft; screen diameter 2 in. from 7.5 to 20 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 13.49 ft above North American Vertical Datum of 1988, from topographic map. Measuring point: Top of PVC casing, 0.27 ft below land surface.

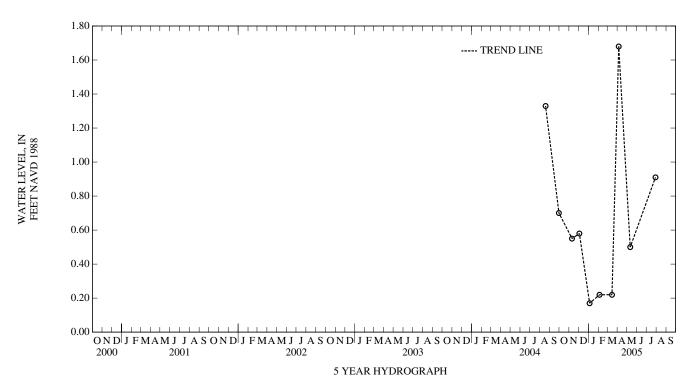
REMARKS.--Anacostia River Watershed project. Ground-Water-Level Monitoring Network. Water levels affected by tide.

PERIOD OF RECORD .-- August 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.68 ft above sea level, April 5, 2005; lowest measured, 0.17 ft above sea level, January 4, 2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 10, 2004 DEC 03	.55 .58	JAN 04, 2005 FEB 04	.17 .22	MAR 15, 2005 APR 05	.22 1.68	MAY 11, 2005 JUL 29	.50 .91
	LOWEST HIGHEST	.17 JAN 04, 200 1.68 APR 05, 20					



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WE Bb 3. SITE ID.--385504076563801. PERMIT NUMBER.--DCMW001-02.

LOCATION.--Lat 38°55'03.6", long 76°56'37.7", Hydrologic Unit 02070010, south of the New York Avenue Bridge over the Anacostia River. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 2 in., to 15 ft depth; screen diameter 2 in., from 15 to 25 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, June 2003 to current year.

DATUM.--Elevation of land surface is 12.30 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 3.60 ft above land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

PERIOD OF RECORD.--September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.56 ft above sea level (recorder), April 2, 2005; lowest measured, 2.47 ft below sea level, April 5, 2004 (recorder).

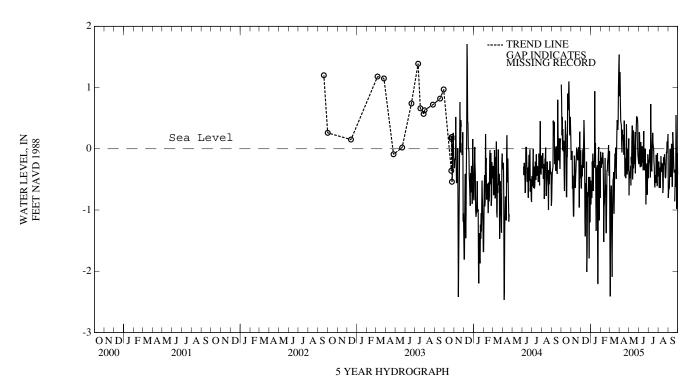
WATER SURFACE ELEVATION IN LEET MAY D 1700	WATER	SURFACE	<b>ELEVATION I</b>	N FEET NAVD 1988
--	-------	---------	--------------------	------------------

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
NOV 05, 2004 DEC 02		JAN 11, 2005 FEB 11 65 FEB 11, 200 1.81 MAY 11, 2		MAR 14, 2005 APR 06	.80 1.19	MAY 11, 2005 JUL 06	1.81 1.47

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAl	RCH
1	2.91	1.05	1.35	-0.18	1.74	-0.03	0.90	-0.52	1.41	-0.05	1.34	-0.04
2	2.36	0.82	1.47	-0.11	1.01	-0.60	0.38	-0.91	1.29	-0.16	1.16	-1.29
3	2.18	0.22	1.52	-0.09	0.72	-0.65	0.78	-0.59	1.17	-0.31	-1.00	-2.41
4	1.95	0.52	1.90	-0.04	0.79	-0.34	0.84	-0.67	1.05	-0.23	0.10	-1.61
5	1.95	-0.02	1.99	-0.65	1.04	-0.27	0.66	-0.80	1.57	-0.16	0.68	-0.74
6	1.32	0.32	0.65	-0.44	0.81	-0.45	1.43	-0.21	1.34	-0.15	0.93	-0.60
7	1.37	-0.04	0.53	-0.78	1.56	-0.06	1.19	-0.33	1.47	-0.25	0.97	-0.64
8	1.04	0.02	0.16	-1.10	1.52	0.00	1.11	-0.08	1.68	-0.06	1.17	-1.39
9	1.35	0.13	0.39	-1.10	1.39	-0.31	1.03	-0.69	1.49	-0.19	-0.24	-2.09
10	1.27	-0.41	1.25	-0.66	1.80	0.13	1.51	-0.23	1.22	-0.61	0.15	-1.25
11	0.73	-0.69	1.39	-0.11	2.29	0.47	1.46	-0.20	0.20	-1.52	0.77	-0.87
12	1.40	-0.18	1.62	-0.24	1.82	0.24	1.37	-0.31	0.68	-0.94	0.89	-0.50
13	2.00	0.08	1.10	-0.64	1.46	-0.14	1.98	-0.10	0.56	-0.89	1.10	-0.49
14	2.09	0.46	1.17	-0.63	0.71	-1.20	2.76	0.94	1.10	-0.66	1.10	-0.38
15	2.38	0.25	1.12	-0.45	0.14	-1.43	1.20	-0.21	1.33	-0.15	0.66	-1.06
16	1.96	0.22	1.37	-0.34	1.11	-0.84	1.30	0.09	0.90	-0.64	0.58	-0.78
17	1.28	-0.78	1.38	-0.15	1.18	-0.56	1.41	-0.64	0.70	-0.59	1.05	-0.31
18	1.22	-0.79	1.38	0.02	0.57	-0.81	-0.33	-1.34	0.44	-1.37	1.06	-0.08
19	1.24	-0.14	1.56	-0.10	1.27	-0.21	1.21	-0.84	0.03	-1.37	0.84	-0.29
20	1.49	-0.13	1.37	-0.09	0.04	-2.01	0.83	-0.31	0.71	-0.84	1.05	0.02
21	2.11	0.90	1.32	-0.18	0.54	-1.67	0.88	-0.39	0.91	-0.36	0.62	-0.38
22	2.23	0.63	1.48	-0.18	0.42	-0.79	1.22	-0.27	0.96	-0.36	0.87	-0.49
23	2.04	0.68	1.45	-0.01	1.60	-0.71	0.50	-2.19	1.06	-0.21	2.15	-0.08
24	2.55	0.92	1.93	-0.04	0.50	-0.78	0.37	-2.21	1.40	-0.16	1.55	0.28
25	2.60	1.10	2.06	0.03	0.71	-0.64	1.26	-0.15	1.29	-0.07	1.97	0.47
26 27 28 29 30 31	2.31 1.90 1.89 2.16 1.94 1.75	0.72 0.32 0.22 0.52 0.37 0.15	0.59 1.34 1.54 1.02 1.60	-0.96 -0.57 0.28 -0.48 -0.03	0.66 0.17 1.29 1.16 0.29 0.90	-0.46 -1.79 -1.09 -0.46 -1.20 -0.69	1.24 0.80 0.58 1.14 1.14 0.82	0.03 -1.01 -1.17 -0.36 -0.20 -0.80	1.45 1.15 1.05 	0.06 -0.37 -0.44 	1.78 1.67 2.91 2.85 2.59 2.59	0.43 0.31 0.46 1.05 1.32 1.54
MONTH	2.91	-0.79	2.06	-1.10	2.29	-2.01	2.76	-2.21	1.68	-1.52	2.91	-2.41

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	AP	RIL	MA	ΑY	JU	NE	JU	JLY	AUG	SUST	SEPTE	EMBER
1 2 3 4 5	2.35 3.56 3.44 1.96 1.70	0.86 1.22 1.25 0.75 0.46	1.42 1.25 1.05 1.06 1.12	-0.76 -0.37 -0.47 -0.46 -0.40	1.26 1.63 1.74 1.46 1.27	-0.25 0.27 0.24 -0.16 -0.30	1.20 1.60 1.16 1.41 1.51	-0.32 -0.18 -0.23 -0.12 -0.01	1.07 1.24 0.91 0.98 1.17	-0.36 -0.21 -0.53 -0.64 -0.31	0.78 0.88 0.76 0.89 1.14	-0.80 -0.69 -0.63 -0.65 -0.45
6 7 8 9 10	1.78 1.80 1.77 1.49 1.81	0.42 0.39 0.07 -0.06 0.31	1.23 0.92 1.67 1.39 1.92	-0.28 -0.60 -0.13 -0.23 0.20	1.35 2.05 1.30 1.24 1.45	-0.22 0.11 -0.16 -0.29 -0.07	1.53 1.15 2.78 1.74 1.35	-0.19 -0.47 0.73 0.20 -0.32	1.08 1.08 1.32 1.43 1.43	-0.57 -0.64 -0.31 -0.12 -0.38	1.55 1.39 1.33 1.33 1.32	-0.01 0.00 -0.18 -0.46 -0.32
11 12 13 14 15	1.57 1.65 1.62 1.50 1.15	0.15 0.20 0.21 0.09 -0.10	1.95 1.33 1.26 1.66 1.14	0.38 -0.50 -0.35 0.30 -0.32	1.41 1.20 1.30 1.04 1.14	0.04 -0.22 -0.05 -0.35 0.02	0.99 1.09 1.45 1.68 1.50	-0.37 -0.20 0.08 0.26 0.10	1.10 1.23 1.24 1.27 1.06	-0.23 -0.32 -0.24 -0.34 -0.72	1.53 1.55 1.09 1.28 1.86	0.08 -0.25 -0.62 -0.52 0.27
16 17 18 19 20	1.74 1.50 0.92 0.93 1.06	0.46 0.12 -0.45 -0.44 -0.15	0.85 0.92 1.21 1.29 2.01	-0.23 -0.25 -0.02 0.09 0.27	1.55 1.38 1.46 1.23 1.54	0.29 -0.16 -0.34 -0.35 -0.14	1.43 1.66 1.53 1.37 1.14	0.04 0.01 -0.21 -0.29 -0.55	1.17 1.55 1.46 1.67 1.73	-0.63 -0.14 -0.26 -0.26 -0.09	1.68 1.67 1.55 1.47	0.12 -0.04 -0.29 -0.39
21 22 23 24 25	0.93 1.73 1.99 1.53 1.30	-0.48 -0.34 0.40 -0.11 -0.42	1.10 1.90 1.82 2.01 2.29	-0.40 0.11 0.22 0.41 0.53	1.80 1.47 1.03 1.59 1.53	0.00 -0.44 -0.91 -0.32 -0.24	1.24 1.36 1.26 1.41 1.61	-0.63 -0.43 -0.54 -0.53 -0.10	1.61 1.32 1.26 1.26 1.18	-0.19 -0.45 -0.48 -0.46 -0.29	1.27 1.29 1.30 1.00 1.76	-0.86 -0.62 -0.34 -0.62 0.55
26 27 28 29 30 31	1.50 1.74 1.16 1.46 1.85	-0.32 0.00 -0.36 -0.10 0.17	1.95 2.32 1.84 1.47 1.34 1.32	0.45 0.51 0.03 -0.12 -0.18 -0.21	1.28 1.15 1.12 1.38 1.42	-0.45 -0.75 -0.50 -0.09 -0.48	1.50 1.21 0.97 1.27 1.44 0.99	-0.56 -0.28 -0.61 -0.07 -0.45 -0.42	1.33 1.34 1.57 1.39 1.34 1.99	-0.06 -0.06 0.12 0.03 0.08 0.24	1.70 1.07 0.88 1.73 0.76	0.19 -0.98 -0.80 -0.07 -0.42
MONTH	3.56	-0.48	2.32	-0.76	2.05	-0.91	2.78	-0.63	1.99	-0.72	1.86	-0.98
YEAR	3.56	-2.41										

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER

LEVEL

1.70

1.51

DATE

MAY 11, 2005

0.04

-0.38

-0.44

---

-1.57

1.77

1.66

2.90

2.84

2.58

2.58

2.90

0.32

0.47

1.05

1.32

1.55

-2.41

1.42

1.13

1.03

---

1.75

JUL 06

WELL NUMBER.--WE Bb 4. SITE ID.--385504076563802. PERMIT NUMBER.--DCMW004-02.

DATE

JAN 11, 2005

FEB 11

LOCATION.--Lat 38°55'03.6", long 76°56'37.7", Hydrologic Unit 02070010, south of the New York Avenue Bridge over the Anacostia River. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WATER

LEVEL

.44

.30

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 32 ft; casing diameter 2 in., to 32 ft depth; screen diameter 2 in., from 22 to 32 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, June 2003 to current year.

DATUM.--Elevation of land surface is 12.37 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 3.00 ft above land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well. Water levels affected by tides.

LEVEL

1.15

- 73

PERIOD OF RECORD.--September 2002 to current year.

DATE

NOV 05, 2004

DEC 02

26 27

28

29

30

MONTH

2.22

1.80

1.80

2.07

1.85

1.66

2.81

0.64

0.24

0.14

0.44

0.30

0.07

-0.86

0.54

1.29

1.49

0.98

1.56

2.01

-1.00

-0.61

0.25

-0.51

-0.05

-1.18

0.65

0.17

1.27

1.14

0.28

0.88

2.27

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.55 ft above sea level, April 2, 2005 (recorder); lowest measured, 2.41 ft below sea level, March 3, 2005.

WATER SURFACE ELEVATION IN	FEET NAVD 1988
WATER	WATER

DATE

MAR 14, 2005

APR 06

LEVEL

.68

1.36

			LOWEST - HIGHEST	.73 FEB 11 1.70 MAY									
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	OCTO	OBER	NOVE	MBER	DECE	DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.81	0.97	1.26	-0.26	1.70	-0.05	0.88	-0.52	1.46	0.01	1.32	-0.05	
2	2.26	0.74	1.38	-0.18	0.97	-0.60	0.37	-0.91	1.34	-0.09	1.14	-1.29	
3	2.09	0.13	1.43	-0.17	0.71	-0.65	0.77	-0.59	1.24	-0.23	-1.01	-2.41	
4	1.86	0.45	1.80	-0.12	0.77	-0.34	0.82	-0.66	1.12	-0.15	0.09	-1.62	
5	1.86	-0.09	1.90	-0.72	1.02	-0.27	0.64	-0.80	1.63	-0.09	0.67	-0.74	
6	1.23	0.24	0.56	-0.51	0.79	-0.46	1.42	-0.21	1.40	-0.07	0.92	-0.60	
7	1.28	-0.12	0.43	-0.84	1.54	-0.07	1.17	-0.33	1.54	-0.16	0.96	-0.63	
8	0.95	-0.05	0.07	-1.18	1.50	0.00	1.09	-0.08	1.75	0.03	1.17	-1.38	
9	1.26	0.05	0.29	-1.18	1.38	-0.31	1.02	-0.68	1.57	-0.09	-0.25	-2.07	
10	1.18	-0.48	1.15	-0.74	1.79	0.13	1.49	-0.22	1.30	-0.50	0.15	-1.24	
11	0.64	-0.77	1.30	-0.18	2.27	0.48	1.45	-0.18	0.29	-1.57	0.76	-0.86	
12	1.31	-0.26	1.53	-0.31	1.81	0.24	1.36	-0.30	0.61	-0.99	0.90	-0.47	
13	1.91	0.00	1.02	-0.71	1.45	-0.14	1.98	-0.08	0.49	-0.93	1.10	-0.46	
14	2.00	0.38	1.08	-0.70	0.70	-1.20	2.76	0.95	1.05	-0.70	1.11	-0.36	
15	2.28	0.18	1.05	-0.51	0.12	-1.43	1.20	-0.19	1.27	-0.19	0.67	-1.04	
16	1.87	0.13	1.29	-0.40	1.09	-0.84	1.30	0.11	0.84	-0.68	0.58	-0.76	
17	1.19	-0.86	1.30	-0.21	1.17	-0.56	1.42	-0.61	0.64	-0.63	1.05	-0.30	
18	1.12	-0.86	1.30	-0.03	0.56	-0.79	-0.32	-1.32	0.40	-1.39	1.06	-0.08	
19	1.15	-0.22	1.49	-0.16	1.26	-0.20	1.22	-0.82	-0.01	-1.40	0.84	-0.28	
20	1.39	-0.21	1.30	-0.14	0.03	-2.00	0.85	-0.27	0.67	-0.87	1.04	0.03	
21	2.02	0.82	1.25	-0.23	0.53	-1.68	0.90	-0.35	0.87	-0.38	0.61	-0.37	
22	2.13	0.55	1.41	-0.23	0.41	-0.79	1.24	-0.23	0.93	-0.39	0.86	-0.49	
23	1.95	0.61	1.39	-0.04	1.59	-0.71	0.52	-2.14	1.03	-0.23	2.15	-0.08	
24	2.46	0.84	1.87	-0.07	0.50	-0.77	0.39	-2.17	1.37	-0.17	1.54	0.29	
25	2.51	1.02	2.01	-0.01	0.70	-0.64	1.29	-0.12	1.26	-0.09	1.96	0.48	

-0.47

-1.79

-1.10

-0.46

-1.20

-0.69

-2.00

1.28

0.85

0.62

1.18

1.18

0.87

2.76

0.08

-0.96

-1.12

-0.31

-0.13

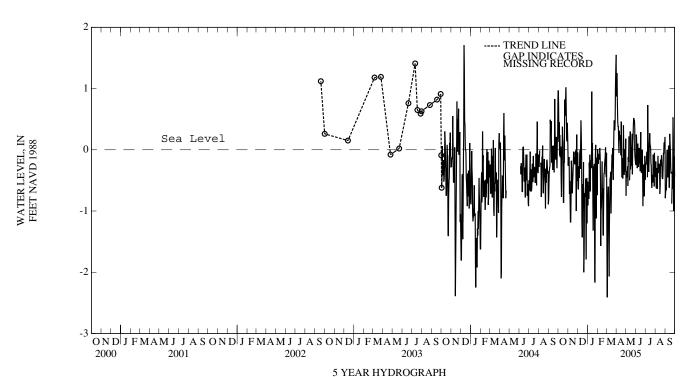
-0.74

-2.17

—Continued

					_	—Continued	1						
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
	AP	RIL	MA	AY	JU	JUNE		JULY		AUGUST		SEPTEMBER	
1 2 3 4 5	2.34 3.55 3.43 1.95 1.69	0.87 1.23 1.25 0.76 0.47	1.43 1.25 1.04 1.06 1.11	-0.75 -0.35 -0.45 -0.43 -0.39	1.24 1.60 1.72 1.44 1.25	-0.25 0.25 0.20 -0.16 -0.30	1.17 1.57 1.13 1.38 1.49	-0.32 -0.21 -0.24 -0.14 -0.03	1.06 1.24 0.91 0.96 1.16	-0.34 -0.19 -0.52 -0.63 -0.30	0.77 0.86 0.74 0.87 1.12	-0.79 -0.69 -0.63 -0.66 -0.46	
6 7 8 9 10	1.75 1.77 1.74 1.48 1.80	0.38 0.38 0.08 -0.05 0.31	1.23 0.93 1.66 1.39 1.93	-0.27 -0.59 -0.12 -0.20 0.22	1.33 2.03 1.28 1.22 1.43	-0.23 0.10 -0.18 -0.28 -0.07	1.14 2.78 1.73 1.35	-0.45 0.73 0.22 -0.30	1.08 1.06 1.31 1.42 1.42	-0.57 -0.64 -0.31 -0.10 -0.38	1.52 1.34 1.30 1.30 1.33	-0.02 0.00 -0.19 -0.45 -0.33	
11 12 13 14 15	1.56 1.65 1.61 1.49 1.16	0.16 0.21 0.22 0.10 -0.09	1.30 1.26 1.63 1.13	-0.50 -0.35 0.30 -0.32	1.39 1.18 1.27 1.02 1.12	0.03 -0.22 -0.06 -0.35 0.01	0.98 1.09 1.48 1.68 1.50	-0.36 -0.19 0.09 0.27 0.11	1.11 1.23 1.23 1.26 1.05	-0.23 -0.32 -0.23 -0.33 -0.72	1.50 1.53 1.07 1.25 1.83	0.07 -0.25 -0.62 -0.50 0.26	
16 17 18 19 20	1.73 1.48 0.91 0.93 1.05	0.46 0.12 -0.45 -0.42 -0.14	0.82 0.90 1.19 1.27 1.98	-0.24 -0.26 0.00 0.08 0.26	1.53 1.35 1.43 1.20 1.51	0.29 -0.16 -0.37 -0.37 -0.14	1.42 1.65 1.53 1.36 1.13	0.06 0.03 -0.21 -0.27 -0.53	1.15 1.54 1.45 1.66 1.72	-0.60 -0.16 -0.26 -0.25 -0.09	1.66 1.65 1.52 1.44	0.11 -0.04 -0.29 -0.39	
21 22 23 24 25	0.92 1.71 1.98 1.52 1.29	-0.47 -0.33 0.40 -0.10 -0.41	1.08 1.87 1.79 1.98 2.27	-0.40 0.11 0.20 0.41 0.52	1.78 1.45 1.00 1.56 1.50	0.00 -0.44 -0.92 -0.34 -0.24	1.24 1.35 1.26 1.40 1.60	-0.62 -0.41 -0.52 -0.51 -0.08	1.60 1.30 1.25 1.25 1.16	-0.18 -0.45 -0.47 -0.47 -0.29	1.21 1.26 1.26 1.00 1.72	-0.88 -0.63 -0.36 -0.64 0.53	
26 27 28 29 30 31	1.49 1.72 1.15 1.45 1.84	-0.31 0.01 -0.35 -0.09 0.18	1.93 2.29 1.80 1.45 1.32 1.30	0.44 0.49 0.03 -0.12 -0.18 -0.21	1.26 1.13 1.09 1.36 1.39	-0.47 -0.76 -0.51 -0.10 -0.49	1.50 1.20 0.97 1.27 1.44 0.98	-0.53 -0.27 -0.60 -0.05 -0.44 -0.42	1.32 1.32 1.55 1.37 1.32 1.96	-0.06 -0.06 0.12 0.03 0.09 0.21	1.66 1.03 0.85 1.69 0.73	0.18 -1.00 -0.79 -0.11 -0.44	
MONTH	3.55	-0.47	2.29	-0.75	2.03	-0.92	2.78	-0.62	1.96	-0.72	1.83	-1.00	
YEAR	3.55	-2.41											

Daily Low Water Levels



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WE Ca 29. SITE ID.--385238076581501. PERMIT NUMBER.--DCMW005-02.

LOCATION.--Lat 38°52'38.4", long 76°58'15.3", Hydrologic Unit 02070010, in Anacostia Park near the roller-skating pavillion. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 48.5 ft; casing diameter 2 in., to 38.5 ft depth; screen diameter 2 in., from 38.5 to 48.5 ft.

INSTRUMENTATION .-- Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 13.38 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.15 ft below land

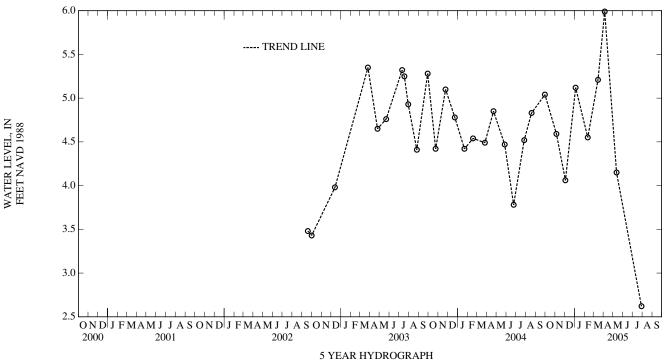
REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.99 ft above sea level, April 5, 2005; lowest measured, 2.62 ft above sea level, July 29,2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 2004 DEC 03	4.59 4.06	JAN 04, 2005 FEB 11	5.12 4.55	MAR 15, 2005 APR 05	5.21 5.99	MAY 12, 2005 JUL 29	4.15 2.62
	LOWEST	2.62 JUL 29, 200 5.99 APR 05, 20					



#### -Continued

WELL NUMBER.--WE Ca 32. SITE ID.--385332076594701. PERMIT NUMBER.--DCMW001-04.

LOCATION.--Lat 39°17'10", long 75°58'40", Hydrologic Unit 02070010, near the intersection of Massachusetts Avenue and 7th Street. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 29 ft; casing diameter 4 in., to 19 ft; screen diameter 4 in. from 19 to 29 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 79.98 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.39 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

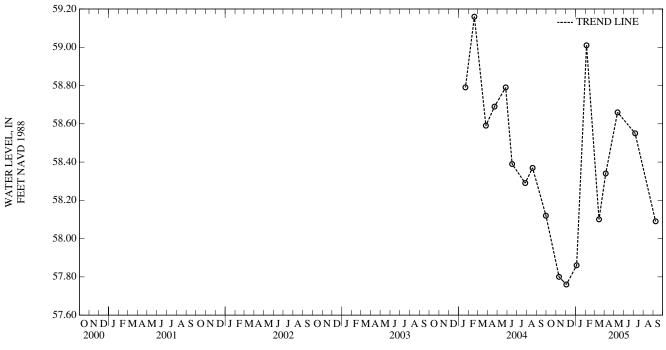
PERIOD OF RECORD .-- January 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.16 ft above sea level, February 19, 2004; lowest measured, 57.76 ft above sea level, December 3, 2004.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 10, 2004	57.80	FEB 04, 2005	59.01	MAY 12, 2005	58.66
DEC 03	57.76	MAR 15	58.10	JUL 06	58.55
JAN 04, 2005	57.86	APR 05	58.34	SEP 08	58.09

LOWEST 57.76 DEC 03, 2004 HIGHEST 59.01 FEB 04, 2005



5 YEAR HYDROGRAPH

417

WELL NUMBER.--WE Cb 5. SITE ID.--385443076562801. PERMIT NUMBER.--DCMW002-02.

LOCATION.--Lat 38°54'43.5", long 76°56'28.4", Hydrologic Unit 00002070010, at Kenilworth Aquatic Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace Deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 22.6 ft; casing diameter 2 in., to 12.6 ft depth; screen diameter 2 in., from 12.6 to 22.6 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, July 2003 to current year.

DATUM.--Elevation of land surface is 18.53 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.20 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD.--September 2002 to current year.

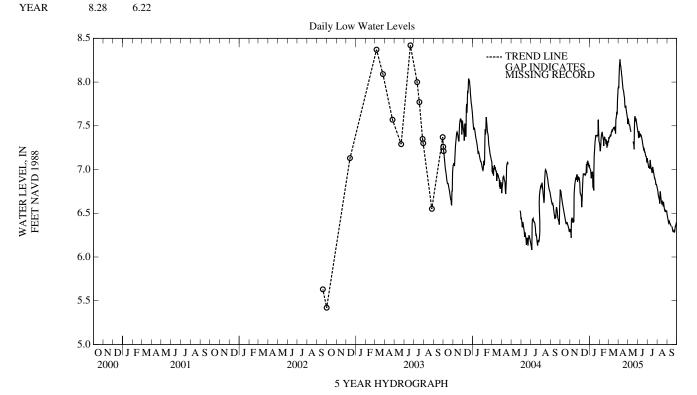
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.42 ft above sea level, June 20, 2003; lowest measured, 5.42 ft above sea level, October 1, 2002.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 2004 10 DEC 02	6.48 6.45 6.78	JAN 11, 2005 FEB 11 MAR 14	6.85 7.41 7.45	MAY 11, 2005 16 JUL 06	7.43 7.35 7.05
		T 6.45 NOV 10, 2 ST 7.45 MAR 14, 2			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	ARY	FEBR	UARY	MAF	RCH
1 2 3 4 5	6.78 6.80 6.77 6.76 6.72	6.77 6.75 6.75 6.72 6.69	6.32 6.34 6.34 6.44 6.47	6.29 6.32 6.29 6.22 6.43	6.94 6.94 6.75 6.74 6.72	6.85 6.75 6.72 6.72 6.70	7.05 7.04 7.04 7.03 7.02	7.02 7.01 7.00 6.99 6.95	7.32 7.30 7.26 7.36 7.36	7.30 7.26 7.21 7.24 7.31	7.39 7.39 7.37 7.39 7.39	7.31 7.37 7.36 7.36 7.38
6 7 8 9 10	6.69 6.66 6.64 6.62 6.60	6.66 6.63 6.61 6.59 6.56	6.47 6.47 6.45 6.42 6.45	6.44 6.45 6.42 6.40 6.39	6.72 6.71 6.77 6.83 6.92	6.70 6.57 6.62 6.75 6.83	6.99 7.04 6.99 7.00 7.00	6.90 6.97 6.92 6.97 6.97	7.40 7.43 7.43 7.46 7.46	7.35 7.40 7.42 7.43 7.41	7.42 7.44 7.45 7.43 7.45	7.38 7.40 7.38 7.40 7.43
11 12 13 14 15	6.56 6.55 6.53 6.51 6.51	6.54 6.52 6.51 6.48 6.47	6.45 6.63 6.76 6.82 6.85	6.44 6.40 6.62 6.76 6.81	6.99 6.97 6.97 6.96 6.95	6.90 6.95 6.95 6.95 6.94	6.99 6.84 6.85 7.13 7.22	6.80 6.79 6.78 6.76 7.13	7.44 7.39 7.36 7.35 7.41	7.37 7.36 7.34 7.27 7.34	7.47 7.47 7.46 7.47 7.47	7.44 7.45 7.44 7.45 7.46
16 17 18 19 20	6.49 6.44 6.43 6.43 6.42	6.44 6.42 6.41 6.38 6.38	6.87 6.89 6.91 6.93 6.93	6.85 6.86 6.89 6.91 6.88	6.97 6.97 6.98 6.99 6.98	6.94 6.95 6.95 6.94 6.95	7.28 7.31 7.36 7.39 7.42	7.22 7.28 7.31 7.35 7.39	7.41 7.39 7.37 7.36 7.38	7.37 7.37 7.35 7.34 7.34	7.48 7.49 7.49 7.49 7.50	7.47 7.48 7.48 7.47 7.46
21 22 23 24 25	6.42 6.42 6.41 6.40 6.38	6.38 6.40 6.39 6.37 6.36	6.97 6.96 6.96 6.99	6.93 6.94 6.94 6.86 6.89	7.06 7.10 7.15 7.10 7.10	6.97 7.06 6.96 7.08 7.08	7.49 7.45 7.43 7.41 7.40	7.39 7.39 7.39 7.38 7.39	7.38 7.38 7.37 7.34 7.32	7.29 7.34 7.33 7.25 7.28	7.50 7.49 7.57 7.61 7.63	7.48 7.47 7.41 7.57 7.59
26 27 28 29 30 31	6.37 6.35 6.33 6.34 6.32	6.35 6.33 6.32 6.29 6.32 6.29	6.94 6.95 6.95 6.93 6.93	6.92 6.91 6.88 6.91 6.88	7.12 7.10 7.09 7.09 7.06 7.07	7.10 7.06 7.05 7.06 7.04 7.05	7.47 7.57 7.62 7.58 7.43 7.33	7.39 7.40 7.57 7.43 7.33 7.31	7.34 7.36 7.38 	7.27 7.32 7.32 	7.68 7.71 7.79 7.86 7.93 7.98	7.62 7.66 7.63 7.79 7.86 7.93
MONTH	6.80	6.29	6.99	6.22	7.15	6.57	7.62	6.76	7.46	7.21	7.98	7.31

—Continued DAY MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN APRIL MAY JUNE AUGUST **SEPTEMBER** JULY 8.01 7.94 7.61 7.56 7.57 7.46 7.43 7.15 7.10 6.82 6.78 6.51 6.47 2 7.93 7.44 7.43 7.13 7.09 6.45 8.06 7.60 6.80 6.76 6.49 7.55 8.17 8.06 7.57 7.47 7.36 7.10 7.06 6.77 6.73 6.46 6.43 4 5 8.22 8.17 7.55 7.52 7.48 7.44 7.07 7.04 6.75 6.71 6.45 6.41 8.26 7.53 8.22 7.51 7.45 7.43 7.06 7.02 6.73 6.68 6.43 6.39 6 7 8.28 7.52 7.51 7.43 7.37 7.07 7.04 6.71 6.42 6.40 8.26 6.67 8.28 8.20 7.51 7.49 7.44 7.38 6.44 7.06 7.02 6.69 6.66 6.41 8 8.22 8.19 7.49 7.46 7.44 7.41 6.45 6.40 7.13 7.01 6.71 6.61 8.19 8.15 7.47 7.45 7.42 7.38 7.13 6.77 6.71 6.43 6.38 7.11 10 8.13 7.45 7.43 7.41 7.40 7.12 6.75 6.41 6.38 8.16 7.08 6.78 11 7.41 7.39 7.09 6.71 6.40 6.37 8.13 8.08 7.05 6.76 7.38 7.36 7.39 7.39 8.09 6.40 12 8.06 ------7.05 7.01 6.72 6.67 6.36 13 8.06 8.01 ------7.03 7.01 6.69 6.64 6.39 6.35 8.01 14 7.97 ------7.37 7.34 7.02 6.99 6.66 6.63 7.35 6.40 6.35 15 7.97 7.93 7.32 7.00 6.96 6.64 6.61 7.32 16 7.93 7.91 7.29 7.03 6.97 6.67 6.62 6.38 6.34 17 7.92 7.90 7.34 7.32 7.30 7.27 7.05 7.03 6.68 6.63 6.36 6.32 7.90 7.87 7.32 7.30 7.28 7.25 7.05 7.01 6.34 6.30 18 6.65 6.61 7.87 7.84 7.31 7.29 7.26 7.23 7.02 6.99 6.33 6.29 19 6.66 6.58 7.84 7.82 7.48 7.23 7.25 7.24 6.96 6.33 6.29 20 7.00 6.67 6.63 7.82 7.79 7.25 7.24 7.74 7.71 7.23 21 7.60 7.48 6.98 6.95 6.65 6.60 6.32 6.29  $\frac{1}{22}$ 7.60 7.20 6.93 6.57 6.55 6.34 6.31 6.97 7.61 6.62 6.58 7.79 23 7.23 7.20 6.90 6.33 6.28 7.71 6.96 7.63 7.61 24 7.21 6.32 7.76 6.94 6.90 6.57 6.53 6.52 6.29 7.73 7.627.55 7.18 25 7.19 7.58 6.55 6.32 7.73 7.69 7.62 7.16 6.93 6.88 6.36 7.17 26 7.69 7.67 7.61 7.15 6.91 6.55 6.52 6.38 6.35 7.58 6.87 27 7.68 7.64 7.58 7.55 7.16 7.15 6.88 6.83 6.55 6.53 6.38 6.35 28 7.53 7.64 7.62 7.56 7.16 7.12 6.86 6.83 6.58 6.52 6.40 6.37 29 7.62 7.59 7.53 7.50 7.15 7.08 6.85 6.83 6.56 6.52 6.43 6.39 30 7.61 7.52 7.51 7.48 7.16 7.13 6.85 6.81 6.55 6.53 6.41 6.39 7.49 7.45 6.83 6.80 6.55 6.49 MONTH 8.28 7.63 7.23 7.48 7.08 7.15 6.80 6.82 6.49 6.51 6.28 7.52



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WATER

LEVEL

6.67

6.31

DATE

MAY 16, 2005

JUL 06

6.71

6.23

7.06

6.58

WELL NUMBER.- WE Cb 6. SITE ID.--385443076562802. PERMIT NUMBER.--DCMW003-02.

LOCATION.--Lat 38°54'43.5", long 76°56'28.4", Hydrologic Unit 02070010, at Kenilworth Aquatic Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER.--Terrace Deposits of Quaternary age. Aquifer code: 110TRRC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 46.3 ft; casing diameter 2 in., to 36.3 ft depth; screen diameter 0.75 in., from 36.3 to 46.3 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recording interval, July 2003 to current year.

DATUM.--Elevation of land surface is 18.79 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC casing, 0.20 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

DATE

DEC 02, 2004

JAN 11, 2005

PERIOD OF RECORD.--September 2002 to current year.

DATE

NOV 05, 2004

10

MONTH

6.09

5.65

6.08

5.62

6.27

5.94

6.41

5.96

WATER

LEVEL

5.82

5.73

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.28 ft above sea level, April 3, 2005; lowest measured, 5.04 ft above sea level, October 1, 2002.

DATE

FEB 11, 2005

MAR 14

WATER

LEVEL

6.57

6.63

WATER

LEVEL

5.91

5.99

				5.73 NOV 1 5.67 MAY								
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	IARY	FEBRU	JARY	MAI	RCH
1 2 3 4 5	6.09 6.09 6.04 6.03 5.96	6.04 6.03 6.00 5.93 5.90	5.67 5.67 5.85 	5.64 5.63 5.62	6.02 6.02 6.02 5.99 5.99	5.95 5.95 5.99 5.97 5.95	6.05 6.02 6.04 6.05 6.03	6.02 6.00 6.02 6.00 6.01	6.26 6.25 6.27 6.39 6.45	6.23 6.23 6.24 6.27 6.39	6.71 6.69 6.64 6.63 6.63	6.68 6.63 6.61 6.61 6.61
6 7 8 9 10	5.92 5.89 5.87 5.87 5.86	5.87 5.86 5.85 5.81 5.79	5.83 5.82 5.80 5.74 5.73	5.80 5.80 5.74 5.71 5.70	5.97 6.05 6.05 6.15 6.25	5.94 5.95 6.02 6.02 6.15	6.05 6.01 6.02 6.00 6.02	6.01 5.96 5.96 5.97 5.98	6.49 6.55 6.59 6.62 6.62	6.44 6.48 6.54 6.56 6.58	6.65 6.66 6.73 6.67 6.67	6.61 6.62 6.66 6.65 6.66
11 12 13 14 15	5.81 5.81 5.82 5.82 5.81	5.79 5.79 5.77 5.77 5.74	5.75 5.95 6.01 6.04 6.05	5.72 5.73 5.95 6.00 6.02	6.27 6.24 6.23 6.16 6.11	6.22 6.22 6.16 6.11 6.08	6.01 6.01 6.05 6.27 6.32	5.97 5.99 5.98 6.03 6.27	6.58 6.59 6.57 6.63 6.63	6.57 6.57 6.52 6.53 6.59	6.71 6.69 6.66 6.65 6.59	6.66 6.64 6.59 6.58
16 17 18 19 20	5.78 5.74 5.72 5.73 5.74	5.71 5.69 5.69 5.70 5.70	6.06 6.06 6.05 6.05 6.03	6.03 6.03 6.02 6.02 6.01	6.11 6.11 6.09 6.11 6.07	6.07 6.07 6.06 6.07 6.02	6.37 6.38 6.33 6.38 6.37	6.32 6.33 6.31 6.32 6.34	6.65 6.63 6.60 6.56 6.58	6.61 6.60 6.56 6.55 6.55	6.60 6.61 6.61 6.63	6.58 6.59 6.59 6.58 6.60
21 22 23 24 25	5.75 5.74 5.75 5.76 5.76	5.71 5.70 5.70 5.72 5.70	6.02 6.02 6.01 6.06 6.08	5.99 5.99 5.99 5.99 5.97	6.07 6.09 6.19 6.14 6.13	6.02 6.06 6.08 6.13 6.11	6.34 6.41 6.38 6.33 6.32	6.30 6.30 6.29 6.29 6.31	6.62 6.61 6.58 6.63 6.62	6.58 6.58 6.56 6.55 6.60	6.62 6.60 6.83 6.82 6.82	6.59 6.58 6.60 6.79 6.79
26 27 28 29 30 31	5.75 5.73 5.70 5.73 5.73 5.70	5.69 5.68 5.68 5.69 5.67 5.65	5.97 5.97 6.01 5.94 5.96	5.93 5.93 5.94 5.92 5.92	6.14 6.12 6.10 6.09 6.07 6.06	6.11 6.05 6.05 6.07 6.04 6.03	6.34 6.29 6.22 6.28 6.31 6.28	6.29 6.21 6.20 6.22 6.27 6.25	6.61 6.62 6.71 	6.59 6.59 6.62 	6.81 6.83 7.06 7.04 6.99 7.00	6.78 6.79 6.83 6.96 6.94 6.95

MONTH

YEAR

7.28

7.28

6.76

5.62

6.89

6.58

6.72

6.30

—Continued DAY MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN APRIL MAY JUNE AUGUST **SEPTEMBER** JULY 7.02 6.96 6.89 6.84 6.65 6.61 6.36 6.33 6.09 6.07 5.91 5.87 2 7.02 5.86 7.23 6.85 6.81 6.64 6.61 6.37 6.30 6.08 6.05 5.89 7.28 7.18 7.18 6.82 6.77 6.71 6.62 6.30 6.26 6.07 6.03 5.86 5.84 4 7.12 6.78 6.73 6.69 6.66 6.28 6.25 6.04 6.01 5.84 5.82 6.25 5 7.14 7.11 6.74 6.72 6.67 6.64 6.28 6.03 5.99 5.82 5.81 6 7 6.75 6.72 6.62 6.28 6.01 5.99 5.83 5.80 7.15 7.11 6.66 6.31 7.16 7.13 6.75 6.73 6.26 5.98 5.84 5.81 6.72 6.65 6.29 6.00 8 7.17 6.75 6.50 6.29 6.08 5.98 5.85 5.82 7.11 6.70 6.68 6.64 9 7.11 7.09 6.70 6.64 6.60 6.46 6.40 6.06 5.84 5.81 6.67 6.11 10 7.11 7.09 6.69 6.64 6.61 6.41 6.36 6.09 5.82 5.80 6.65 6.11 6.59 6.33 5.82 5.79 11 7.09 7.06 6.70 6.62 6.37 6.10 6.06 6.66 6.56 6.55 5.83 5.82 5.80 6.03 12 7.07 7.05 6.69 6.63 6.59 6.34 6.30 6.07 13 7.06 7.02 6.64 6.61 6.59 6.32 6.29 6.05 6.01 5.80 6.53 14 7.03 6.97 6.74 6.63 6.56 6.31 6.27 6.02 5.99 5.82 5.78 15 6.98 6.93 6.74 6.70 6.54 6.50 6.29 6.27 6.00 5.96 16 6.95 6.92 6.52 6.47 6.35 6.28 6.01 5.96 5.82 5.79 17 6.97 6.94 6.63 6.60 6.48 6.44 6.37 6.34 6.03 5.99 5.83 5.79 6.95 6.92 6.45 6.41 6.35 6.31 5.98 5.81 5.78 18 6.61 6.58 6.01 6.93 6.90 6.59 6.58 6.42 6.38 6.32 5.97 5.80 5.77 19 6.28 6.04 6.92 6.86 6.58 6.41 6.38 6.28 5.81 5.77 20 6.90 6.24 6.05 6.02 5.79 5.79 5.77 5.76 21 6.90 6.87 6.87 6.85 6.43 6.39 6.26 6.23 6.05 6.00  $\frac{1}{22}$ 6.93 6.39 6.25 6.01 5.97 6.88 6.84 6.20 6.87 6.42 23 6.95 6.91 6.86 6.82 6.39 6.36 6.25 5.98 5.95 5.79 6.20 5.76 24 5.76 5.79 6.22 6.92 6.86 6.81 6.40 6.35 5.96 5.92 5.74 6.88 6.18 25 6.35 6.24 5.75 5.91 6.88 6.87 6.39 5.93 6.83 6.82 6.19 26 6.85 6.80 5.93 5.91 5.82 5.78 6.84 6.81 6.37 6.33 6.20 6.16 27 6.84 6.80 6.82 6.76 6.35 6.32 6.18 6.13 5.94 5.92 5.81 5.75 28 5.75 6.80 6.77 6.79 6.74 6.35 6.31 6.14 6.10 5.98 5.94 5.77 29 6.78 6.76 6.75 6.70 6.36 6.30 6.12 6.10 5.95 5.93 5.80 5.76 30 6.89 6.78 6.72 6.68 6.38 6.35 6.13 6.09 5.95 5.93 5.76 5.75 6.69 6.64 6.10 6.08 5.97 5.91

Daily Low Water Levels

6.50

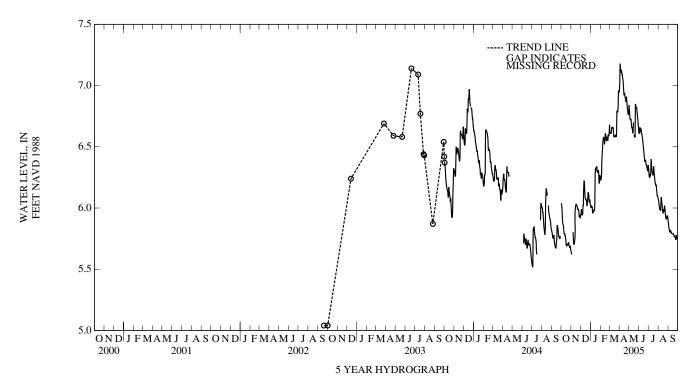
6.08

5.91

6.11

5.91

5.74



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

WELL NUMBER.--WE Cb 8. SITE ID.--385252076572801. PERMIT NUMBER.--DCMW002-04

LOCATION.--Lat 38°52'52.3", long 76°57'28.0", Hydrologic Unit 02070010, In Fort Dupont Park near the Activity Center. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER .-- Potomac Group Aquifer of lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 265 ft; casing diameter 4 in., to 255 ft; screen diameter 4 in., from 255 to 265 ft.

INSTRUMENTATION.--Monthly water-level measurements with electric tape by U.S. Geological Survey personnel. Equipped with a digital water-level recorder from December 2004 to current year.

DATUM.--Altitude of land surface is 61 ft above North American Vertical Datum of 1988, from topographic map. Measuring point: Top of PVC casing, 0.67 ft below land surface.

REMARKS.--Anacostia River Watershed Ground-Water-Level Monitoring Network observation well.

PERIOD OF RECORD .-- January 2004 to current year.

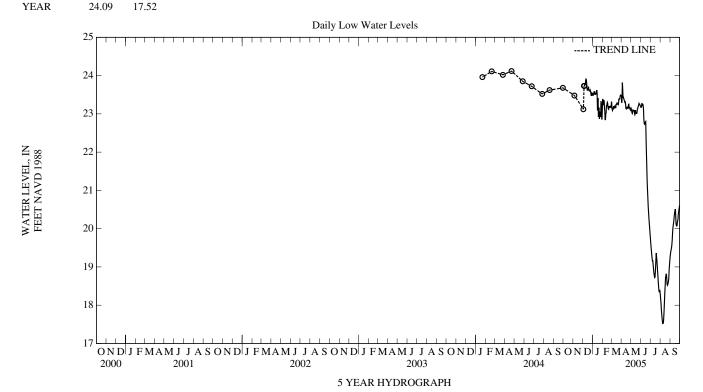
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.12 ft above sea level, April 22, 2004; lowest measured, 17.52 ft above sea level, August 8 and 9, 2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 2004 DEC 03 JAN 11, 2005	23.48 23.12 22.98	FEB 11, 2005 MAR 14 APR 06	23.05 23.15 23.41	MAY 16, 2005 JUL 29 SEP 08	23.06 18.38 19.96
		T 18.38 JUL 29, 20 ST 23.48 NOV 05,			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTO	OBER	NOVE	MBER	DECE	MBER	JANU	JARY	FEBR	UARY	MAI	RCH
1 2 3 4 5	  	  	  	  	23.78	   23.73	23.55 23.52 23.57 23.59 23.59	23.52 23.47 23.50 23.53 23.55	23.47 23.50 23.42 23.36 23.50	23.36 23.39 23.23 23.25 23.36	23.36 23.33 23.22 23.13 23.15	23.32 23.22 23.12 23.09 23.12
6 7 8 9	  	  	  	  	23.78 23.88 23.88 23.87 23.96	23.73 23.77 23.78 23.78 23.87	23.64 23.60 23.61 23.54 23.59	23.59 23.52 23.51 23.51 23.53	23.45 23.36 23.17 23.13 23.15	23.33 23.14 23.07 22.85 22.85	23.20 23.28 23.35 23.20 23.20	23.12 23.17 23.20 23.15 23.15
11 12 13 14 15	  	  	  	  	23.97 23.92 23.94 23.82 23.70	23.91 23.90 23.82 23.70 23.62	23.58 23.58 23.66 24.06 23.65	23.52 23.57 23.56 23.62 23.52	23.26 23.26 23.37 23.34 23.33	23.01 23.02 23.21 23.21 23.27	23.27 23.27 23.22 23.29 23.28	23.19 23.22 23.18 23.15 23.24
16 17 18 19 20	  	  	  	  	23.69 23.69 23.72 23.77 23.73	23.62 23.66 23.66 23.71 23.62	23.52 23.43 23.55 23.41 23.16	23.09 23.19 23.41 22.92 23.06	23.39 23.32 23.27 23.17 23.19	23.30 23.27 23.17 23.13 23.12	23.27 23.29 23.30 23.29 23.32	23.24 23.26 23.28 23.26 23.27
21 22 23 24 25	  	  	  	  	23.64 23.62 24.07 23.67 23.64	23.60 23.60 23.62 23.63 23.58	23.45 23.44 23.49 23.33 23.15	23.16 22.87 22.92 23.03 23.02	23.26 23.23 23.21 23.26 23.25	23.19 23.19 23.17 23.17 23.21	23.31 23.28 23.98 23.45 23.42	23.25 23.24 23.28 23.40 23.38
26 27 28 29 30 31	   	   	   	   	23.64 23.63 23.56 23.60 23.56 23.55	23.58 23.49 23.47 23.56 23.50 23.51	23.33 23.55 23.61 23.29 23.06 23.37	22.92 23.33 23.27 22.94 22.85 23.06	23.22 23.21 23.35 	23.18 23.17 23.21 	23.42 23.46 24.09 23.61 23.50 23.51	23.39 23.39 23.46 23.50 23.47 23.47
MONTH					24.07	23.47	24.06	22.85	23.50	22.85	24.09	23.09

—Continued DAY MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN MAX MIN APRIL MAY JUNE AUGUST SEPTEMBER JULY 23.56 23.49 23.23  $23.15 \\ 23.12$ 23.20 23.17 19.85 19.73 18.32 18.24 19.37 19.32 23.16 23.83 23.21 23.17 19.46 19.37 2 23.29 19.76 19.60 18.24 18.14 3 23.82 23.46 23.13 23.08 23.30 23.21 19.60 19.45 18.14 18.01 19.47 19.43 19.53 4 23.93 23.82 23.08 23.03 23.31 23.28 19.45 19.37 18.01 17.88 19.47 23.04 5 23.83 23.64 23.01 23.29 23.25 19.37 19.33 17.88 17.77 19.60 19.53 23.23 19.36 19.73 6 23.67 23.41 23.10 23.04 23.30 19.24 17.78 17.68 19.60 23.48 23.45 23.13 23.30 23.26 23.10 19.24 19.15 17.68 17.58 19.86 19.73 8 23.50 23.41 23.12 23.26 23.20 17.52 20.03 19.86 23.09 19.26 19.17 17.58 23.10 23.20 17.55 23.42 23.37 23.08 23.13 19.18 19.07 17.52 20.08 20.03 10 23.38 23.36 23.11 23.08 23.13 22.90 19.08 18.98 17.62 17.53 20.14 20.08 23.12 11 23.37 23.32 22.90 22.76 18.98 18.89 17.78 20.22 20.13 23.10 17.62 23.33 23.35 22.76 22.77 22.79 22.73 22.74 20.33 20.39 23.11 12 23.30 23.01 18.89 18.82 17.97 17.78 20.22 23.01 23.31 13 22.98 18.82 18.76 18.18 17 97 20.33 14 23.31 23.25 23.16 23.01 22.77 18.76 18.72 18.37 18.18 20.44 20.38 15 23.25 23.14 23.16 23.10 22.82 22.79 18.85 18.73 18.52 18.37 20.50 20.44 16 23.16 23.13 23.11 23.05 22.86 22.80 19.02 18.85 18.72 18.52 20.59 20.50 17 23.22 23.16 23.06 23.02 22.80 22.52 19.21 19.02 18.77 18.72 20.59 20.50 23.21 23.17 23.04 23.01 22.52 22.10 19.37 19.21 18.76 20.50 20.30 18 18.82 23.18 23.16 23.05 23.01 22.10 21.63 19.39 19.36 20.30 19 18.87 18.82 20.12 23.17 23.32 21.27 23.22 23.05 20 21.63 19.37 19.26 18.85 18.79 20.13 20.08 21 23.19 23.14 23.18 23.13 21.27 21.11 19.26 19.17 18.79 18.67 20.09 20.07 22 23.24  $\frac{1}{23.14}$ 23.18 23.14 20.17 21.11 19.17 19.04 20.08 20.93 18.67 18.54 23 23.32 23.24 23.21 23.18 20.75 19.08 18.90 18.55 18.52 20.22 20.17 20.93 24 23.30 23.25 23.25 18.90 18.60 20.25 23.21 20.75 20.60 18.75 18.54 20.20 25 23.25 23.18 23.27 23.23 18.59 20.37 20.44 20.25 20.60 18.78 18.67 18.61 26 20.51 23.19 23.16 23.28 23.27 20.44 20.27 18.67 18.52 18.70 18.60 20.37 27 23.20 23.16 23.28 23.25 20.27 20.14 18.52 18.39 18.86 18.70 20.51 20.47 28 23.16 23.12 23.27 23.25 20.14 20.02 18.39 18.35 19.00 18.86 20.56 20.48 29 23.13 23.10 23.26 23.23 20.02 19.92 18.42 18.35 19.12 19.00 20.63 20.56 30 23.23 23.13 23.24 23.21 19.94 19.85 18.43 18.40 19.24 19.12 20.67 20.61 31 23.23 23.19 18.40 18.32 19.33 19.24 MONTH 19.33 19.32 23.93 23.10 23.32 22.98 23.31 19.85 19.85 18.32 17.52 20.67



OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### WELL NUMBER.--WE Cb 9. SITE ID.--385355076555501.--PERMIT NUMBER.--DCMW001-05

LOCATION.--Lat 38°53'55", long 076°55'55", Hydrologic Unit 02070010, at Lederer Community Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18.5 ft; casing diameter 4 in., to 8.5 ft; screen diameter 4 in. from 8.5 to 18.5 ft. INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 45.52 ft above North American Vertical Datum of 1988, from topographic map. Measuring point: Top of PVC casing, 0.14 ft below land surface.

REMARKS.--Anacostia River Watershed Project. Ground-Water-Level Monitoring Network. Water levels affected by tide.

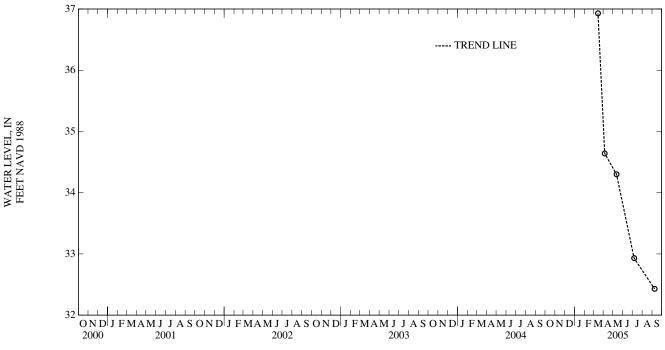
PERIOD OF RECORD .-- March, 2005 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.93 ft above sea level, March 15, 2005; lowest measured, 32.43 ft above sea level, September 8, 2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2005 APR 05	36.93 34.64	MAY 12, 2005 JUL 06	34.30 32.93	SEP 08, 2005	32.43
	LOWES	T 32.43 SEP 08, 20	005		

LOWEST 32.43 SEP 08, 2005 HIGHEST 36.93 MAR 15, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

#### District of Columbia—Continued

#### WELL NUMBER.--WE Cb 10. SITE ID.--385354076555901.--PERMIT NUMBER.--DCMW001-05

LOCATION.--Lat 38°53'54", long 076°55'59", Hydrologic Unit 02070010, at Lederer Community Gardens. Owner: District of Columbia Department of Health, Water Quality Division.

AQUIFER .-- Alluvium of Quaternary age. Aquifer code: 110ALVM.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18 ft; casing diameter 4 in., to 8 ft; screen diameter 4 in., from 8 to 18 ft.

INSTRUMENTATION.--Periodic water-level measurements with electric tape by U.S. Geological Survey personnel.

DATUM.--Altitude of land surface is 42.44 ft above North American Vertical Datum of 1988, from topographic map. Measuring point: Top of PVC casing, 0.14 ft below land surface.

REMARKS.--Anacostia River Watershed Project. Ground-Water-Level Monitoring Network. Water level affected by tide.

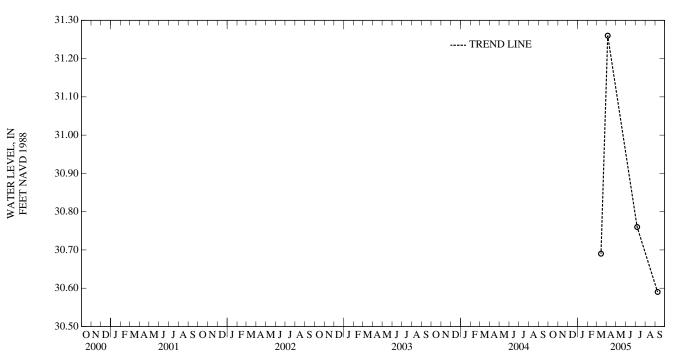
PERIOD OF RECORD .-- March, 2005 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.26 ft above sea level, April 5, 2005; lowest measured, 30.59 ft above sea level, September 8, 2005.

#### WATER SURFACE ELEVATION IN FEET NAVD 1988

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 2005	30.69	APR 05, 2005	31.26	JUL 06, 2005	30.76	SEP 08, 2005	30.59
	LOWEST	30.59 SEP 08, 20	005				

HIGHEST 31.26 APR 05, 2005



5 YEAR HYDROGRAPH

OCTOBER 1, 2000 THROUGH SEPTEMBER 30, 2005

## Ground-Water-Quality Records Remark Codes

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

Printed Output	Remark
Е	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

#### **Water-Quality Control Data**

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a nondetection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte either was not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by a USGS Water Science Center are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the USGS Water Science Center.

#### **Blank Samples**

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed

to segregate a different part of the overall data-collection process. The types of blank samples collected by this USGS Water Science Center are:

**Field blank**—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

**Trip blank**—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

**Equipment blank**—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

**Sampler blank**—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

**Filter blank**—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

**Splitter blank**—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

**Preservation blank**—A blank solution that is treated with the sampler preservatives used for an environmental sample.

## **Reference Samples**

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

#### **Replicate Samples**

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

**Concurrent samples**—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

**Sequential samples**—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

**Split sample**—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

# QUALITY OF GROUND WATER DATA KENT COUNTY, DELAWARE

Well Number	Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	0830 1100 1300 1000 <i>1005</i>	Environn Environn Environn Environn <i>Replicate</i>	nental nental nental	112CLMB 112CLMB 112CLMB 112CLMB 112CLMB	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	55    	30.00 14.00 14.00 14.00 14.00	30 14 14 14	27 11 11 11
	08-16-05	1430	Environn	nental	112CLMB	1028	80020		14.00	14	11
Well Number	Date	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling depth, feet (00003)	Sampling method, code (82398)	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	4.86 .98 .89 1.51	1.0 .50 .66 .57	60 40 50 60	27.0 11.0 12.5 12.0	4040 4040 4040 4040 4040	.5 1.0  .3	767 767 773 761	1.0 .6 2.6 1.5	10 6 24 14	7.8 5.5 5.6 5.4
	08-16-05	2.92	.50	50	13.0	4040	.3	767	1.4	14	5.4
Well Number	Date	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	220 140 136 89	23.0 14.5 12.0 15.5	14.5 15.0 13.0 13.0	98 37 39 37	38.6 13.2 13.9 13.1	.314 1.07 1.09 1.05	.74 2.27 2.20 1.96	4.31 8.02 8.33 7.83	  11@c  	66 9  10
	08-16-05	129	23.5	17.2	37	13.3	.963	2.27	7.78		16
Well Number	Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	80 10  12  20	E.01n   	10.4 15.2 15.0 14.8	E.1n <.1 <.1 <.1 	17.8 20.2 19.8 19.5	23.9 .2 .2 E.1n 	153 107 102 124 	<.04 <.04 <.04 <.04 <.04	<.06 8.05d 7.20d 7.04d 7.07d 7.00d	<.008 <.008 E.004n <.008 <.008
					•			-	-		-

Geologic Unit (aquifer): 112CLMB - Columbia Formation Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO Sampling Method: 4040 - Submersible pump

Well Number	Date	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	E.05n 7.86d 7.52d 7.30d 6.91d	.122 <.006 <.006 <.006 <.006	Mn   3 	<.20   <.20	1.0   <.2	38   53 	<.06   .21	<8   E4n 	E.03n   <.04 	<.8   .9
	08-16-05	6.96d	<.006								
Well Number	Date	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	.112   .158 	E.3n   <.4 	219 E3n <6 E6n	<.08   .10	1.0   2.9 	14.6 5.3 5.7 3.9	8.1   <.4 	1.65   1.64 	<.4   <.4 	<.2   <.2 
	08-16-05			<6			3.5				
Well Number	Date	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2',6-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	241   115 	<.04   <.04	E.1n   .3 	.6   1.5	<.09mc <.09mc <.09mc <.09mc <.09mc	<.006 <.006 <.006 <.006 <.006	<.005 <.005 <.005 <.005 <.005	<.006mc E.072mc E.060mc E.058mc <i>E.055mc</i>	<.004mc <.004mc <.004mc <.004mc <.004mc	<.004mc <.004 <.004
	08-16-05						006	005	F 070mc	<.004mc	<.004mc
						<.09mc	<.006	<.005	E.079IIIC	<.004IIIC	<.00+IIIC
Well Number	Date	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)
	Date  08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	chloro- aniline water, fltrd, ug/L	2methyl phenol, water, fltrd, ug/L	chlor, water, fltrd, ug/L	chlor, water, fltrd, ug/L	alpha- Endo- sulfan, water, fltrd, ug/L	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry	Atra- zine, water, fltrd, ug/L	Azin- phos- methyl oxon, water, fltrd, ug/L	Azin- phos- methyl, water, fltrd 0.7u GF ug/L	Ben- flur- alin, water, fltrd 0.7u GF ug/L

Well Number	Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	thrin, water, fltrd, ug/L	methrir water, fltrd, ug/L	n water fltrd 0.7u GF ug/L
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	<.041mc <.041mc <.041mc <.041mc <.041mc	<.020mc	<.06mc <.06mc <.06mc <.06mc <.06mc	<.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006	<.008mc	<.018   	<.027m <.008m <.008m <.027m <.027m	c <.009m c <.009m c <.009m	c <.003 c <.003 c <.003
	08-16-05	<.041mc	<.020mc	<.06mc	<.005	<.006	<.008mc	<.018	<.027m	c <.009m	c <.003
Well Number	Date	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Endo- sulfan sulfate water, fltrd, ug/L (61590)
Ib32-05 Ib32-08	08-18-0 12-08-0 02-07-0 05-11-0	04 <.012 05 <.012 05 <.012	<.01 <.01 <.01 <.01	<.005 <.005 <.005 <.005 <.005	76.7 110 108 98.1 102	<.08mc <.08mc <.08mc <.08mc <.08mc	<.009 <.009 <.009 <.009 <.009	<.006mc <.006mc <.006mc <.006mc <.006mc	<.01   	<.02mc	<.014   
	08-16-0	5 <.012		<.005	102	<.08mc	<.009	<.006mc	<.01	<.02mc	<.014
Well Number	Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.004   	<.002mc <.0020mc <.0020mc <.0020mc <.0020mc	<.004 <.004 <.004 <.004 <.004	<.005    	<.049 <.049 <.049 <.049 <.049	<.04mc u <.04mc <.04mc <.04mc	<.03 <.03 <.03	<.029 <.029 <.029 <.029 <.029	<.013 <.013 <.013 <.013	<.024 <.024 <.024 <.024 <.024
	08-16-05	<.004	<.002mc	<.004	<.005	<.049	<.04mc	<.03	<.029	<.013	<.024
Well Number	Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methi- althion water, fltrd, ug/L (61598)
Ib32-05 Ib32-08	08-18-0 12-08-0 02-07-0 05-11-0	04 <.016 05 <.016 05 <.016	<.003mc <.003mc r	<.003 <.003 <.003 <.003 <.003	<.013 <.013 <.013 <.013 <.013	<.538mc <.387mc <.387mc <.538mc <.538mc	<.003 <.003 <.003 <.003 <.003	<.030 <.030 <.030 <.030 <.030	<.027 <.027 <.027 <.027 <.027	<.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006
	08-16-0	<.016		<.003	<.013	<.538mc	<.003	<.030	<.027	<.005	<.006

Well Number	Date	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.03mc <.03mc <.03mc <.03mc <.03mc	<.015 <.015 <.015 <.015 <.015	<.006 <.006 .009 .008 <.006	<.006 <.006 <.006 <.006 <.006	<.003    	<.008 <.008 <.008 <.008 <.008	<.007    	<.022 <.022 <.022 <.022 <.022	<.10mc <.10mc <.10mc <.10mc <.10mc	<.011 <.011 <.011 <.011 <.011
	08-16-05	<.03mc	<.015	E.006b	<.006	<.003	<.008	<.007	<.022	<.10mc	<.011
Well Number	Date	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.05mc <.05mc <.05mc <.05mc <.05mc	<.008mc <.008mc <.008mc <.008mc <.008mc	<.01 <.01 <.01 <.01 <.01	<.005 <.005 <.005 <.005 <.005	<.004 <.004 <.004 <.004 <.004	<.011   	<.02   	<.005 <.005 <.005 <.005 <.005	<.02 <.02 <.02 <.02 <.02	<.008mc    
	08-16-05	<.05mc	<.008mc	<.01	<.005	<.004	<.011	<.02	<.005	<.02	<.008mc
Well Number	Date	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	ug/L	Tri- chloro- ethane, water, unfltrd ug/L	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.07 <.07 <.07 <.07 <.07	<.02 <.02 <.02 <.02 <.02	<.01 <.01 <.01 <.01 <.01	<.010    	<.01mc	<.004mc	<.009 <.009 <.009 <.009	<.03b   	<.03b   	<.08b   
	08-16-05	<.07	<.02	<.01	<.010	<.01mc	<.004mc	<.009			
Well Number	Date	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.04b	<.04b	<.04b	<.02b	<.03b	<.1  	<.1   	<.2   	<.18  	<.1b
	05-11-05 08-16-05										

Well Number	Date	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.1  	<.06b  	<.5   	<.04b	<.05b	<.1  	105   	<.03b	<.04b	<.03b  
	05-11-05 08-16-05										
Well Number	Date	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05	<.1b   	<.03b   	86.3   	<.05b   	<.04b	<.06b   	<.50mc	<.05b   	<.08b   	<6   
	08-16-05										
	00 10 05										
Well Number	Date	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)	Bromomethane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfiltrd ug/L (34311)
		nitrile water unfltrd ug/L	water unfltrd ug/L	benzene water unfltrd ug/L	chloro- methane water unfltrd ug/L	di- chloro- methane water unfltrd ug/L	ethene, water, unfltrd ug/L	methane water unfltrd ug/L	di- sulfide water unfltrd ug/L	benzene water unfltrd ug/L	ethane, water, unfltrd ug/L
Number Ib32-05	Date  08-18-05 12-08-04 02-07-05 05-11-05	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030) <.02b	benzene water unfltrd ug/L (81555)	chloro- methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)	ethene, water, unfltrd ug/L (50002)	methane water unfltrd ug/L (34413)	di- sulfide water unfltrd ug/L (77041)	benzene water unfltrd ug/L (34301) <.03b	ethane, water, unfltrd ug/L (34311)
Number Ib32-05	Date  08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030) <.02b  	benzene water unfltrd ug/L (81555)	chloro-methane water unfitrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)	ethene, water, unfltrd ug/L (50002)	methane water unfitrd ug/L (34413) <-3mc  	di- sulfide water unfltrd ug/L (77041) E.06b	benzene water unfltrd ug/L (34301) <.03b  	ethane, water, unfltrd ug/L (34311)
Number  Ib32-05 Ib32-08	Date  08-18-05 12-08-04 02-07-05 05-11-05 05-11-05 08-16-05	nitrile water unfltrd ug/L (34215)  <.8 Chloromethane water unfltrd ug/L	water unfltrd ug/L (34030) <-02b      cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L	benzene water unfltrd ug/L (81555)  <.03b cis- 1,3-Di- chloro- propene water unfltrd ug/L	chloro-methane water unfltrd ug/L (77297)  <.12	di- chloro- methane water unfltrd ug/L (32101)  <.03b  Di- bromo- methane water unfltrd ug/L	ethene, water, unfltrd ug/L (50002)  <.1 Di- chloro- di- fluoro- methane wat unf ug/L	methane water unfltrd ug/L (34413)  <.3mc Di-chloro-methane water unfltrd ug/L	disulfide water unfltrd ug/L (77041)  E.06b	benzene water unfltrd ug/L (34301)  <.03b Diiso- propyl ether, water, unfltrd ug/L	ethane, water, unfltrd ug/L (34311)  <.1 Ethyl methac- rylate, water, unfltrd ug/L

Well Number	Date	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iodo- methane water unfltrd ug/L (77424)	Iso- butyl methyl ketone, water, unfltrd ug/L (78133)	Iso- propyl- benzene water unfltrd ug/L (77223)	Methyl acrylo- nitrile water unfltrd ug/L (81593)	Methyl acryl- ate, water, unfltrd ug/L (49991)	Methyl methac- rylate, water, unfltrd ug/L (81597)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	<2.0    	<.03b	<.1   	<.1   	<.50mc	<.4b	<.04b	<.4   	<1.0    	<.2   
	08-16-05										
Well Number	Date	Methyl tert- pentyl ether, water, unfltrd ug/L (50005)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphth- alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	<.04b	<.06b	<.5    	<.4b	<.1    	<.04b	<.04b	<.06b	<.04b	<.03b
Well Number	Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Tetra- hydro- furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	trans- 1,4-Di- chloro- 2- butene, wat unf ug/L (73547)
Ib32-05 Ib32-08	08-18-05 12-08-04 02-07-05 05-11-05 05-11-05	<.1   	<.06b	<.03b	<.06b    	<1   	<.02b	99.0    	<.03b	<.09b	<.7b   
	08-16-05										

#### KENT COUNTY, DELAWARE—Continued

Well Numbe	Date	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Di- chlor- vos, water fltrd, ug/L (38775)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
Ib32-05	08-18-05	<.10	<.04b	<.08b	<.02b	<.1b	<.01mc	.05	4040
Ib32-08	12-08-04						<.01mc		4040
	02-07-05						<.01mc		4040
	05-11-05						<.01mc	<.04	4040
	05-11-05						<.01mc		4040
	08-16-05						<.01mc		4040

Remark codes used in this table:

< -- Less than. E -- Estimated. M-- Presence verified but not quantified.

Value qualifier codes used in this table: @ -- Holding time exceeded b -- Value extrapolated at low end

b -- Value extrapolated at low end
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table: r -- Sample ruined in preparation u -- Unable to determine-matrix interference

Sampler type: 4040 - Submersible positive-pressure pump

#### NEW CASTLE COUNTY, DELAWARE

Well Number	Date	Time	Samp	le type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
Gb51-07	12-08-04	1400	Enviror	mental	112PCPC	1028	80020	20.01	20	18	.85
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)	Tur- bidity, NTU (00076)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
Gb51-07	12-08-04	.33	45	4040	1.0	767	.6	6	4.6	44	15.5
	Date	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)
Gb51-07	12-08-04	15.0	3	.25	.496	1.13	1.24	M	M	u	3.73
	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)
Gb51-07	12-08-04	<.1	7.18	8.1	40	<.04	<.06	<.008	.21	<.006	1340d
	Date	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)
Gb51-07	12-08-04	<.20	E.1n	64	.17	E5n	.06	E.7n	1.17	1.1	2,160
	Date	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)
Gb51-07	12-08-04	.88	E.4n	22.2	<.4	.31	<.4	<.2	14.8	<.04	2.8

Geologic Unit (aquifer): 112PCPC - Pleistocene-Pliocene Series

Agency collecting sample: 1028 - U.S. Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

Sampling Method: 4040 - Submersible pump

## NEW CASTLE COUNTY, DELAWARE—Continued

		ell nber	Date	Zinc, water, fltrd, ug/L (01090)	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2',6-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
	Gb51-07		12-08-04	18.4	<.09mc	<.006	<.005	<.006mc	<.004mc	<.004	<.006mc	<.006	<.005
			Date	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyflu- thrin, water, fltrd, ug/L (61585)
	Gb51-07		12-08-04	85.2	<.007	<.07mc	<.050mc	<.010	<.041mc	<.06mc	<.005	<.006	<.008mc
		Date	Cyper- methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dim oate, water, 1 fltrd 0.7u Gl ug/L (82662)	Ethio monoxo water	Dimethoate, Ethion water, monoxon fltrd water, 0.7u GF fltrd, ug/L (82662) (61644)
Gb51-07		12-08-04	<.009mc	<.003	<.012	<.01	<.005	103	<.08mc	<.009	<.006mc	<.0020mc	<.006mc<.0020mc
			Date	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)
	Gb51-07		12-08-04	<.004	<.049	u	<.03	<.029	<.013	<.024	<.016	<.003mc	<.003
			Date	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)
	Gb51-07		12-08-04	<.013	<.387mc	<.003	<.030	<.027	<.005	<.006	<.03mc	<.015	<.006
	0151.77		Date	Metri- buzin, water, fltrd, ug/L (82630)	Myclo- butanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)
	Gb51-07		12-08-04	<.006	<.008	<.022	<.10mc	<.011	<.05mc	<.008mc	<.01	<.005	<.004

#### NEW CASTLE COUNTY, DELAWARE—Continued

Well Number	Date	Sima- zine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Di- chlor- vos, water fltrd, ug/L (38775)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
Gb51-07	12-08-04	<.005	<.02	<.07	<.02	<.01	<.009	<.01mc	.11	4040

Remark codes used in this table:

< -- Less than. E -- Estimated.

M-- Presence verified but not quantified.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table: u -- Unable to determine-matrix interference

Sampler type: 4040 - Submersible pump

#### SUSSEX COUNTY, DELAWARE

Well Number	Date	Time	Sample	e type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	1400 1300 1400 <i>1500</i> 1600	Environi Environi Environi <i>Blank</i> Environi	mental mental	112CLMB 112CLMB 112CLMB	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	29 29 29 29	29 29 29 	26 26 26 	13.86 12.88 12.12  13.12
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	1601 1100 1000 1300	Replicate Environi Environi Environi	mental mental	112CLMB 112BVDM 112BVDM 112BVDM	1028 1028 1028 1028	1028 80020 80020 80020	13 13 13	13 13 13	10 10 10	5.42 3.28 6.74
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling depth, feet (00003)	Sam- pling method, code (82398)	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Turbidity, water, unfltrd field, NTU (61028)	Tur- bidity, NTU (00076)	Baro- metric pres- sure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	.50 .28 .70 	60 55 40  38	26.0 27.0  27.0	4040 4040 4040 4040 4040	2.1  	 -5  .7	1.0   	767 768 765 	6.2 6.1 4.9  6.0	60 59 47 
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	.50 .76 .50	60 30 60	  	4040 4040 4040 4040	.0 .4 .5	  	  	767 765 763	4.0 2.1 2.1	39 19 21
	Date	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	4.8 5.0 4.7  4.7	119 94 71  103	14.5 12.0 24.5	14.0 14.0 14.3  14.3	27 23 23  23	3.52 3.10 3.00 .24 3.04	4.37 3.71 3.69 <i>E.007n</i> 3.84	2.32 2.04 1.93 <.16 2.05	7.49 7.29 7.28 .55 7.53	 6@c   
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	4.6 4.4 4.6	54 31 45	15.0 24.0	15.0 11.5 16.5	9 10 8	1.40c 1.55 1.31	1.26c 1.34 1.12	.69c .55 .66	3.78c 3.36 3.73	  <5@c

Geologic Unit (aquifer): 112CLMB - Columbia Formation 112BVDM - Beaverdam Sand

Agency collecting sample: 1028 - U.S. Geological Survey Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

Well Number	Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	3  4  4	4  5  5	.02 .02 	7.59 7.83 6.66 <.20 6.80	<.1 <.1 <.1 <.1	11.3 11.6 11.8 2.96 11.9	6.5 5.7 6.5 <.2 6.4	102 67 68 <10 71	<.04 <.04 <.04 <.04 <.04	7.12d 5.58d 5.64d <.06 6.13d
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	3 3 3	4 4 4 	<.02	5.30 5.06 5.16	<.1 <.1 <.1	7.17c 6.21 6.40	8.8 8.5 10.2	35 27 33	<.04 <.04 <.04	<.06 <.06 <.06
	Date	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	<.008 <.008 <.008 <.008 <.008	7.54d 5.97d 6.00d <.06 6.30d	<.006 <.006 <.006 <.006	32	 <.20 	  E.1n 	133	.25	  E6n  	 .05 
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.008 <.008 <.008	E.03n E.05n .07	<.006 <.006 <.006	  224 	<.20	  <.2 	 106 	  .29 	 8 	  .04 
	Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	  E.7n 	 -788 	.8	<6 12 E4n 8 6	.20	1.2	32.6 30.1 24.9 <.6 29.5	  <.4 	1.25 	  1.1 
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	  E.8n 	.130	  E.4n 	E6nc E5n E5n	  .91 	  <.6 	8.8c 8.4 8.3	  <.4 	 .85 	  E.4n 

Well Number	Date	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	ium, water, fltrd, ug/L	fltrd, ug/L	Zinc, water, fltrd, ug/L	1-Naph- thol, a water, fltrd 0.7u GF 0 ug/L	ethyl2 aniline di water a fltrd an 0.7u GF w ug/L u	ilide at flt g/L	CIAT, water, fltrd, ug/L 04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	  <.2 	 106 	 <.04 	  .5 	2.5 	<.09mc <.09mc <.09mc	<.006 < <.006 < <.006 <	005 < 005 <	.006mc .006mc .006mc .010mc	<.004mc <.004mc <.004mc <.004mc <.004mc
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	  <.2 	43.0	  <.04 	  .4 	 1.0 	<.09mc	<.006 < <.006 <	.005 <.	.006mc .006mc .006mc	<.004mc <.004mc <.004mc
	Date	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260	chlor wate fltrd ug/I	r, sulfan, r, water, l, fltrd, L ug/L	wat flt percent recovry	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	<.004 <.004  <. <i>004mc</i> <.004mc	  <.004 <.004	<.006mc <.006mc <.006mc <.006mc <.006mc	<.006 <.006 <.006	<.00 <.00 <.00	5 5 5 <.005	99.7 97.0 103 85.8 87.0	<.007 <.007 <.007 <.007 <.007	<.07mc <.07mc <.07mc <i>u</i> <.07mc	<.050mc <.050mc <.050mc <.050mc <.050mc
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.004  <.004mc	  <.004	<.006mc <.006mc <.006mc	<.006	<.00.	5	103 109 78.5	<.007 <.007 <.007	<.07mc <.07mc <.07mc	<.050mc <.050mc <.050mc
	f a w f 0.7 Date	alin, t rater, v Itrd 7u GF 0. rg/L	Car- paryl, vater, fltrd 7u GF ug/L (2680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cyflu- thrin, water, fltrd, ug/L (61585)	Cyper- methrin water, fltrd, ug/L (61586)
Qc22-04	02-08-05 < 05-12-05 < 08-24-05 <	.010 <. .010 <. .010 <.	041mc 041mc 041mc 041mc 041mc	  <.020mc <.020mc	<.06mc <.06mc <.06mc <.06mc <.06mc	<.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006	  <.008mc <.008mc	  <.018 <.018	<.008mc <.027mc <.027mc <.027mc <.027mc	<.009mc <.009mc <.009mc
Of12-05	12-01-04 < 05-12-05 <	.010 <.	041mc 041mc 041mc	  <.020mc	<.06mc <.06mc <.06mc	<.005 <.005 <.005	<.006 <.006 <.006	  <.008mc	  <.018	<.008mc <.027mc <.027mc	<.009mc

Well Number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	<.003 <.003 <.003 <.005b <.003	<.012 <.012 <.012 <.012 <.012	<.01 <.01 <.01	<.005 <.005 <.005 <.005 <.005	102 124 104 <i>105</i> 93.8	<.08mc <.08mc <.08mc <.08mc <.08mc	<.009 <.009 <.009 <.009 <.009	<.006mc <.006mc <.006mc <.006mc <.006mc	  <.01 <.01	  <.02mc <.02mc
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.003 <.003 <.003	<.012 <.012 <.012	<.01 <.01	<.005 <.005 <.005	98.3 110 75.2	<.08mc <.08mc <.08mc	<.009 <.009 <.009	<.006mc <.006mc <.006mc	   <.01	  <.02mc
	Date	Endo- sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion water, fltrd, ug/L (82346	fltrd 0.7u GF ug/L	ug/L	sulf- oxide, water, fltrd, ug/L	Fenamiphos, water, fltrd, ug/L	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	  <.014 <.014	  <. <i>004</i> <.004	<.0020mc <.0020mc <.0020mc <.002mc <.002mc	<.004	  <.010 <.005	<.049 <.049 <.049 <.049 <.049	<.04mc <.04mc <.04mc <.04mc <.04mc	<.03 <.03 <.03	<.029 <.029 <.029 <.029 <.029	<.013 <.013 <.013 <.013 <.013
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	  <.014	   <.004	<.0020mc <.0020mc <.002mc		  <.005	<.049 <.049 <.049	<.04mc <.04mc <.04mc		<.029 <.029 <.029	<.013 <.013 <.013
	Date	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	<.024 <.024 <.024 <.024 <.024	<.016 <.016 <.016 <.016 <.016	<.003mc u r 	<.003 <.003 <.003 <.003 <.003	<.013 <.013 <.016 <. <i>013</i> <.013	<.387mc <.538mc <.538mc <.538mc <.538mc	<.003 <.003 <.003 <.003 <.003	<.030 <.030 <.030 <.030 <.030	<.027 <.027 <.027 <.027 <.027	<.005 <.005 <.005 <.020 <.005
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.024 <.024 <.024	<.016 <.016 <.016	<.003mc r	<.003 <.003 <.003	<.013 <.013 <.013	<.387mc <.538mc <.538mc	<.003 <.003 <.003	<.030 <.030 <.030	<.027 <.027 <.027	<.005 <.005 <.005

Well Number	Date	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05	<.006 <.006 <.006	<.03mc <.03mc <.03mc <.03mc <.03mc	<.015 <.015 <.015 <.015 <.015	<.006 .014 .007 .020 E.008b	<.006 <.006 <.006 <.006 <.006	  <.005b <.003	<.008 <.008 <.008 <.008 <.008	  <.007 <.007	<.022 <.022 <.022 <.022 <.022	<.10mc <.10mc <.10mc <.10mc <.10mc
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.006 <.006	<.03mc <.03mc <.03mc	<.015 <.015 <.015	<.006 E.004n E.004n	<.006 <.006 <.006	  <.003	<.008 <.008 <.008	  <.007	<.022 <.022 <.022	<.10mc <.10mc <.10mc
	Date	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	<.011 <.011 <.011 <.011 <.011	u <.05mc <.05mc <.05mc <.05mc	<.008mc <.008mc <.008mc <.008mc <.008mc	<.01 <.01 <.01 <.01 <.01	<.005 <.005 <.005 <.005 <.005	<.004 <.004 <.004 <.004 <.004	  <.011 <.011	  <.02 <.02	<.005 <.005 <.005 <.005 <.005	<.02 <.02 <.02 <.02 <.02
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	<.011 <.011 <.011	u <.05mc <.05mc	<.008mc <.008mc <.008mc	<.01 <.01 <.01	<.005 <.005 <.005	<.004 <.004 <.004	   <.011	  <.02	<.005 <.005 <.005	<.02 <.02 <.02
	Date	Tefluthrin, water, fltrd, ug/L (61606)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u Gl ug/L (82661)	ug/L	Uranium natural water, fltrd, ug/L (22703)
Qc22-04	12-01-04 02-08-05 05-12-05 08-24-05 08-24-05	  <.008mc <.008mc	<.07 <.07 <.07 <.07 <.07	<.02 <.02 <.02 <.02 <.02	<.01 <.01 <.01 <.01 <.01	  <.010 <.010	  <.01mc <.01mc	  <.004mc <.004mc		<.01mc <.01mc <.01mc <.01mc <.01mc	<.04
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	  <.008mc	<.07 <.07 <.07	<.02 <.02 <.02	<.01 <.01 <.01	  <.010	  <.01mc	  <.004mc	<.009 <.009 <.009	<.01mc <.01mc <.01mc	.06

#### SUSSEX COUNTY, DELAWARE—Continued

Well Number	Date	Sampler type, code (84164)
Qc22-04	12-01-04 02-08-05 05-12-05	4040 4040 4040
	08-24-05 08-24-05	4040 4040
Of12-05	08-24-05 12-01-04 05-12-05 08-17-05	4040 4040 4040 4040

Remark codes used in this table: < -- Less than. E -- Estimated.

- Value qualifier codes used in this table:

  @ -- Holding time exceeded

  b -- Value extrapolated at low end

  c -- See laboratory comment

  d -- Diluted sample: method hi range
  - exceeded m -- Value is highly variable by this method
  - n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table:
r -- Sample ruined in preparation
u -- Unable to determine-matrix
interference
Sampling Method: 4040 - Submersible pump

# QUALITY OF GROUND WATER DATA BALTIMORE COUNTY, MARYLAND

	Welll Number	Date	Time	Sample type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
BA Cd	245	11-17-04	1000	Environmental	400BLMR	82420	80020	400	400.00	400	74
BA Ea		11-17-04	0800	Environmental	400BLMR	82420	80020	225	225.00	225	50
BA Ee		11-08-04	1135	Environmental	110CLVM	1028	80020		14.15		
BA Ee	152	11-08-04	1230	Environmental	110CLVM	1028	80020		19.20		
BA Ee	156	11-08-04	1300	Environmental	110CLVM	1028	80020		12.00		
BA Ee	157	11-08-04	1330	Environmental	110ALVM	1028	80020		9.96		
BA Ee	158	11-08-04	1400	Environmental	110ALVM	1028	80020		7.96		
BA Ee	159	11-08-04	1440	Environmental	110ALVM	1028	80020		5.96		
		07-11-05	1140	Environmental	110ALVM	1028	80020		5.96		
BA Ee	160	11-09-04	1435	Environmental	110ALVM	1028	80020		12.00		
BA Ee	161	11-09-04	1400	Environmental	110ALVM	1028	80020		10.80		
BA Ee		11-09-04	1310	Environmental	110ALVM	1028	80020		9.00		
Dir Le	105	11-09-04	1311	Replicate	110ALVM	1028	80020		9.00		
BA Ee	170	11-10-04	1505	Environmental	110ALVM	1028	80020		15.00		
BA Ee		11-10-04	1352	Environmental	110ALVM	1028	80020		28.10		
BA Ee	175	11-10-04	1435	Environmental	110ALVM	1028	80020		15.50		
		11-10-04	1436	Replicate	110ALVM	1028	80020		15.50		
BA Ee	176	11-17-04	1430	Environmental	110ALVM	1028	80020		11.85		
BA Ee	177	11-15-04	1340	Environmental	110ALVM	1028	80020		9.85		
		11-15-04	1342	Blank		1028	80020		9.85		
BA Ee	178	11-15-04	1300	Environmental	110ALVM	1028	80020		7.85		
BA Ee		11-15-04	1115	Environmental	110ALVM	1028	80020		7.50		
BA Ee		11-10-04	1200	Environmental	110CLVM	1028	80020		20.50		
BA Ee	188	11-10-04	1225	Environmental	110CLVM	1028	80020		13.50		
BA Ee	189	11-10-04	1110	Environmental	110CLVM	1028	80020		24.50		
BA Ee	214	11-17-04	1230	Environmental	110ALVM	1028	80020		5.84		
BA Ee		11-17-04	1255	Environmental	110ALVM	1028	80020		4.26		
BA Ee		11-17-04	1315	Environmental	110ALVM	1028	80020		2.35		
D. I LC		07-12-05	1235	Environmental	110ALVM	1028	80020		2.35		
BA Ee	217	11-17-04	1040	Environmental	110ALVM	1028	80020		7.56		
		11-17-04	1041	Replicate	110ALVM	1028	80020		7.56		
BA Ee	218	11-17-04	1115	Environmental	110ALVM	1028	80020		6.24		
BA Ee		11-17-04	1115	Environmental	110ALVM	1028	80020		4.26		
BA Ee		11-16-04	1255	Environmental	110ALVM	1028	80020		6.12		
BA Ee		11-16-04	1330	Environmental	110ALVM	1028	80020		4.44		
211 110		11 10 0 1	1000	Lii . ii chinentul	1101111111	1020	00020				

Geologic Unit (aquifer): 400BLMR - Baltimore Gneiss 110CLVM - Colluvium 110ALVM - Quaternary System

 $\begin{array}{c} {\rm Agency\ collecting\ sample:\ 82420\ -\ Maryland\ Geological\ Survey} \\ {\rm 1028\ -\ U.S.\ Geological\ Survey} \end{array}$ 

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

## BALTIMORE COUNTY, MARYLAND—Continued

Welll Number	Date	Depth to water level, feet below LSD (72019)	Sam- pling method, code (82398)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
BA Cd 245 BA Ea 98 BA Ee 145 BA Ee 152 BA Ee 156	11-17-04 11-17-04 11-08-04 11-08-04 11-08-04	4.53 4.74 4.62	8030 8030 4080 4080 4080	 33 45 46	4.3 3.6 5.4	7.3 6.7 7.1 7.0 7.0	393 376 619 647 752	13.1 13.7 14.1 13.4 13.5	 280 290 320	 62.2 67.0 77.4	30.2 30.4 31.3
BA Ee 157 BA Ee 158 BA Ee 159 BA Ee 160	11-08-04 11-08-04 11-08-04 07-11-05 11-09-04	4.33 4.29 4.49 4.42 9.46	4080 4080 4080 4080 4080	22 18 35 38 99	3.8 3.9 4.0 .9 8.4	7.2 7.3 7.0 7.0 6.8	804 640 741 773 574	12.7 10.7 12.1 20.7 12.6	300 300 280 270 460	78.3 78.2 72.8 68.8 108	25.2 24.9 23.7 24.1 45.9
BA Ee 161 BA Ee 165 BA Ee 170 BA Ee 174	11-09-04 11-09-04 11-09-04 11-10-04 11-10-04	5.33 5.60 5.60 11.18 5.33	4080 4080 4080 4080 4080	68 97  100 40	3.4 1.9  7.5 3.1	6.9 6.8  6.8 7.1	885 819  822 676	13.8 12.3  10.4 13.2	430 400 <i>390</i> 440 320	100 93.5 <i>91.7</i> 102 71.3	43.5 39.8 39.1 43.8 34.1
BA Ee 175 BA Ee 176 BA Ee 177	11-10-04 11-10-04 11-17-04 11-15-04 11-15-04	5.39 5.39 6.29 6.67	4080 4080 4080 4080 4080	40  129	3.2  4.6	7.1  6.7	711  821	11.7  15.4	340 340 120 430	76.2 75.8 14.1 97.0 <.02	36.6 36.5 20.6 44.8 <.008
BA Ee 178 BA Ee 183 BA Ee 187 BA Ee 188 BA Ee 189	11-15-04 11-15-04 11-10-04 11-10-04 11-10-04	5.85 5.44 8.65 7.23 8.86	4080 4080 4080 4080 4080	167 56 74 36	5.0 .8 6.5 2.0	6.6 6.9 6.7 7.1	796 663 526 609	14.2 13.6 16.1 13.6	430 440 290 230 280	97.2 100 64.7 51.6 62.9	44.5 46.2 31.3 23.9 29.9
BA Ee 214 BA Ee 215 BA Ee 216 BA Ee 217	11-17-04 11-17-04 11-17-04 07-12-05 11-17-04	63 48 47 38 .02	4080 4080 4080 4080 4080	9.9 16 21 17 44	6.4 5.7 5.3 5.8 5.0	7.5 7.3 7.2 7.3 6.9	448 437 445 507 453	13.8 13.3 13.3 20.3 12.8	200 210 210 210 210 210	43.2 44.3 45.0 44.4 45.1	23.1 23.4 23.7 23.4 24.6
BA Ee 218 BA Ee 219 BA Ee 220 BA Ee 221	11-17-04 11-17-04 11-17-04 11-16-04 11-16-04	.02 1.17 1.14 22 46	4080 4080 4080 4080 4080	33 48 22 22	5.3 4.3 .8 4.6	7.0 6.9 7.2 7.2	 444 539 457 444	13.0 12.4 14.0 13.2	210 210 240 210 210	45.0 43.5 50.2 43.7 44.6	24.5 23.6 28.1 24.0 24.4

Sampling Method: 8030 - Grab sample at water-supply tap 4080 - Peristaltic pump

## BALTIMORE COUNTY, MARYLAND—Continued

										Nitrite +	
Welll Number	Date	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
BA Cd 245 BA Ea 98 BA Ee 145 BA Ee 152 BA Ee 156	11-17-04 11-17-04 11-08-04 11-08-04 11-08-04	2.33 2.19 2.60	20.2 20.3 28.4	62.5 63.2 86.5	 E.1n E.1n .2	 11.9 11.2 10.7	13.1 13.3 16.8	<.04 <.04 <.04	   	1.81 1.44 1.01	<.008 <.008 <.008
BA Ee 157 BA Ee 158 BA Ee 159 BA Ee 160	11-08-04 11-08-04 11-08-04 07-11-05 11-09-04	3.82 3.69 3.63 3.29 2.30	45.3 43.5 39.5 45.8 22.3	123 122 112 116 85.3	.1 .1 .2 .1 E.1n	9.7 9.1 8.5 11.2 12.0	20.0 20.0 19.3 17.3 26.2	<.04 <.04 <.04 <.04 <.04	   	1.20 1.14 .96 1.04 4.81	<.008 <.008 <.008 <.008 <.008
BA Ee 161 BA Ee 165 BA Ee 170 BA Ee 174	11-09-04 11-09-04 11-09-04 11-10-04 11-10-04	1.86 1.89 1.92 2.00 2.43	17.9 20.8 20.6 19.3 17.7	71.4 66.3 65.1 75.4 59.9	E.1n E.1n . <i>I</i> E.1n <.1	11.6 10.9 <i>11.1</i> 11.4 10.7	22.7 20.4 22.3 26.6 17.1	<.04 <.04 <.04 <.04 <.04	2.24 2.27 	5.20d 2.26 2.29 5.30d 1.99	<.008 .018 .014 <.008 <.008
BA Ee 175 BA Ee 176 BA Ee 177	11-10-04 11-10-04 11-17-04 11-15-04 11-15-04	2.64 2.69 .73 1.88 <.16	14.5 14.3 19.3 10.6 <.20	59.1 59.5 237 50.0 <.20	E.1n <i>E.1n</i> <.1 E.1n <.1	11.7 11.8 19.6 11.8 <.2	20.3 20.3 34.4 22.5 <.2	<.04 <.04 .22 <.04 <.04	2.45 	2.10 2.06 2.57 3.35 <.06	<.008 <.008 .123 <.008 <.008
BA Ee 178 BA Ee 183 BA Ee 187 BA Ee 188 BA Ee 189	11-15-04 11-15-04 11-10-04 11-10-04 11-10-04	1.64c 1.92 2.12 3.07 3.80	9.20c 7.75 21.0 29.2 33.2	46.5 47.8 62.9 64.7 68.2	E.1n E.1n E.1n E.1n E.1n	11.9 12.2 10.4 10.1 8.5	23.8 23.1 13.6 9.3 13.9	<.04 <.04 <.04 E.03n <.04	   	3.29 2.78 .90 <.06 1.56	<.008 <.008 <.008 E.005n <.008
BA Ee 214 BA Ee 215 BA Ee 216 BA Ee 217	11-17-04 11-17-04 11-17-04 07-12-05 11-17-04	1.96 1.99 2.09 1.96 2.03	6.99 6.89 7.00 7.69 9.62	25.6 26.2 26.8 29.6 32.3	E.1n E.1n E.1n E.1n E.1n	10.4 10.6 10.4 10.8 10.2	7.3 7.1 7.2 7.5 8.8	<.04 <.04 <.04 <.04 <.04	   1.15	1.21 1.20 1.17 1.20 1.16	E.006n E.005n E.006n <.008 .009
BA Ee 218 BA Ee 219 BA Ee 220 BA Ee 221	11-17-04 11-17-04 11-17-04 11-16-04 11-16-04	2.00 2.00 2.05 1.89 1.85	9.63 8.69 13.6 7.64 7.67	32.2 29.7 41.9 26.9 27.1	E.1n E.1n E.1n E.1n E.1n	10.3 10.1 10.6 9.4 10.2	8.8 8.1 11.4 7.9 8.1	<.04 <.04 <.04 <.04 <.04	1.08	1.17 1.08 1.16 .40 1.07	E.007n .008 E.007n <.008 <.008

#### BALTIMORE COUNTY, MARYLAND—Continued

	Welll Number	Date	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Mang ese wate fltro ug/ (0105	er, d, L	Rn-222 2-sigma water unfltrd pCi/L (76002)	unf pC	ter, Sa ltrd t i/L c	mpler ype, ode 4164)	
	BA Cd 245 BA Ea 98 BA Ee 145 BA Ee 152 BA Ee 156	11-17-04 11-17-04 11-08-04 11-08-04 11-08-04	4 4 1.90 4 1.57	 .007 E.004n .006	  E5n <6 6	<.	.6 .6	42 120  	13,	- 4	  080 080 080	
	BA Ee 157 BA Ee 158 BA Ee 159 BA Ee 160	11-08-04 11-08-04 11-08-04 07-11-05 11-09-04	1.20 1.16 5 1.16	.008 .011 .007 .011 <.006	88 <6 991 <6 <6	2. 31.	.8 .1 .7	   	-	- 4 - 4 - 4	080 080 080 080 080	
	BA Ee 161 BA Ee 165 BA Ee 170 BA Ee 174	11-09-04 11-09-04 11-09-04 11-10-04 11-10-04	4 2.26 4 2.29 4 5.55d	<.006 <.006 <.006 <.006 E.005n	<6c <6 <6 <6	13. 11.	<i>7</i> .9	   	-	- 4 - 4 - 4	080 080 080 080 080	
	BA Ee 175 BA Ee 176 BA Ee 177	11-10-04 11-10-04 11-17-04 11-15-04 11-15-04	4 2.16 4 2.85 4 3.72	.006 .006 E.003n <.006 <.006	<6 <6 33400d E4n <6	4,220 9.	6	   	-	- 4 - 4 - 4	080 080 080 080	
	BA Ee 178 BA Ee 183 BA Ee 187 BA Ee 188 BA Ee 189	11-15-04 11-15-04 11-10-04 11-10-04	4 3.22 4 .94 4 .16	<.006 <.006 .010 <.006 E.003n	571 76 <6 3,540 <6	22. 584		   	-	- 4 - 4 - 4	080 080 080 080 080	
	BA Ee 214 BA Ee 215 BA Ee 216 BA Ee 217	11-17-04 11-17-04 11-17-04 07-12-03 11-17-04	1.26 1.18 5 1.22	.006 E.005n E.005n .008 <.006	24 <6 26 <6 8	1. 2. <.	.6 .5	   	-	- 4 - 4 - 4	080 080 080 080 080	
	BA Ee 218 BA Ee 219 BA Ee 220 BA Ee 221	11-17-04 11-17-04 11-17-04 11-16-04	4 1.16 4 1.15 4 .41	<.006 <.006 <.006 E.005n E.003n	31 17 57 18 13	5. 13. 238	.4	   	-	- 4 - 4 - 4	080 080 080 080 080	
Welll Number	· Date	Time	Sample type		ologic unit	Agency col- lecting sample, code (00027)	Agendana- lyzin sampl code (0002	cy control con	et ow	Depth to water level, feet below LSD (72019)	Sampling method, code (82398)	Carbon dioxide water, unfltrd mg/L (00405)
de 222 de 223 de 224 de 225	11-16-04 11-18-04 11-18-04 11-18-04 11-18-04	1320 1405 1445	Environmenta Environmenta Environmenta Environmenta <i>Blank</i>	1 110 <i>a</i> 1 110 <i>a</i> 1 110 <i>a</i>	ALVM ALVM ALVM ALVM A <i>LVM</i>	1028 1028 1028 1028 1028	8002 8002 8002 8002 8002	0 10 0 9 0 7	.50 .74 .06 .12	26 .62 .72 .59	4080 4080 4080 4080 4080	28 .4 5.2 .4
Ele 226 Ele 227 Ele 228 Ele 229 Ele 230	11-16-04 11-16-04 11-16-04 11-18-04 11-18-04	1150 1220 1125	Environmenta Environmenta Environmenta Environmenta Environmenta	1 110 <i>a</i> 1 110 <i>a</i> 1 110 <i>a</i>	ALVM ALVM ALVM ALVM ALVM	1028 1028 1028 1028 1028	8002 8002 8002 8002 8002	0 5 0 3 0 9	.62 .93 .79 .62 .21	54 .92 1.06 2.68 2.82	4080 4080 4080 4080 4080	35 22 45 17 10

Sampler type: 4080 - Peristaltic pump Geologic Unit (aquifer): 110ALVM - Quaternary System

Environmental

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

110ALVM

1028

80020

5.75

2.79

4080

18

Sampling Method: 4080 - Peristaltic pump

11-18-04

1225

BA Ee 222 BA Ee 223 BA Ee 224 BA Ee 225

BA Ee 226 BA Ee 227 BA Ee 228 BA Ee 229 BA Ee 230

BA Ee 231

## BALTIMORE COUNTY, MARYLAND—Continued

Well Number	Date	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)
BA Ee 222 BA Ee 223 BA Ee 224 BA Ee 225	11-16-04 11-18-04 11-18-04 11-18-04	2.4 5.5 5.7 2.2	7.1 8.8 7.8 8.9	461 332 407 348	11.6 14.4 13.8 13.8	220 190 210 220	45.5 38.2 42.4 45.1 <.02	25.3 23.8 24.4 26.7 <.008	1.71 2.04 1.91 1.59 <.16	7.65 7.88 7.82 8.31 <.20	27.0 20.6 25.4 24.6 <.20
BA Ee 226 BA Ee 227 BA Ee 228 BA Ee 229 BA Ee 230	11-16-04 11-16-04 11-16-04 11-18-04 11-18-04	.6 .8 .5 4.7 5.8	7.0 7.2 7.0 7.3 7.5	447 473 531 404 430	15.0 15.8 14.7 14.0 14.4	220 220 270 200 200	45.8 46.1 58.9 42.6c 43.6	24.6 24.6 28.6 22.4c 22.7	2.01 1.96 3.19 1.90c 1.79	7.68 7.79 6.67 6.82c 6.82	27.0 27.0 23.5 25.0 24.6
BA Ee 231	11-18-04	5.2	7.3	447	16.0	210	45.4	23.4	2.01	6.66	24.4
						Nitrite +		Total nitro-	Ortho- phos-		Mangan-
Welll Number	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	gen, wat flt by anal ysis, mg/L (62854)	phate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	ese, water, fltrd, ug/L (01056)
	Date  11-16-04 11-18-04 11-18-04 11-18-04	ide, water, fltrd, mg/L	water, fltrd, mg/L	water, fltrd, mg/L	water, fltrd, mg/L as N	water fltrd, mg/L as N	water, fltrd, mg/L as N	wat flt by anal ysis, mg/L	water, fltrd, mg/L as P	water, fltrd, ug/L	ese, water, fltrd, ug/L
Number  BA Ee 222 BA Ee 223 BA Ee 224	11-16-04 11-18-04 11-18-04 11-18-04	ide, water, fltrd, mg/L (00950) <.1 E.1n E.1n	water, fltrd, mg/L (00955) 9.7 9.5 10.5 9.7	water, fltrd, mg/L (00945) 8.6 6.7 7.7 9.2	water, fltrd, mg/L as N (00608) <.04 <.04 <.04 <.04	water fltrd, mg/L as N (00631) .96 1.16 1.10 .62	water, fltrd, mg/L as N (00613) <.008 <.008 <.008 <.008	wat flt by anal ysis, mg/L (62854) .96 1.23 1.08 .68	water, fltrd, mg/L as P (00671) E.004n E.003n E.003n	water, fltrd, ug/L (01046) 15 <6c <6 <6	ese, water, fltrd, ug/L (01056) 1.1 <.6 <.6 <.6 20.6

Date	Sampler type, code (84164)
11-16-04 11-18-04 11-18-04 11-18-04	4080 4080 4080 4080 4080
11-16-04 11-16-04 11-18-04 11-18-04	4080 4080 4080 4080 4080
	11-16-04 11-18-04 11-18-04 11-18-04 11-16-04 11-16-04 11-16-04 11-18-04

Remark codes used in this table: < -- Less than. E -- Estimated.

Value qualifier codes used in this table: c -- See laboratory comment d -- Diluted sample: method hi range

exceeded n -- Below the LRL and above the LT-MDL

Sampler type: 4080 - Peristaltic pump

# QUALITY OF GROUND WATER DATA DORCHESTER COUNTY, MARYLAND

Well Number	Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
DO Ci 8	05-04-05	1600	Environn	nental	112CLMB	82420	80020	90	90	90	80
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
DO Ci 8	05-04-05	3.0	23	116	6.4	4.8	229	15.1	72	14.3	8.75
	Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)
DO Ci 8	05-04-05	4.16	6.54	2	2	17.6	<.1	16.3	4.0	186	<.04
	Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water, fltrd, ug/L (01000)	Beryll- ium, water, fltrd, ug/L (01010)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)
DO Ci 8	05-04-05	17.2d	<.008	<.02	<.04	.5	<.2	1.94	19	30	1.78
	Date	Manganese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Thall- ium, water, fltrd, ug/L (01057)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)
DO Ci 8	05-04-05	62.0	61.4	.04	.08	.13	E.03t	<.05	<.05	E.01t	<.05
	Date	Butylate, water, fltrd, ug/L (04028)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)	Hexa- zinone, water, fltrd, ug/L (04025)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propa- chlor, water, fltrd, ug/L (04024)
DO Ci 8	05-04-05	<.05	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Geologic Unit (aquifer): 112CLMB - Columbia Formation Agency collecting sample: 82420 - Maryland Geological Survey Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

## DORCHESTER COUNTY, MARYLAND—Continued

Well Number	Date	Sima- zine, water, fltrd, ug/L (04035)	Terba- cil, water, fltrd, ug/L (04032)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)
DO Ci 8	05-04-05	<.05	<.05	<.2	<.1	<.2	<.1	<.2	<.1	<.1	<.2
	Date	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)
DO Ci 8	05-04-05	<.2	<.2	<.2	<.2	<.5	<.2	<.1	<.2	142	<.1
	Date	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylo- nitrile water unfltrd ug/L (34215)
DO Ci 8	05-04-05	<.2	<.1	<.2	<.1	83.8	<.2	<.2	<.2	<.2	<2.5
	Date	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)
DO Ci 8	05-04-05	<.1	<.2	<.2	<.1	<.3mc	<.1	<.2	<.2mc	<.1	<.2
	Date	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Iso- propyl- benzene water unfltrd ug/L (77223)	Naphth- alene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)
DO Ci 8	05-04-05	<.2	<.2	<.2mc	<.2	<.1	<.2	<.2	<.5	<.2	<.2
Well Number	Date	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)
DO Ci 8	05-04-05	<.2	<.1	<.2	<.2	<.1	<.2	<.1	103	<.1	<.2

## DORCHESTER COUNTY, MARYLAND—Continued

Well Number	Date	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	
DO Ci 8	05-04-05	<.2	<.1	<.2	<.1	<.2	15	120	

Remark codes used in this table:

< -- Less than. E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
t -- Below the long-term MDL

# QUALITY OF GROUND WATER DATA FREDERICK COUNTY, MARYLAND

	W Nun		Date	Time	Sampl	e type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	
	FR Dc 69		10-13-04	0932	Environ	mental	400CTCN	1028	80020	500	500	500	58	
			Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)	Turbidity, water, unfltrd field, NTU (61028)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	
	FR Dc 69		10-13-04	5.0	12	4040	1.0	741	3.9	37	7.5	322	12.5	
		Date	Temperature, water, deg C (00010)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	water fltrd ug/L	CEAT, water, fltrd, ug/L (04038)	water, fltrd, ug/L	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)
FR Dc 69		10-13-04	12.6	99.2	<.016	<.04	<.02mc	E.13mc	E.01mtcE	E.015mtc	E.01mtcI	E.015mtc	<.008	<.02mc
			Date	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	
	FR Dc 69		10-13-04	<.028	<.02mc	<.022mc	<.04mc	.074	104	<.02	<.022	<.02	<.01mc	
			Date	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd, ug/L (50305)	Caf- feine- 13C, surrog, wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro-di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	
	FR Dc 69		10-13-04	<.02mc	<.03mc	<.018	126	<.02	<.016	<.02mc	<.032	E.03vmn	<.04c	
			Date	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	
	FR Dc 69		10-13-04	<.02	<.01mc	<.03	<.04	<.03	<.04	<.01	<.01v	<.02	<.04mc	

Geologic Unit (aquifer): 400CTCN Catoctin Metabasalt Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

## FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)
FR Dc 69	10-13-04	<.02	<.04mc	<.04mc	<.020	<.01	<.03	<.01mc	<.01	<.010mc	<.020mc
	Date	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propicona- zole, water, fltrd, ug/L (50471)
FR Dc 69	10-13-04	<.03mc	<.04	<.01	E.01t	<.02mc	<.01	<.03	<.03	<.030	<.01
	Date	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, ug/L (04032)	Tri- benuron water, fltrd, ug/L (61159)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)
FR Dc 69	10-13-04	<.008	<.02	<.038	<.026v	<.016mc	u	<.03	<.03b	<.03b	<.08b
	Date	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)
FR Dc 69	10-13-04	<.04b	<.04b	<.04b	<.02b	<.03b	<.1	<.1	<.2	<.18	<.1b
	Date	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)
FR Dc 69	10-13-04	<.1	<.06b	<.5	<.04b	<.05b	<.1	116	<.03b	<.04b	<.03b
	Date	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)
FR Dc 69	10-13-04	<.1b	<.03b	99.8	<.05b	<.04b	<.06b	<.50mc	<.05b	<.08b	<6

#### FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)	Bromomethane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)
FR Dc 69	10-13-04	<.8	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1
	Date	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Di- ethyl ether, water, unfltrd ug/L (81576)	Diiso- propyl ether, water, unfltrd ug/L (81577)	Ethyl methac- rylate, water, unfltrd ug/L (73570)
FR Dc 69	10-13-04	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2
	Date	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iodo- methane water unfltrd ug/L (77424)	Iso- butyl methyl ketone, water, unfltrd ug/L (78133)	Iso- propyl- benzene water unfltrd ug/L (77223)	Methyl acrylo- nitrile water unfltrd ug/L (81593)	Methyl acryl- ate, water, unfltrd ug/L (49991)	Methyl methac- rylate, water, unfltrd ug/L (81597)
FR Dc 69	10-13-04	<2.0	<.03b	<.1	<.1	<.50mc	<.4b	<.04b	<.4	<1.0	<.2
	Date	Methyl tert- pentyl ether, water, unfltrd ug/L (50005)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphth- alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)
FR Dc 69	10-13-04	<.04b	<.06b	<.5	<.4b	<.1	<.04b	<.04b	<.06b	<.04b	<.03b
	Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Tetra- hydro- furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	trans- 1,4-Di- chloro- 2- butene, wat unf ug/L (73547)
FR Dc 69	10-13-04	E.1n	<.06b	<.03b	<.06b	E1b	<.02b	104	<.03b	<.09b	<.7b

#### FREDERICK COUNTY, MARYLAND—Continued

Well Number	Date	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Sampler type, code (84164)	
FR Dc 69	10-13-04	<.10b	<.04b	<.08b	E.02n	<.1b	4040	

Remark codes used in this table: < -- Less than. E -- Estimated.

- Value qualifier codes used in this table:
  b -- Value extrapolated at low end
  c -- See laboratory comment
  m -- Value is highly variable by this method
  n -- Below the LRL and above the LT-MDL
  t -- Below the long-term MDL
  v -- Analyte detected in laboratory blank

Null value qualifier codes used in this table: u -- Unable to determine-matrix interference

Sampler type: 4040 - Submersible pump

## QUALITY OF GROUND WATER DATA KENT COUNTY, MARYLAND

Well Number	Da	te T	Гіте	Sampl	e type	Geol un		Agency col- lecting sample, code (00027)	Agency ana- lyzing sample code (00028)	hole, feet below LSD	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
Diffuse Seep nr Morgan Crk KE Bd 42	10-04 11-30 02-1: 05-10 08-10	0-04 5-05 0-05	1500 1200 1130 1000 1100	Environi Environi Environi Environi Environi	nental nental nental	110AI 112CI 112CI 112CI 112CI	MB MB MB	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	   	27 27 27 27 27	 27 27 27 27	24 24 24 24
KE Bd 81 KE Bd 170	08-16 06-2' 06-2: 10-0-	7-05 7- <i>05</i> 1-04	1105 1100 1105 1230 1300	Replicat Environi Blank Environi Replicat	nental nental	112CL 112CL 112CL 110AL 110AL	LMB LMB LVM	1028 82420 1028 1028 1028	80020 80020 80020 80097 80097	50   	6.30 6.30	42   	37  6.2
	D	ate	Depth to water level, feet below LSD 72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minute: (72004	Sar plindep	ng th, et	Sampling method, code (82398)	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Turbidity, water, unfltrd field, NTU (61028)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	SUVA, 254 nm, abs L/ (mgDOC* meter) (63162)	
Diffuse Seep nr N KE Bd 42	11-3 02- 05-	04-04 30-04 15-05 10-05 16-05	8.84 8.22 7.58 9.61	.30 .76 .35	110 50 60 95	24 23	- - .5	8010 4040 4040 4040 4040	2.8 1.8	-1.0   .9	   	   	
KE Bd 81 KE Bd 170	06-2 06-2 10-0	16-05 27-05 27-05 04-04 04-04	  0.95 	6	25  	   	- - -	4040 8030  4080 4080	   	   	  .010 .015	  1.9 2.8	
	Date	Baro- metric pres- sure, mm H (00025	e diox wat unfl g mg	tide D ter, sol trd oxy L m	ois- oi lved p gen, o g/L u	Dis- olved xygen, ercent of sat- ration 00301)	pH wate unfli field sto unit (0046	er, cond trd tan d, wat l uS/ ts 25 d	duc- ce, Ter unf at cm a egC de	ure, ato air, wa eg C de	g C CaC	ss, Calc ter, wat L as fltr	er, d, /L
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	767 767 766 767	  	- - !	 6.6 5.8 6.5	 63 58 65	7.2 5.9 5.7 5.9 5.7	39 7 44 9 44	98 1 19 14 2	1.5 14 9.0 13 1.0 13	4.0 17 3.5 17 5 17	40 5.70 31.70 33.70 32.70 31.70 31.70	8 5
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	   	 50  	0 1	 0.5  	   	5.4  	4 17 - -	79 - -	14 	4.1 6 6	70 31. 65 7.9 - <.63 14. 63 14.	95 02 6

Geologic Unit (aquifer): 110ALVM - Quaternary System

112CLMB - Columbia Formation

Agency collecting sample: 1028 - U.S. Geological Survey

82420 - Maryland Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

Sampling Method: 8010- Other

4040 - Submersible pump

8030 - Grab sample at water-supply tap

Well Number	Date	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	6.01 20.9 20.0 20.4 21.3	2.35 3.05 2.98 2.68 2.69	2.91 6.91 12.7 12.1 6.60	  0 	21  28 23	26  34 28	<.20d E.01n <.02	8.79 23.3 35.0 36.9 21.6	E.07n .14 .16 .15 .12	10.4 13.8 12.4 12.8 12.6
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	21.3 10.9 <.008 6.41 6.41	2.70 2.04 <.16 3.55 3.48	6.55 3.04 <.20 6.76 6.62	   	4   	4   	  .02 .03	21.6 14.0 <.20 14.2 14.3	.13 <.10 <.10 <.10 <.10	12.7 10.6 <.20 11.0 11.0
	Date	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	13.0 51.2 46.5 42.7 52.0	76 213 261 273 232	.20 <.04 <.04 <.04 <.04	1.72   	1.73 19.8d 18.9d 16.9d 18.6d	.01 <.008 <.008 <.008 <.008	20.0d 19.7d 17.9d 20.4d	3.47   	E.005n E.005n <.006 .006 E.004n	   
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	50.6 8.40 <.18 28.8 29.1	245 97 <10 127 123	<.04 <.04 <.04 <.04	   	10.9d <.060 10.1d 9.73d	<.008 <.008 <.008 <.008	  10.1d 10.4d	   	<.02 <.02 E.004n E.004n	<.04 <.04 
	Date	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	.37oc   	   	   	   9.9 	   <.2	  .6	  142 	  <.06 	   E6n 	  .06 
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	   	  .5 .5	1.12 E.20n	   	   	.3 <.2 	   	E.05n <.06	   	   

Well Numbe	r	Date	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper water, fltrd, ug/L (01040)	water, fltrd, ug/L	Iron, water, unfltrd recover -able, ug/L (01045)	water, fltrd, ug/L	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)
Diffuse Seep n KE Bd 42		10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	  2.7 	  .590	  .8 	213 261 67 16 51	   	  .32	  1.3 	56.4 189 178 166 181	   	   
KE Bd 81 KE Bd 170		08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	   	   	   	50 <6 <6 192 184	E3n <6	1.04 <.08 	   	178 29.9 <.6 16.1 16.1	28.8 <.6 	.066 .082 
		Date	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)
Diffuse Seep nr KE Bd 42	11 02 05	0-04-04 1-30-04 2-15-05 5-10-05 8-16-05	   <.4 	   4.79	  8.4 	  <.20	  282 	  .04	   .27	13.0	<.088mc <.088mc <.088mc <.088mc	<.006 <.006 <.006 <.006
KE Bd 81 KE Bd 170	06 06 10	8-16-05 6-27-05 6-27-05 0-04-04 0-04-04	   	   	   	   	   	<.04 <.04 	   	   	   	   
	Date	2-[( Ethy 6met phen amin oxoE ug/ (628:	yl2', hyl diet hyl) acc o]2 anil SSA wat L ug	,6-' ihyl et- ( lide v t flt /L	CIAT, water, fltrd, ug/L )4040)	CEAT, water, fltrd, ug/L (04038)	Ala- chlor 2nd amide, water, fltrd, ug/L (63781)	Aceto- chlor 3rd amide, water, fltrd, ug/L (63782)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	2methyl phenol, water, fltrd, ug/L
Diffuse Seep nr Mo KE Bd 42	10-04-0 11-30-0 02-15-0 05-10-0 08-16-0	04 05 05	<.0 <.0 <.0	005 E 005 E 005 E	173mc 229mc 219mc 262mc	   	<.020    	<.020   	<.004mc <.004mc <.004mc <.004mc	<.004 <.004  <.004mc	    <.004	<.006mc <.006mc <.006mc <.006mc
KE Bd 81 KE Bd 170	08-16-0 06-27-0 06-27-1 10-04-0	05 05 04 .42	- - 20 -	- - <. -	71 05 	.27 <.05 	   	   	   	   	   	   

Well Number	Da	0 te	Aceto- chlor ESA, water, fltrd 0.7u GF ug/L 61029)	Aceto- chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto- chlor SAA, water, fltrd, ug/L (62847)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor ESA SA, water, fltrd, ug/L (62849)	Ala- chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala- chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala- chlor SAA, water, fltrd, ug/L (62848)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- Endo- sulfan, water, fltrd, ug/L (34362)
Diffuse Seep nr KE Bd 42	Mo 10-04 11-30 02-15 05-10 08-10	0-04 5-05 0-05	<.020    	<.020    	<.020    	<.006 <.006 <.006 <.006	<.020    	<.020    	<.020    	<.020    	<.005 <.005 <.005 <.005	   <.005
KE Bd 81	08-16 06-2	7-05				<.05			 		<.05	
KE Bd 170	06-22 10-04 10-04	4-04	<.020 <.020	<.020 <.020	<.020 <.020	<.05  	<.020 <.020	.100 .100	<.020 <.020	<.020 <.020	<.05  	  
	alpha HCH-d6 surrog Sch200 wat fl Date percen recovr (99995	alpha HCH-c surrog Sch200 wat fl Date percer recovi (9999)	d6, g, 03 A lt zi e wa nt fli ry ug	ine, ater, trd, g/L	Azin-phos-methyl oxon, water, fug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)
Difference Community	10-04-04											
Diffuse Seep nr Mo KE Bd 42	11-30-04	 11-30 99.6003	)-04	 091 <	 <.070mc	<.05mc	<.010			 <.041mc		 <.056mc
KL Bu 42	02-15-05 91.4995 05-10-	02-15 91.4995	5-05		<.070mc	<.05mc	<.010			<.041mc		<.056mc
	05,111.76		76	110 <	<.070mc	<.05mc	<.010			<.041mc		<.056mc
	08-16-05 82.9	08-16 82.9		123 <	<.07mc	<.05mc	<.01			<.041mc	<.02mc	<.056mc
	08-16-05	08-16										
KE Bd 81	06-27-05		7-05	38				<.05	<.05			
KE Bu 01	06-27-05	06-27						<.05	<.05			
KE Bd 170	10-04-04	10-04	1-04									
	10-04-04	10-04 										
	Date	Chlor pyrifo water fltrd, ug/L (3893)	Pr- me os wa r, fl , 0.70	thrin ater trd u GF g/L	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Cyflu- thrin, water, fltrd, ug/L (61585)	Cyper methri water fltrd, ug/L (61586	in water, fltre 0.7u ug/l	er chlor d wate GF fltrd L ug/I	o- chloro- o- ala- r, chlor, r, water, , fltrd, L ug/L
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.005 <.005 <.005 <.005	5 <.0 5 <.0 5 <.0	 006 006 006 006	    <.008mc	    <.018	   	<.008mc <.008mc <.027mc <.027mc	<.009r <.009r <.009r <.009r	nc <.00 nc <.00	)3 )3	0 <.020    
KE Bd 81	08-16-05 06-27-05			 		<.2	<.05					
KE Bd 170	06-27-05 10-04-04				 	<.2	<.05					
	10-04-04											

Well Number	Date	De- chloro- dimeth- enamid, water, fltrd, ug/L (63779)	De- chloro- metola- chlor, water, fltrd, ug/L (63780)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	  	<.020    	<.012 <.012 <.012 <.012	<.006 <.006 <.006	<.005 <.005 <.005 <.005	91.6535 91.7799 94.7708 95.4	<.084mc <.084mc <.084mc <.084mc	<.009 <.009 <.009 <.009	<.020    	<.020    
KE Bd 81	08-16-05 06-27-05										
KE Bd 170	06-27-05 10-04-04		 							<.020	<.020
KE Bu 170	10-04-04									<.020	<.020
	Date	Dimeth- enamid water, fltrd, ug/L (61588)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Diphen- amid, water, fltrd, ug/L (04033)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Endo- sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion water, fltrd, ug/L (82346	fltrd 0.7u GF ug/L
KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.020    	<.006mc <.006mc <.006mc <.006mc	   	   <.006	   <.021mc	   <.014	   <.004	<.002mc <.002mc <.002mc <.002mc	<.004 <.004	
	08-16-05										
	06-27-05 <i>06-27-05</i>			<.05 <.05							
	10-04-04 10-04-04	<.020 <.020									
	Date	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenami phos, water, fltrd, ug/L (61591)	nil amide, wat flt ug/L	Fipro- nil sulfide water, fltrd, ug/L (62167	nil sulfone water, fltrd, ug/L	Fipronil, water, fltrd, ug/L (62166)	Flufen- acet ESA, water, fltrd, ug/L (61952)	Flufe- nacet OA, water, fltrd, ug/L (62483)	Flufe- nacet, water, fltrd, ug/L (62481)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.049 <.049 <.049	<.039mc <.039mc <.039mc <.039mc	<.029 <.029 <.029 <.029	<.029 <.029 <.029 <.029	<.013 <.013 <.013 <.013	<.024 <.024	<.016 <.016 <.016 <.016	<.020    	<.020    	<.020    
KE Bd 81	08-16-05 06-27-05						 				
	06-27-05										
KE Bd 170	10-04-04 10-04-04								<.020 <.020	<.020 <.020	<.020 <.020

Well Number	Date	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L	water, fltrd, ug/L	Hydroxy aceto- chlor, water, fltrd, ug/L (63784)	Hydroxy ala- chlor, water, fltrd, ug/L (63783)	Hydroxy dimeth- enamid, water, fltrd, ug/L (64045)	Hydroxy metola- chlor, water, fltrd, ug/L (63785)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.003n 5u 5r		<.013 <.013 <.013 <.013	<.020   	<.020    	<.020    		<.387mc <.387mc <.538mc <.538mc	<.003 <.003 <.003 <.003	<.030 <.030 <.030 <.030
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04	i i l	   	<.05 <.05	   	   	   	   	   	   	   
	Date	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L ) (61596)	Methi- althion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	chlor ESA, water, fltrd - 0.7u Gl ug/L	chlor OA, water, fltrd F 0.7u GF ug/L	Metola- chlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.027 <.027 <.027	<.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006	<.030mc <.030mc <.030mc <.030mc	<.015 <.015	3.57   	.530    	E.003n <.009c .009 E.007b	<.006 <.006 <.006 <.008	   <.003
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	i i i	   	   	   	   	7.69 7.75	  .590 .600	E.015t <.05	<.05 <.05 	   
	Date	Myclo- butanil water, fltrd, ug/L (61599)	ug/L	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosme water, fltrd, ug/L (61601)	water, fltrd, ug/L	tryn, water, fltrd, ug/L	water, fltrd 0.7u GF ug/L
KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.008 <.008 <.008 <.008	    <.007	<.022 <.022 <.022 <.022 <.022	<.105mc <.105mc <.105mc <.105mc	<.011 <.011 <.011 <.011	<.051mc <.051mc <.051mc <.051mc	<.008m <.008m <.008m <.008m	c <.010 c <.010	<.005 <.005 <.005 <.005	<.004 <.004 <.004 <.004
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	   	   	   	   	   	   	   	<.05 <.05	<.05 <.05	   

Well Number	Date	Propachlor ESA, water, fltrd 0.7u GF ug/L (62766)	Propa- chlor OA, water, fltrd 0.7u GF ug/L (62767)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbacil, water, fltrd, ug/L (04032)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	<.050    	<.020    	   	   <.011	   <.023	<.005 <.005 .006 E.007b	<.016 <.016 <.016 <.016	   <.008mc	   	<.068 <.068 <.068 <.068
KE Bd 81	08-16-05 06-27-05			<.05			.081		 	<.05	
KE Bd 170	06-27-05 10-04-04	<.050	<.020	<.05			<.05	 		<.05	 
KE Bu 170	10-04-04	<.050	<.020								
	Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribuphos, water, fltrd, ug/L (61610)	wate fltro 0.7u ( ug/I	Tetra , chlord r, ethand l water GF unfltr L ug/L	chloro chloro e, ethane d unfltro ug/L	-Tetra- chloro- e, ethane, water, unfltrd ug/L	CFC-113 water unfltrd ug/L
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05	<.017 <.017	<.010 <.010	  	  	  	<.00 <.00		  	  	  
	05-10-05 08-16-05	<.017 <.017	<.010 <.010	<.010	<.013mc	<.004m	<.00 c <.00				
KE Bd 81	08-16-05 06-27-05							 <.2	 <.1	<.2	 <.1
	06-27-05							<.2	<.1	<.2	<.1
KE Bd 170	10-04-04 10-04-04										
	Date	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	ethane, water unfltrd ug/L	chloro- ethene, water, unfltrd ug/L	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)
Diffuse Seep nr Mo											
KE Bd 42	11-30-0 02-15-0	5									
	05-10-0 08-16-0										
KE Bd 81	08-16-0 06-27-0		 <.1	 <.1	 <.2	 <.2	 <.2	 <.2	 <.2	 <.5	 <.2
KE Bd 170	06-27-0 06-27-0 10-04-0	5 <.2	<.1 <.1	<.1 <	<.2	<.2	<.2	<.2	<.2	<.5 	<.2
KE Du 1/0	10-04-0										

Well Number	Date	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	   	   	   	   	   	   	   	   	   	   
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	<.1 <.1 	<.2 <.2 <.2	105.32 102.93	<.1 <.1 	<.2 <.2 <.2	<.1 <.1 	<.2 <.2 <.2	<.1 <.1 	72.20 79.49 	<.2 <.2 <.2
	Date	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	   	   	   	   	   	   	   	   	   	  
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	<.2 <.2 <.2	<.2 <.2 <.2	<.2 <.2 <.2	<2.5 <2.5 <2.5	<.1 <.1 	<.2 <.2 <.2	<.2 <.2 <.2	<.1 <.1 	<.3mc <.3mc	 <.1 <. <i>I</i> 
	Date	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	   	   	   	   	   	   	   	   	   	   
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	<.2 <.2 <.2	<.2mc <.2mc	<.1 <.1 	<.2 <.2 <.2	<.2 <.2 <.2	<.2 <.2 <.2	<.2mc <.2mc	<.2 <.2 <.2	<.1 <.1 	<.2 <.2 <.2

Well Number	Date	Iso- propyl- benzene water unfltrd ug/L (77223)	water, unfltrd ug/L	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05		   	   	   	   	   	   	   	   	   
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04		<.5 <.5 	<.2 <.2 <.2	<.2 <.2 	<.2 <.2 <.2	<.1 <.1 	<.2 <.2 <.2	<.2 <.2 <.2	<.1 <.1 	<.2 <.2 <.2
	Date	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Di- chlor- vos, water fltrd, ug/L (38775)
Diffuse Seep nr Mo KE Bd 42	10-04-04 11-30-04 02-15-05 05-10-05 08-16-05	   	   	   	   	   	   	   	   	   	<.012mc <.012mc <.012mc <.012mc
KE Bd 81 KE Bd 170	08-16-05 06-27-05 06-27-05 10-04-04 10-04-04	<.1 <.1 	95.47 97.71 	 <.1 <.1 	<.2 <.2 <.2 	<.2 <.2 <.2 	<.1 <.1 	<.2 <.2 <.2	<.1 <.1 	<.2 <.2 <.2	   

#### KENT COUNTY, MARYLAND—Continued

Well Number	Date	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
Diffuse Seep nr Mo	10-04-04				8010
KE Bd 42	11-30-04				4040
	02-15-05				4040
	05-10-05			<.04	4040
	08-16-05				4040
	08-16-05				4040
KE Bd 81	06-27-05	19	280		
	06-27-05				
KE Bd 170	10-04-04				4080
	10-04-04				4080

Remark codes used in this table: < -- Less than.
E -- Estimated.

Value qualifier codes used in this table:
b -- Value extrapolated at low end
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
o -- Result determined by alternate method
t -- Below the long-term MDL

Null value qualifier codes used in this table:
o -- Insufficient amount of water
r -- Sample ruined in preparation
u -- Unable to determine-matrix interference

Sampler type: 8010 - Other

4040 - Submersible positive-pressure pump

# QUALITY OF GROUND WATER DATA MONTGOMERY COUNTY, MARYLAND

Well Number	Date	Time	Samp	le type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	0913 0930 1115 1030 0910	Blank Blank Environ Environ	mental	300UPPC 300UPPC 300UPPC 300UPPC 300UPPC	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	60 60 60	59.77 59.77 59.77	60 60 60	33 33 33
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	0840 1135 1105 1030 0935	Environ Environ Environ Environ Environ	mental mental mental	300UPPC 300IJVM 300KNSG 300KNSG 300KNSG	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	60 205 47 47 47	59.77 200.29 45.13 45.13 45.13	60 200 45 45 45	33 34 18 18
	08-03-05	0930	Environ	mental	300KNSG	1028	80020	47	45.13	45	18
	Date	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sam- pling depth, feet (00003)	Sam- pling method, code (82398)	Turbidity, water, unfltrd field, NTU (61028)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	32.34 33.01 32.95	2.0 2.0 2.0 1.5	 70 65 60	43.7 44.0 47.0	70 4030 4030 4030 4030	 20 19 18	768 762 754	8.4 8.3 7.3	 81 79 75	5.5 5.3 5.3
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	33.88 .74 8.70 7.37 7.15	1.9 .38 .80 .40 .50	78 115 100 90	45.0 80.0 40.0 40.0 35.0	4030 4030 4030 4030 4030	16 28 4.0 4.0 17	756 760 764 765 754	8.0 4.9 5.7 7.0 2.0	81 52 59 68 21	5.1 7.9 6.5 6.6 7.0
	08-03-05	7.91	.90	85	35.0	4030	20	756	1.7	19	7.0
	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	88 91 100	11.0 2.5 17.5	14.2 13.5 15.9	25 27 30	5.05 5.61 5.93	2.95 3.17 3.56	1.00 1.05 1.05	5.43 5.45 5.71	10 10 10 75	 12 12 91
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	90 149 277 285 297	25.0 20.5 14.5 2.0 19.5	15.6 17.7 17.2 14.2 17.6	26 73 95 100 100	5.44 24.8 26.9 28.6 30.4	3.08 2.58 6.75 6.95 7.01	1.07 .50 4.60 4.36 4.43	5.15 6.37 11.9 11.1 11.4	8 69 37 50 56	10 83 45 62 69
	08-03-05	274	27.5	21.1	90	25.9	6.09	4.32	10.1	57	69

Geologic Unit (aquifer): 300UPPC - Upper Pelitic Schist Of Wissahickon Formation

300IJMV - Ijamsville Formation 300KNSG - Kennsington Quartz Diorite

Agency collecting sample: 1028 - U.S. Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

Sampling Method: 70 - Grab sample 4030 - Suction pump

Well Number	Date	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	E.02n E.02n	10.6 11.3 12.2	<.1 <.1 <.1	16.4 16.4 15.7	1.6 1.7 2.0	  55 57 68	<.04 <.04 <.04 <.04 <.04	<.06 <.06 2.33 2.51 2.54	<.008 <.008 <.008 <.008 <.008	<.06 <.06 2.40 2.52 2.52
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	.04 .03	10.5 1.48 31.0 32.5 30.0	<.1 E.1n E.1n E.1n E.1n	14.8 12.3 23.6 23.7 18.4	1.7 6.8 20.8 20.7 18.0	70 102 167 163 170	<.04 <.04 <.04 E.02n	2.38 <.06 2.85 2.79 1.90	<.008 <.008 E.006n E.005n E.006n	2.38 <.06 2.99 2.91 1.96
	08-03-05		29.3	<.1	12.8	12.1	160	.13	1.24	E.007n	1.48
	Date	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.012dc <.006 .033 .029	<2 <2   Mn	<.20 <.20   <.20	<.2 <.2   <.2	<.2 Mn   19	<.06 <.06   E.04n	<8 <8   <8	<.04 <.04   E.02n	<.8 E.4n  E.8n	<.014 .022  .138
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	.034 <.006 E.005n <.006 <.006	2   <2	<.20  <.20	.8   <.2	48   91	<.06  <.06	E4n    <8	<.04  <.04	<.8   <.8	.070   .153
	08-03-05	E.004n									
	Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.4 <.4   <.4	  E4n 78 E5n	<.08 <.08   .09	<.6 <.6  1.0	<.2 .2 8.0 6.8 5.7	<.4 <.4   <.4	<.06 .53   .98	<.4 <.4   <.4	E.1n <.2  <.2	<.40 <.40  64.7
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.4   E.3n	7 <6 131 86 1,890	<.08   <.08	4.5   3.3	4.6 36.2 80.2 91.5 291	2.0   .6	.87   2.09	 <.4   E.2n	<.2   <.2	71.4   105
	08-03-05		2,620			232					

Well Number	Date	Thall- ium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water,	ug/L	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2',6-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.04 <.04   <.04	<.1 <.1   .2	E.4n E.4n   2.9	 <.09 <.09mc <.09mc	<.006 .006<<.006</td <td>&lt;.005</td> <td>E.005n E.008mc E.007mc</td> <td> &lt;.004 &lt;.004mc &lt;.004mc</td> <td>&lt;.004 &lt;.004</td> <td>   </td>	<.005	E.005n E.008mc E.007mc	 <.004 <.004mc <.004mc	<.004 <.004	   
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.04   <.04	.3   <.1	1.6   <.6	<.09mc <.09mc <.09 <.09mc <.09mc	<.006 <.006 <.006 <.006 <.006	<.005 <.005 <.005 <.005 <.005	E.008mc <.006mc <.006 <.006mc <.006mc	<.004mc <.004mc <.004 <.004mc <.004mc	<.004mc  <.004 <.004	<.004   
	08-03-05				<.09mc	<.006	<.005	E.005mnc	<.004mc	<.004mc	<.004
	Date	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH-dé surrog, Sch200: wat flt percent recovry (99995)	Atra- 3 zine, water, fltrd, ug/L	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.006 <.006mc <.006mc	<.006 <.006 <.006	<.005 <.005 <.005	   	 98.3 89.9 94.7	<.007 .008 <.007	 <.07 <.07mc <.07mc	 <.050 <.050mc <.050mc	<.010 <.010 <.010	E.005t E.009mtc <.041mc
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.006mc <.006mc <.006mc <.006mc	<.006 <.006 <.006 <.006 <.006	<.005 <.005 <.005 <.005 <.005	<.005   	89.7 85.9 105 86.5 91.0	E.005n <.007 <.007 <.007 <.007	<.07mc <.07mc <.07 <.07mc <.07mc	<.050mc <.050mc <.050 <.050mc <.050mc	<.010 <.010 <.010 <.010 <.010	E.007mtc <.041mc <.041 <.041mc <.041mc
	08-03-05	<.006mc	<.006	<.005	<.005	89.5	E.006n	<.07mc	<.050mc	<.010	<.041mc
	Date	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyana zine, water fltrd, ug/L ) (04041	thrin, , water, fltrd, ug/L	Cyper- methrin water, fltrd, ug/L (61586)	water fltrd 0.7u G ug/L	mil, water, F fltrd, ug/L
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05	  	<.06 <.06mc	<.005 <.005	<.006 <.006	  	  	<.008 <.008mc			<.012
MO Dd 28 MO Dg 34	05-10-05 08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.020mc	<.06mc <.06mc <.06 <.06 <.06mc <.06mc	<.005 <.005 <.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006 <.006	<.008m	c <.018	<.027mc <.027mc <.027mc <.008 <.008mc <.027mc	<.009m <.009m <.009 <.009m	c <.003 c <.003 c <.003 c <.003	<ul> <li>&lt;.012</li> <li>&lt;.012</li> <li>&lt;.012</li> <li>&lt;.012</li> <li>&lt;.012</li> </ul>
	08-03-05	<.020mc	<.06mc	<.005	<.006	<.008m	c <.018	<.027mc	<.009m	c <.003	<.012

Well Number	Date	Diazinon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Endo- sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	 <.01 <.01 <.01	<.005 .005<<.005</.005</td <td>107 115 100</td> <td>&lt;.08 &lt;.08mc &lt;.08mc</td> <td>E.002t E.004n &lt;.009</td> <td>&lt;.006 &lt;.006mc &lt;.006mc</td> <td>   </td> <td>   </td> <td>   </td> <td>   </td>	107 115 100	<.08 <.08mc <.08mc	E.002t E.004n <.009	<.006 <.006mc <.006mc	   	   	   	   
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.01 <.01 <.01 <.01	<.005 <.005 <.005 <.005 <.005	102 92.5 102 105 97.5	<.08mc <.08mc <.08 <.08mc <.08mc	E.003t <.009 <.009 <.009 <.009	<.006mc <.006mc <.006 <.006mc <.006mc	<.01    	<.02mc	<.014	<.004    
	Date	Ethion monoxon water, fltrd, ug/L (61644)	Ethion water, fltrd, ug/L (82346	Etho- prop, , water, fltrd 0.7u GF ug/L	ug/L	Fenami- phos sulf- oxide, water, fltrd, ug/L	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.0020 <.0020mc <.0020mc		   	<.049 <.049 <.049	<.04 <.04mc <.04mc		<.029 <.029 <.029	<.013 <.013 <.013	<.024 <.024 <.024	 <.016 <.016 <.016
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05 08-03-05	<.002mc <.0020mc <.0020 <.0020mc <.0020mc <.002mc	<.004 <.004	<.005     <.005	<.049 <.049 <.049 <.049 <.049	<.04mc <.04mc <.04 <.04mc <.04mc <.04mc	<.03 <.03 <.03 <.03	<.029 <.029 <.029 <.029 <.029 <.029	<.013 <.013 <.013 <.013 <.013 <.013	<.024 <.024 <.024 <.024 <.024 <.024	<.016 <.016 <.016 <.016 <.016 <.016
	Date	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	 <.003 r r	<.003 <.003 <.003	<.013 <.013 <.013	 <.387 <.387mc <.538mc	<.003 <.003 <.003	<.030 <.030 <.030	<.027 <.027 <.027	<.005 <.005 <.005	<.006 <.006 <.006	<.03 <.03mc <.03mc
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	r <.003 r	<.003 <.003 <.003 <.003 <.003	<.013 <.013 <.013 <.013 <.013	<.538mc <.538mc <.387 <.387mc <.538mc	<.003 <.003 <.003 <.003 <.003	<.030 <.030 <.030 <.030 <.030	<.027 <.027 <.027 <.027 <.027	<.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006	<.03mc <.03mc <.03 <.03mc <.03mc
	08-03-05		<.003	<.013	<.538mc	<.003	<.030	<.027	<.005	<.006	<.03mc

Well Number	Date	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.015 <.015	E.004n .008 <.006	<.006 <.006 <.006	   	<.008 <.008 <.008	   	<.022 <.022 <.022	<.10 <.10mc <.10mc	<.011 <.011 <.011	<.05 <.05mc <.05mc
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.015 <.015 <.015	E.006b <.006 <.006 <.006 <.006	<.006 <.006 <.006 <.006 <.006	<.003    	<.008 <.008 <.008 <.008 <.008	<.007    	<.022 <.022 <.022 <.022 <.022	<.10mc <.10mc <.10 <.10mc <.10mc	<.011 <.011 <.011 <.011 <.011	<.05mc <.05mc <.05 <.05mc <.05mc
	08-03-05	<.015	<.010	<.006	<.003	<.008	<.007	<.022	<.10mc	<.011	<.05mc
	Date	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbufos oxon sulfone water, fltrd, ug/L (61674)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.008 <.008mc <.008mc	<.01 <.01 <.01	<.005 <.005 <.005	<.004 <.004 <.004	   	   	<.005 <.007 <.005	<.02 <.02 <.02 <.02	   	 <.07 <.07 <.07
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.008mc <.008mc <.008 <.008mc <.008mc	<.01 <.01 <.01 <.01 E.01n	<.005 <.005 <.005 <.005 <.005	<.004 <.004 <.004 <.004 <.004	<.011   	<.02    	E.006b <.005 <.005 <.005 <.005	<.02 <.02 <.02 <.02 <.02	<.008mc    	<.07 <.07 <.07 <.07 <.07
	08-03-05	<.008mc	E.01n	<.005	<.005b	<.011	<.02	<.010	<.02	<.008mc	<.07
	Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	 <.02 <.02 <.02	 <.01 <.01 <.01	   	   	   	<.009 <.009 <.009	<.03b <.03b <.03b <.03b <.03b	<.03b <.03b <.03b <.03b <.03b	<.08b <.08b <.08b <.08b	<.04b <.04b <.04b <.04b <.04b
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.02 <.02 <.02 <.02 <.02	<.01 <.01 <.01 <.01 <.01	<.010    	<.01mc    	<.004mc	<.009 <.009 <.009 <.009 <.009	<.03b <.03b <.03b <.03b	<.03b <.03b <.03b <.03b <.03b	<.08b <.08b <.08b <.08b	<.04b <.04b <.04b <.04b <.04b
	08-03-05	<.02	<.01	<.010	<.01mc	<.004mc	<.009	<.03b	<.03b	<.08b	<.04b

Well Number	Date	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.04b <.04b <.04b <.04b	<.04b <.04b <.04b <.04b <.04b	<.02b <.02b <.02b <.02b <.02b	<.03b <.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1	<.1 <.1 <.1 <.1	<.2 <.2 <.2 <.2 <.2	<.18 <.18 <.18 <.18 <.18	<.1b <.1b <.1b <.1b	<.1 <.1 <.1 <.1 <.1
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.04b <.04b <.04b <.04b <.04b	<.04b <.04b <.04b <.04b <.04b	<.02b <.02b <.02b <.02b <.02b	<.03b <.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1 <.1	<.1b <.1 <.1 <.1 <.1	<.2 <.2 <.2 <.2 <.2	<.18 <.18 <.18 <.18 <.18	<.1b <.1b <.1b <.1b	<.1 <.1 <.1 <.1 <.1
	08-03-05	<.04b	<.04b	<.02b	<.03b	<.1	<.1	<.2	<.18	<.1b	<.1
	Date	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.06b E.03n <.06b <.06b <.06b	<.5 <.5 <.5 <.5 <.5	<.04b <.04b <.04b <.04b <.04b	<.05b <.05b <.05b <.05b <.05b	<.1 <.1 <.1 <.1	129 106 111 105 99.2	<.03b <.03b <.03b <.03b <.03b	<.04b <.04b <.04b <.04b	<.03b <.03b <.03b <.03b	<.1b <.1b <.1b <.1b
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.06b <.06b .13 <.06b <.06b	<.5 <.5 <.5 <.5 <.5	<.04b <.04b <.04b <.04b <.04b	<.05b <.05b <.05b <.05b <.05b	<.1 <.1 <.1 <.1 <.1	101 98.6 114 104 101	<.03b <.03b <.03b <.03b <.03b	<.04b <.04b E.04n <.04b <.04b	<.03b <.03b <.03b <.03b <.03b	<.1b <.1b <.1b <.1b
	08-03-05	<.06b	<.5	<.04b	<.05b	<.1	113	<.03b	<.04b	<.03b	<.1b
	Date	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo- nitrile water unfltrd ug/L (34215)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	E.06b E.03b <.03b <.03b <.03b	77.0 91.5 93.4 102 88.6	<.05b <.05b <.05b <.05b <.05b	<.04b <.04b <.04b <.04b <.04b	<.06b <.06b <.06b <.06b <.06b	<.50mc <.50mc <.50mc <.50mc <.50mc	<.05b <.05b <.05b <.05b <.05b	<.08b <.08b <.08b <.08b <.08b	<6 <6 <6 <6 <6	<.8 <.8 <.8 <.8 <.8
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.03b <.03b <.03b E.02t <.03b	103 89.8 93.1 104 90.2	<.05b <.05b <.05b <.05b <.05b	<.04b <.04b <.04b <.04b <.04b	<.06b <.06b E.02t <.06b <.06b	<.50mc <.50mc <.50mc <.50mc <.50mc	<.05b <.05b <.05b <.05b <.05b	<.08b <.08b <.08b <.08b	<6 <6 <6 <6	<.8 <.8 <.8 <.8 <.8 <.8
	08-03-05	<.03b	81.7	<.05b	<.04b	<.06b	<.50mc	<.05b	<.08b	<6	<.8

Well Number	Date	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)	Bromomethane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.02b <.02b <.02b <.02b <.02b	<.03b <.03b <.03b <.03b	<.12 <.12b <.12b <.12 <.12	<.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1	<.3mc <.3mc <.3mc <.3mc <.3mc	<.04b <.04b <.04b <.04b	<.03b <.03b <.03b <.03b	<.1 <.1b <.1 <.1 <.1	<.2mc <.2mc <.2mc <.2mc <.2mc
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.02b <.02b E.02b <.02b <.02b	<.03b <.03b <.03b <.03b <.03b	<.12 <.12 <.12b <.12 <.12	<.03b <.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1 <.1	<.3mc <.3mc <.3mc <.3mc <.3mc	<.04b E.02n <.04b <.04b <.04b	<.03b <.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1 <.1	<.2mc <.2mc <.2mc <.2mc <.2mc
	08-03-05	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
	Date	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Di- ethyl ether, water, unfltrd ug/L (81576)	Diiso- propyl ether, water, unfltrd ug/L (81577)	Ethyl methac- rylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.02b <.02b <.02b <.02b <.02b	<.05b <.05b <.05b <.05b	<.1 <.1b <.1 <.1	<.05b <.05b <.05b <.05b <.05b	E.13mnc <.18mc <.18mc <.18mc <.18mc	<.1b <.1b <.1b <.1b	<.1b <.1b <.1b <.1b	<.10 <.10 <.10 E.04t E.05t	<.2 <.2 <.2 <.2 <.2	<2.0 <2.0 <2.0 <2.0 <2.0
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.02b <.02b <.02b <.02b <.02b	<.05b <.05b <.05b <.05b <.05b	<.1 <.1 <.1 <.1 <.1	<.05b <.05b <.05b <.05b <.05b	<.18mc <.18mc <.18mc <.18mc <.18mc	<.1b <.1b <.1b <.1b	<.1b <.1b <.1b <.1b	E.05n <.10 <.10 <.10 <.10	<.2 <.2 <.2 <.2 <.2	<2.0 <2.0 <2.0 <2.0 <2.0
	08-03-05	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<2.0
	Date	Ethyl- benzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iodo- methane water unfltrd ug/L (77424)	Iso- butyl methyl ketone, water, unfltrd ug/L (78133)	Iso- propyl- benzene water unfltrd ug/L (77223)	Methyl acrylo- nitrile water unfltrd ug/L (81593)	Methyl acryl- ate, water, unfltrd ug/L (49991)	Methyl methac- rylate, water, unfltrd ug/L (81597)	Methyl tert- pentyl ether, water, unfltrd ug/L (50005)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.03b <.03b <.03b <.03b <.03b	<.1 <.1 <.1 <.1 <.1	<.1 <.1 <.1 <.1	<.50mc <.50mc <.50mc <.50mc <.50mc	<.4b <.4b <.4b <.4b	<.04b <.04b <.04b <.04b <.04b	<.4 <.4 <.4 <.4 <.4	<1.0 <1.0 <1.0 <1.0 <1.0	<.2 <.2 <.2 <.2 <.2	<.04b <.04b <.04b <.04b <.04b
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.03b <.03b E.03b <.03b <.03b	<.1b <.1 <.1 <.1 <.1	<.1 <.1 <.1 <.1 <.1	<.50mc <.50mc <.50mc <.50mc <.50mc	<.4b <.4b <.4b <.4b	<.04b <.04b <.04b <.04b <.04b	<.4 <.4 <.4 <.4 <.4	<1.0 <1.0 <1.0 <1.0 <1.0	<.2 <.2 <.2 <.2 <.2	<.04b <.04b <.04b <.04b <.04b
	08-03-05	<.03b	<.1	<.1	<.50mc	<.4b	<.04b	<.4	<1.0	<.2	<.04b

Well Number	Date	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.06b <.06b <.06b <.06b	<5 <5 <5 <5	<.4b <.4b <.4b <.4b	<.1 <.1 <.1 <.1	<.04b <.04b <.04b <.04b	<.04b <.04b <.04b <.04b	<.06b <.06b <.06b <.06b <.06b	<.04b <.04b <.04b <.04b <.04b	<.03b <.03b <.03b <.03b	<.1 <.1 .1 .1
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.06b <.06b E.14b <.06b <.06b	<.5 <.5 <.5 <.5 <.5	<.4b <.4b <.4b <.4b	<.1b <.1 <.1 <.1 <.1	<.04b <.04b E.02t <.04b <.04b	<.04b <.04b E.05b <.04b <.04b	<.06b <.06b <.06b <.06b	<.04b <.04b <.04b <.04b <.04b	<.03b <.03b <.03b <.03b <.03b	.2 <.1 <.1 Mt <.1
	08-03-05	<.06b	<5	<.4b	<.1	<.04b	<.04b	<.06b	<.04b	<.03b	<.1
	Date	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Tetra- hydro- furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	trans- 1,4-Di- chloro- 2- butene, wat unf ug/L (73547)	Tri- bromo- methane water unfltrd ug/L (32104)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.06b <.06b <.06b <.06b	<.03b <.03b <.03b <.03b <.03b	<.06b <.06b <.06b <.06b	<1 <1b <1 <1 Mt	<.02b E.02n <.02b <.02b <.02b	96.0 99.1 96.6 98.4 92.9	<.03b <.03b <.03b <.03b <.03b	<.09b <.09b <.09b <.09b	<.7 <i>b</i> <.7 <i>b</i> <.7 <i>b</i> <.7 <i>b</i>	<.10 <.10 <.10 <.10 <.10
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.06b <.06b <.06b <.06b	<.03b <.03b <.03b <.03b <.03b	<.06b <.06b <.06b <.06b	<1b <1b <1 <1 E1b	<.02b <.02b .15 E.01n <.02b	99.7 93.0 96.7 99.4 93.2	<.03b <.03b <.03b <.03b <.03b	<.09b <.09b <.09b <.09b <.09b	<.7b <.7b <.7b <.7b	<.10 <.10 <.10 <.10 <.10
	08-03-05	<.06b	<.03b	<.06b	Mn	<.02b	96.6	<.03b	<.09b	<.7b	<.10

#### MONTGOMERY COUNTY, MARYLAND—Continued

Well Number	Date	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Di- chlor- vos, water fltrd, ug/L (38775)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
MO Ce 26	11-10-04 11-10-04 11-15-04 02-01-05 05-10-05	<.04b <.04b <.04b <.04b <.04b	.31 <.08b <.08b <.08b <.08b	<.02b <.02b 1.56 1.68 1.61	<.1b <.1b <.1b <.1b	<.01 <.01mc <.01mc	<.04 <.04   <.04	4030 4030 4030 4030 4030
MO Dd 28 MO Dg 34	08-04-05 05-10-05 11-16-04 02-02-05 05-09-05	<.04b <.04b <.04b <.04b E.03n	<.08b <.08b <.08b <.08b <.08b	1.75 E.01n E.03b E.03b E.02n	<.1b <.1b <.1b <.1b	<.01mc <.01mc <.01 <.01mc <.01mc	.41   .10	4030 4030 4030 4030 4030
	08-03-05	E.07b	<.08b	<.02b	<.1b	<.01mc		4030

Remark codes used in this table:

- < -- Less than. E -- Estimated.
- M -- Presence verified but not quantified.

- Value qualifier codes used in this table:
  b -- Value extrapolated at low end
  c -- See laboratory comment
  d -- Diluted sample: method hi range exceeded
  m -- Value is highly variable by this method
  n -- Below the LRL and above the LT-MDL
  t -- Below the long-term MDL

Null value qualifier codes used in this table:  $r \;\; \text{-- Sample ruined in preparation}$ 

Sampler type: 4030 - Suction pump

#### QUEEN ANNES COUNTY, MARYLAND

Well Number	Date	Time	Sample type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
QA Db 14  QA Db 15	04-12-05 04-18-05 09-21-05 04-18-05 09-21-05	1500 1015 1000 1100 1100	Environmental Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	1028 80020 80020 80020 80020	   	165 165 165 103 103	165 165 165 103 103	145 145 145 96 96
QA Db 17 QA Db 23 QA Db 27	04-18-05 09-21-05 04-12-05 04-18-05	1300 1200 1430 1200	Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420	80020 80020 80020 80020	  	185 145	 185 145	 165 110
QA Db 30 QA Db 32 QA Db 34 QA Db 35	09-21-05 09-13-05 09-13-05 09-15-05 09-14-05	1230 1416 1145 1450 1330	Environmental Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 1028 82420 82420	80020 80020 80020 80020 80020	   	145 220 116 180 200	145 220 116 180 200	110 210 106 170 190
QA Db 37 <i>QA Ea 39</i>	09-15-05 04-12-05 04-12-05 09-21-05	1530 1125 1130 1400	Environmental Blank Environmental Environmental	125AQUI <i>125AQUI</i> 125AQUI 125AQUI	82420 82420 82420 82420	80020 80020 80020 80020	  	250 95 95 95	250  95 95	240  80 80
QA Ea 42 QA Ea 45 QA Ea 48	04-20-05 09-27-05 04-20-05 09-27-05 04-21-05	1100 1230 1200 1500 1230	Environmental Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 80020 80020 80020	   	120 120 210 210 160	120 120 210 210 160	100 100 200 200 129
QA Ea 59	04-21-05 09-27-05 04-12-05 04-18-05 09-27-05	1235 1130 1230 1400 1330	Blank Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 1028 80020 80020	   	160 160 215 215 215	160 215 215 215	129 195 195 195
QA Ea 60 QA Ea 61	04-20-05 04-20-05 09-28-05 04-21-05 09-27-05	1300 1305 1000 1130 1630	Environmental Replicate Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 80020 80020 80020	   	185 185 185 170 170	185 185 185 170 170	165 165 165 150 150
QA Ea 77 QA Ea 78 QA Ea 79	09-12-05 09-12-05 05-18-05 09-12-05 09-16-05	1055 1100 1400 1500 1055	Environmental Blank Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 80020 80020 80020	 140 	205 205 140 135 298	205 140 135 298	195  120 125 288
QA Ea 80 QA Ea 81 QA Ea 82 QA Eb 144	09-16-05 09-12-05 04-13-05 09-27-05 04-19-05	1035 1300 1340 1530 1015	Environmental Environmental Environmental Environmental Environmental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 80020 80020 80020	   	130 310 170 170 240	130 310 170 170 240	120 300 155 155 220
QA Eb 155 QA Eb 156 QA Eb 157	09-28-05 09-15-05 09-14-05 09-14-05 05-18-05	1100 1230 1100 <i>1105</i> 1500	Environmental Environmental Environmental Replicate Ref. material	125AQUI 125AQUI 125AQUI <i>125AQUI</i> 125AQUI	82420 82420 82420 82420	80020 80020 80020 80020 80020	   	240 245 220 220 120	240 245 220 220	220 235 210 210
QA Fa 49 QA Fa 54	05-18-05 09-14-05 09-14-05 04-13-05 04-12-05	1501 1130 <i>1135</i> 1220 1345	Ref. material Environmental Replicate Environmental Environmental	125AQUI 125AQUI <i>125AQUI</i> 125AQUI 125AQUI	1028 82420 82420 82420 82420	80020 80020 80020 80020 80020	   	120 120 <i>120</i> 210 260	120 120 210 260	110 110 185 240

Geologic Unit (aquifer): 125AQUI - Aquia Formation

Agency collecting sample: 82420 - Maryland Geological Survey 1028 - U.S. Geological Survey

Agency analyzing sample: 1028 - Geological Survey

80020 - USGS-National Water Quality Lab, Denver, CO

#### QUEEN ANNES COUNTY, MARYLAND—Continued

Well Number	Date	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
QA Db 14	04-12-05 04-18-05 09-21-05	  	  5	18 23 15	8030 8030 4040	  	  	7.2 7.2 7.1	455 453 452	14.6 14.7 15.5	  
QA Db 15	04-18-05 09-21-05		3	18 25	8030 4040			7.0 7.0	1,080 1,100	14.7 19.3	
QA Db 17	04-18-05 09-21-05		4	25 20	8030 4040			7.1 7.1	833 762	14.7 16.4	
QA Db 23 QA Db 27	04-12-05 04-18-05			18 40	8030 8030			7.2 7.0	444 1,280	14.8 14.9	
QA Db 30 QA Db 32 QA Db 34 QA Db 35	09-21-05 09-13-05 09-13-05 09-15-05 09-14-05	17.10 16.83 8.48 5.95	5 6 6  5	34 130 120 33 45	4040 4040 4040 4030 4040	   	   	7.0 6.2 6.5 6.9 6.7	1,050 18,100 8,640 482 18,400	15.0 16.4 15.6 15.9 15.9	   
QA Db 37 QA Ea 39	09-15-05 04-12-05 04-12-05 09-21-05	8.35  	   4	92  24 20	4040  8030 4040	  	  	7.4  7.4 7.4	526  420 445	17.1  15.1 16.0	  
QA Ea 42	04-20-05 09-27-05		 4.5	12 20	8030 4040			7.5 7.5	775 882	15.5 15.9	
QA Ea 45	04-20-05 09-27-05		3	18 22	8030 4040			7.5 7.6	366 374	15.8 16.5	
QA Ea 48	04-21-05 04-21-05			13	8030			7.3	1,550	15.2	
QA Ea 59	09-27-05 04-12-05 04-18-05 09-27-05	  	4.5  3.5	30 25 15 28	4040 8030 8030 4040	  	  	7.3 7.8 7.8 7.8	1,760 595 582 604	16.6 15.5 15.5 16.1	  
QA Ea 60	04-20-05 04-20-05		 	19	8030			7.5	1,780	16.0	
QA Ea 61	09-28-05 04-21-05 09-27-05		3  4.5	24 25 28	4040 8030 4040	 	 	7.5 7.1 7.1	1,940 5,810 6,140	16.4 15.4 15.7	 
QA Ea 77	09-12-05 09-12-05	13.06	6	87	4040			7.1	17,500	16.7	
QA Ea 78 QA Ea 79	05-18-05 09-12-05 09-16-05	13.34 11.36	7 20 6.7	40 45 110	4030 4040	7.6  	<1  	7.6 7.5 9.0	321 323 353	16.6 16.1 16.8	130  
QA Ea 80 QA Ea 81 QA Ea 82	09-16-05 09-12-05 04-13-05 09-27-05	11.53 12.68 	17.1 5  4	45 65 32 35	4030 4040 8030 4040	  	  	7.8 7.8 7.1 7.6	344 491 1,130 1,210	15.4 17.1 15.0 16.8	  
QA Eb 155	04-19-05 09-28-05	  11 5 4	4	33 40	8030 4040	 2.1		7.6 7.7	418 422	15.8 16.3	 240
QA Eb 155 QA Eb 156	09-15-05 09-14-05 09-14-05	11.54 14.75 	1 6 	75 45 	4030 4030	3.1	  	8.1 6.8 	1,790 22,300 	16.5 16.0	240  
QA Eb 157	05-18-05 05-18-05 09-14-05	13.03	30	 50	4030	  	  	 7.3	 338	 15.0	 
QA Fa 49 QA Fa 54	09-14-05 04-13-05 04-12-05	  	  	20 31	8030 8030	  	  	7.1 7.5	787 349	15.9 15.5	  
11 3.5 1 1 0000	a										

Sampling Method: 8030 - Grab sample at water-supply tap

4040 - Submersible pump 4030 - Suction pump

Well Number	Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
QA Db 14	04-12-05 04-18-05							14.0			
QA Db 15	09-21-05 04-18-05 09-21-05	  	 	 	  	 	 	13.9 133 135	 	 	 
QA Db 17	04-18-05 09-21-05							121 108			
QA Db 23 QA Db 27	04-12-05 04-18-05							15.8 246			
QA Db 30	09-21-05 09-13-05							191 6120d			
QA Db 32 QA Db 34	09-13-05 09-15-05							2610d 8.98			
QA Db 35	09-14-05							6210d			
QA Db 37 <i>QA Ea 39</i>	09-15-05 04-12-05							11.3 <.20	 		 
	04-12-05 09-21-05							35.9 43.8			
QA Ea 42	04-20-05 09-27-05							118 171			
QA Ea 45	04-20-05 09-27-05							8.95 9.65			
QA Ea 48	04-21-05							379d			
	04-21-05 09-27-05							<.20 438d			
QA Ea 59	04-12-05										
	04-18-05 09-27-05							90.1 89.4			
QA Ea 60	04-20-05 04-20-05							514d 511d			
QA Ea 61	09-28-05 04-21-05							531d 1830d			
QA Ea 01	09-27-05							1950d			
QA Ea 77	09-12-05 09-12-05							6030d <.20			
QA Ea 78	05-18-05	40.2	7.20	3.80	11.4	159	194	4.00	.10	25.3	<.18
QA Ea 79	09-12-05 09-16-05							4.02 1.41			
QA Ea 80	09-16-05							2.29			
QA Ea 81 QA Ea 82	09-12-05 04-13-05							32.2 280			
-	09-27-05							286			
QA Eb 144	04-19-05 09-28-05							4.88 4.82			
QA Eb 155	09-15-05	43.0	33.0	17.3	237			366d	1.06	13.5	66.4d
QA Eb 156	09-14-05							7660d			
QA Eb 157	<i>09-14-05</i> 05-18-05							7550d 			
	05-18-05							4.10			
	09-14-05 09-14-05							4.12 3.93			
QA Fa 49 QA Fa 54	04-13-05 04-12-05							120 11.0			
-											

Well Number	Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water, fltrd, ug/L (01000)	Beryll- ium, water, fltrd, ug/L (01010)	Iron, water, fltrd, ug/L (01046)
QA Db 14	04-12-05										
	04-18-05 09-21-05										
QA Db 15	04-18-05										
OA DI: 17	09-21-05										
QA Db 17	04-18-05 09-21-05										
QA Db 23	04-12-05										
QA Db 27	04-18-05										
O A DI- 20	09-21-05										
QA Db 30 QA Db 32	09-13-05 09-13-05										
QA Db 34	09-15-05										
QA Db 35	09-14-05										
QA Db 37	09-15-05										
QA Ea 39	04-12-05										
~	04-12-05										
	09-21-05										
QA Ea 42	04-20-05										
QA Ea 45	09-27-05 04-20-05										
QII Da 45	09-27-05										
QA Ea 48	04-21-05										
	04-21-05										
QA Ea 59	09-27-05										
QA Ea 39	04-12-05 04-18-05										
	09-27-05										
QA Ea 60	04-20-05										
	04-20-05										
QA Ea 61	09-28-05 04-21-05										
Q.1.2 01	09-27-05										
QA Ea 77	09-12-05										
QA Ea 78	09-12-05 05-18-05	198	.98	<.060	<.008	.13	.11	5.53	6.3	<.06	1,020
	09-12-05										
QA Ea 79	09-16-05										
QA Ea 80 QA Ea 81	09-16-05 09-12-05										
QA Ea 81 QA Ea 82	04-13-05										
O + E1 144	09-27-05										
QA Eb 144	04-19-05										
QA Eb 155	09-28-05 09-15-05	926	.30	<.060	<.008	.06	.07				 62
QA Eb 156	09-13-03	920	.50	<.000	<.008	.00	.07				
-	09-14-05										
QA Eb 157	05-18-05										
	05-18-05										
	09-14-05 09-14-05										
QA Fa 49	04-13-05										
QA Fa 54	04-12-05										

Well Number	Date	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Thall- ium, water, fltrd, ug/L (01057)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
QA Db 14	04-12-05 04-18-05 09-21-05	 	 	 		 	 	 	 	 	 
QA Db 15	04-18-05 09-21-05	 	  	 	 	 	 	 	 	 	 
QA Db 17	04-18-05 09-21-05										
QA Db 23 QA Db 27	04-12-05 04-18-05										
QA Db 30 QA Db 32 QA Db 34 QA Db 35	09-21-05 09-13-05 09-13-05 09-15-05 09-14-05	   	   	   	   	   	   	   	   	   	   
QA Db 37 QA Ea 39	09-15-05 04-12-05 04-12-05 09-21-05	  	  	  	  	  	  	  	  	  	  
QA Ea 42	04-20-05 09-27-05										
QA Ea 45 QA Ea 48	04-20-05 09-27-05 04-21-05	  	  	  	  	  	  	  	  	  	  
QA Ea 59	04-21-05 09-27-05 04-12-05 04-18-05 09-27-05	   	   	   	   	   	   	   	   	   	   
QA Ea 60	04-20-05 04-20-05										
QA Ea 61	09-28-05 04-21-05 09-27-05	 	 	 	 	 	 	 	 	 	 
QA Ea 77	09-12-05 09-12-05										
QA Ea 78 QA Ea 79	05-18-05 09-12-05 09-16-05	1,440  	<.08 	26.5  	26.1  	E.009n 	<.04  	<.05  	<.05  	<.05  	<.05 
QA Ea 80 QA Ea 81 QA Ea 82 QA Eb 144	09-16-05 09-12-05 04-13-05 09-27-05 04-19-05	   	  	   	   	   	   	   	   	   	   
QA Eb 155 QA Eb 156 QA Eb 157	09-28-05 09-15-05 09-14-05 09-14-05 05-18-05	232  	   	12.7  	11.6  	   	  	   	   	   	   
QA Fa 49 QA Fa 54	05-18-05 09-14-05 09-14-05 04-13-05 04-12-05	   	   	  	   	   	   	   	   	   	   

Well Number	Date	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)	Hexa- zinone, water, fltrd, ug/L (04025)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)
QA Db 14	04-12-05 04-18-05 09-21-05	  	  	  	  	  	  	  	  	  	  
QA Db 15	04-18-05 09-21-05										
QA Db 17	04-18-05										
QA Db 23	09-21-05 04-12-05										
QA Db 27	04-18-05										
QA Db 30	09-21-05 09-13-05										
QA Db 32	09-13-05										
QA Db 34 QA Db 35	09-15-05 09-14-05										
0.4 PJ .27	00 15 05										
QA Db 37 <i>QA Ea 39</i>	09-15-05 <i>04-12-05</i>										
2	04-12-05										
0.4.540	09-21-05										
QA Ea 42	04-20-05 09-27-05										
QA Ea 45	04-20-05 09-27-05										
QA Ea 48	04-21-05										
	04-21-05										
QA Ea 59	09-27-05 04-12-05										
Ç	04-18-05 09-27-05										
QA Ea 60	04-20-05										
	04-20-05										
QA Ea 61	09-28-05 04-21-05										
	09-27-05										
QA Ea 77	09-12-05 09-12-05										
QA Ea 78	05-18-05	<.05	<.05	<.05	<.2	<.05	<.05	<.05	<.05	<.05	<.05
QA Ea 79	09-12-05 09-16-05										
QA Ea 80	09-16-05										
QA Ea 81 QA Ea 82	09-12-05 04-13-05										
	09-27-05										
QA Eb 144	04-19-05										
QA Eb 155	09-28-05 09-15-05										
QA Eb 156	09-14-05										
QA Eb 157	09-14-05 05-18-05										
V.1. 20 13/	05-18-05										
	09-14-05										
OA Ea 40	09-14-05										
QA Fa 49 QA Fa 54	04-13-05 04-12-05										

Well Number	Date	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Sima- zine, water, fltrd, ug/L (04035)	Terba- cil, water, fltrd, ug/L (04032)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)
QA Db 14	04-12-05 04-18-05			 				 			
QA Db 15	09-21-05 04-18-05 09-21-05	  	  	  	  	  	  	  	  	  	  
QA Db 17	04-18-05 09-21-05										
QA Db 23 QA Db 27	04-12-05 04-18-05										
QA Db 30 QA Db 32	09-21-05 09-13-05 09-13-05	 	  	 	  	  	  	  	  	 	  
QA Db 34 QA Db 35	09-15-05 09-14-05										
QA Db 37 QA Ea 39	09-15-05 04-12-05 04-12-05 09-21-05	  	  	  	  	  	  	  	  	  	  
QA Ea 42	04-20-05 09-27-05										
QA Ea 45	04-20-05 09-27-05										
QA Ea 48	04-21-05 04-21-05										
QA Ea 59	09-27-05 04-12-05 04-18-05 09-27-05	  	  	  	  	  	  	  	  	  	  
QA Ea 60	04-20-05 04-20-05										
QA Ea 61	09-28-05 04-21-05 09-27-05	 	 	 	 	 	 	  	 	 	 
QA Ea 77	09-12-05 09-12-05										
QA E 78	05-18-05 09-12-05	<.05	<.05	<.05	<.05	<.2	<.1 	<.2 	<.1 	<.2	<.1 
QA Ea 79 QA Ea 80	09-16-05 09-16-05										
QA Ea 81 QA Ea 82	09-12-05 04-13-05										
QA Eb 144	09-27-05 04-19-05										
QA Eb 155 QA Eb 156	09-28-05 09-15-05 09-14-05 09-14-05	  	  	  	  	  	  	  	  	  	  
QA Eb 157	05-18-05										
	05-18-05 09-14-05 09-14-05	 	 	 	 	 	 	  	 	 	 
QA Fa 49 QA Fa 54	04-13-05 04-12-05										

Well Number	Date	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)
QA Db 14	04-12-05										
QA DU 14	04-12-05										
	09-21-05										
QA Db 15	04-18-05 09-21-05										
OA DI- 17											
QA Db 17	04-18-05 09-21-05										
QA Db 23	04-12-05										
QA Db 27	04-18-05										
	00 21 05										
QA Db 30	09-21-05 09-13-05										
QA Db 32	09-13-05										
QA Db 34	09-15-05										
QA Db 35	09-14-05										
QA Db 37	09-15-05										
QA Ea 39	04-12-05										
	04-12-05										
	09-21-05										
QA Ea 42	04-20-05										
	09-27-05										
QA Ea 45	04-20-05										
QA Ea 48	09-27-05 04-21-05										
QA La 40											
	04-21-05										
OA Ec. 50	09-27-05										
QA Ea 59	04-12-05 04-18-05										
	09-27-05										
OA Ec. 60	04 20 05										
QA Ea 60	04-20-05 04-20-05										
	09-28-05										
QA Ea 61	04-21-05										
•	09-27-05										
QA Ea 77	09-12-05										
	09-12-05										
QA Ea 78	05-18-05	<.1	<.2	<.2	<.2	<.2	<.2	<.5	<.2	<.1	<.2
OA Eo. 70	09-12-05										
QA Ea 79	09-16-05										
QA Ea 80	09-16-05										
QA Ea 81	09-12-05										
QA Ea 82	04-13-05 09-27-05										
QA Eb 144	04-19-05										
<b>C</b>											
QA Eb 155	09-28-05 09-15-05										
QA Eb 156	09-13-05										
Z11 EU 130	09-14-05										
QA Eb 157	05-18-05										
	05-18-05										
	09-14-05										
	09-14-05										
QA Fa 49	04-13-05										
QA Fa 54	04-12-05										

Well Number	Date	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)
QA Db 14	04-12-05										
	04-18-05										
QA Db 15	09-21-05 04-18-05										
QN Do 15	09-21-05										
QA Db 17	04-18-05										
QIIDO II	09-21-05										
QA Db 23	04-12-05										
QA Db 27	04-18-05										
0.1.70.	09-21-05										
QA Db 30 QA Db 32	09-13-05 09-13-05										
QA Db 32 QA Db 34	09-15-05										
QA Db 35	09-14-05										
QA Db 37	09-15-05										
QA Ea 39	<i>04-12-05</i> 04-12-05										
	09-21-05										
QA Ea 42	04-20-05										
QA Ea 42	09-27-05										
QA Ea 45	04-20-05										
QA Ea 48	09-27-05 04-21-05										
Q/I Du 40											
	<i>04-21-05</i> 09-27-05										
QA Ea 59	04-12-05										
	04-18-05										
	09-27-05										
QA Ea 60	04-20-05										
	<i>04-20-05</i> 09-28-05										
QA Ea 61	04-21-05										
	09-27-05										
QA Ea 77	09-12-05										
QA Ea 78	<i>09-12-05</i> 05-18-05	98.19	 <.1	<.2	 <.1	<.2	 <.1	102.68	<.2	<.2	<.2
QA Ea 76	09-12-05										
QA Ea 79	09-16-05										
QA Ea 80	09-16-05										
QA Ea 81	09-12-05										
QA Ea 82	04-13-05 09-27-05										
QA Eb 144	04-19-05										
	09-28-05										
QA Eb 155	09-28-05										
QA Eb 156	09-14-05										
QA Eb 157	<i>09-14-05</i> 05-18-05										
Z11 E0 151			-		=	-		=	-		· <del>-</del>
	05-18-05 09-14-05										
	09-14-05										
QA Fa 49	04-13-05										
QA Fa 54	04-12-05										

Well Number	Date	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)
QA Db 14	04-12-05 04-18-05 09-21-05	  	 	  	 	  	  	  	 	 	 
QA Db 15	04-18-05 09-21-05	 	 	 	 	 	 	 	 	 	 
QA Db 17	04-18-05 09-21-05										
QA Db 23 QA Db 27	04-12-05 04-18-05										
QA Db 30 QA Db 32 QA Db 34 QA Db 35	09-21-05 09-13-05 09-13-05 09-15-05 09-14-05	   	   	   	   	   	   	   	   	   	   
QA Db 37 QA Ea 39	09-15-05 04-12-05 04-12-05 09-21-05	  	  	  	  	  	  	  	  	  	  
QA Ea 42	04-20-05 09-27-05										
QA Ea 45 QA Ea 48	04-20-05 09-27-05 04-21-05	  	  	  	  	  	  	  	  	  	  
QA Ea 59	04-21-05 09-27-05 04-12-05 04-18-05 09-27-05	   	   	   	   	   	   	   	   	   	   
QA Ea 60	04-20-05 04-20-05										
QA Ea 61	09-28-05 04-21-05 09-27-05	 	 	 	 	 	 	 	 	 	 
QA Ea 77	09-12-05 09-12-05										
QA Ea 78 QA Ea 79	05-18-05 09-12-05 09-16-05	<.2  	<2.5 	<.1 	<.2 	<.2 	<.1 	<.3mc	<.1 	<.2 	<.2mc
QA Ea 80 QA Ea 81 QA Ea 82	09-16-05 09-12-05 04-13-05 09-27-05	   	   	   	   	   	   	   	   	   	   
QA Eb 144	04-19-05										
QA Eb 155 QA Eb 156 QA Eb 157	09-28-05 09-15-05 09-14-05 09-14-05 05-18-05	   	   	   	   	   	   	   	   	   	   
QA Fa 49 QA Fa 54	05-18-05 09-14-05 09-14-05 04-13-05 04-12-05	   	   	  	   	   	   	   	   	   	   

Well Number	Date	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Iso- propyl- benzene water unfltrd ug/L (77223)	Naphthalene, water, unfltrd ug/L (34696)
QA Db 14	04-12-05										
	04-18-05										
QA Db 15	09-21-05 04-18-05										
	09-21-05										
QA Db 17	04-18-05										
<b>C</b>	09-21-05										
QA Db 23	04-12-05										
QA Db 27	04-18-05										
O A DI- 20	09-21-05										
QA Db 30 QA Db 32	09-13-05 09-13-05										
QA Db 34	09-15-05										
QA Db 35	09-14-05										
QA Db 37	09-15-05 <i>04-12-05</i>										
QA Ea 39	04-12-05										
	09-21-05										
QA Ea 42	04-20-05										
_	09-27-05										
QA Ea 45	04-20-05 09-27-05										
QA Ea 48	04-21-05										
	04-21-05										
	09-27-05										
QA Ea 59	04-12-05										
	04-18-05 09-27-05										
0.1.760											
QA Ea 60	04-20-05 04-20-05										
	09-28-05										
QA Ea 61	04-21-05										
	09-27-05										
QA Ea 77	09-12-05										
QA Ea 78	<i>09-12-05</i> 05-18-05	 <.1	<.2	<.2	<.2	<.2mc	<.2	.1	<.2	<.2	E.3
Q.1.2 / 0	09-12-05										
QA Ea 79	09-16-05										
QA Ea 80	09-16-05										
QA Ea 81 QA Ea 82	09-12-05 04-13-05										
QA La 62	09-27-05										
QA Eb 144	04-19-05										
	09-28-05										
QA Eb 155	09-15-05										
QA Eb 156	09-14-05 09-14-05										
QA Eb 157	05-14-05										
	05-18-05										
	09-14-05										
OA E- 40	09-14-05										
QA Fa 49 QA Fa 54	04-13-05 04-12-05										
Z	J. 12 03										

Well Number	Date	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)
QA Db 14	04-12-05										
	04-18-05 09-21-05										
QA Db 15	04-18-05										
	09-21-05										
QA Db 17	04-18-05										
-	09-21-05										
QA Db 23	04-12-05										
QA Db 27	04-18-05										
0.1.70.00	09-21-05										
QA Db 30 QA Db 32	09-13-05 09-13-05										
QA Db 32 QA Db 34	09-13-03										
QA Db 35	09-14-05										
QA Db 37	09-15-05										
QA Ea 39	04-12-05										
	04-12-05										
	09-21-05										
QA Ea 42	04-20-05										
QA Ea 45	09-27-05 04-20-05										
QA La 43	09-27-05										
QA Ea 48	04-21-05										
	04-21-05										
	09-27-05										
QA Ea 59	04-12-05										
	04-18-05 09-27-05										
QA Ea 60	04-20-05										
	04-20-05 09-28-05										
QA Ea 61	04-21-05										
	09-27-05										
QA Ea 77	09-12-05										
_	09-12-05										
QA Ea 78	05-18-05 09-12-05	<.2	<.2	<.2	<.1 	<.2	<.2	<.1 	<.2	.2	100.32
QA Ea 79	09-12-05										
QA Ea 80	09-16-05										
QA Ea 80 QA Ea 81	09-10-05										
QA Ea 82	04-13-05										
O + E1 144	09-27-05										
QA Eb 144	04-19-05										
0.4 El 155	09-28-05										
QA Eb 155	09-15-05										
QA Eb 156	09-14-05 09-14-05										
QA Eb 157	05-18-05										
	05-18-05										
	09-14-05										
0.4.774.2	09-14-05										
QA Fa 49	04-13-05										
QA Fa 54	04-12-05										

Well Number	Date	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Rn-222 2-sigma water unfltrd pCi/L (76002)	Rn-222, water, unfltrd pCi/L (82303)
QA Db 14	04-12-05									
QA DU 14	04-12-05									
	09-21-05									
QA Db 15	04-18-05 09-21-05									
0.1 70.1 45										
QA Db 17	04-18-05									
QA Db 23	09-21-05 04-12-05									
QA Db 27	04-12-05									
OA Db 20	09-21-05 09-13-05									
QA Db 30 QA Db 32	09-13-05									
QA Db 34	09-15-05									
QA Db 35	09-14-05									
QA Db 37	09-15-05									
QA Ea 39	04-12-05									
	04-12-05									
	09-21-05									
QA Ea 42	04-20-05									
_	09-27-05									
QA Ea 45	04-20-05									
QA Ea 48	09-27-05 04-21-05									
QA La 40										
	04-21-05									
OA Ec. 50	09-27-05									
QA Ea 59	04-12-05 04-18-05									
	09-27-05									
OA Eo 60	04-20-05									
QA Ea 60	04-20-05									
	09-28-05									
QA Ea 61	04-21-05									
	09-27-05									
QA Ea 77	09-12-05									
OA Eo 79	09-12-05	 - 1			 - 1		 - 1		10	210
QA Ea 78	05-18-05 09-12-05	<.1 	<.2	<.2	<.1 	<.2	<.1 	<.2	19 	210
QA Ea 79	09-16-05									
QA Ea 80	09-16-05									
QA Ea 80 QA Ea 81	09-10-05									
QA Ea 82	04-13-05									
	09-27-05									
QA Eb 144	04-19-05									
	09-28-05									
QA Eb 155	09-15-05									
QA Eb 156	09-14-05									
OA EL 157	09-14-05									
QA Eb 157	05-18-05									
	05-18-05									
	09-14-05									
QA Fa 49	<i>09-14-05</i> 04-13-05									
QA Fa 54	04-13-05									
-										

#### QUEEN ANNES COUNTY, MARYLAND-Continued

Well Number	Date	Time	Sampl	e type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Flow rate, instantaneous gal/min (00059)
QA Fa 54 QA Fa 58 QA Fa 60 QA Fa 63	09-30-05 09-30-05 04-20-05 09-30-05 04-13-05	1000 1330 1400 1130 1120	Environ Environ Environ Environ Environ	mental mental mental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420	80020 80020 80020 80020 80020	260 280 240.00 240 235.00	260 280 240 240 235	240 260 230 230 200	5 6  2
QA Fa 64 QA Fa 66	09-30-05 04-19-05 09-27-05 04-12-05 09-28-05	1300 1120 1400 1450 1200	Environ Environ Environ Environ Environ	mental mental mental mental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420 82420 82420	80020 80020 80020 80020 80020 80020	235 231.00 231 270.00 270	235 231 231 270 270	200 191 191 250 250	6  6  4
QA Fa 67 QA Fa 72	09-28-05 04-13-05 09-30-05 04-12-05 09-30-05	1205 1015 1200 1130 1100	Blank Environ Environ Environ Environ	mental mental	125AQUI 125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420	80020 80020 80020 80020 80020	270 270.00 270 220.00 220	270 270 270 220 220	250 250 200 200	3  6
QA Fa 74 QA Fa 75	04-21-05 09-28-05 04-13-05 09-30-05	1030 1300 1445 1200	Environ Environ Environ Environ	mental mental	125AQUI 125AQUI 125AQUI 125AQUI	82420 82420 82420 82420	80020 80020 80020 80020	280 280 200.00 200	200 200	180 180	4  5
	We Numl		Date	Pump or flow period prior to sam- pling, minutes (72004)	Sam- pling method, code (82398)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)		
	QA Fa 54 QA Fa 58 QA Fa 60 QA Fa 63		09-30-05 09-30-05 04-20-05 09-30-05 04-13-05	21 20 15 6 25	4040 4040 8030 4040 8030	7.6 7.8 8.0 8.2 6.7	355 468 422 428 453	16.3 16.3 28.1 22.0 15.6	11.2 9.01 9.54 10.1 8.22		
	QA Fa 64 QA Fa 66		09-30-05 04-19-05 09-27-05 04-12-05 09-28-05	11 15 18 20 15	4040 8030 4040 8030 4040	7.1 7.6 7.7 7.3 7.7	465 1,210 1,230 508 517	15.8 16.0 17.4 15.5 17.2	8.33 296 293 20.5 20.3		
	QA Fa 67 QA Fa 72		09-28-05 04-13-05 09-30-05 04-12-05 09-30-05	13 33 42 19	8030 4040 8030 4040	7.3 7.7  7.8	344 351 486 495	15.8 16.3 15.4 16.2	<.20 10.9 11.1 14.5 14.8		
	QA Fa 74		04-21-05	19	8030	7.5	448	15.4	10.9		

Remark codes used in this table:

Value qualifier codes used in this table:

Geologic Unit (aquifer): 125AQUI - Aquia Formation

Agency collecting sample: 82420 - Maryland Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

8030 - Grab sample at water-supply tap

<sup>&</sup>lt; -- Less than. E -- Estimated.

c-- See laboratory comment

d-- Diluted sample: method hi range exceeded m-- Value is highly variable by this method

n-- Below the LRL and above the LT-MDL

# QUALITY OF GROUND WATER DATA SOMMERSET COUNTY, MARYLAND

Well Number	Date	Time	Sample	e type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
SO De 44	08-23-05 08-23-05	1330 <i>1400</i>	Environr Replicate		112CLMB 112CLMB	1028 1028	80020 80020	43 43	43 43	40 40	1.55 1.55
	Date	Pump or flow period prior to sam- pling, minutes (72004)	Sampling depth, feet (00003)	Sampling method, code (82398)	Tur- bidity, water, unfltrd field, NTU (61028)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
SO De 44	08-23-05 08-23-05	95 95	39.0 39.0	4040 <i>4040</i>	12	765 	1.0	10	6.3	168	24.0
	Date	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
SO De 44	08-23-05 08-23-05	17.4	46 45	10.2 10.0	5.03 4.87	2.28 2.22	7.57 7.35	66 	80	10.2 10.4	.2 .2
	Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)
SO De 44	08-23-05 08-23-05	34.1 34.8	2.8 2.8	129 128	.26 .25	<.06 <.06	<.008 <.008	.29 .31	.437d .429d	Mn Mn	<.20 <.20
	Date	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)
SO De 44	08-23-05 08-23-05	E.1n <i>E.1n</i>	12 12	E.03n <i>E.04n</i>	25 26	<.04 <.04	E.5n <i>E.4n</i>	.039 .036	<.4 <.4	12300d 12800d	<.08 <.08

Geologic Unit (aquifer): 112CLMB - Columbia Formation

Agency collecting sample: 1028 - U.S. Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

Sampling Method: 4040 - Submersible pump

### SOMMERSET COUNTY, MARYLAND—Continued

Well Number	Date	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
SO De 44	08-23-05 08-23-05	9.3 10.0	264 272	<.4 <. <i>4</i>	.56 .57	<.4 <.4	.4 .5	38.4 39.2	<.04 <.04	.5 .1	1.8 2.4
	Date	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2Chloro -2',6-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
SO De 44	08-23-05 08-23-05	<.09mc <.09mc	<.006 <.006	<.005 <.005	<.006mc <.006mc	<.004mc <.004mc	<.004mc <.004mc	<.004 <.004	<.006mc <.006mc	<.006 <.006	<.005 <.005
	Date	alpha- Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atra- zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)
SO De 44	08-23-05 08-23-05	<.005 <.005	78.1 84.9	<.007 <.007	<.07mc <.07mc	<.050mc <.050mc	<.010 <.010	<.041mc <.041mc	<.020mc <.020mc	<.06mc <.06mc	<.005 <.005
	Date	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cyflu- thrin, water, fltrd, ug/L (61585)	Cyper- methrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)
SO De 44	08-23-05 08-23-05	<.006 <.006	<.008mc <.008mc	<.018 <.018		<.009mc <.009mc	<.003 <.003	<.012 <.012	<.005 <.005	95.1 <i>101</i>	<.08mc <.08mc
	Date	Diel- drin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulf- oton sulfone water, fltrd, ug/L (61640)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Endo- sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)
SO De 44	08-23-05 08-23-05	<.009 <.009	<.006mc <.006mc	<.01 <.01	<.02mc <.02mc	<.014 <.014	<.004 <.004	<.002mc <.002mc	<.004 <.004	<.005 <.005	<.049 <.049

#### SOMMERSET COUNTY, MARYLAND—Continued

Well Number	Date	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)
SO De 44	08-23-05 08-23-05	<.04mc <.04mc	<.03 <.03	<.029 <.029	<.013 <.013	<.024 <.024	<.016 <.016	<.003 <.003	<.013 <.013	<.538mc <.538mc	<.003 <.003
	Date	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)
SO De 44	08-23-05 08-23-05	<.030 <.030	<.027 <.027	<.005 <.005	<.006 <.006	<.03mc <.03mc	<.015 <.015	<.006 <.006	<.006 <.006	<.003 <.003	<.008 <.008
	Date	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propanil, water, fltrd 0.7u GF ug/L (82679)
SO De 44	08-23-05 08-23-05	<.007 <.007	<.022 <.022	<.10mc <.10mc	<.011 <.011	<.05mc <.05mc	<.008mc <.008mc	<.01 <.01	<.005 <.005	<.004 <.004	<.011 <.011
	Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Teflu- thrin, water, fltrd, ug/L (61606)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribu- phos, water, fltrd, ug/L (61610)
SO De 44	08-23-05 08-23-05	<.02 <.02	<.005 <.005	<.02 <.02	<.008mc <.008mc	<.07 <.07	<.02 <.02	<.01 <.01	<.010 <.010	<.01mc	<.004mc <.004mc
	Date	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)
SO De 44	08-23-05 08-23-05	<.009 <.009	<.03b <.03b	<.03b <.03b	<.08b <.08b	<.04b <.04b	<.04b <.04b	<.04b <.04b	<.02b <.02b	<.03b <.03b	<.1 <.1

### SOMMERSET COUNTY, MARYLAND—Continued

Well Number	Date	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)
SO De 44	08-23-05 08-23-05	<.1b <.1b	<.2 <.2	<.18 <.18	<.1b <.1b	<.1 <.1	<.06b <.06b	<.5 <.5	<.04b <.04b	<.05b <.05b	<.1 <.1
	Date	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)
SO De 44	08-23-05 08-23-05	98.6 99.7	<.03b <.03b	<.04b <.04b	<.03b <.03b	<.1b <.1b	<.03b <.03b	113 114	<.05b <.05b	<.04b <.04b	<.06b <.06b
	Date	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)
SO De 44	08-23-05 08-23-05	<.50mc <.50mc	<.05b <.05b	<.08b <.08b	<6 <6	<.8 <.8	<.02b <.02b	<.03b <.03b	<.12 <.12	<.03b <.03b	<.1 <.1
	Date	Bromo- methane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)
SO De 44	08-23-05 08-23-05	<.3mc <.3mc	<.04b <.04b	<.03b <.03b	<.1 <.1	<.2mc	<.02b <.02b	<.05b <.05b	<.1 <.1	<.05b <.05b	<.18mc <.18mc
	Date	Di- chloro- methane water unfltrd ug/L (34423)	Di- ethyl ether, water, unfltrd ug/L (81576)	Diiso- propyl ether, water, unfltrd ug/L (81577)	Ethyl methac- rylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iodo- methane water unfltrd ug/L (77424)	Iso- butyl methyl ketone, water, unfltrd ug/L (78133)
SO De 44	08-23-05 08-23-05	.1 .1	<.1b <.1b	<.10 <.10	<.2 <.2	<2.0 <2.0	<.03b <.03b	<.1b <.1b	<.1 <.1	<.50mc <.50mc	<.4b <.4b

#### SOMMERSET COUNTY, MARYLAND—Continued

Well Number	Date	Iso- propyl- benzene water unfltrd ug/L (77223)	Methyl acrylo- nitrile water unfltrd ug/L (81593)	Methyl acryl- ate, water, unfltrd ug/L (49991)	Methyl methac- rylate, water, unfltrd ug/L (81597)	Methyl tert- pentyl ether, water, unfltrd ug/L (50005)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)
SO De 44	08-23-05 08-23-05	<.04b <.04b	<.4 <. <i>4</i>	<1.0 <1.0	<.2 <.2	<.04b <.04b	<.06b <.06b	<.5 <.5	<.4b <.4b	<.1b <.1b	<.04b <.04b
	Date	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Tetra- hydro- furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)
SO De 44	08-23-05 08-23-05	<.04b <.04b	<.06b <.06b	<.04b <.04b	<.03b <.03b	<.1 <.1	<.06b <.06b	<.03b <.03b	<.06b <.06b	<1b	<.02b <.02b
	Date	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	trans- 1,4-Di- chloro- 2- butene, wat unf ug/L (73547)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Di- chlor- vos, water fltrd, ug/L (38775)
SO De 44	08-23-05 08-23-05	105 107	<.03b <.03b	<.09b <.09b	<.7b <.7b	<.10 <.10	<.04b <.04b	<.08b <.08b	<.02b <.02b	<.1b <.1b	<.01mc <.01mc

Uranium natural water, fltrd, ug/L (22703) Date

08-23-05 08-23-05 SO De 44 <.04 <.04

Remark codes used in this table:

< -- Less than. E -- Estimated.

M -- Presence verified but not quantified.

Value qualifier codes used in this table:
b -- Value extrapolated at low end
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded m -- Value is highly variable by this

method

 $\boldsymbol{n}\,$  -- Below the LRL and above the LT-MDL

# QUALITY OF GROUND WATER DATA ${\tt TALBOT\ COUNTY,\ MARYLAND}$

Well Number	Date	Time	Samp	le type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
TA Ce 7	05-18-05 05-18-05	1100 1105	Enviror <i>Replica</i>		122CLVR 122CLVR	82420 82420	80020 80020	104 104	104.00 104	102 102	95 95
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)
TA Ce 7	05-18-05 05-18-05	4.0 4.0	98 	6.8	<1.0	7.7 	364	17.7 	150 160	39.3 40.8	12.8 13.1
	Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)
TA Ce 7	05-18-05 05-18-05	5.88 5.96	14.8 15.4	180	220	2.53 2.55	.3 .3	41.1d <i>47.0d</i>	3.0 3.0	255 254	.18 .18
	Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water, fltrd, ug/L (01000)	Beryll- ium, water, fltrd, ug/L (01010)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)
TA Ce 7	05-18-05 <i>05-18-05</i>	<.06 <.06	<.008 <.008	<.02 E.01n	<.04 <.04	4.3 4.2	<.2 <.2	<.06 <.06	65 69	520 550	<.08 <.08
	Date	Manganese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Thall- ium, water, fltrd, ug/L (01057)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)
TA Ce 7	05-18-05 05-18-05	2.3 2.1	2.3 2.2	.01 <i>E.01n</i>	<.04 <.04	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05

Geologic Unit (aquifer): 122CLVR - Calvert Formation

Agency collecting sample: 82420 - Maryland Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

### TALBOT COUNTY, MARYLAND—Continued

Well Number	Date	Butylate, water, fltrd, ug/L (04028)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)	Hexa- zinone, water, fltrd, ug/L (04025)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propa- chlor, water, fltrd, ug/L (04024)
TA Ce 7	05-18-05 <i>05-18-05</i>	<.05 <.05	<.20 <.20	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05	<.05 <.05
	Date	Sima- zine, water, fltrd, ug/L (04035)	Terba- cil, water, fltrd, ug/L (04032)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)
TA Ce 7	05-18-05 05-18-05	<.05 <.05	<.05 <.05	<.2 <.2	<.1 <.1	<.2 <.2	<.1 <.1	<.2 <.2	<.1 <.1	<.1 <.1	<.2 <.2
	Date	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)
TA Ce 7	05-18-05 05-18-05	<.2 <.2	<.2 <.2	<.2 <.2	<.2 <.2	<.5 <.5	<.2 <.2	<.1 <.1	<.2 <.2	98.5 99.6	<.1 <.1
	Date	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylo- nitrile water unfltrd ug/L (34215)
TA Ce 7	05-18-05 05-18-05	<.2 <.2	<.1 <.1	<.2 <.2	<.1 <.1	95.9 95.2	<.2 <.2	<.2 <.2	<.2 <.2	<.2 <.2	<2.5 <2.5
	Date	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodi- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)
TA Ce 7	05-18-05 05-18-05	<.1 <.1	<.2 <.2	<.2 <.2	<.1 <.1	<.3mc	<.1 <.1	<.2 <.2	<.2mc <.2mc	<.1 <.1	<.2 <.2

#### TALBOT COUNTY, MARYLAND—Continued

Well Number	Date	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Iso- propyl- benzene water unfltrd ug/L (77223)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)
TA Ce 7	05-18-05 05-18-05	<.2 <.2	<.2 <.2	<.2mc <.2mc	<.2 <.2	.2 .2	<.2 <.2	<.2 <.2	E.3 E.3	<.2 <.2	<.2 <.2
	Date	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)
TA Ce 7	05-18-05 05-18-05	<.2 <.2	<.1 <.1	<.2 <.2	<.2 <.2	<.1 <.1	<.2 <.2	.2 .2	98.4 98.7	<.1 <.1	<.2 <.2
TA	3. 7		unf ate ug (32)	mo- chlohane ethotter wa ltrd unf /L ug 104) (39	ri- chlororo- fluorene, metleter, was litred unf	oro- chlohane met tter wa Itrd unf t/L ug 488) (32	oro- chl hane id ater wa fltrd unf g/L ug 106) (39	le, 2-si ter, wa Itrd und t/L pC 175) (76	fltrd unf Ci/L pC 002) (823	ter, ltrd i/L 303)	
TAO	Ce 7		8-05 < 8-05 <	.2 <	.1 <		i.1 <	.2 2 .2 2		30 50	

Remark codes used in this table:

< -- Less than. E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL

# QUALITY OF GROUND WATER DATA WASHINGTON COUNTY, MARYLAND

Well Number	Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	0950 1015 1115 1020 0900	Environn Environn Environn Environn Environn	nental nental nental	377TMSN 377TMSN 377TMSN 377TMSN 377TMSN	1028 1028 1028 1028 1028	80020 80020 80020 80020 80020	166.00 166.00 166.00 166.00 100.00	100 166 166 166 100	57 57 57 57 57 83	38.20 36.60 31.81 40.92 44.70
·	02-15-05 05-17-05 05-17-05 08-11-05	0950 0715 0845 0745	Environn Blank Environn Environn	nental	377TMSN 377TMSN 377TMSN 377TMSN	1028 1028 1028 1028	80020 80020 80020 80020	100.00 100.00 100.00	100  100 100	83 83 83	43.50  39.20 45.75
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)	Turbidity, water, unfltrd field, NTU (61028)	Baro- metric pres- sure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	2.8 3.0 3.0 2.9 2.4	120 100 90 75 70	4040 4040 4040 4040 4040	1.0 1.0 1.0 1.0 1.0	739 747 750 748 750	7.2 8.4 6.2 5.0 6.6	70 76 61 53 64	7.2 7.0 7.3 7.2 7.3	500 507 515 508 395	6.0 .5 22.5 26.5 11.0
	02-15-05 05-17-05 05-17-05 08-11-05	2.0 2.1 2.5	80  80 65	4040 4040 4040 4040	1.0  1.0 1.0	750  750 748	7.3  6.7 6.7	70  65 67	7.3 7.4 7.3	392  401 389	3.5  15.0 24.5
	Date	Temper- ature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	12.6 10.2 13.6 17.2 13.1	280 270 270 280 190	72.7 70.8 67.7 74.2 49.9	23.0 23.9 24.3 24.1 15.3	1.46 1.44 1.46 1.36 2.57	3.77 3.91 4.12 3.94 4.22	216 199 227 224 137	263 243 276 272 169	.03    .03	9.99 9.85 11.0 10.2 15.2
•	02-15-05 05-17-05 05-17-05 08-11-05	12.4  13.5 14.1	200 200 200	52.9 .05 51.6 54.0	16.2 <.008 16.3 16.0	2.51 <.16 2.51 2.46	4.24 E.11n 3.88 3.93	148  141 133	181  172 162	.07  	14.3 <.20 12.6 13.1

Geologic Unit (aquifer): 377TMSN - Tomstown Dolomite

Agency collecting sample: 1028 - U.S. Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

Sampling Method: 4040 - Submersible pump

#### WASHINGTON COUNTY, MARYLAND—Continued

Well Number		<b>D</b> ate	water, fltrd, mg/L	water, fltrd, mg/L	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, wat flt by anal ysis, mg/L (62854)	Orthophosphate, water, fltrd, mg/L as P (00671)
WA Bj 51 WA Cj 132	02- 05- 08-	05-04 14-05 17-05 11-05 19-04	.1 .1 .1 .1	9.71 9.88 10.2 9.48 13.1	5.9 5.8 5.8 5.7 6.2	264 285 276 279 216d	<.04 <.04 <.04 <.04 <.04	   	4.48 4.44 4.61 4.57 7.37d	<.008 <.008 <.008 <.008	4.67 4.66 4.79 4.61 7.59d	.010 .011 .010 .006 .007
	<i>05-</i> 05-	15-05 17-05 17-05 11-05	<.1	12.8 .43 12.6 11.8	6.5 <.2 6.3 6.4	222 <10 228 220	<.04  <.04 <.04	7.56   	7.57d  7.46d 7.38d	.008  <.008 <.008	7.78d  7.79d 7.46d	.009  .008 .006
	Ē	)ate	water, fltrd, ug/L	water, fltrd, ug/L	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
WA 6: 132	02- 05- 08-	05-04 14-05 17-05 11-05 19-04	  Mn 	  <.20	  <.2 	  32 	 <.06 	  <8 	  <.04 	  E.5n 	.204	2.3
WA Cj 132	02- 05- 05-	15-05 17-05 17-05 11-05	 2 <2 	 <.20 <.20	 <.2 E.1n	 Mn 45	<.06 <.06	 <8 E5n	<.04 <.04	 E.4n E.6n 	E.008n .159	 .4 5.0
	Е	Oate (	water, fltrd, ug/L	water, fltrd, ug/L	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Thall- ium, water, fltrd, ug/L (01057)
WA Bj 51 WA Cj 132	02- 05- 08-	05-04 14-05 17-05 11-05 19-04	<6 <6 <6 <6 <6	  .22 	  1.7 	<.6 E.6n E.1n <.6 <.6	  <.4 	3.15	  <.4 	  <.2 	59.0 	  <.04 
	02- 05- 05-	15-05 17-05 17-05 11-05	<6 <6 E5n <6	.10 .18	 <.6 16.1 	E.3n <.2 .6 .8	<.4 <.4	.17 2.28	<.4 E.3n	<.2 <.2 <.2	.95c 129	<.04 <.04
Well Number	Date	Vanadium, water, fltrd, ug/L (01085	Zinc, water, fltrd, ug/L	1-Naph thol, water, fltrd 0.7u GI ug/L (49295)	anilir wate fltrd F 0.7u C	l2',0 ne dietl er ace l anili GF wat ug/	5-' nyl t- CL de wa flt flt L ug	AT, tter, rd, t/L 040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	3,5-Di- chloro- aniline water, fltrd, ug/L (61627	2 methyl phenol, water, fltrd, ug/L
WA Bj 51	11-05-04			<.09	<.00				<.004	<.004 <.004		<.006
WA Cj 132	02-14-05 05-17-05 08-11-05 11-19-04	.2 	2.5	<.09mo <.09mo <.09mo <.09	c <.00	6 <.00 6 <.00	)5 E.06 )5 E.05	55mc 56mc 58mc 32	<.004mc <.004mc <.004mc <.004	<.004 <.004mc <.004mc <.004		<.006mc <.006mc <.006mc <.006

#### WASHINGTON COUNTY, MARYLAND—Continued

WA Bj 51	Date  11-05-04 02-14-05 05-17-05 08-11-05	Aceto-chlor, water, fltrd, ug/L (49260)  <.006 <.006 <.006 <.006	Ala- chlor, water, fltrd, ug/L (46342) <.005 <.005 <.005 <.005	Endo- sulfan, water, fltrd, ug/L (34362)	alpha- HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	Atrazine, water, fltrd, ug/L (39632)  .107 .093 .090 .082	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)  <.07 <.07mc <.07mc <.07mc	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)  <.010 <.010 <.010 <.010	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)
WA Cj 132	11-19-04 02-15-05	<.006 <.006	<.005 <.005		80.4 99.4	.135	<.07	<.050 <.050mc	<.010 <.010	<.041 <.041mc	
	05-17-05 05-17-05										
	08-11-05	<.006	<.005	<.005	85.1	.121	<.07mc	<.050mc	<.010	<.041mc	<.020mc
	Date	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	cis- Propi- cona- zole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041	thrin , water fltrd, ug/L	, met ; wa ; flti ug	hrin w ter, f rd, 0.7 /L u	Desu iny CPA, fipro vater nil, ltrd wate lu GF fltro ug/L ug/I 2682) (6217	Diaz- inon oxon, r, water, l, fltrd, ug/L
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	<.06 <.06mc <.06mc <.06mc <.06	<.005 <.005 <.005 <.005 <.005	<.006 <.006 <.006 <.006 <.006	  <.008mc	  <.018	<.008 <.027r <.027r <.027r <.008	nc <.00	9mc < 9mc < 9mc <	.003 <.01 .003 <.01 .003 <.01 .003 <.01 .003 <.01	2 <.01 2 <.01 2
	02-15-05 05-17-05 05-17-05 08-11-05	<.06mc	<.005   <.005	<.006  <.006	  <.008mc	  <.018	<.027r   <.027r	-	-	.003 <.01  .003 <.01	
Well Number	Date	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog, Sch2003 wat flt percent recovry (99994)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimeth oate, water, fltrd 0.7u Gi ug/L (82662	oton , sulfon water F fltrd, ug/L	foton, water, fltrd 0.7u GI ug/L	ug/L	fltrd 0.7u GF ug/L	Ethion monoxon water, fltrd, ug/L (61644)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	<.005 <.005 <.005	84.4 89.5 77.4 87.6 57.4	<.08 <.08mc <.08mc <.08mc <.08	<.009 <.009 <.009 <.009 <.009	<.006 <.006m <.006m <.006m <.006	1c	  <.02ma	     	   <.004	<.0020 <.0020mc <.0020mc <.002mc <.002mc
	02-15-05 05-17-05		105	<.08mc	<.009	<.006m	nc				<.0020mc
	05-17-05 08-11-05		83.7	<.08mc	<.009	<.006m	nc <.01	<.02mc	<.014	<.004	<.002mc

### WASHINGTON COUNTY, MARYLAND—Continued

	Date	Ethion, water, fltrd, ug/L (82346)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenami- phos sulfone water, fltrd, ug/L (61645)	Fenami- phos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)
WA Bj 51	11-05-04 02-14-05 05-17-05 08-11-05	<.004 <.004 <.004 <.004	   <.005	<.049 <.049 <.049 <.049	<.04 <.04mc <.04mc <.04mc	<.03 <.03 <.03 <.03	<.029 <.029 <.029 <.029	<.013 <.013 <.013 <.013	<.024 <.024 <.024 <.024	<.016 <.016 <.016 <.016	<.003
WA Cj 132	11-19-04 02-15-05 <i>05-17-05</i> 05-17-05 08-11-05	<.004 <.004   <.004	   <.005	<.049 <.049   <.049	<.04 <.04mc <.04mc <.04mc	<.03 <.03 <.03	<.029 <.029   <.029	<.013 <.013 <.013	<.024 <.024   <.024	<.016 <.016 <.016	<.003
	Date	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	<.003 <.003 <.003 <.003 <.003	<.013 <.013 <.013 <.013 <.013	<.387 <.538mc <.538mc <.538mc <.387	<.003 <.003 <.003 <.003 <.003	<.030 <.030 <.030 <.030 <.030	<.027 <.027 <.027 <.027 <.027	<.005 <.005 .005 <.005 <.005	<.006 <.006 <.006 <.006 <.006	<.03 <.03mc <.03mc <.03mc <.03	<.015 <.015 <.015 <.015 <.015
WA CJ 132	02-15-05 05-17-05 05-17-05 08-11-05	<.003 <.003  <.003	<.013  <.013	<.538mc <.538mc <.538mc	<.003 <.003  <.003	<.030  <.030	<.027 <.027  <.027	<.005  <.005	<.006  <.006	<.03mc	<.015  <.015
Well Number	Date	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclo- butanil water, fltrd, ug/L (61599)	Oxy- fluor- fen, water, fltrd, ug/L (61600)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)
WA Bj 51 WA Cj 132	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	.008 .010 .010 .009 .010	<.006 <.006 <.006 <.006 <.006	  <.003	<.008 <.008 <.008 <.008 <.008	   <.007	<.022 <.022 <.022 <.022 <.022	<.10 <.10mc <.10mc <.10mc <.10	<.011 <.011 <.011 <.011 <.011	<.05 <.05mc <.05mc u <.05	<.008 <.008mc <.008mc u <.008
-	02-15-05 05-17-05 05-17-05 08-11-05	.009   E.006b	<.006  <.006	  <.003	<.008   <.008	  <.007	<.022   <.022	<.10mc   <.10mc	<.011   <.011	<.05mc   u	<.008mc   u

#### WASHINGTON COUNTY, MARYLAND—Continued

	Date	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)
WA Bj 51	11-05-04 02-14-05 05-17-05 08-11-05	<.01 <.01 E.01n Mn	<.005 <.005 <.005 <.005	<.004 <.004 <.004 <.004	   <.011	  <.02	.029 .033 .029 .035	<.02 <.02 <.02 <.02	  <.008mc	<.07 <.07 <.07 <.07	<.02 <.02 <.02 <.02
WA Cj 132	11-19-04	<.01	<.005	<.004			.021	<.02		<.07	<.02
	02-15-05 05-17-05 05-17-05 08-11-05	<.01   <.01	<.005   <.005	<.004   <.004	  <.011	  <.02	.023   .021	<.02   <.02	  <.008mc	<.07   <.07	<.02   <.02
	Well Number	Date	Ter- buthyl- azine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans- Propi- cona- zole, water, fltrd, ug/L (79847)	Tribu- phos, water, fltrd, ug/L (61610)	Tri- flur- alin, water, fltrd 0.7u Gl ug/L (82661	water F fltrd, ug/L	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)	
WA B	•	11-05-04 02-14-05 05-17-05 08-11-05 11-19-04	<.01 <.01 <.01 <.01 <.01	   <.010	  <.01mc	   <.004mc	<.009 <.009 <.009 <.009 <.009	<.01 <.01mc <.01mc <.01mc <.01	 -32 	4040 4040 4040 4040 4040	
		02-15-05	<.01				<.009	<.01mc		4040	

- Remark codes used in this table:
  < -- Less than.
  E -- Estimated.
  M-- Presence verified but not quantified.

- Value qualifier codes used in this table:
  b -- Value extrapolated at low end
  c -- See laboratory comment
  d -- Diluted sample: method hi range exceeded
  m -- Value is highly variable by this method
  n -- Below the LRL and above the LT-MDL

- Null value qualifier codes used in this table: r -- Sample ruined in preparation u -- Unable to determine-matrix interference

Sampler type: 4040 - Submersible pump

# QUALITY OF GROUND WATER DATA WICOMICO COUNTY, MARYLAND

Well Number	Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
WI Ce 13	05-05-05	1000	Environn	nental	112CLMB	82420	80020	65	65	65	45
	Date	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
WI Ce 13	05-05-05	2.90	30.0	42	37	5.0	5.9	165	15.7	37	10.2
	Date	Magnesium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)
WI Ce 13	05-05-05	2.81	2.17	12.9	16	20	12.0	<.1	27.3	15.4	124
	Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water, fltrd, ug/L (01000)	Beryllium, water, fltrd, ug/L (01010)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)
WI Ce 13	05-05-05	<.04	5.14d	<.008	<.02	<.04	.8	.3	<.06	623	3,620
	Date	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Thall- ium, water, fltrd, ug/L (01057)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)
WI Ce 13	05-05-05	E.05n	32.5	32.8	.01	<.04	E.02t	<.05	<.05	<.05	<.05
	Date	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Cyanazine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)	Hexa- zinone, water, fltrd, ug/L (04025)	Metola- chlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)
WI Ce 13	05-05-05	<.05	<.05	<.20	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Geologic Unit (aquifer): 112CLMB - Columbia aquifer

Agency collecting sample: 82420 - Maryland Geological Survey

 $Agency\ analyzing\ sample:\ 80020\ -\ USGS-National\ Water\ Quality\ Lab,\ Denver,\ CO$ 

### WICOMICO COUNTY, MARYLAND—Continued

Well Number	Date	Propa- chlor, water, fltrd, ug/L (04024)	Sima- zine, water, fltrd, ug/L (04035)	Terbacil, water, fltrd, ug/L (04032)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)
WI Ce 13	05-05-05	<.05	<.05	<.05	<.2	<.1	<.2	<.1	<.2	<.1	<.1
	Date	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pet rev (99832)
WI Ce 13	05-05-05	<.2	<.2	<.2	<.2	<.2	<.5	<.2	<.1	<.2	145
	Date	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)
WI Ce 13	05-05-05	<.1	<.2	<.1	<.2	<.1	83.8	<.2	<.2	<.2	<.2
	Date	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloro- methane water unfltrd ug/L (77297)	Bromodi- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)
WI Ce 13	05-05-05	<2.5	<.1	<.2	<.2	<.1	<.3mc	<.1	<.2	<.2mc	<.1
	Date	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Iso- propyl- benzene water unfltrd ug/L (77223)	Naphth- alene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)
WI Ce 13	05-05-05	<.2	<.2	<.2	<.2mc	<.2	<.1	<.2	<.2	<.5	<.2
	Date	n- propyl- benzene water unfltrd ug/L (77224)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)
WI Ce 13	05-05-05	<.2	<.2	<.1	<.2	<.2	<.1	<.2	<.1	104	<.1

#### WICOMICO COUNTY, MARYLAND—Continued

Well Number	Date	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)
WI Ce 13	05-05-05	<.2	<.2	<.1	<.2	.1	<.2

Remark codes used in this table: < -- Less than. E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

#### WORCESTER COUNTY, MARYLAND

Well Number	Date	Time	Sampl	e type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of hole, feet below LSD (72001)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)
WO Ah 36 WO Ah 38 WO Bh 28 WO Bh 29	09-07-05 09-07-05 09-07-05 09-07-05	1500 1430 0900 0855	Environi Environi Environi Environi	mental mental mental	122MNKN 122MNKN 122OCNC 122OCNC	1028 1028 1028 1028	80020 80020 80020 80020	  	430  294 294	430  294 	420  249 248
WO Bh 34 WO Bh 84	09-07-05 05-05-05 09-07-05 09-07-05	1330 1200 0830 0835	Environi Environi Environi Replicat	mental mental	122MNKN 112CLMB 121BVDM 121BVDM	1028 82420 1028 1028	80020 80020 80020 80020	89 	353 89 89 89	353 89 89	337 84 84
WO Bh 85 WO Bh 89	09-07-05 09-07-05	0845 0955	Environi Environi	mental	122PCMK 122MNKN	1028 1028	80020 80020		195 500	195 500	191 495
WO Bh 98 WO Bh 101 WO Bh 102 WO Cg 33	09-07-05 09-07-05 09-07-05 12-27-04 09-07-05	1130 0905 <i>0910</i> 1600 0915	Environi Environi Replicat Environi Environi	mental <i>e</i> mental	1220CNC 1220CNC 1220CNC 122MNKN 1220CNC	1028 1028 1028 82420 1028	80020 80020 80020 80020 80020	  580 	310. 312 312 548 290	285 307  538 290	275 280  528 260
WO Cg 87	09-07-05	0922	Environ	mental	122OCNC	1028	80020		310	305	250
	Date	Depth to water level, feet below LSD (72019)	Flow rate, instan- taneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sam- pling depth, feet (00003)	Sampling method, code (82398)	Baro- metric pres- sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
WO Ah 36 WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	26.12   16.13	30.0    30.0	65    120	   	4040 8010 8010 8010 4040	772 772 772 772 772 772	   	.7   .7	8    7	6.3 6.4 7.0 6.9 6.5
WO Bh 84	05-05-05 09-07-05 09-07-05 09-07-05	4.44 4.70  5.82	40.0 30.0 30.0 20.0	23 60 60 60	  	4030 4030 4040	 772 772 772	39  	4.0 4.0 .7	40 40 7	6.7 6.7 6.7 6.6
WO Bh 89	09-07-05	18.75	20.0	30		4040	772		.8	8	7.7
WO Bh 98 WO Bh 101	09-07-05 09-07-05 09-07-05	92.68  	25.0	30	  	4040 8010 8010	772 772 772	  	.7  	7  	7.3 7.3 7.3
WO Bh 102 WO Cg 33	12-27-04 09-07-05		2.0	420	220	4040 8010	772	9.6 	<1.0		7.9 7.0
WO Cg 87	09-07-05					8010	772				7.3

Geologic Unit (aquifer): 122MNKN - Manokin aquifer 121BVDM - Beaverdam Sand 122OCNC - Ocean City aquifer

112CLMB -Columbia Formation 122PCMK - Pocomoke aquifer

Agency collecting sample: 1028 - U.S. Geological Survey

82420 - Maryland Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump 8010 - Other

Well Number	Date	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
WO Ah 36 WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	732 512 648 608 236	27.0 27.0 25.0 25.0 26.0	17.0    17.5	   	   	   	   	   	   	   
WO Bh 85 WO Bh 89	05-05-05 09-07-05 09-07-05 09-07-05	415 379 379 395 1,940	25.0 25.0 25.0 26.0	16.6 16.5 <i>16.5</i> 17.5 17.5	98    	19.5   	12.0	11.9    	33.4	120    	146   
WO Bh 98 WO Bh 101 WO Bh 102 WO Cg 33	09-07-05 09-07-05 09-07-05 12-27-04 09-07-05	427 392 392 3,790 422	25.0 25.0 25.0  25.0	18.0   24.9	  250	  32.1d	   42.1d	  29.6d 	   712d 	  367	  448 
WO Cg 87	09-07-05	441	25.0								
	Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat fit mg/L (70300)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)
WO Ah 36 WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	Date 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	ide, water, fltrd, mg/L	ide, water, fltrd, mg/L	water, fltrd, mg/L	water, fltrd, mg/L	on evap. at 180degC wat flt mg/L	water, fltrd, mg/L as N	+ nitrate water fltrd, mg/L as N	water, fltrd, mg/L as N	phos- phate, water, fltrd, mg/L as P	phorus, water, fltrd, mg/L
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	ide, water, fltrd, mg/L (00940)  156 95.9 124 95.3 14.9 51.9 52.5 51.8 48.2	ide, water, fltrd, mg/L (00950)	water, fltrd, mg/L (00955)	water, fltrd, mg/L (00945)	on evap. at 180degC wat fit mg/L (70300)	water, fltrd, mg/L as N (00608)	+ nitrate water fltrd, mg/L as N (00631)	water, fltrd, mg/L as N (00613)	phos- phate, water, fltrd, mg/L as P (00671)	phorus, water, fltrd, mg/L (00666)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05	ide, water, fltrd, mg/L (00940) 156 95.9 124 95.3 14.9 51.9 52.5 51.8	ide, water, fltrd, mg/L (00950)	water, fltrd, mg/L (00955)	water, fltrd, mg/L (00945)	on evap. at 180degC wat flt mg/L (70300)	water, fltrd, mg/L as N (00608)	+ nitrate water fltrd, mg/L as N (00631)	water, fltrd, mg/L as N (00613)	phosphate, water, fltrd, mg/L as P (00671)	phorus, water, fltrd, mg/L (00666)

Well Number	Date	Organic carbon, water, unfltrd mg/L (00680)	Arsenic water, fltrd, ug/L (01000)	Beryll- ium, water, fltrd, ug/L (01010)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Thall- ium, water, fltrd, ug/L (01057)
WO Ah 36 WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05	  	  	  	  	  	  	  	  	  	  
WO Bh 29 WO Bh 34	09-07-05 09-07-05				 		 				 
WO Bh 84	05-05-05 09-07-05	5.5	.2	<.06	6,350	5,870	<.08	85.4	84.2	<.01	<.04
WO Bh 85 WO Bh 89	09-07-05 09-07-05 09-07-05	 	 	 	  	  	 	 	 	  	 
WO Bh 98 WO Bh 101	09-07-05 09-07-05 09-07-05	  	  	  	  	  	  	  	  	  	  
WO Bh 102 WO Cg 33	12-27-04 09-07-05	4.8	1.1d 	<.12d	<18d	5090d 	<.16d	81.5d 	122d 	E.01n	<.08d
WO Cg 87	09-07-05										
	Date	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Butylate, water, fltrd, ug/L (04028)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)
WO Ah 36 WO Ah 38	09-07-05 09-07-05			 	 	 			 	 	
WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05	 	 	  	  	  	  	  	 	  	  
WO Bh 84	05-05-05 09-07-05 09-07-05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.20	<.05	<.05
WO Bh 85 WO Bh 89	09-07-05 09-07-05			 	 	 	 			 	 
WO Bh 98 WO Bh 101	09-07-05 09-07-05 09-07-05			 	  	 	  	  		 	  
WO Bh 102 WO Cg 33	12-27-04 09-07-05				 			 			
WO Cg 87	09-07-05										

Well Number	Date	Hexa- zinone, water, fltrd, ug/L (04025)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propa- chlor, water, fltrd, ug/L (04024)	Sima- zine, water, fltrd, ug/L (04035)	Terbacil, water, fltrd, ug/L (04032)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)
WO Ah 36 WO Ah 38	09-07-05 09-07-05										 
WO Bh 28 WO Bh 29	09-07-05 09-07-05										
WO Bh 34	09-07-05										
WO Bh 84	05-05-05 09-07-05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.2	<.1 
WO Bh 85	09-07-05 09-07-05										
WO Bh 89	09-07-05										
WO Bh 98	09-07-05 09-07-05										
WO Bh 101	09-07-05										
WO Bh 102 WO Cg 33	12-27-04 09-07-05										
WO Cg 87	09-07-05										
	Date	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)
WO Ah 36	09-07-05	-Tetra- chloro- ethane, water, unfltrd ug/L	water unfltrd ug/L	Tri- chloro- ethane, water, unfltrd ug/L	chloro- ethane, water unfltrd ug/L	chloro- ethene, water, unfltrd ug/L	chloro- propene water unfltrd ug/L	Tri- chloro- benzene water unfltrd ug/L	Tri- chloro- propane water unfltrd ug/L	Tri- chloro- benzene water unfltrd ug/L	Tri- methyl- benzene water unfltrd ug/L
WO Ah 38	09-07-05 09-07-05	-Tetra- chloro- ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri- chloro- ethane, water, unfltrd ug/L (34511)	chloro- ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri- chloro- benzene water unfltrd ug/L (77613)	Tri- chloro- propane water unfltrd ug/L (77443)	Tri- chloro- benzene water unfltrd ug/L (34551)	Tri- methyl- benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29	09-07-05 09-07-05 09-07-05 09-07-05	-Tetra- chloro- ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloro- ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra- chloro- ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloro- ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri- chloro- propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri- methyl- benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra- chloro- ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri- chloro- ethane, water, unfltrd ug/L (34511)	chloro- ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloroethane, water unfiltrd ug/L (34496)	chloro-ethene, water, unfiltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05 09-07-05 09-07-05	-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloroethane, water unfltrd ug/L (34496)	chloroethene, water, unfltrd ug/L (34501)	chloro-propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloro-ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro-propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89 WO Bh 98	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloro-ethane, water unfiltrd ug/L (34496)	chloro-ethene, water, unfltrd ug/L (34501)	chloro- propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89 WO Bh 98 WO Bh 101	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	-Tetra-chloro-ethane, water, unfltrd ug/L (34516)	water unfltrd ug/L (77652)	Tri-chloro-ethane, water, unfltrd ug/L (34511)	chloro-ethane, water unfltrd ug/L (34496)	chloro- ethene, water, unfltrd ug/L (34501)	chloro-propene water unfltrd ug/L (77168)	Tri-chloro-benzene water unfltrd ug/L (77613)	Tri-chloro-propane water unfltrd ug/L (77443)	Tri-chloro-benzene water unfltrd ug/L (34551)	Tri-methyl-benzene water unfltrd ug/L (77222)

Well Number	Date	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)
WO Ah 36	09-07-05										
WO Ah 38 WO Bh 28	09-07-05 09-07-05										
WO Bh 29	09-07-05										
WO Bh 34	09-07-05										
WO Bh 84	05-05-05	<.5	<.2	<.1	<.2	146	<.1	<.2	<.1	<.2	<.1
	09-07-05										
WO Bh 85	<i>09-07-05</i> 09-07-05										
WO Bh 89	09-07-05										
WO Bh 98	09-07-05										
WO Bh 101	09-07-05										
W 0 D1 400	09-07-05										
WO Bh 102 WO Cg 33	12-27-04 09-07-05										
•											
WO Cg 87	09-07-05										
	Date	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)
WO Ah 36	Date 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rcv	chloro- propane water unfltrd ug/L	Chloro- toluene water unfltrd ug/L	Chloro- toluene water unfltrd ug/L	propyl- toluene water unfltrd ug/L	nitrile water unfltrd ug/L	water unfltrd ug/L	benzene water unfltrd ug/L	chloro- methane water unfltrd ug/L	di- chloro- methane water unfltrd ug/L
WO Ah 36 WO Ah 38	09-07-05 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyl- toluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro- methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyl- toluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro- methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29	09-07-05 09-07-05 09-07-05 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyl- toluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro- methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluoro-benzene surrog. VOC Sch wat unf pet rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloromethane water unfltrd ug/L (77297)	di- chloro- methane water unfitrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro-methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluoro-benzene surrog. VOC Sch wat unf pet rev (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfitrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro-methane water unfltrd ug/L (77297)	di- chloro- methane water unfitrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05	fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	chloro-propane water unfiltrd ug/L (77170)	Chlorotoluene water unfiltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfitrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro-methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)  <.1
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluoro- benzene surrog. VOC Sch wat unf pct rev (99834)	chloro-propane water unfiltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)  <.2	propyltoluene water unfltrd ug/L (77356)	nitrile water unfitrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloro-methane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluorobenzene surrog. VOC Sch wat unf pct rev (99834)	chloro-propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfitrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloromethane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89 WO Bh 98 WO Bh 101	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	chloro- propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfltrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloromethane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89 WO Bh 98	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	fluorobenzene surrog. VOC Sch wat unf pct rev (99834)	chloro-propane water unfltrd ug/L (77170)	Chlorotoluene water unfltrd ug/L (77275)	Chlorotoluene water unfltrd ug/L (77277)	propyltoluene water unfltrd ug/L (77356)	nitrile water unfitrd ug/L (34215)	water unfltrd ug/L (34030)	benzene water unfltrd ug/L (81555)	chloromethane water unfltrd ug/L (77297)	di- chloro- methane water unfltrd ug/L (32101)

Well Number	Date	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)
WO Ah 36 WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05	  	  	  	  	  	  	  	  	  	  
WO Bh 29 WO Bh 34	09-07-05 09-07-05										
WO Bh 84	05-05-05 09-07-05	<.3mc	<.1 	<.2	<.2mc	<.1 	<.2	<.2	<.2	<.2mc	<.2
WO Bh 85 WO Bh 89	09-07-05 09-07-05 09-07-05	 	 		 			 	 	 	  
WO Bh 98 WO Bh 101	09-07-05 09-07-05										 
WO Bh 102 WO Cg 33	09-07-05 12-27-04 09-07-05	 	 	 	 	 	 	 	 	 	  
WO Cg 87	09-07-05										
	Date	Ethyl- benzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Iso- propyl- benzene water unfltrd ug/L (77223)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)
WO Ah 36 WO Ah 38	09-07-05	benzene water unfltrd ug/L (34371)	chloro- buta- diene, water, unfltrd ug/L	propyl- benzene water unfltrd ug/L	alene, water, unfltrd ug/L	benzene water unfltrd ug/L	propyl- benzene water unfltrd ug/L (77224)	Butyl- benzene water unfltrd ug/L	water unfltrd ug/L	t-butyl ether, water, unfltrd ug/L	Butyl- benzene water unfltrd ug/L
WO Ah 38 WO Bh 28	09-07-05 09-07-05 09-07-05	benzene water unfltrd ug/L (34371)	chloro- buta- diene, water, unfltrd ug/L (39702)	propyl- benzene water unfltrd ug/L (77223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propyl- benzene water unfltrd ug/L (77224)	Butyl- benzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butylbenzene water unfiltrd ug/L (77353)
WO Ah 38	09-07-05 09-07-05	benzene water unfltrd ug/L (34371)	chloro- buta- diene, water, unfltrd ug/L (39702)	propyl- benzene water unfltrd ug/L (77223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propyl- benzene water unfltrd ug/L (77224)	Butyl- benzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butyl- benzene water unfltrd ug/L (77353)
WO Ah 38 WO Bh 28 WO Bh 29	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 05-05-05 09-07-05	benzene water unfltrd ug/L (34371)	chloro- buta- diene, water, unfltrd ug/L (39702)	propylbenzene water unfltrd ug/L (777223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propylbenzene water unfltrd ug/L (77224)	Butylbenzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butylbenzene water unfltrd ug/L (77353)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	benzene water unfltrd ug/L (34371)	chloro- buta- diene, water, unfltrd ug/L (39702)	propylbenzene water unfltrd ug/L (77223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propylbenzene water unfltrd ug/L (77224)	Butylbenzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butylbenzene water unfltrd ug/L (77353)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	benzene water unfltrd ug/L (34371)	chloro-buta-diene, water, unfltrd ug/L (39702)	propylbenzene water unfltrd ug/L (77223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propylbenzene water unfltrd ug/L (77224)	Butylbenzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butylbenzene water unfltrd ug/L (77353)
WO Ah 38 WO Bh 28 WO Bh 29 WO Bh 34 WO Bh 84 WO Bh 85 WO Bh 89 WO Bh 98	09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05 09-07-05	benzene water unfltrd ug/L (34371)  <.1	chloro-buta-diene, water, unfltrd ug/L (39702)	propylbenzene water unfltrd ug/L (77223)	alene, water, unfltrd ug/L (34696)	benzene water unfltrd ug/L (77342)	propylbenzene water unfltrd ug/L (77224)	Butylbenzene water unfltrd ug/L (77350)	water unfltrd ug/L (77128)	t-butyl ether, water, unfltrd ug/L (78032)	Butylbenzene water unfltrd ug/L (77353)

#### WORCESTER COUNTY, MARYLAND—Continued

Well Number	Date	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)
WO Ah 36	09-07-05										
WO Ah 38	09-07-05										
WO Bh 28	09-07-05										
WO Bh 29	09-07-05										
WO Bh 34	09-07-05										
WO Bh 84	05-05-05	<.1	<.2	<.1	104	<.1	<.2	<.2	<.1	<.2	<.1
	09-07-05										
	09-07-05										
WO Bh 85	09-07-05										
WO Bh 89	09-07-05										
WO Bh 98	09-07-05										
WO Bh 101	09-07-05										
	09-07-05										
WO Bh 102	12-27-04										
WO Cg 33	09-07-05										
WO Cg 87	09-07-05										

Well Number	Date	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Sampler type, code (84164)
WO Ah 36	09-07-05		4040
WO Ah 38	09-07-05		8010
WO Bh 28	09-07-05		8010
WO Bh 29	09-07-05		8010
WO Bh 34	09-07-05		4040
WO Bh 84	05-05-05	<.2	
	09-07-05		4030
	09-07-05		4030
WO Bh 85	09-07-05		4040
WO Bh 89	09-07-05		4040
WO Bh 98	09-07-05		4040
WO Bh 101	09-07-05		8010
	09-07-05		8010
WO Bh 102	12-27-04		4040
WO Cg 33	09-07-05		8010
WO Cg 87	09-07-05		8010

Remark codes used in this table: < -- Less than. E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
Sampler type: 4040 - Submersible pump
8010 - Other

#### WASHINGTON, D.C.

Well Number	Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	1030 1035 1400 1000 1330	Environn Blank Environn Environn Environn	nental nental	110ALVM 110ALVM 110TRRC 110ALVM	1028 1028 1028 1028 1028	80855 80020 80855 80855 80855	30 48.5 29 33	30  48 29 33	25  38 19 13	3.23  10.20 21.97 14.04
WE Cb 12	09-27-05 09-27-05 09-27-05	2359 1000 2359	Blank Environn Blank	nental	217PTMC	1028 1028 1028	80855 80855 80855	39	39	29 	23.65
	Date	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)
AC Aa 1	09-21-05	.75	80	4040	7.7	769	39	3.1	31	6.7	291
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05	1.0 .75 1.0	55 90 90	4040 4040 4040 4040	12 7.5 1.4	770 765 764	44 115 31	1.1 5.8 <1.0	11 61 	6.0 5.6 7.3	179 1,100 696
WE Cb 12	09-27-05 09-27-05 09-27-05	.85 	75 	4040 	.9 	764 	160 	<1.0	  	5.8	164 
	Date	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
AC Aa 1	09-21-05 09-21-05	28.0	16.5	84	19.5 .08c	8.67 <.008c	2.66 <.16c	7.23 .30c	131	159	9.39 <.20
WE Ca 29 WE Ca 32	09-19-05 09-22-05	32.0 25.5	17.0 18.0	29 200	6.05 57.4	3.43 14.3	1.89 7.73	4.97 122	64 17	78 21	17.8 257
WE Ca 34	09-27-05	25.0	16.0	310	103	13.8	6.72	13.9	317	386	27.6
WE Cb 12	09-27-05 09-27-05 09-27-05	21.0	15.0	59 	14.4 	5.66	3.28	4.21	50 	60 	9.14 

Geologic Unit (aquifer): 110ALVM - Quaternary Alluvium 110TRRC - Terrace Deposits 217PTMC - Potomac Group

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80855 - Severn-Trent Laboratory, Denver, CO  $\,$ 

80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

Well Number AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	Date 09-21-05 09-21-05 09-19-05 09-22-05 09-22-05	E.1n E.1n <.1	Silica, water, fltrd, mg/L (00955) 10.7 1.6 15.7 7.6 22.4	Sulfate water, fltrd, mg/L (00945) <-2 <-2c <-2c 79.7 E.1n	Ammoni + org-N, water, unfltrd mg/L as N (00625) 4.2 < .10 .64 < .10 3.6	Ammonia water, fltrd, mg/L as N	Nitrite + nitrate water fltrd, mg/L as N (00631)  <.06 <.06 <.06 <.06 <.06 <.06 <.06 <.06	Nitrite water, fltrd, mg/L as N (00613)  E.006n < .008 E.005n < .008 < .008	Organic nitro- gen, water, unfltrd mg/L (00605)	Phosphorus, water, fltrd, mg/L (00666)  .43 < .04 E.04n < .04 .14	Phosphorus, water, unftrd mg/L (00665)  .47 <.04 .18 <.04 .20
WE Cb 12	09-27-05 09-27-05 09-27-05	.1	14.0	12.5	.15	 .11	<.06	E.006n	.03	<.04	 <.04
	Date	Alum- inum, water, fltrd, ug/L	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L	Iron, water, fltrd, ug/L
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<2 15 <2 4 2	<.20 <.20 <i>c</i> <.20 <.20 <.20	39.9oc <i>E.08noc</i> 3.1oc .43oc 2.1	97 <.2c 117 87 404	<.06 <.06c E.03n <.06 <.06	<.04 <.04c <.04 .07 <.04	.17 .11c .18 1.1 .15	3.9oc <.014c E.02noc .423 .334	<.40oc .4 <.40oc 1.2 E.4n	22500d <6 23900d 13 7,930
WE Cb 12	09-27-05 09-27-05 09-27-05	2	<.20 	.3	136	<.06	<.04	.12	8.77	E.3n	3,060
	Date (	Lead, water, fltrd, ug/L	water, fltrd, ug/L	Mercury water, fltrd, ug/L	water, fltrd, ug/L	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	2,4,5-T surrog, water, fltrd, percent recovry (99958)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<.08 .26c <.08 .14 <.08	63.1 <.2c 141 2.8 643	<.01 <.01 <.01 <.01 <.01	4.9 <.4c .5 <.4 E.3n	1.0oc .12  4.22 3.49	E.06noc <.08oc <.08oc 2.1oc	<.2 <.2 <i>c</i> <.2 <.2 <.2	<.04 <.04c <.04 .08 <.04	372oc .6 E.35no 2.0 .9	E93.1 E182 c E108 E146 87.7
WE Cb 12	09-27-05 09-27-05 09-27-05	.13 1	 1,400 	<.01	E.2n	4.65 	<.4	<.2	<.04	4.5 	83.3 
	Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	ug/L	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	ug/L	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<.016 <.016 <.016	<.08 <.04 <.04 <.04 <.04	<.02 <.02 <.02 <.02 <.02	<.03 <.03 <.03 E.02n <.03	<.08c <.08c <.08c <.08c <.08c	<.032 <.032 <.032 <.032 <.032	<.008 <.008 <.008 <.008	<.02mc <.02mc <.02mc <.02mc <.02mc	<.028 <.028 <.028 <.028 <.028	<.02 <.02 <.02 <.02 <.02
WE Cb 12	09-27-05 09-27-05 09-27-05	<.023	<.04 	<.02	<.03	<.08c	<.032	<.008	E.09mc	<.028	<.02

Well Number	Date	Aldicarb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)
AC Aa 1	09-21-05 09-21-05	<.022	<.04mc <.04mc	<.008 <.008	162 111	<.02 <.02	<.022 <.022	<.02 <.02	<.01 <.01	<.02 <.02	<.03 <.03
WE Ca 29 WE Ca 32 WE Ca 34	09-19-05 09-22-05 09-27-05	<.022	<.04mc <.04mc <.04mc	<.008 .020 <.008	99.6 105 69.2	<.02 <.02 <.02	<.022 <.022 <.022	<.02 <.02 <.02	<.01 <.01 <.01	<.02 <.02 <.02	<.03 <.03 <.03
WE Cb 12	09-27-05 09-27-05 09-27-05	<.022	<.04mc	<.008	84.1 	<.02	<.022	<.02	<.01	<.02	<.03
	Date (	water, fltrd, ug/L	surrog, wat flt percent 0 recovry	baryl, water, fltrd .7u GF ( ug/L	water, fltrd 0.7u GF ug/L	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro thalo- nil, water, fltrd 0.7u G ug/L (49306	Clopyr alid, water, fltrd F 0.7u G ug/L	Cyclo- ate, water, F fltrd, ug/L
AC Aa 1 WE Ca 29 WE Ca 32	09-21-05 09-21-05 09-19-05 09-22-05	<.018 <.018 .030 <.018	109 138 112 106	<.02 <.02 <.02 <.02	<.016 <.016 <.016 <.016	<.02 <.02 <.02 <.02	<.032mc <.032mc <.032mc <.032mc	<.04vmc <.04vmc <.04vmc <.04vmc	<.04 <.04 <.04 <.04	<.02 <.02 <.02 <.02	<.01 <.01 <.01 <.01
WE Ca 34	09-27-05	<.018	82.1	<.02	<.016	<.02	<.032mc	<.04vmc	<.04	<.02	<.01
WE Cb 12	09-27-05 09-27-05 09-27-05	<.018	83.2	<.02	<.016	<.02	<.032mc	<.04vmc	<.04 	<.02	<.01
	Date	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	ug/L	amid, water,	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imaza- quin, water, fltrd, ug/L (50356)
AC Aa 1	09-21-05 09-21-05	<.03	<.04 <.04	<.03 <.03	<.04 <.04	<.01 <.01	<.01v <.01v	<.02 <.02	<.04 <.04	<.02 <.02	<.04mc <.04mc
WE Ca 29 WE Ca 32 WE Ca 34	09-19-05 09-22-05 09-27-05	<.03	<.04 <.04 <.04	<.03 <.03 <.03	<.04 <.04 <.04	<.01 <.01 <.01	<.01v <.01v <.01v	<.02 <.02 <.02	<.04 <.04 <.04	<.02 <.02 <.02	<.04mc <.04mc <.04mc
WE Cb 12	09-27-05 09-27-05 09-27-05	<.03	<.04	<.03	<.04 	<.01	<.01v	<.02	<.04	<.02	<.04mc

Well Number	Date	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<.04 <.04 <.04 <.04 <.04	<.020 <.020 <.020 <.020 .301 <.020	<.01 <.01 <.01 <.01 <.01	<.03 <.03 <.03 <.03 <.03 <.03	<.01 <.01 <.01 <.01 <.01	<.01 <.01 <.01 <.01 <.01	<.010 <.010 <.010 <.010 <.010	<.020 <.020 <.020 <.020 <.020	<.03mc <.03mc <.03mc <.03mc <.03mc	<.04 <.04 <.04 <.04 <.04
WE Cb 12	09-27-05 09-27-05 09-27-05	<.04	<.020	<.01	<.03	<.01	<.01	<.010	<.020	<.03mc	<.04
	Date	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<.01 <.01 <.01 <.01 <.01	<.04mc <.04mc <.04mc <.04mc <.04mc	<.02 <.02 <.02 <.02 <.02	<.01 <.01 <.01 <.01 <.01	<.03 <.03 <.03 <.03 <.03	<.03 <.03 <.03 <.03 <.03	<.030 <.030 <.030 <.030 <.030	<.01 <.01 <.01 <.01 <.01	<.008 <.008 <.008 <.008 <.008	<.02 <.02 <.02 <.02 <.02
WE Cb 12	09-27-05 09-27-05 09-27-05	<.01	<.04mc	<.02	<.01	<.03	<.03	<.030 	<.01	<.008	<.02
	Date	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)
AC Aa 1 WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<.038 <.038 <.038 <.038 <.038	<.026v <.026v <.026v .193v <.026v	<.016 <.016 <.016 <.016 <.016	<.03 <.03 <.03 <.03 <.03	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0  <1.0 <1.0 <1.0
WE Cb 12	09-27-05 09-27-05 09-27-05	<.038	<.026v	<.016	<.03	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0

Well Number	Date	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)
AC Aa 1	09-21-05	<1.0	<1.0	<1.0	<1	<1.0	<2.0	<1.0	<1	<1.0	<1.0
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1 <1 <1	<1.0 <1.0 <1.0	<2.0 <2.0 <2.0	<1.0 <1.0 <1.0	<1 <1 <1	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0
WE Cb 12	09-27-05 09-27-05 09-27-05	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1 <1 <1	<1.0 <1.0 <1.0	<2.0 <2.0 <2.0	<1.0 <1.0 <1.0	<1 <1 <1	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0
	Date	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)
A.C. A. 1	00 21 05	1.0									. 50
AC Aa 1	09-21-05	<1.0	<1	<1.0	<1	< 5.0	<1.0	<1.0	<1.0	<20	<.50
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<1.0 <1.0 <1.0 <1.0	<1 <1 <1 <1	<1.0 <1.0 <1.0 <1.0	<1 <1 <1 <1	<5.0 <5.0 <5.0 <5.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<20  <20 <20 <20	<.50 <.50 <.50 <.50
WE Ca 29 WE Ca 32	09-21-05 09-19-05 09-22-05	<1.0 <1.0	<1 <1	<1.0 <1.0	<1 <1	<5.0 <5.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<20 <20	<.50 <.50
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05 09-27-05 09-27-05	<1.0 <1.0 <1.0 <1.0 <1.0	<1 <1 <1 <1 <1	<1.0 <1.0 <1.0 <1.0 <1.0	<1 <1 <1 <1 <1	<5.0 <5.0 <5.0 <5.0 <5.0	<1.0 <1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0 <1.0	<20 <20 <20 <20 <20	<.50 <.50 <.50 <.50 <1.0 <.50
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05 09-27-05 09-27-05		Sromo-chloro-methane water unfltrd ug/L (77297)			<5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0	Chloroethane, water, unfltru (34311)	-1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0	cis- 1,2-Di- chloro- ethene, water, unffltre (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	
WE Ca 29 WE Ca 32 WE Ca 34 WE Cb 12	09-21-05 09-19-05 09-22-05 09-27-05 09-27-05 09-27-05 09-27-05		Sromo-chloro-methane water unfltrd ug/L (77297)		Sromomethane water unfltrd ug/L (34413)	<5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 Chloro- benzene water unfltrd ug/L (34301)		-1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 Chloromethane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unffltre, (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	<pre>c.50 &lt;.50 &lt;.50 &lt;.50 &lt;.1.0 &lt;.50 &lt;1.0  Di- bromo- chloro- methane water unfltrd ug/L (32105)</pre>

#### WASHINGTON, D.C.—Continued

Well Number	Date	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iso- propyl- benzene water unfltrd ug/L (77223)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)
AC Aa 1	09-21-05	<1.0	<2.0	<5.0	<.50	<1	<10	<1.0	<.50	<1	<1.0
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05	<1.0 <1.0 <1.0	<2.0 <2.0 <2.0	E.41v <5.0 <5.0	<.50 <.50 <.50	<1 <1 <1	<10 <10 <10	<1.0 <1.0 <1.0	<.50 <.50 <.50	<1 <1 <1	<1.0 <1.0 <1.0
WE Cb 12	09-27-05 09-27-05 09-27-05	<1.0 <1.0 <1.0	<2.0 <2.0 <2.0	<5.0 <5.0 E.66	<1.0 <.50 <1.0	<1 <1 <1	<10 	<1.0 <1.0 <1.0	<.50 	<1 <1 <1	<1.0 <1.0 <1.0
	Date	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)
AC Aa 1	09-21-05	<1.0	<.50	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<.50	<1.0
WE Ca 29 WE Ca 32 WE Ca 34	09-21-05 09-19-05 09-22-05 09-27-05	<1.0 <1.0 <1.0	<.50 <.50 <.50	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<5.0 <5.0 <5.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<.50 <.50 <.50	<1.0 <1.0 <1.0
WE Cb 12	09-27-05 09-27-05 09-27-05	<1.0 <1.0 <1.0	<.50	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<5.0 <5.0 <5.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <.50 <1.0	<1.0 <1.0 <1.0
		Date	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)	
AC Aa 1 WE Ca 29 WE Ca 3 WE Ca 3	2	09-21-05 09-21-05 09-19-05 09-22-05 09-27-05	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<1.0 <1.0 <1.0 <1.0	<2.0 <2.0 <2.0 <2.0	<1.0  <1.0 11 <1.0	<1.0 <1.0 <1.0 <1.0	<.04 <.04c <.04 <.04 E.03n	4040 4040 4040 4040 4040	
WE Cb 1		09-27-05 09-27-05 09-27-05	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<2.0 <2.0 <2.0	<1.0 3.9 <1.0	<1.0 <1.0 <1.0	<.04 	4040 	

Remark codes used in this table: < -- Less than. E -- Estimated.

Sampler type:: 4040 - Submersible pump

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
o -- Result determined by alternate method
v -- Analyte detected in laboratory blank

#### WE Bb 3

#### WATER-QUALITY RECORDS

PERIOD OF RECORD .-- June 2003 to current year.

PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: June 2003 to current year. WATER TEMPERATURE: June 2003 to current year.

INSTRUMENTATION .-- Water-quality monitor June 2003 to current year.

REMARKS.--Records good. Missing record due to periodic instrument malfunction.

#### EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1090 microsiemens/cm, on several days during Mar. 2004; minimum, 765 microsiemens/cm, Sept. 30, 2004. WATER TEMPERATURE: Maximum, 14.7°C, Dec. 1, 20, 2004; minimum, 13.1°C, June 30, July 3, 2004.

EXTREMES FOR CURRENT YEAR.— SPECIFIC CONDUCTANCE: Maximum, 1,040 microsiemens/cm, on several days; minimum, 835 microsiemens/cm, Oct. 1. WATER TEMPERATURE: Maximum, 14.7°C, Dec. 1, 20; minimum, 13.3°C, May 10, June 23, 25.

WE Bb 3-—Continued

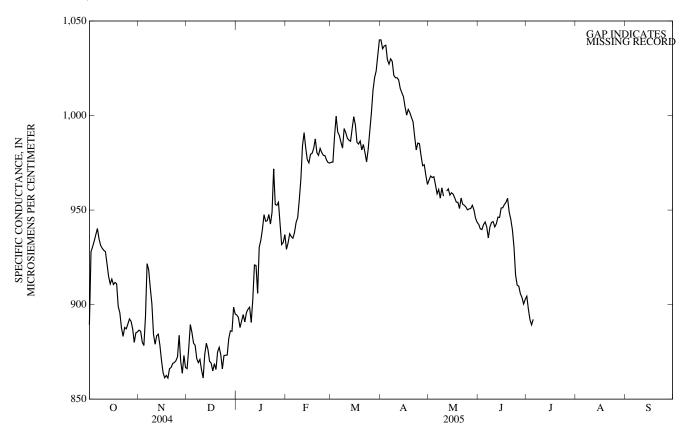
## SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	NOVEMBE	R	I	DECEMBEI	2		JANUARY	
1	925 935	835 920	889 928	896 896	877 877	886 886	874 892	848 867	866 877	901 904	888 884	894 803
2 3	933	913	931	889	875	880	896	867 884	877 889	904	881	893 888
4	939	926	934	891	870	878	896	876	885	901	885	891
5	944	928	937	920	874	894	885	876	880	904	888	895
6	949	929	940	929	914	922	887	869	878	898	882	891
7	946	927	935	928	909	918	882	862	871	904	889	896
8 9	941 940	920 920	931 930	920 915	898 882	909 900	875 879	861 862	869 871	904 907	893 891	898 899
10	938	920	929	896	872	884	871	854	865	898	875	891
11	937	916	928 922	888	871 871	879 884	872	840	861	919	886	903 921
12	936	906	922	892	871	884	881	863	874	929	908	921
13 14	927 917	905 904	915 911	893 893	878 867	884 878	887 885	874 870	880 876	930 925	893 869	921 906
15	920	906	913	880	862	870	884	862	870	937	923	930
16	917	904	911	874	852	864	882	859	869	940	928	934
17	921	901	912	868	852 852	861	872	858 862	865	944	933	940 948
18	922	895	911 899	869	852	863	878	862	869	952	944	948 944
19 20	916 904	884 886	899 896	870 872	848 860	861 866	875 888	861 866	866 875	956 950	936 939	944 944
											940	
21 22	898 890	882 879	888 883	874 876	857 857	867 869	888 882	866 866	877 873	954 951	940	948 943
23	894	884	888	877	860	869	880	850	866	964	940	949
24	894	885	887	879	853	869 870	880	850 865	873	979	961	972
25	894	883	890	882	854	872	884	866	873	961	935	953
26	896	888	892	891 880	874 854	884	884	866	873 882	958	941	953 954
27 28	895 894	887 880	891 887	880 874	854 848	870 864	894 898	868 867	882 886	959 954	947 934	954
29	886	876	880	881	868	873	898	877	886	934	934	943 932
30	890	879	885	879	850	867	907	877 890	886 899	940	928	933
31	892	881	886				904	886	895	945	931	937
MONTH	949	835	908	929	848	879	907	840	875	979	869	924
		FEBRUARY			MARCH			APRIL			MAY	
1	935	922	929	982	971	975	1,040	1,040	1,040	973	961	966
2 3	940 944	926 932	933 937	982 1,000	972 978	975 989	1,040 1,040	1,030 1,030	1,040 1,040	974 970	962 964	968 967
4	944	932	936	1,000	992	1,000	1,040	1,030	1,040	973	963	968
5	942	927	935	997	986	991	1,040	1,020	1,030	968	958	963
6	944	933	938	995	983	989	1,030	1,020	1,030	962	953	959
7	950	935	943	993	979	986	1,030	1,030	1,030	965	953	961
8 9	956 964	936 949	946 955	988 1,000	980 986	983 993	1,030 1,030	1,020 1,020	1,030 1,020	960	951 959	956 062
10	975	957	967	999	982	991	1,020	1,020	1,020	964 964	953	956 962 957
11	1,000	968	984	995	981	988	1,020	1,020	1,020			
12	1,000	981	991	994	981	987	1,020	1,010	1,020	964	958	960
13	990 984	975	983	993	980 979	986	1,020	1,010	1,010	963	959	961
14 15	984 979	968 971	977 975	1,010 1,000	979 996	993 999	1,020 1,010	1,010 1,010	1,010 1,010	961 961	955 957	958 959
16	984	975	979	1,000	989	995	1,010	1,000	1,000	961	957	958
17	985	975	980	993	981	986	1,010	1,000	1,000	960	954	956
18	988	977	983	987	983	985	1,010	1,000	1,000	957	952	954
19 20	994 986	979 971	988 980	991 985	983 979	987 982	1,010 1,000	998 996	1,000 999	956 955	952 947	954 951
21 22	984 989	972 977	979 983	988 987	982 972	985 980	1,000 996	992 980	997 989	962 959	952 950	956 953
23	989	976	980	981	969	975	986	976	982	956	951	953
24	988	976	979	989	972	982	990	982	985	955	949	952
25	983	975	979	997	988	992	991	980	985	954	946	950
26 27	982 983	973 970	976 975	1,010 1,020	995 1,010	1,000 1,010	988 978	972 968	979 973	953 954	949 946	951 951
28	983	970 970	973 975	1,020	1,010	1,010	978 978	968	973 974	954 956	950	953
29				1,030	1,020	1,020	974	962	968	954	946	950
30				1,040	1,030	1,030	968	959	964	952	941	946
31				1,040	1,040	1,040				949	939	944
MONTH	1,000	922	967	1,040	969	993	1,040	959	1,010	974	939	957

WE Bb 3---Continued

### SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		SI	ЕРТЕМВІ	ER
1	947	939	942	915	896	904						
2 3	943 943	938 938	940 940	904 898	892 885	898 892						
3 4	943 946	938	940 942	898 892	885	892 889						
5	940	938	944	892 895	887	892						
3	747	771	744	675	007	072						
6	945	939	941									
7	940	929	935									
8	944	938	941									
9	945	942	944									
10	947	942	944									
11	945	938	941									
12	943	938	941									
13	948	938 944	943 946									
14	949	944	946									
15	954	948	951									
13	754	740	751									
16	955	949	951									
17	956	950	953									
18	958	952	954									
19	959	953	956									
20	957	944	949									
21	950	942	945									
22	950	929	940									
23	941	920	930									
24	926	907	916									
25	915	903	910									
	715											
26	916	903	910									
27	912	893	906									
28	910	899	904									
29	906	894	900									
30	911	898	903									
31												
MONTH	959	893	936	915	885	895						
YEAR	1,040	835	937									



DAILY MEAN SPECIFIC CONDUCTIVITY - 2005 WATER YEAR

#### WE Bb 3---Continued

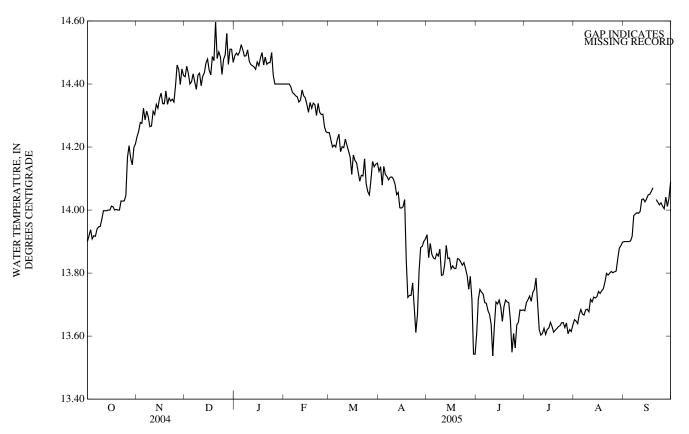
## TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WATER YI	EAR OCT	OBER 2004 I	O SEPTEM	BER 2005				
DAY	MAX	MIN	MEAN									
	(	OCTOBER	2	N	OVEMBE			ECEMBE	ER		JANUARY	<i>I</i>
1	13.9	13.9	13.9	14.4	14.1	14.2	14.7	14.3	14.4	14.6	14.4	14.5
2	14.0	13.9	13.9	14.4	14.1	14.2	14.6	14.3	14.5	14.6	14.4	14.5
3	14.0	13.9	13.9	14.4	14.1	14.3	14.6	14.3	14.4	14.6	14.4	14.5
4	14.0	13.9	13.9	14.4	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
5	14.0	13.9	13.9	14.5	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
6	14.0	13.9	13.9	14.4	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
7	14.0	13.9	13.9	14.4	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
8	14.0	13.9	13.9	14.5	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
9	14.0	13.9	13.9	14.4	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
10	14.0	13.9	14.0	14.4	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
11	14.0	13.9	14.0	14.6	14.2	14.3	14.6	14.3	14.4	14.6	14.4	14.5
12	14.0	13.9	14.0	14.6	14.2	14.3	14.6	14.3	14.4	14.5	14.4	14.5
13	14.0	13.9	14.0	14.6	14.2	14.3	14.6	14.3	14.4	14.5	14.4	14.5
14	14.0	14.0	14.0	14.5	14.2	14.3	14.6	14.4	14.5	14.5	14.4	14.4
15	14.0	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.5	14.5	14.4	14.5
16	14.1	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.4	14.5	14.4	14.5
17	14.1	14.0	14.0	14.6	14.2	14.3	14.6	14.4	14.4	14.5	14.4	14.5
18	14.0	14.0	14.0	14.6	14.2	14.3	14.6	14.4	14.5	14.5	14.5	14.5
19	14.1	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.5	14.5	14.4	14.5
20	14.0	14.0	14.0	14.6	14.2	14.3	14.7	14.5	14.6	14.5	14.4	14.5
21	14.0	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.5	14.5	14.4	14.5
22	14.1	14.0	14.0	14.6	14.2	14.3	14.6	14.4	14.5	14.5	14.4	14.5
23	14.1	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.5	14.5	14.4	14.5
24	14.1	14.0	14.0	14.6	14.2	14.3	14.6	14.4	14.4	14.5	14.5	14.5
25	14.1	14.0	14.0	14.6	14.2	14.4	14.6	14.4	14.5	14.5	14.4	14.4
26 27 28 29 30 31	14.4 14.4 14.4 14.3 14.4 14.4	14.0 14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.1 14.2 14.2	14.6 14.6 14.6 14.6 14.6	14.3 14.3 14.3 14.3 14.3	14.5 14.4 14.4 14.4 14.4	14.6 14.6 14.6 14.6 14.6 14.6	14.4 14.4 14.4 14.4 14.4 14.4	14.5 14.6 14.5 14.5 14.5 14.5	14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4 14.4
MONTH	14.4	13.9	14.0	14.6	14.1	14.3	14.7	14.3	14.5	14.6	14.4	14.5
	F	EBRUAR	Y		MARCH			APRIL			MAY	
1	14.4	14.4	14.4	14.3	14.2	14.2	14.2	13.9	14.1	14.0	13.7	13.9
2	14.4	14.4	14.4	14.3	14.1	14.2	14.2	14.0	14.1	14.0	13.6	13.8
3	14.4	14.4	14.4	14.2	14.2	14.2	14.2	14.0	14.1	14.0	13.8	13.9
4	14.4	14.4	14.4	14.3	14.2	14.2	14.2	14.0	14.1	14.0	13.7	13.9
5	14.4	14.3	14.4	14.3	14.1	14.2	14.2	14.0	14.1	14.0	13.6	13.8
6 7 8 9 10	14.4 14.4 14.4 14.4 14.4	14.3 14.3 14.3 14.3 14.2	14.4 14.4 14.4 14.4 14.3	14.3 14.3 14.3 14.3 14.3	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 13.9	13.6 13.6 13.7 13.3	13.8 13.9 13.9 13.9 13.8
11	14.4	14.2	14.3	14.3	14.1	14.2	14.1	14.0	14.1	13.9	13.7	13.8
12	14.4	14.3	14.4	14.3	14.1	14.2	14.1	13.9	14.0	13.9	13.8	13.8
13	14.4	14.3	14.4	14.3	14.1	14.2	14.1	13.9	14.1	13.9	13.8	13.9
14	14.4	14.3	14.4	14.3	14.0	14.2	14.1	13.8	14.0	13.9	13.8	13.8
15	14.4	14.2	14.3	14.3	14.0	14.1	14.1	13.8	14.0	13.9	13.8	13.8
16	14.4	14.2	14.3	14.3	14.0	14.2	14.1	13.9	14.0	13.9	13.8	13.8
17	14.4	14.3	14.3	14.3	14.0	14.2	14.1	13.8	14.0	13.9	13.8	13.8
18	14.4	14.3	14.3	14.3	14.0	14.2	14.1	13.5	13.8	13.9	13.8	13.8
19	14.4	14.3	14.3	14.3	13.9	14.1	14.0	13.5	13.7	13.9	13.8	13.8
20	14.4	14.2	14.3	14.2	13.9	14.1	14.0	13.4	13.7	13.9	13.8	13.8
21	14.4	14.2	14.3	14.2	13.9	14.1	14.0	13.5	13.7	13.9	13.8	13.8
22	14.4	14.2	14.3	14.2	13.9	14.1	14.0	13.5	13.8	13.9	13.8	13.8
23	14.4	14.2	14.3	14.3	13.9	14.2	14.0	13.4	13.7	13.9	13.8	13.8
24	14.4	14.2	14.3	14.2	13.9	14.1	14.0	13.4	13.6	13.9	13.8	13.8
25	14.4	14.2	14.3	14.2	13.8	14.1	14.0	13.4	13.7	13.9	13.7	13.8
26 27 28 29 30 31	14.4 14.3 14.3 	14.2 14.2 14.2 	14.3 14.2 14.2 	14.2 14.2 14.2 14.2 14.2 14.2	13.8 13.9 14.0 14.0 14.1 14.1	14.0 14.1 14.2 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0	13.4 13.6 13.7 13.7 13.8	13.8 13.9 13.9 13.9 13.9	13.9 13.8 13.8 13.8 13.8 13.7	13.7 13.7 13.7 13.4 13.4 13.4	13.8 13.7 13.8 13.7 13.5 13.5
MONTH	14.4	14.2	14.3	14.3	13.8	14.2	14.2	13.4	13.9	14.0	13.3	13.8

WE Bb 3---Continued

## TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST	,	S	ЕРТЕМВІ	ER
1 2 3 4 5	13.7 13.8 13.8 13.8 13.8	13.4 13.6 13.7 13.7 13.6	13.6 13.7 13.7 13.7 13.7	13.8 13.8 13.8 13.8 13.8	13.5 13.6 13.6 13.7 13.7	13.7 13.7 13.7 13.7 13.7	13.8 13.8 13.7 13.8 13.8	13.6 13.6 13.5 13.6 13.6	13.7 13.6 13.6 13.7 13.7	13.9 13.9 13.9 13.9 14.0	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9
6 7 8 9 10	13.8 13.8 13.8 13.8 13.8	13.6 13.6 13.5 13.5 13.4	13.7 13.7 13.7 13.7 13.6	13.8 13.8 13.9 13.8 13.8	13.6 13.7 13.7 13.4 13.5	13.7 13.7 13.8 13.7 13.6	13.8 13.8 13.8 13.8 13.8	13.6 13.6 13.6 13.6 13.6	13.7 13.7 13.7 13.7 13.7	14.0 14.0 14.0 14.0 14.0	13.9 13.9 13.9 13.9 13.9	13.9 14.0 14.0 14.0 14.0
11 12 13 14 15	13.7 13.8 13.8 13.8 13.8	13.4 13.4 13.6 13.7 13.7	13.5 13.6 13.7 13.7 13.7	13.8 13.8 13.8 13.8 13.8	13.4 13.5 13.5 13.5 13.5	13.6 13.6 13.6 13.6 13.6	13.8 13.8 13.8 13.8 13.8	13.6 13.6 13.6 13.6 13.7	13.7 13.7 13.7 13.7 13.7	14.0 14.1 14.1 14.1 14.1	13.9 14.0 14.0 14.0 14.0	14.0 14.0 14.0 14.0 14.0
16 17 18 19 20	13.8 13.8 13.8 13.8 13.8	13.6 13.5 13.5 13.7 13.7	13.7 13.6 13.7 13.7 13.7	13.8 13.8 13.8 13.8 13.8	13.5 13.5 13.5 13.5 13.4	13.6 13.6 13.6 13.6 13.6	13.8 13.8 13.8 13.8 13.8	13.6 13.7 13.7 13.7 13.7	13.7 13.7 13.7 13.8 13.8	14.1 14.1 14.2 14.2	14.0 14.0 14.0 14.0	14.0 14.1 14.1 14.1
21 22 23 24 25	13.8 13.8 13.7 13.7 13.7	13.7 13.4 13.3 13.4 13.3	13.7 13.7 13.5 13.6 13.6	13.8 13.8 13.8 13.8 13.8	13.5 13.5 13.5 13.5 13.5	13.6 13.6 13.6 13.6 13.6	13.8 13.8 13.8 13.9 13.9	13.7 13.7 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	14.1 14.1 14.1 14.2 14.1	14.0 14.0 14.0 14.0 14.0	14.0 14.0 14.0 14.0 14.0
26 27 28 29 30 31	13.7 13.8 13.8 13.8 13.8	13.4 13.4 13.5 13.4 13.4	13.6 13.6 13.7 13.7	13.7 13.8 13.7 13.7 13.7 13.7	13.5 13.6 13.5 13.5 13.5 13.5	13.6 13.6 13.6 13.6 13.6 13.6	13.9 13.9 13.9 13.9 13.9 13.9	13.8 13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.9 13.9	14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0	14.0 14.0 14.0 14.0 14.1
MONTH	13.8	13.3	13.7	13.9	13.4	13.6	13.9	13.5	13.7	14.2	13.9	14.0
YEAR	14.7	13.3	14.0									



DAILY MEAN WATER TEMPERATURE - 2005 WATER YEAR

#### WE Bb 3---Continued

Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sam- pling method, code (82398)
SEP 20 20	1000 1010	Environn Replicate		110ALVM 110ALVM	1028 1028	80855 80020	25 25	25 	15	11.56	1.0	90 	4040 
Date	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
SEP 20 20	30	768 	151	1.0	10	5.9	363	31.0	15.5	48 47	12.0 11.8	4.30 4.22	2.49 2.54
Date	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, unfltrd mg/L (00605)	Phos- phorus, water, fltrd, mg/L (00666)
SEP 20 20	9.02 8.81	141	171 	23.0 23.3	E.1n <i>E.1n</i>	19.1 19.1	<.2 <.2	5.0d 4.8	4.38d <i>4.35d</i>	<.06 <.06	<.008 <.008	.65 .46	.49 .52
Date	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)
SEP 20 20	.70d .72	2 2	<.20 <.20	.38oc .42oc	178 <i>177</i>	E.03n E.03n	.10 .16	.75 .80	2.2oc 2.2oc	E.26noc E.24noc	54400d 53600d	<.08 <.08	2,330 2,320
Date	Mercury water, fltrd, ug/L (71890)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)
SEP 20 20	<.01 <.01	E.2n <i>E.2n</i>	.62oc .67oc	<.08oc <.08oc	<.2 <.2	<.04 <.04	.73oc E.34noc	E152 E142	<.016 <.016	<.04 <.04	<.02 <.02	<.03 <.03	<.08c <.08c
Date	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)
_	<.032 .044 Unit (aquifer			<.028 <.028	<.02 <.02	<.022 <.022	<.04mc <.04mc	<.008 <.008	110 93.8	<.02 <.02	<.022 <.022	<.02 <.02	<.01 <.01

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80855 - Severn-Trent Laboratory, Denver, CO

80020 - USGS-National Water Quality Lab, Denver, CO

Sampling Method: 4040 - Submersible pump

#### QUALITY OF GROUND WATER IN THE DISTRICT OF COLUMBIA

#### WE Bb 3---Continued

Date	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf- feine, water, fltrd, ug/L (50305)	Caf- feine- 13C, surrog, wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)
SEP 20 20	<.02 <.02	<.03 <.03	<.018 <.018	98.5 64.6	<.02 <.02	<.016 <.016	<.02 <.02	<.032mc <.032mc	<.04vmc	<.04 <.04	<.02 <.02	<.01 <.01	<.03 <.03
Date SEP	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)
20 20	<.04 <.04	<.03 <.03	<.04 <.04	<.01 <.01	<.01v <.01v	<.02 <.02	<.04 <.04	<.02 <.02	<.04mc <.04mc	<.04 <.13	<.020 <.020	<.01 <.01	<.03 <.03
Date	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)
SEP 20 20	<.01 <.01	<.01 <.01	<.010 <.010	<.020 <.020	<.03mc <.03mc	<.04 <.04	<.01 <.01	<.04mc	<.02 <.02	<.01 <.01	<.03 <.03	<.03 <.03	<.030 <.030
Date SEP	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)
20 20	<.01 <.01	<.008 <.008	<.02 <.02	<.038 <.038	<.026v <.026v	<.016 <.016	<.03 <.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Date	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)
SEP 20 20	<1.0	<1.0	<1.0	<1 	<1.0	<2.0	<1.0	<1 	<1.0	<1.0	<1.0	<1 	<1.0

#### WE Bb 3---Continued

Date	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)
SEP 20	<1	< 5.0	<1.0	<1.0	<1.0	<20	<.50	<1.0	<1.0	<1.0	<2.0	<.50	<2.0
20													
Date	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iso- propyl- benzene water unfltrd ug/L (77223)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)
SEP 20	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	E.46v	<.50	<1	<10	<1.0	<.50	<1
20													
Date	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)
SEP 20 20	<1.0	<1.0	<.50	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<.50	<1.0	<1.0	<1.0

Date	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
SEP						
20	<1.0	< 2.0	<1.0	<1.0	<.04	4040
20					<.04	

Remark codes used in this table: < -- Less than. E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
o -- Result determined by alternate method
v -- Analyte detected in laboratory blank

Sampler type: 4040 - Submersible pump

### WE Bb 4

### WATER-QUALITY RECORDS

PERIOD OF RECORD .-- June 2003 to current year.

PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: June 2003 to current year. WATER TEMPERATURE: June 2003 to current year.

INSTRUMENTATION.--Water-quality monitor June 2003 to current year.

REMARKS.--Records good. Missing record due to periodic instrument malfunction.

### EXTREMES FOR PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 285 microsiemens/cm, Mar. 31, Apr. 1, 2005; minimum, 164 microsiemens/cm, Feb. 11, 2005. WATER TEMPERATURE: Maximum, 14.8°C, Jan. 11, 12, 13, 23, 2005; minimum, 13.6°C June 12, 2004.

EXTREMES FOR CURRENT YEAR.-- SPECIFIC CONDUCTANCE: Maximum, 285 microsiemens/cm, Mar. 31, Apr. 1; minimum, 164 microsiemens/cm, Feb. 11. WATER TEMPERATURE: Maximum, 14.8°C, Jan. 11, 12, 13, 23; minimum, 13.9°C, July 17, 18, 23.

WE Bb 4—Continued

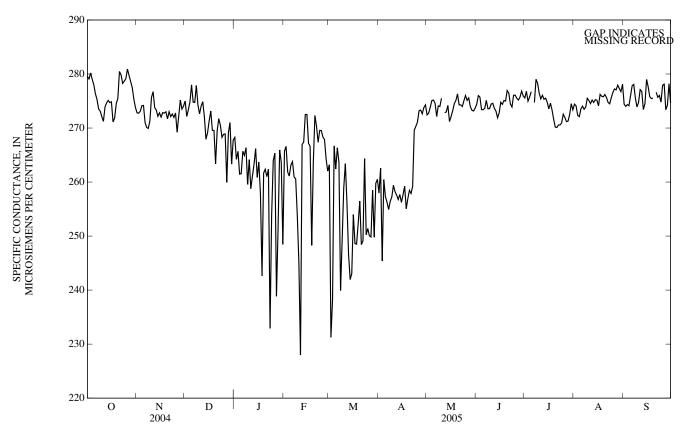
# SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBE	R	D	ECEMBE	R		JANUARY	7.
1 2 3 4 5	282 282 282 280 279	278 278 279 278 276	280 279 280 279 278	275 275 276 280 280	272 271 271 272 270	273 273 273 274 274	277 273 275 278 280	272 270 272 273 277	275 272 273 275 278	270 268 268 268 264	263 247 264 240 238	268 264 266 261 262
6 7 8 9 10	277 276 274 274 273	276 274 272 272 271	276 275 274 273 272	272 271 271 274 278	270 270 269 270 272	271 270 270 271 276	278 276 280 277 276	273 273 275 272 271	275 275 278 274 273	267 268 269 265 266	264 242 263 231 262	266 265 266 260 264
11 12 13 14 15	273 278 280 280 281	270 270 272 273 272	271 274 275 275 275	278 275 276 274 275	274 272 271 271 272	277 274 273 272 273	276 277 275 270 270	271 273 269 256 267	274 275 272 268 269	267 264 266 270 269	240 252 261 264 200	259 261 263 266 261
16 17 18 19 20	277 274 278 278 280	272 269 269 271 273	275 271 272 274 275	273 274 274 275 273	271 272 272 272 272 271	272 273 273 273 272	275 274 272 271 271	269 272 268 268 250	271 273 270 270 263	266 264 260 264 266	263 207 186 260 260	264 258 243 262 262
21 22 23 24 25	284 284 281 282 284	278 278 276 276 277	280 280 278 279 279	274 273 274 273 275	272 272 272 271 266	273 272 273 272 273	273 276 272 275 270	267 260 263 253 268	270 272 270 268 269	263 266 262 262 267	260 261 176 204 261	261 262 233 254 264
26 27 28 29 30 31	284 281 280 279 277 274	279 278 278 276 274 273	281 280 279 277 275 274	271 274 277 276 277	264 270 273 271 271	269 272 275 274 274	271 268 273 273 268 271	267 245 265 263 249 265	269 260 269 271 263 268	267 264 265 267 266 264	264 182 183 264 259 177	265 239 251 266 264 248
MONTH	284	269	276	280	264	273	280	245	271	270	176	260
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	270 270 266 264 267	263 266 257 258 258	266 267 262 261 263	271 271 268 271 273	252 179 176 261 203	263 231 238 267 262	285 279 284 278 277	232 233 234 232 232	258 263 245 260 257	276 276 276 278 278	269 269 271 271 272	272 273 274 275 275
6 7 8 9 10	268 264 263 263 261	258 257 256 182 167	264 261 261 254 245	273 271 269 268 270	250 224 185 184 203	266 264 240 249 259	277 272 273 273 276	232 239 242 242 242	256 255 256 257 259	278 275 277 277 278	272 270 272 271 273	275 272 274 274 276
11 12 13 14 15	272 273 274 277 277	164 217 207 268 268	228 267 267 272 273	271 272 273 274 274	251 190 190 195 202	263 256 247 242 243	274 276 273 274 275	242 241 242 241 240	258 258 257 258 256	276 276 276 276 274	271 270 272 269	273 273 274 271
16 17 18 19 20	274 270 272 270 275	236 261 192 195 264	267 267 248 264 272	271 275 275 274 274	205 207 208 209 210	254 249 248 252 256	279 281 271 271 271	238 238 238 241 244	258 259 255 257 258	274 275 277 278 278	270 271 271 273 273	272 273 275 275 276
21 22 23 24 25	276 273 275 274 274	259 258 261 260 260	270 267 270 270 268	273 271 276 275 275	208 207 211 219 221	248 249 264 250 251	269 271 274 274 275	245 250 256 268 268	258 259 270 270 271	277 277 277 278 278	271 271 272 272 274	274 274 274 275 276
26 27 28	274 273	258 236	268 264	274 272	225 225	250 250 259	276 276	269 271	273 273	277 278 277	273 273	275 276 274
29 30 31	273 270  	217  	262  	275 276 283 285	227 231 232 232	259 250 260 260	276 278 277	270 271 271	273 274 274 	276 275 276	271 271 271 271	273 273 274

WE Bb 4—Continued

## SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		Si	ЕРТЕМВІ	ER
1 2 3 4 5	277 278 278 276 277	272 274 274 271 271	274 276 276 273 273	279 280 280 280 280	272 274 269 271 274	276 277 275 276 277	277 278 276 277 278	272 270 268 266 268	274 274 272 272 274	277 277 276 278 280	270 270 270 268 270	274 274 274 274 276
6 7 8 9 10	277 278 277 276 277	271 273 271 271 272	274 275 274 274 274	279 281 281 280	271 275 274 273	275 279 278 276	278 278 279 279 278	271 269 269 272 274	274 273 274 276 275	282 281 278 276 278	272 276 273 271 270	278 278 276 274 275
11 12 13 14 15	277 276 276 274 275	272 271 270 270 270	275 274 273 272 273	279 280 278 278 280	273 272 272 271 271	275 276 275 276 275	277 278 278 277 276	272 273 272 273 274	275 275 275 275 275 275	280 280 276 276 281	273 273 270 273 274	277 277 273 274 279
16 17 18 19 20	277 277 278 278 279	273 272 272 272 272 273	275 274 275 275 277	276 278 278 276 276	270 271 270 266 265	274 275 273 272 270	279 280 278 279 278	269 271 273 273 274	274 276 276 276 276	279 277 277 277 	276 274 273 273	278 276 275 276
21 22 23 24 25	279 278 276 278 279	273 272 271 274 274	276 274 274 276 276	277 277 277 278 278	264 265 264 265 267	270 271 271 271 273	277 276 277 278 278	274 273 271 273 275	276 275 274 276 277	281 277 278 277 283	274 275 275 273 275	277 276 276 275 278
26 27 28 29 30 31	278 278 278 279 280	272 272 273 274 272	276 275 276 277 276	277 276 276 280 280 277	268 266 266 266 270 270	272 271 271 273 274 273	278 278 280 278 278 278 281	276 276 276 275 276 276	277 277 278 277 277 277	280 276 277 280 276	274 270 272 272 272 272	278 273 274 278 275
MONTH	280	270	275	281	264	274	281	266	275	283	268	276
YEAR	285	164	269									



DAILY MEAN SPECIFIC CONDUCTIVITY - 2005 WATER YEAR

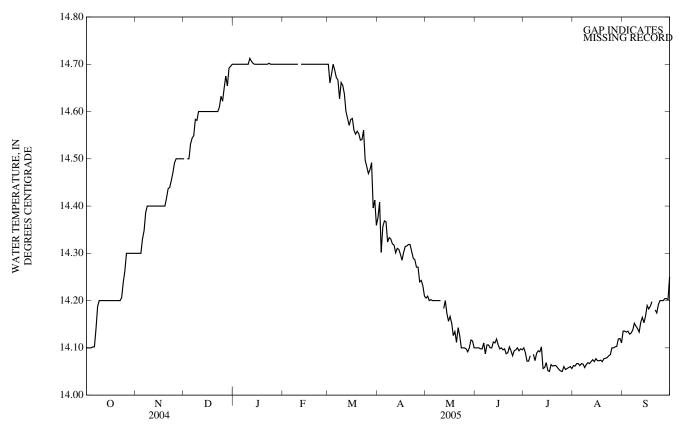
# TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			OVEMBE			ECEMBE			JANUARY	•
1 2 3 4 5	14.1 14.1 14.1 14.1 14.2	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.3 14.3 14.3 14.3 14.4	14.3 14.3 14.3 14.3 14.3	14.3 14.3 14.3 14.3	14.5 14.5 14.5 14.6	14.5 14.5 14.5	14.5 14.5 14.5 14.5	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
6 7 8 9	14.2 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.2 14.2	14.1 14.1 14.2 14.2 14.2	14.4 14.4 14.4 14.4 14.4	14.3 14.3 14.4 14.4 14.4	14.3 14.4 14.4 14.4 14.4	14.6 14.6 14.6 14.6 14.6	14.5 14.5 14.5 14.5 14.6	14.5 14.5 14.6 14.6 14.6	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
11 12 13 14 15	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2	14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.8 14.8 14.8 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
16 17 18 19 20	14.2 14.2 14.2 14.2 14.2	14.2	14.2 14.2 14.2 14.2 14.2	14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.4 14.4 14.4	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
21 22 23 24 25	14.2 14.2 14.3 14.3 14.3	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.3	14.5 14.5 14.5	14.4 14.4 14.4 14.4 14.4	14.4 14.4 14.5 14.5 14.5	14.6 14.6 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.7 14.7 14.8 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
26 27 28 29 30 31	14.3 14.3 14.3 14.3 14.3 14.3	14.3 14.3 14.3	14.3 14.3 14.3 14.3 14.3 14.3	14.5 14.5 14.5	14.5 14.5 14.5 14.5 14.5	14.5 14.5 14.5 14.5 14.5	14.7 14.7 14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6 14.7	14.7 14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7 14.7
MONTH		14.1			14.3		14.7		14.6		14.7	14.7
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.6 14.6 14.7 14.6	14.7 14.7 14.7 14.7 14.7	14.5 14.5 14.4 14.5 14.5	14.3 14.2 14.2 14.2 14.2	14.4 14.4 14.3 14.4 14.4	14.2 14.3 14.2	MAY 14.2 14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2
6 7 8 9 10	14.7 14.7 14.7 14.7 14.7	14.7 14.7	14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6	14.7 14.7 14.6 14.7 14.7	14.5 14.5 14.5 14.5 14.5	14.2 14.2 14.2 14.2	14.4 14.3 14.3 14.3	14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2
11 12 13 14 15	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7	14.7 14.6 14.6 14.6 14.6	14.6 14.6 14.5 14.4 14.5	14.6 14.6 14.6 14.6 14.6	14.5 14.4 14.5 14.5 14.4	14.2 14.2 14.2 14.2 14.2	14.3 14.3 14.3 14.3 14.3	14.2 14.2 14.2 14.2	14.1 14.2 14.1 14.1	14.2 14.2 14.2 14.2
16 17 18 19 20	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6	14.5 14.4 14.4 14.4 14.4	14.6 14.6 14.6 14.6 14.6	14.4 14.4 14.4 14.4 14.4	14.1 14.1 14.2 14.2 14.2	14.3 14.3 14.3 14.3 14.3	14.2 14.2 14.2 14.3 14.2	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.1 14.1 14.1
21 22 23 24 25	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6	14.4 14.4 14.3 14.3 14.3	14.5 14.5 14.6 14.5 14.5	14.4 14.4 14.3 14.3 14.3	14.2 14.2 14.2 14.2 14.2	14.3 14.3 14.3 14.3 14.3	14.2 14.2 14.1 14.1 14.2	14.1 14.1 14.1 14.1 14.0	14.1 14.1 14.1 14.1 14.1
26 27 28 29 30 31	14.7 14.7 14.7 	14.7 14.7 14.7  	14.7 14.7 14.7 	14.6 14.6 14.5 14.5 14.5	14.3 14.3 14.3 14.3 14.3 14.3	14.5 14.5 14.5 14.4 14.4 14.4	14.3 14.3 14.3 14.3 14.3	14.2 14.2 14.2 14.2 14.2	14.3 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.2 14.2 14.1	14.0 14.0 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1 14.1
MONTH	14.7	14.7	14.7	14.7	14.3	14.6	14.5	14.1	14.3	14.3	14.0	14.2

WE Bb 4—Continued

## TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WAILKI	LANGE	ODLK 2004	O SEI TEM	DLK 2003				
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST	,	S	ЕРТЕМВЕ	ER
1 2 3 4 5	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.1 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1
6 7 8 9 10	14.2 14.1 14.2 14.2 14.1	14.1 14.0 14.0 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.1 14.1	14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.2 14.1 14.1
11 12 13 14 15	14.1 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.1 14.2 14.2 14.2 14.2	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.1 14.1	14.1 14.2 14.2 14.2 14.2
16 17 18 19 20	14.1 14.1 14.1 14.1 14.1	14.0 14.1 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.1 14.2 14.2 14.2	14.0 13.9 13.9 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.2	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2
21 22 23 24 25	14.1 14.2 14.2 14.1 14.1	14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.1 14.1	14.0 14.0 13.9 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.1 14.2 14.1	14.0 14.0 14.0 14.0 14.1	14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2	14.1 14.1 14.1 14.2 14.2	14.2 14.2 14.2 14.2 14.2
26 27 28 29 30 31	14.1 14.1 14.1 14.1 14.1	14.0 14.1 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1	14.2 14.1 14.1 14.1 14.1 14.1	14.0 14.0 14.0 14.0 14.0 14.0	14.1 14.1 14.1 14.1 14.1 14.1	14.2 14.2 14.2 14.2 14.2 14.2	14.0 14.1 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1 14.1	14.2 14.3 14.3 14.3 14.3	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2
MONTH	14.2	14.0	14.1	14.2	13.9	14.1	14.2	14.0	14.1	14.3	14.1	14.2
YEAR	14.8	13.9	14.3									



DAILY MEAN WATER TEMPERATURE - 2005 WATER YEAR

Date	Time	Sample	type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	well, feet below LSD	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sam- pling method, code (82398)
SEP 20	1430	Environn	nental	110ALVM	1028	80855	32	32	22	11.53	.66	55	4040
Date	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)
SEP 20	.8	768	91	1.6	16	6.0	279	32.0	16.0	45	10.5	4.63	3.33
Date	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, unfltrd mg/L (00605)	Phos- phorus, water, fltrd, mg/L (00666)
SEP 20	9.13	101	123	24.2	.1	16.8	<.2	1.8	1.76d	<.06	<.008	.01	.43
Date	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)
SEP 20	.48	2	<.20	.40oc	163	E.04n	.13	.57	1.9oc	E.20noc	36900d	<.08	1,600
Date	Mercury water, fltrd, ug/L (71890)	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)
SEP 20	<.01	<.4	.98oc	<.08oc	<.2	<.04	E.44noc	E111	<.016	<.04	<.02	<.03	<.08c
Date	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)
SEP 20	<.032	<.008	<.02mc	<.028	<.02	<.022	<.04mc	<.008	104	<.02	<.022	<.02	<.01

Geologic Unit (aquifer): 110ALVM - Holocene Alluvium

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80855 - Severn-Trent Laboratory, Denver, CO

Sampling Method: 4040 - Submersible pump

Date	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd, ug/L (50305)	Caf- feine- 13C, surrog, wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)	Daethal mono- acid, water, fltrd 0.7u GF ug/L (49304)
SEP 20	<.02	<.03	<.018	111	<.02	<.016	<.02	<.032mc	<.04vmc	<.04	<.02	<.01	<.03
Date SEP 20	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356) <.04mc	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)
20	<.04	<.03	<.04	<.01	<.01v	<.02	<.04	<.02	<.04IIIC	<.04	<.020	<.01	<.03
Date	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)
SEP 20	<.01	<.01	<.010	<.020	<.03mc	<.04	<.01	<.04mc	<.02	<.01	<.03	<.03	<.030
Date	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)
SEP 20	<.01	<.008	<.02	<.038	<.026v	<.016	<.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Date	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltud ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)
SEP 20	<1.0	<1.0	<1.0	<1	<1.0	<2.0	<1.0	<1	<1.0	<1.0	<1.0	<1	<1.0
Date SEP 20	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso-propyl-toluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo-di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chlorobenzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)
۷٠	<1	<3.0	<1.U	<1.0	<1.0	<20	<.30	<1.U	<1.0	<1.0	<2.U	<.30	<2.U

Date	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iso- propyl- benzene water unfltrd ug/L (77223)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphth- alene, water, unfltrd ug/L (34696)
SEP 20	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	E.40v	<.50	<1	<10	<1.0	<.50	<1
Date	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)
SEP 20	<1.0	<1.0	<.50	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<.50	<1.0	<1.0	<1.0

		Tri-				
	Tri-	chloro-	Tri-	Vinyl		
	chloro-	fluoro-	chloro-	chlor-	Uranium	
	ethene,	methane	methane	ide,	natural	
	water,	water	water	water,	water,	Sampler
-	unfltrd	unfltrd	unfltrd	unfltrd	fltrd,	type,
Date	ug/L	ug/L	ug/L	ug/L	ug/L	code
	(39180)	(34488)	(32106)	(39175)	(22703)	(84164)
SEP						
20	<1.0	< 2.0	<1.0	<1.0	<.04	4040

Remark codes used in this table:

< -- Less than. E -- Estimated.

Value qualifier codes used in this table:

c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
o -- Result determined by alternate method
v -- Analyte detected in laboratory blank

Sampler type: 4040 - Submersible pump

### WE Cb 5

### WATER-QUALITY RECORDS

PERIOD OF RECORD .-- July 2003 to September 2005.

PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: July 2003 to current year. WATER TEMPERATURE: July 2003 to current year.

INSTRUMENTATION .-- Water-quality monitor July 2003 to current year.

REMARKS.--Records good. Missing record due to periodic instrument malfunction.

### EXTREMES FOR PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 431 microsiemens/cm, May 28, 2004; minimum, 242 microsiemens/cm, on several days during March 2005. WATER TEMPERATURE: Maximum, 16.2°C, on several days Nov. through Dec. (multiple years); minimum, 13.4°C, on several days during May 2005.

EXTREMES FOR CURRENT YEAR.-- SPECIFIC CONDUCTANCE: Maximum, 315 microsiemens/cm, Oct. 1; minimum, 242 microsiemens/cm, on several days. WATER TEMPERATURE: Maximum, 16.2°C, Nov. 5; minimum, 13.4°C, on several days.

WE Cb 5-—Continued

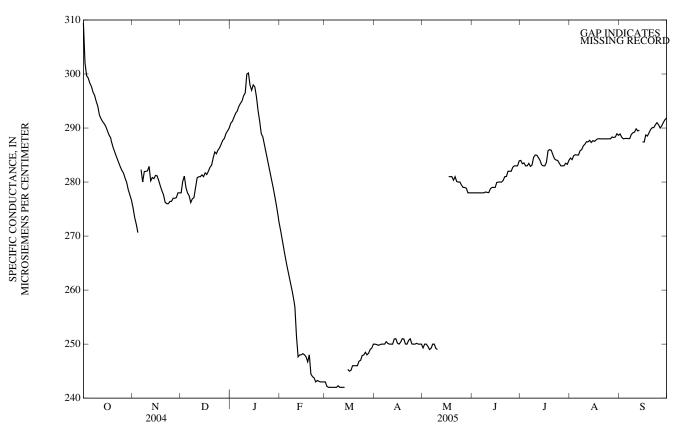
SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	NOVEMBE	R	D	ECEMBE	ER		JANUARY	
1 2 3 4 5	315 306 300 300 299	306 298 299 299 298	309 302 300 299 298	276 274 273 271	274 273 271 270	275 273 272 271	278 287 282 281 278	278 278 280 277 277	278 280 281 279 278	291 292 292 293 294	290 291 292 292 293	291 291 292 293 293
6 7 8 9 10	298 297 297 296 305	297 296 296 294 293	298 297 296 295 294	284 281 282 282 284	280 279 281 281 281	282 280 282 282 282	278 277 277 278 280	277 275 275 276 278	277 276 277 277 279	294 295 295 296 298	294 294 295 295 296	294 295 295 296 297
11 12 13 14 15	294 292 292 295 294	292 291 290 290 290	292 292 291 291 290	284 282 282 281 282	282 278 280 280 281	283 280 281 281 281	281 282 281 282 281	280 280 281 281 281	281 281 281 281 281	305 303 299 298 299	297 299 296 296 297	300 300 298 297 298
16 17 18 19 20	290 290 289 288 286	289 288 288 286 285	289 289 288 287 286	282 281 280 279 278	281 280 278 278 277	281 280 279 278 278	282 282 282 283 284	281 281 282 282 283	282 281 282 283 283	298 297 295 292 291	297 295 292 290 288	298 296 293 291 289
21 22 23 24 25	286 285 284 283 283	285 284 283 282 282	285 284 284 283 282	277 276 276 277 277	276 276 276 276 276	276 276 276 276 276	285 286 286 286 287	284 285 285 285 286	284 286 285 286 286	289 288 286 285 283	288 286 285 283 282	288 287 285 284 283
26 27 28 29 30 31	282 282 281 279 278 277	281 280 279 278 277 276	282 281 280 279 278 277	277 277 278 278 278 	277 277 277 278 278 	277 277 277 278 278 	288 288 289 289 290 290	287 287 288 289 289 290	287 288 288 289 289 290	282 280 279 277 276 274	280 279 277 276 274 272	281 280 278 277 275 273
MONTH	315	276	290	284	270	278	290	275	282	305	272	290
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	272 271 270 267 265	270 268 267 265 264	271 269 268 266 265	243 243 242 242 242	243 242 242 242 242	243 242 242 242 242	250 250 250 250 250 250	249 249 249 249 250	250 250 250 250 250 250	250 250 250 250 250 249	249 250 250 249 249	249 250 250 250 249
6 7 8 9 10	264 262 261 260 258	262 261 260 258 256	263 262 260 259 257	242 242 242 250 242	242 242 242 242 242 242	242 242 242 242 242	250 250 251 251 250	250 250 250 250 250 250	250 250 250 250 250	250 250 250 250 249	249 250 250 249 249	249 250 250 249 249
11 12 13 14 15	256 248 248 249 257	246 247 248 248 248	251 248 248 248 248	242 242 242  246	242 242 242  245	242 242 242  245	250 250 251 251 251	250 250 250 251 250	250 250 251 251 250	  	  	   
16 17 18 19 20	249 258 247 258 245	248 246 246 245 244	248 248 247 248 244	245 246 246 246 246	245 245 246 246 246	245 245 246 246 246	250 251 251 251 251	250 250 251 250 250	250 250 251 251 250	281 281 281 281	281 281 281 280	281 281 281 280
21 22 23 24 25	244 244 243 253 249	243 243 243 243 243	244 244 243 243 243	246 247 247 248 248	246 246 247 247 248	246 247 247 248 248	250 251 251 251 250	250 250 250 250 250 250	250 251 251 250 250	281 281 280 280 280	281 280 280 280 279	281 280 280 280 279
26 27 28 29 30 31	243 243 243 	243 243 243 	243 243 243 	249 249 249 249 250 250	248 248 248 249 249 250	248 248 248 249 249 250	250 251 250 250 250	250 250 250 250 250 250	250 250 250 250 250 250	279 279 279 278 278 278	279 279 278 278 278 278 278	279 279 279 278 278 278
MONTH	272	243	252	250	242	245	251	249	250	281	249	268

WE Cb 5---Continued

## SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST	,	S	ЕРТЕМВІ	ER
1 2 3 4 5	278 278 278 278 278 278	278 278 278 278 278	278 278 278 278 278	284 284 284 283 283	284 283 283 283 283	284 283 284 283 283	285 285 285 286 285	284 284 284 285 285	284 284 285 285 285	289 289 288 289 289	288 288 288 288 288	289 288 288 288 288
6 7 8 9 10	278 278 278 279 279	278 278 278 278 278 278	278 278 278 278 278	284 284 284 286 285	283 282 282 284 285	283 283 283 285 285	285 286 286 287 287	285 285 286 286 287	285 286 286 287 287	289 289 289 290 290	288 288 288 289 289	288 288 289 289 289
11 12 13 14 15	279 279 279 279 279	278 278 279 279 279	278 279 279 279 279	285 285 284 284 283	284 284 284 283 283	285 285 284 283 283	288 288 288 288 288	287 287 287 287 287	287 287 288 287 288	290 290 290  289	289 289 289  287	290 289 290  287
16 17 18 19 20	280 280 280 280 281	279 280 280 280 280	280 280 280 280 280	283 285 286 286 286	283 282 285 286 285	283 284 286 286 286	288 288 288 288 288	287 287 288 288 288	288 288 288 288 288	288 290 290 290 290	286 288 288 288 289	287 289 289 289 290
21 22 23 24 25	281 282 282 282 282 282	281 281 282 282 282	281 281 282 282 282	286 286 285 284 284	285 284 284 284 283	285 284 284 284 283	288 288 288 288 288	288 288 288 288 288	288 288 288 288 288	291 291 291 291 291	290 290 290 291 290	290 290 291 291 291
26 27 28 29 30 31	283 283 283 283 284	282 283 283 283 283	283 283 283 283 284	283 283 284 284 284 284	283 283 283 283 283 283 284	283 283 283 283 283 284	289 289 289 289 289 289	288 288 288 288 288 288	288 288 288 288 289 289	290 291 292 292 292	290 290 291 291 291	290 290 291 292 292
MONTH	284	278	280	286	282	284	289	284	287	292	286	289
YEAR	315	242	275									



DAILY MEAN SPECIFIC CONDUCTIVITY - 2005 WATER YEAR

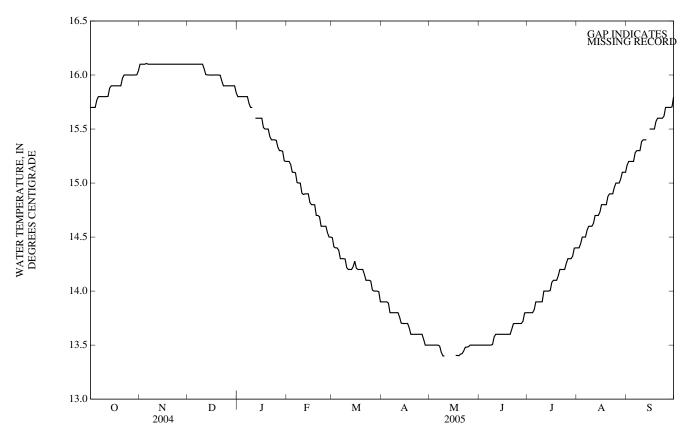
# TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WATER YI	EAR OCT	OBER 2004 1	IO SEPTEM	BER 2005				
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	(	OCTOBER	<b>t</b>	N	OVEMBE	R	D	ECEMBE	ER		JANUARY	
1 2 3 4 5	15.7 15.7 15.7 15.7 15.8	15.7 15.7 15.7 15.7 15.7	15.7 15.7 15.7 15.7 15.8	16.1 16.1 16.1 16.1 16.2	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	15.8 15.8 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8
6 7 8 9 10	15.8 15.8 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	15.8 15.8 15.8 15.7 15.7	15.8 15.8 15.7 15.7 15.7	15.8 15.8 15.7 15.7 15.7
11 12 13 14 15	15.8 15.9 15.9 15.9 15.9	15.8 15.8 15.8 15.9 15.9	15.8 15.8 15.9 15.9 15.9	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.1 16.0 16.0 16.0 16.0	15.6 15.6 15.6 15.6	15.6 15.6 15.6 15.6	15.6 15.6 15.6 15.6
16 17 18 19 20	15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	15.6 15.6 15.5 15.5 15.5	15.6 15.5 15.5 15.5 15.5	15.6 15.5 15.5 15.5 15.5
21 22 23 24 25	16.0 16.0 16.0 16.0 16.0	15.9 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.0 16.0 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	16.0 15.9 15.9 15.9 15.9	15.5 15.4 15.4 15.4 15.4	15.4 15.4 15.4 15.4 15.3	15.4 15.4 15.4 15.4 15.4
26 27 28 29 30 31	16.0 16.0 16.0 16.0 16.1 16.1	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0 16.0	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	15.9 15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9 15.8	15.9 15.9 15.9 15.9 15.9 15.8	15.4 15.3 15.3 15.3 15.3 15.2	15.3 15.3 15.3 15.2 15.2 15.2	15.3 15.3 15.3 15.3 15.2 15.2
MONTH	16.1	15.7	15.9	16.2	16.1	16.1	16.1	15.8	16.0	15.8	15.2	15.5
	F	EBRUAR			MARCH			APRIL			MAY	
1 2 3 4 5	15.2 15.2 15.2 15.1 15.1	15.2 15.2 15.1 15.1 15.1	15.2 15.2 15.2 15.1 15.1	14.5 14.5 14.4 14.4 14.4	14.4 14.4 14.4 14.3	14.5 14.4 14.4 14.4 14.4	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.8	13.9 13.9 13.9 13.9 13.9	13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5
6 7 8 9 10	15.1 15.1 15.0 15.0 15.0	15.0 15.0 15.0 15.0 14.9	15.1 15.0 15.0 15.0 14.9	14.3 14.3 14.3 14.3 14.3	14.3 14.3 14.3 14.2 14.2	14.3 14.3 14.3 14.3 14.2	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.5 13.5 13.5 13.4 13.4	13.5 13.4 13.4 13.4 13.4	13.5 13.5 13.4 13.4 13.4
11 12 13 14 15	14.9 14.9 14.9 14.9 14.9	14.8 14.9 14.9 14.9 14.8	14.9 14.9 14.9 14.9 14.8	14.2 14.2 14.2 14.3 14.3	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.3	13.8 13.8 13.8 13.7 13.7	13.8 13.7 13.7 13.7 13.7	13.8 13.8 13.7 13.7 13.7	   	  	  
16 17 18 19 20	14.8 14.8 14.8 14.7 14.7	14.8 14.8 14.7 14.7 14.7	14.8 14.8 14.8 14.7 14.7	14.3 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.2	13.7 13.7 13.7 13.6 13.6	13.7 13.7 13.6 13.6 13.6	13.7 13.7 13.7 13.6 13.6	13.5 13.5 13.5 13.5	13.4 13.4 13.4 13.4	13.4 13.4 13.4 13.4
21 22 23 24 25	14.7 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.7 14.6 14.6 14.6 14.6	14.2 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.0	14.2 14.1 14.1 14.1 14.1	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	13.5 13.5 13.5 13.5 13.5	13.4 13.4 13.4 13.4 13.4	13.4 13.4 13.5 13.5 13.5
26 27 28 29 30 31	14.6 14.5 14.5 	14.5 14.5 14.5 	14.5 14.5 14.5 	14.1 14.0 14.0 14.0 14.0 14.0	14.0 14.0 14.0 14.0 13.9 13.9	14.0 14.0 14.0 14.0 14.0 13.9	13.6 13.6 13.5 13.5	13.6 13.5 13.5 13.5 13.5	13.6 13.6 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5 13.5
MONTH	15.2	14.5	14.8	14.5	13.9	14.2	13.9	13.5	13.7	13.5	13.4	13.5

WE Cb 5---Continued

## TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WAILKII	LANGE	ODLK 2004	I O SLI I LIVI	DLK 2003				
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST	•	S	ЕРТЕМВІ	ER
1 2 3 4 5	13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.5	13.8 13.8 13.8 13.8 13.9	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	14.4 14.4 14.5 14.5 14.5	14.4 14.4 14.4 14.5 14.5	14.4 14.4 14.4 14.5 14.5	15.2 15.2 15.2 15.2 15.2	15.1 15.2 15.2 15.2 15.2	15.2 15.2 15.2 15.2 15.2
6 7 8 9 10	13.5 13.5 13.5 13.6 13.6	13.5 13.5 13.5 13.5 13.5	13.5 13.5 13.5 13.5 13.6	13.9 13.9 13.9 13.9 14.0	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	14.5 14.6 14.6 14.6 14.6	14.5 14.5 14.6 14.6 14.6	14.5 14.6 14.6 14.6 14.6	15.3 15.3 15.3 15.3 15.4	15.2 15.3 15.3 15.3 15.3	15.3 15.3 15.3 15.3 15.4
11 12 13 14 15	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	14.0 14.0 14.0 14.0 14.1	14.0 14.0 14.0 14.0 14.0	14.0 14.0 14.0 14.0 14.0	14.7 14.7 14.7 14.7 14.8	14.6 14.7 14.7 14.7 14.7	14.6 14.7 14.7 14.7 14.7	15.4 15.4 15.4  15.5	15.4 15.4 15.4  15.5	15.4 15.4 15.4  15.5
16 17 18 19 20	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	13.6 13.6 13.6 13.6 13.6	14.1 14.1 14.1 14.1 14.2	14.0 14.1 14.1 14.1 14.1	14.1 14.1 14.1 14.1 14.1	14.8 14.8 14.8 14.8 14.9	14.8 14.8 14.8 14.8 14.8	14.8 14.8 14.8 14.8 14.9	15.5 15.5 15.5 15.6 15.6	15.5 15.5 15.5 15.5 15.6	15.5 15.5 15.5 15.6 15.6
21 22 23 24 25	13.7 13.7 13.7 13.7 13.7	13.6 13.6 13.7 13.7 13.7	13.6 13.7 13.7 13.7 13.7	14.2 14.2 14.2 14.2 14.3	14.2 14.2 14.2 14.2 14.2	14.2 14.2 14.2 14.2 14.3	14.9 14.9 14.9 15.0 15.0	14.9 14.9 14.9 14.9 15.0	14.9 14.9 14.9 15.0 15.0	15.6 15.6 15.6 15.7 15.7	15.6 15.6 15.6 15.6 15.7	15.6 15.6 15.6 15.6 15.7
26 27 28 29 30 31	13.7 13.7 13.8 13.8 13.8	13.7 13.7 13.7 13.7 13.8	13.7 13.7 13.7 13.8 13.8	14.3 14.3 14.3 14.4 14.4	14.3 14.3 14.3 14.3 14.3 14.4	14.3 14.3 14.3 14.3 14.4 14.4	15.0 15.0 15.1 15.1 15.1 15.1	15.0 15.0 15.0 15.1 15.1 15.1	15.0 15.0 15.0 15.1 15.1 15.1	15.7 15.7 15.7 15.8 15.8	15.7 15.7 15.7 15.7 15.7	15.7 15.7 15.7 15.7 15.8
MONTH	13.8	13.5	13.6	14.4	13.8	14.1	15.1	14.4	14.8	15.8	15.1	15.5
YEAR	16.2	13.4	14.8									



DAILY MEAN WATER TEMPERATURE - 2005 WATER YEAR

Date	Time	Sampl	le type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)
SEP 14	1400	Environ	mental	110TRRC	1028	80855	22.6	23	13	12.26	1.0	50	4040
Date	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dis- solved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfitrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)
SEP 14	1.3	764	168	4.5	48	5.2	286	31.0	18.0	110	34.7	5.21	4.39
Date	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro- gen, water, unfltrd mg/L (00600)	Phos- phorus, water, fltrd, mg/L (00666)
SEP 14	9.40	10	12	11.9	<.1	6.4	76.7	.12	<.04	5.41d	<.008	5.5	<.04
Date	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molyb- denum, water, fltrd, ug/L (01060)
SEP 14	<.04	2	<.20	E.06noc	29	.07	.32	.47oc	E3n	.10	19.3	<.01	<.4
Date SEP 14	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)
14	.9100	<b>\.</b> .2	15.0211	2.400	E120	<.010	<b>\.</b> .04	<.∪∠	<.03	\.U0C	<.U3Z	<.UU0	<.02IIIC
Date	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pet rev (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caf- feine, water, fltrd, ug/L (50305)
SEP 14 Geologic U	<.028 Jnit (aquife	<.02 r): 110TR1	<.022 RC - Terra	<.04mc	<.008	119	<.02	<.022	<.02	<.01	<.02	<.03	<.018

Geologic Unit (aquifer): 110TRRC - Terrace Deposits Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80855 - Severn-Trent Laboratory, Denver, CO

Sampling Method: 4040 - Submersible pump

Date	Caf- feine- 13C, surrog, wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)
SEP 14	129	<.02	<.016	<.02	<.032mc	<.04vmc	<.04	<.02	<.01	<.03	<.04	<.03	<.04
Date SEP	Diphen- amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)
14	<.01	<.01v	<.02	<.04	<.02	<.04mc	<.04	<.020	<.01	<.03	<.01	<.01	<.010
Date	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)
SEP 14	<.020	<.03mc	<.04	<.01	<.04mc	<.02	<.01	<.03	<.03	<.030	<.01	<.008	<.02
Date SEP	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)
14	<.038	<.026v	<.016	<.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Date	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)
SEP 14	<1	<1.0	<2.0	<1.0	<1	<1.0	<1.0	<1.0	<1	<1.0	<1	<5.0	<1.0
Date SEP	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)
14	<1.0	<1.0	<20	<.50	<1.0	<1.0	<1.0	<2.0	<.50	<2.0	<2.0	<1.0	<1.0

Date	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iso- propyl- benzene water unfltrd ug/L (77223)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)
SEP 14	<1.0	<1.0	<2.0	<5.0	<.50	<1	<10	<1.0	<.50	<1	<1.0	<1.0	<.50
Date	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra- chloro- methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)
SEP 14	<1.0	<1.0	E1.4	<1.0	<1.0	<1.0	<.50	<1.0	<1.0	<1.0	<1.0	<2.0	E.95

Date	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Uranium natural water, fltrd, ug/L (22703)	Sampler type, code (84164)
SEP 14	<1.0	< 04	4040

Remark codes used in this table: < -- Less than. E -- Estimated.

Value qualifier codes used in this table: c -- See laboratory comment d -- Diluted sample: method hi range

exceeded m -- Value is highly variable by this method

n -- Below the LRL and above the LT-MDL

o -- Result determined by alternate method v -- Analyte detected in laboratory blank

Sampler type: 4040 - Submersible pump

### WE Cb 6

### WATER-QUALITY RECORDS

PERIOD OF RECORD .-- July 2003 to current year

PERIOD OF DAILY RECORD.--SPECIFIC CONDUCTANCE: July 2003 to current year. WATER TEMPERATURE: July 2003 to current year.

INSTRUMENTATION .-- Water-quality monitor July 2003 to current year.

REMARKS.--Records good. Missing record due to periodic instrument malfunction.

### EXTREMES FOR PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 134 microsiemens/cm, Feb. 3, 2004; minimum, 48 microsiemens/cm, Feb. 27, 28, 2005.

WATER TEMPERATURE: Maximum, 16.1°C, on many days during Nov. through Jan. (multiple years); minimum, 14.3°C, on many days during June 2004.

EXTREMES FOR CURRENT YEAR.--SPECIFIC CONDUCTANCE: Maximum, 102 microsiemens/cm, Sept. 10, 11, 12, 13, 14; minimum, 48 microsiemens/cm, Feb. 27, 28. WATER TEMPERATURE: Maximum, 16.1°C, on many days; minimum, 14.5°C, May 26, 27, June 2, 3, 4.

WE Cb 6---Continued

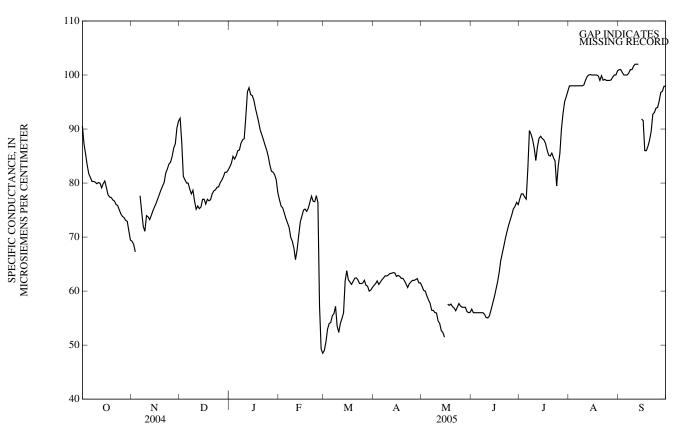
# SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		1	NOVEMBEI	R	I	DECEMBE	3		JANUARY	
1 2 3 4 5	94 89 86 84 82	87 85 83 82 81	91 87 85 83 82	70 69 68 	68 68 66 	69 69 67 	92 92 82 81 80	92 82 81 80 80	92 88 81 81 80	83 84 85 85 86	83 83 84 84 84	83 84 85 84 85
6 7 8 9 10	82 82 82 82 81	81 80 80 80 79	81 80 80 80 80	78 76 73 73 74	76 73 71 70 73	78 75 72 71 74	80 80 78 79 78	80 78 78 78 76	80 79 78 79 77	86 87 88 88 89	86 86 87 88 88	86 86 87 88 88
11 12 13 14 15	81 80 82 81	80 79 78 78 79	80 80 79 80 80	74 74 74 75 76	73 73 74 74 75	74 73 74 75 76	76 76 76 76 77	75 75 75 75 76	75 76 75 76 77	98 98 98 97 97	89 96 97 95 96	92 97 98 96 96
16 17 18 19 20	80 79 79 79 79	77 76 76 76 76	79 78 77 77 77	77 77 78 79 80	76 77 77 78 79	76 77 78 79 79	77 77 77 77 78	77 76 77 76 76	77 76 77 77 77	96 95 93 92 90	95 93 92 90 89	95 94 93 91 90
21 22 23 24 25	78 77 78 77 76	76 75 75 74 73	77 76 76 75 74	82 82 83 84 84	80 81 82 83 83	80 82 83 84 84	78 79 79 80 80	78 78 78 79 79	78 79 79 79 79	89 88 88 87 86	88 88 87 86 84	89 88 87 86 85
26 27 28 29 30 31	75 74 74 73 72 70	73 73 72 72 70 69	74 74 73 73 71 69	86 88 88 92 92	84 86 87 87 91	85 86 87 90 91	81 81 82 82 82 83	79 80 81 82 82 82	80 81 81 82 82 82	84 83 83 82 81 80	82 82 82 81 79 78	83 82 82 82 81 78
MONTH	94	69	78	92	66	78	92	75	79	98	78	88
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	78 77 76 76 74	76 75 74 74 73	77 76 75 74 73	49 52 54 54 55	49 49 52 53 54	49 51 53 54 54	62 62 62 62 62	60 61 61 61	61 62 61 62	61 60 60 59	60 60 60 59 58	61 60 60 59 58
6 7 8 9 10	73 72 70 70 69	72 70 70 69 66	73 72 70 69 68	56 57 58 57 54	54 55 55 52 52	55 56 57 54 52	63 63 63 64	62 62 62 62 62	62 62 63 63 63	58 57 57 57 56	57 56 56 56 55	58 56 56 56 56
11 12 13 14 15	67 69 71 74 75	65 67 69 71 73	66 68 70 73 74	54 56 56 71 66	54 54 56 56 63	54 55 56 62 64	64 64 64 64 63	63 63 63 63	63 63 63 63	56 54 54 53 52	54 54 52 52 51	54 54 53 52 51
16 17 18 19 20	75 76 75 77 77	75 75 74 74 76	75 75 75 75 76	63 62 62 62 63	62 61 61 61 62	62 62 61 62 62	63 63 63 63 62	62 62 62 62 61	63 63 62 62 62	59 58 58 58	57 57 57 57 57	58 57 58 57
21 22 23 24 25	78 78 78 79 79	77 75 74 74 63	78 77 77 78 76	63 63 62 62 62	62 62 61 61 61	62 62 61 61 62	62 61 62 62 62	61 60 61 61	61 61 61 62 62	57 57 58 58 58	56 56 57 57 57	57 56 57 58 57
26 27 28 29 30 31	67 51 49 	51 48 48 	57 49 48 	62 62 62 60 61 62	62 61 60 60 60	62 61 61 60 60 61	62 63 63 62 62	61 62 62 61 61	62 62 62 62 62	57 57 57 57 56 57	57 57 57 56 56 56	57 57 57 56 56 56
MONTH	79	48	71	71	49	58	64	60	62	61	51	57

WE Cb 6---Continued

## SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		S	ЕРТЕМВІ	ER
1 2 3 4 5	57 56 56 56 56	56 56 56 56 56	57 56 56 56 56	78 78 78 78 78	76 78 78 77 77	77 78 78 77 77	98 98 98 98	98 98 98 98	98 98 98 98 98	101 101 101 100 100	101 101 100 100 100	101 101 100 100 100
6 7 8 9 10	56 56 56 56 56	56 56 56 55 55	56 56 56 56 55	90 90 90 89 88	77 89 89 88 84	83 90 89 88 86	98 99 98 98 99	98 98 98 98	98 98 98 98 98	100 101 101 101 102	100 100 101 101 101	100 100 101 101 102
11 12 13 14 15	56 56 57 58 60	55 55 56 57 58	55 55 56 58 59	85 88 89 89	84 85 88 88	84 87 88 89 88	100 100 100 101 100	99 99 100 100 100	99 100 100 100 100	102 102 102  93	102 102 102  88	102 102 102  92
16 17 18 19 20	61 62 65 66 68	59 61 62 64 66	60 61 63 65 67	88 89 88 88	88 85 85 85 85	88 87 86 85 85	100 100 100 100 99	100 100 100 99 99	100 100 100 100 99	92 86 86 87 89	86 86 86 86 87	92 86 86 87 88
21 22 23 24 25	69 70 72 73 74	67 69 70 71 72	68 70 71 72 73	89 85 85 82 84	84 84 79 78 82	86 85 84 79 83	100 100 100 99 99	99 99 99 99	100 99 99 99	90 93 94 94 94	89 90 93 93 94	90 93 93 94 94
26 27 28 29 30 31	75 76 76 77 76	73 74 75 76 76	74 75 76 76 76	86 92 94 96 96 98	84 86 92 94 96	85 90 93 95 96 97	99 100 100 100 100 101	99 99 99 100 100	99 99 100 100 100 101	96 97 97 98 98	94 96 97 97 90	95 97 97 98 98
MONTH	77	55	63	98	76	86	101	98	99	102	86	96
YEAR	102	48	76									



DAILY MEAN SPECIFIC CONDUCTIVITY - 2005 WATER YEAR

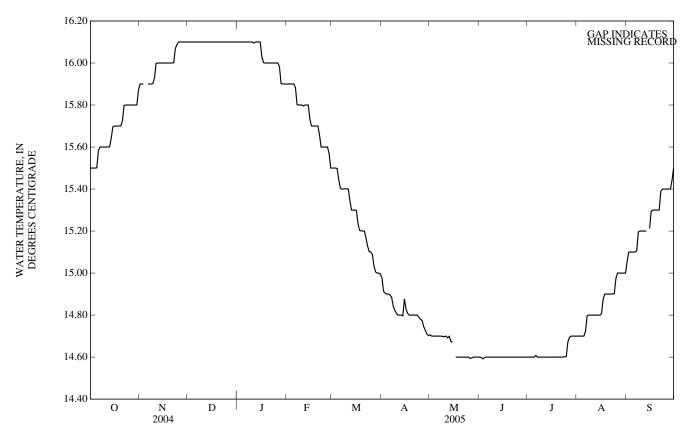
# TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WATER YE	EAR OCTO	JBER 2004 1	IO SEPTEMI	BER 2005				
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			OVEMBE			ECEMBE			JANUARY	
1 2 3 4 5	15.5 15.5 15.5 15.5 15.6	15.5 15.5 15.5 15.5 15.5	15.5 15.5 15.5 15.5 15.5	15.9 15.9 15.9 	15.9 15.9 15.9	15.9 15.9 15.9 	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1
6 7 8 9 10	15.6 15.6 15.6 15.6 15.6	15.5 15.6 15.6 15.6 15.6	15.6 15.6 15.6 15.6 15.6	15.9 15.9 15.9 16.0 16.0	15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1
11 12 13 14 15	15.6 15.6 15.7 15.7 15.7	15.6 15.6 15.6 15.6 15.6	15.6 15.6 15.6 15.6 15.7	16.0 16.0 16.0 16.0 16.0	15.9 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.0 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1
16 17 18 19 20	15.7 15.7 15.7 15.7 15.8	15.7 15.7 15.7 15.7 15.7	15.7 15.7 15.7 15.7 15.7	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0
21 22 23 24 25	15.8 15.8 15.8 15.8 15.8	15.7 15.7 15.8 15.8 15.8	15.7 15.8 15.8 15.8 15.8	16.0 16.1 16.1 16.1 16.1	16.0 16.0 16.0 16.0 16.1	16.0 16.0 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0	16.0 16.0 16.0 16.0 16.0
26 27 28 29 30 31	15.8 15.8 15.8 15.8 15.9 15.9	15.8 15.8 15.8 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8 15.9	16.1 16.1 16.1 16.1 	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1 16.1	16.1 16.1 16.1 16.1 16.1	16.0 16.0 16.0 15.9 15.9	16.0 15.9 15.9 15.9 15.9 15.9	16.0 16.0 15.9 15.9 15.9 15.9
MONTH	15.9	15.5	15.7	16.1	15.9	16.0	16.1	16.1	16.1	16.1	15.9	16.0
	I	FEBRUARY	7		MARCH			APRIL			MAY	
1 2 3 4 5	15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	15.9 15.9 15.9 15.9 15.9	15.5 15.5 15.5 15.5 15.5	15.5 15.5 15.5 15.4 15.4	15.5 15.5 15.5 15.5 15.4	15.0 15.0 15.0 14.9 14.9	14.9 14.9 14.9 14.9 14.9	15.0 14.9 14.9 14.9 14.9	14.8 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.7 14.7
6 7 8 9 10	15.9 15.9 15.8 15.8 15.8	15.8 15.8 15.8 15.8 15.8	15.9 15.8 15.8 15.8 15.8	15.5 15.4 15.4 15.5 15.4	15.4 15.4 15.4 15.4 15.4	15.4 15.4 15.4 15.4 15.4	14.9 14.9 14.9 14.9 14.9	14.8 14.8 14.8 14.8 14.8	14.9 14.9 14.8 14.8 14.8	14.7 14.7 14.7 14.7 14.7	14.7 14.7 14.7 14.6 14.6	14.7 14.7 14.7 14.7 14.7
11 12 13 14 15	15.8 15.8 15.8 15.8 15.8	15.7 15.8 15.8 15.8 15.7	15.8 15.8 15.8 15.8 15.7	15.4 15.4 15.3 15.3 15.3	15.4 15.3 15.3 15.3 15.3	15.4 15.3 15.3 15.3 15.3	14.8 14.8 14.8 14.9 14.9	14.8 14.8 14.8 14.7 14.8	14.8 14.8 14.8 14.8 14.9	14.8 14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6	14.7 14.7 14.7 14.7 14.7
16 17 18 19 20	15.7 15.7 15.7 15.7 15.7	15.7 15.7 15.7 15.7 15.7	15.7 15.7 15.7 15.7 15.7	15.3 15.3 15.3 15.3 15.2	15.2 15.2 15.2 15.2 15.2	15.3 15.2 15.2 15.2 15.2	14.9 14.9 14.8 14.8 14.8	14.8 14.8 14.8 14.8 14.8	14.8 14.8 14.8 14.8 14.8	14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6
21 22 23 24 25	15.7 15.6 15.6 15.6 15.6	15.6 15.6 15.6 15.6 15.6	15.7 15.6 15.6 15.6 15.6	15.2 15.2 15.2 15.2 15.1	15.2 15.1 15.1 15.1 15.1	15.2 15.2 15.1 15.1 15.1	14.8 14.8 14.8 14.8 14.8	14.8 14.8 14.8 14.7 14.7	14.8 14.8 14.8 14.8 14.8	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6	14.6 14.6 14.6 14.6 14.6
26 27 28 29 30	15.6 15.6 15.5 	15.6 15.5 15.5 	15.6 15.6 15.5	15.1 15.1 15.1 15.0 15.0	15.0 15.0 15.0 15.0 15.0	15.1 15.0 15.0 15.0 15.0	14.8 14.8 14.8 14.8 14.8	14.7 14.7 14.7 14.7 14.7	14.8 14.7 14.7 14.7 14.7	14.6 14.6 14.6 14.6 14.6	14.5 14.5 14.6 14.6	14.6 14.6 14.6 14.6 14.6
31 MONTH	15.9	15.5	15.7	15.0 15.5	14.9 14.9	15.0 15.3	15.0	14.7	14.8	14.6 14.8	14.6 14.5	14.6 14.7
	13.7	15.5	15.7	13.3	1 1.7	15.5	15.0	1 1.7	11.0	17.0	17.5	1 1./

WE Cb 6---Continued

## TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

				WILLIAM I	Li III OCI	ODLIC 2001 I	O DEI TEM	DLIC 2003				
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		SI	ЕРТЕМВЕ	ER
1	14.6	14.6	14.6	14.6	14.6	14.6	14.7	14.7	14.7	15.1	15.0	15.1
2	14.6	14.5	14.6	14.6	14.6	14.6	14.7	14.7	14.7	15.1	15.1	15.1
3	14.6	14.5	14.6	14.6	14.6	14.6	14.7	14.7	14.7	15.1	15.1	15.1
4	14.6	14.5	14.6	14.6	14.6	14.6	14.7	14.7	14.7	15.1	15.1	15.1
5										15.1		
3	14.6	14.6	14.6	14.6	14.6	14.6	14.7	14.7	14.7	13.1	15.1	15.1
6	14.6	14.6	14.6	14.8	14.6	14.6	14.8	14.7	14.7	15.1	15.1	15.1
7	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.7	14.8	15.2	15.1	15.1
8	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.1	15.2
9	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.2	15.2
10	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.2	15.2
	146	116	146		116	146	140	140		15.0	15.0	
11	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.2	15.2
12	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.2	15.2
13	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.2	15.2	15.2
14	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8			
15	14.6	14.6	14.6	14.6	14.6	14.6	14.8	14.8	14.8	15.3	15.2	15.2
16	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.8	14.8	15.3	15.2	15.3
17	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.8	14.9	15.3	15.3	15.3
18	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.9	14.9	15.3	15.3	15.3
	14.6	14.6						14.9		15.3		
19			14.6	14.6	14.6	14.6	14.9		14.9		15.3	15.3
20	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.9	14.9	15.3	15.3	15.3
21	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.9	14.9	15.3	15.3	15.3
22	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.9	14.9	15.4	15.3	15.4
23	14.6	14.6	14.6	14.6	14.6	14.6	14.9	14.9	14.9	15.4	15.4	15.4
24	14.6	14.6	14.6	14.7	14.6	14.6	15.0	14.9	14.9	15.4	15.4	15.4
25	14.6	14.6	14.6	14.7	14.6	14.6	15.0	14.9	15.0	15.4	15.4	15.4
23	14.0	14.0	14.0	17.7	14.0	14.0	13.0	14.7	13.0	13.4	13.4	13.4
26	14.6	14.6	14.6	14.7	14.6	14.7	15.0	15.0	15.0	15.4	15.4	15.4
27	14.6	14.6	14.6	14.7	14.6	14.7	15.0	15.0	15.0	15.4	15.4	15.4
28	14.6	14.6	14.6	14.7	14.7	14.7	15.0	15.0	15.0	15.4	15.4	15.4
29	14.6	14.6	14.6	14.7	14.7	14.7	15.0	15.0	15.0	15.5	15.4	15.4
30	14.6	14.6	14.6	14.7	14.7	14.7	15.0	15.0	15.0	15.5	15.5	15.5
31				14.7	14.7	14.7	15.0	15.0	15.0			
MONTH	14.6	14.5	14.6	14.8	14.6	14.6	15.0	14.7	14.9	15.5	15.0	15.3
YEAR	16.1	14.5	15.3									



DAILY MEAN WATER TEMPERATURE - 2005 WATER YEAR

### WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sampl	le type	Geologic unit	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sam- pling, minutes (72004)	Sampling method, code (82398)
SEP 14	1030	Environ	mental	110TRRC	1028	80855	46.3	46	36	12.70	1.0	93	4040
Date	Turbdty white light, det ang 90+/-30 corretd NTRU (63676)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
SEP 14	2.3	764	<1.0	6.2	87	28.0	17.0	10	2.47	1.03	1.25	1.65	27
Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro- gen, water, unfltrd mg/L (00605)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Aluminum, water, fltrd, ug/L (01106)
SEP 14	32	5.58	<.1	11.0	6.4	.18	.11	<.06	.009	.07	.13	.17	<2
Date	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, fltrd, ug/L (01060)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)
SEP 14	<.20	3.4oc	72	<.06	<.04	.08oc	5,210	<.08	92.0	<.01	E.4n	<.08oc	<.2
Date	Thall- ium, water, fltrd, ug/L (01057)	Zinc, water, fltrd, ug/L (01090)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)
SEP 14	<.04	.64oc	E113	<.016	<.04	<.02	<.03	<.08c	<.032	<.008	<.02mc	<.028	<.02
Date	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atra- zine, water, fltrd, ug/L (39632)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rev (90640)	Bendio- carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Caffeine, water, fltrd, ug/L (50305)	Caf- feine- 13C, surrog, wat flt percent recovry (99959)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)
SEP 14	<.022	<.04mc	<.008	104	<.02	<.022	<.02	<.01	<.02	<.03	<.018	150	<.02

Geologic Unit (aquifer): 110TRRC - Terrace Deposit

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80855 - Severn-Trent Laboratory, Denver, CO  $\,$ 

Sampling Method: 4040 - Submersible pump

Date SEP	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di- amino- s-tri- azine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyclo- ate, water, fltrd, ug/L (04031)	Daethal mono- acid, water, fltrd 0.7u GF ug/L (49304)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, ug/L (04033)	Diuron, water, fltrd 0.7u GF ug/L (49300)
14	<.016	<.02	<.032mc	<.04vmc	<.04	<.02	<.01	<.03	<.04	<.03	<.04	<.01	<.01v
Date	Fenuron water, fltrd 0.7u GF ug/L (49297)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Imazaquin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Metsul- furon, water, fltrd, ug/L (61697)
SEP 14	<.02	<.04	<.02	<.04mc	<.04	<.020	<.01	<.03	<.01	<.01	<.010	<.020	<.03mc
Date	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Pic- loram, water, fltrd 0.7u GF ug/L (49291)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sulfo- met- ruron, water, fltrd, ug/L (50337)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)
SEP 14	<.04	<.01	<.04mc	<.02	<.01	<.03	<.03	<.030	<.01	<.008	<.02	<.038	<.026v
Date	Terba- cil, water, fltrd, ug/L (04032)	Tri- clopyr, water, fltrd 0.7u GF ug/L (49235)	1,1,1,2 -Tetra- chloro- ethane, water, unfltrd ug/L (77562)	1,1,1- Tri- chloro- ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra- chloro- ethane, water, unfltrd ug/L (34516)	1,1,2- Tri- chloro- ethane, water, unfltrd ug/L (34511)	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)
SEP 14	<.016	<.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1	<1.0
Date	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	4- Chloro- toluene water unfltrd ug/L (77277)	4-Iso- propyl- toluene water unfltrd ug/L (77356)
SEP 14	<2.0	<1.0	<1	<1.0	<1.0	<1.0	<1	<1.0	<1	<5.0	<1.0	<1.0	<1.0
Date SEP	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chloro- benzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)
14	<20	<.50	<1.0	<1.0	<1.0	<2.0	<.50	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0

### QUALITY OF GROUND WATER IN THE DISTRICT OF COLUMBIA

### WE Cb 6---Continued

Date	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Ethyl- benzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)	Iso- propyl- benzene water unfltrd ug/L (77223)	meta- + para- Xylene, water, unfltrd ug/L (85795)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n- propyl- benzene water unfltrd ug/L (77224)	o- Xylene, water, unfltrd ug/L (77135)	sec- Butyl- benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)
SEP 14	<2.0	<5.0	<.50	<1	<10	<1.0	<.50	<1	<1.0	<1.0	<.50	<1.0	<1.0
Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert- Butyl- benzene water unfltrd ug/L (77353)	Tetra- chloro- ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans- 1,2-Di- chloro- ethene, water, unfltrd ug/L (34546)	trans- 1,3-Di- chloro- propene water unfltrd ug/L (34699)	Tri- bromo- methane water unfltrd ug/L (32104)	Tri- chloro- ethene, water, unfltrd ug/L (39180)	Tri- chloro- fluoro- methane water unfltrd ug/L (34488)	Tri- chloro- methane water unfltrd ug/L (32106)	Vinyl chlor- ide, water, unfltrd ug/L (39175)	Uranium natural water, fltrd, ug/L (22703)
SEP 14	<5.0	<1.0	<1.0	<1.0	<.50	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<.04

Sampler type, code (84164) Date SEP 4040 14...

Remark codes used in this table:

< -- Less than. E -- Estimated.

Value qualifier codes used in this table:

value qualifier codes used in this table:

c -- See laboratory comment

m -- Value is highly variable by this method

n -- Below the LRL and above the LT-MDL

o -- Result determined by alternate method

v -- Analyte detected in laboratory blank

Sampler type: Submersible pump

### WE Cb 8

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2004 to September 2005.

### PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: December 2004 to current year. WATER TEMPERATURE: December 2004 to current year.

INSTRUMENTATION.--Water-quality monitor December 2004 to current year.

REMARKS.--Records good. Missing record due to periodic instrument malfunction.

### EXTREMES FOR PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 60 microsiemens/cm, Sept. 8,9, 2005; minimum, 33 microsiemens/cm, Apr. 2, 2005. WATER TEMPERATURE: Maximum, 14.1°C, Sept. 8, 2005; minimum, 11.1°C, on Mar. 28, 2005.

### EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 60 microsiemens/cm, Sept. 8, 9; minimum, 33 microsiemens/cm, Apr. 2. WATER TEMPERATURE: Maximum, 14.1°C, Sept. 8; minimum, 11.1°C, Mar. 28.

WE Cb 8---Continued

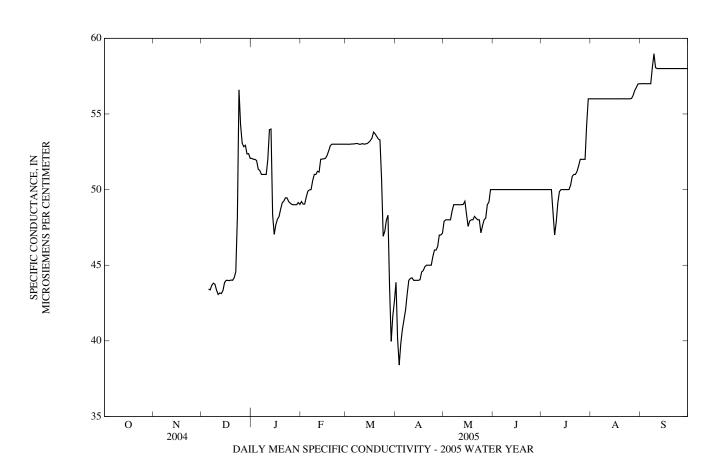
# SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBE	R	D	ECEMBE	ER	:	JANUARY	7
1 2										53 52	52 52	52 52
3 4										52 52	52 51	52 52
5							44	43	43	52	51	51
6 7							44 44	43 43	43 44	52 51	51 51	51 51
8							44	43	44	51	51	51
9 10							44 44	43 43	44 43	51 51	51 51	51 51
11							44	43	43	54	50	52
12 13							44 44	43 43	43 43	54 54	53 54	54 54
14 15							44 44	43 43	43 44	55 48	44 47	48 47
16							44	44	44	48	47	48
17 18							44 44	44 43	44 44	49 49	48 48	48 48
19 20							45 44	44 44	44 44	49 51	48 49	49 49
20							45	44	44	51	49	49
22							45	44	45	51	49	49
23 24							57 59	44 54	48 57	51 50	49 49	49 49
25							55	53	54	50	49	49
26 27							54 53	52 52	53 53	50 49	49 49	49 49
28 29							53 53	52 52	53 52	49 49	49 49	49 49
30 31							53 53	52 52	52 52	50 50	49 49	49 49
MONTH							59	43	47	55	44	50
	I	EBRUAR	Y		MARCH			APRIL			MAY	
1	50	49	49	53	53	53	44	43	44	48	47	48
2 3	50 50	49 49	49 49	53 53	53 53	53 53	45 39	33 37	40 38	48 48	48 48	48 48
4 5	50 50	49 49	50 50	53 54	53 53	53 53	40 41	39 40	40 41	48 48	48 48	48 48
6	50	49	50	54	53	53	42	41	41	49	48	49
7 8	50 51	50 50	50 51	54 54	53 53	53 53	43 44	41 42	42 43	49 49	49 49	49 49
9 10	51	51	51	53	53 53	53	46	43 43	44 44	49 49	49 49	49 49
10	51 52	51 51	51 51	53 54	53	53 53	45 45	43	44	49 49	49	49
12	52	51	51	53	53	53	44	44	44	49	49	49
13 14	52 53	52 52	52 52 52 52	54 54	53 53 53	53 53	44 44	44 44	44 44	50 50	49 49	49 49
15	53	52		54		53	44	44	44	49	48	48
16 17	53 53	52 52	52 52	54 54	53 53	53 53	45 45	44 44	44 45	48 48	47 47	48 48
18 19	53 53	52 52	53	54 54	53 53	54 54	45 45	44 44	45 45	48 48	48 48	48 48
20	53	53	53 53	54	53	54	45	45	45	51	48	48
21 22	53 53	53 53	53 53	54 54	53 53	53 53	45 45	45 45	45 45	49 48	48 48	48 48
22 23 24	53 53	53 53	53 53	54	45 46	51	45	45	45 46	48	48	48
25	53	53	53 53	47 48	47	47 47	46 46	45 46	46	48 48	47 47	47 48
26 27	53 53	53 53	53 53	48 49	47	48	46 47	46	46 46	48 49	48 48	48 48
28	53	53	53	49	48 36	48 44	47 47	46 46	46 47	49	49	49
29 30				41	39	40	47	47	47	50	49	49
30				42	41	42	48	47	47	50	50	50
31 MONTH		  49	 52	42 43 54	41 42 36	42 43 51	48  48	47  33	47  44	50 50 51	50 50 47	50 50 48

WE Cb 8---Continued

## SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		S	ЕРТЕМВІ	ER
1 2 3 4 5	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	56 56 56 56 56	56 56 56 56 56	56 56 56 56 56	57 57 57 57 57	57 57 57 57 57	57 57 57 57 57
6 7 8 9 10	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 47 49	50 50 47 47 47	50 50 48 47 48	56 56 56 56 56	56 56 56 56 56	56 56 56 56 56	57 57 60 60 59	57 57 57 58 58	57 57 58 59 58
11 12 13 14 15	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	49 49 50 50 50	49 50 50 50 50	56 56 56 56 56	56 56 56 56 56	56 56 56 56 56	58 58 58 58 58	58 58 58 58 58	58 58 58 58 58
16 17 18 19 20	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	50 50 50 51 51	50 50 50 50 50	50 50 50 50 50 51	56 56 56 56 56	56 56 56 56 56	56 56 56 56 56	58 58 58 58 58	58 58 58 58 58	58 58 58 58 58
21 22 23 24 25	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	51 51 52 52 52 52	51 51 51 51 52	51 51 51 52 52	56 56 56 56 56	56 56 56 56 56	56 56 56 56 56	58 58 58 58 58	58 58 58 58 58	58 58 58 58 58
26 27 28 29 30 31	50 50 50 50 50	50 50 50 50 50	50 50 50 50 50	52 52 52 56 56 56	52 52 52 52 52 56 56	52 52 52 54 56 56	57 57 57 57 57 57	56 56 56 56 56 57	56 56 57 57 57 57	58 58 58 58 58	58 58 58 58 58	58 58 58 58 58
MONTH	50	50	50	56	47	51	57	56	56	60	57	58
YEAR	60	33	51									



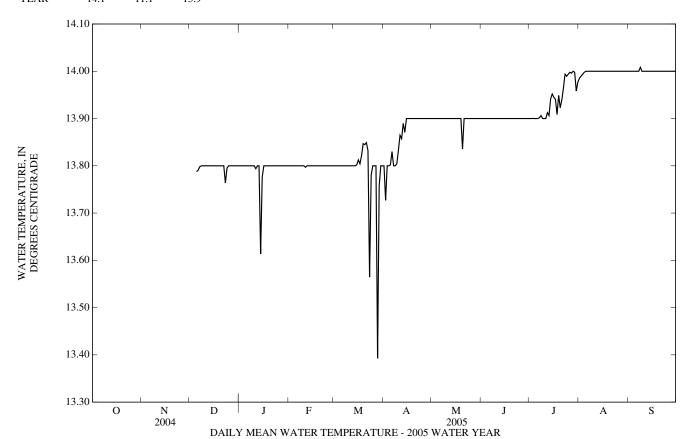
# TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			OVEMBE			ECEMBE			JANUARY	
1 2 3 4 5	  	  	   	   	  	  	13.8	   13.7	   13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8
6 7 8 9 10	  	  	   	  	  	  	13.8 13.8 13.8 13.8 13.8	13.7 13.7 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8
11 12 13 14 15	  	  	   	  	   	  	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.7 13.8 13.8 13.3 13.7	13.8 13.8 13.6 13.6
16 17 18 19 20	  	  	   	   	   	  	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8
21 22 23 24 25	  	  	   	   	   	   	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.7 13.7 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8
26 27 28 29 30 31	   	   	   	   	   	   	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8 13.8
MONTH							13.8	13.7	13.8	13.8	13.3	13.8
		FEBRUARY	7		MARCH			APRIL			MAY	
1 2 3 4 5	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.9	13.8 13.3 13.8 13.8 13.8	13.8 13.7 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9
6 7 8 9 10	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.9 13.8 13.8 13.9 13.9	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9
11 12 13 14 15	13.8 13.8 13.8 13.8 13.8	13.7 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.9	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.8 13.8 13.8 13.8 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9
16 17 18 19 20	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.8 13.8 13.8 13.8 13.8	13.8 13.8 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.6	13.9 13.9 13.9 13.9 13.8
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26 27 28 29 30 31	13.8 13.8 13.8 	13.8 13.8 13.8 	13.8 13.8 13.8 	13.8 13.8 13.8 13.8 13.8	13.8 13.8 11.1 13.6 13.8 13.8	13.8 13.8 13.4 13.8 13.8 13.8	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9 13.9	13.9 13.9 13.9 13.9 13.9 13.9
MONTH	13.8	13.7	13.8	13.9	11.1	13.8	13.9	13.3	13.9	13.9	13.6	13.9

WE Cb 8---Continued

# TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY				AUGUST			SEPTEMBER		
1	13.9	13.9	13.9	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0
2	13.9	13.9	13.9	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0
3	13.9	13.9	13.9	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0
4	13.9	13.9	13.9	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0
5	13.9	13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
6	13.9	13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
7	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
8	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.1	14.0	14.0
9	13.9	13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
10	13.9	13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
11	13.9	13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
12	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
13	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
14	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
15	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
16	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
17	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
18	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
19	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
20	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
21	13.9	13.9	13.9	14.0	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0
22	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
23	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
24	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
25	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
26	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
27	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
28	13.9	13.9	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
29	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
30	13.9	13.9	13.9	14.0	13.9	14.0	14.0	14.0	14.0	14.0	14.0	14.0
31				14.0	13.9	14.0	14.0	14.0	14.0			
MONTH	13.9	13.9	13.9	14.0	13.9	13.9	14.0	13.9	14.0	14.1	14.0	14.0
YEAR	14.1	11.1	13.9									



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Photo by U.S. Geological Survey personel

Well BA Ea 18 Granite

## **Conversion Factors**

Multiply	Ву	To obtain
	Length	
inch (in.)	2.54x10 <sup>1</sup>	millimeter (mm)
	2.54x10 <sup>-2</sup>	meter (m)
foot (ft)	3.048x10 <sup>-1</sup>	meter (m)
mile (mi)	1.609x10 <sup>0</sup>	kilometer (km)
	Area	
acre	4.047x10 <sup>3</sup>	square meter (m²)
	4.047x10 <sup>-1</sup>	square hectometer (hm²)
	4.047x10 <sup>-3</sup>	square kilometer (km²)
square mile (mi <sup>2</sup> )	2.590x10 <sup>0</sup>	square kilometer (km²)
	Volume	
gallon (gal)	3.785x10 <sup>0</sup>	liter (L)
	3.785x10 <sup>-3</sup>	cubic meter (m³)
	3.785x10 <sup>0</sup>	cubic decimeter (dm³)
million gallons (Mgal)	3.785x10 <sup>3</sup>	cubic meter (m³)
	3.785x10 <sup>-3</sup>	cubic hectometer (hm³)
cubic foot (ft <sup>3</sup> )	2.832x10 <sup>-2</sup>	cubic meter (m³)
	2.832x10 <sup>1</sup>	cubic decimeter (dm³)
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	2.447x10 <sup>3</sup>	cubic meter (m³)
	2.447x10 <sup>-3</sup>	cubic hectometer (hm³)
acre-foot (acre-ft)	1.233x10 <sup>3</sup>	cubic meter (m³)
	1.233x10 <sup>-3</sup>	cubic hectometer (hm³)
	1.233x10 <sup>-6</sup>	cubic kilometer (km³)
	Flow	
cubic foot per second (ft <sup>3</sup> /s)	2.832x10 <sup>1</sup>	liter per second (L/s)
	2.832x10 <sup>-2</sup>	cubic meter per second (m³/s)
	2.832x10 <sup>1</sup>	cubic decimeter per second (dm³/s)
gallon per minute (gal/min)	6.309x10 <sup>-2</sup>	liter per second (L/s)
	6.309x10 <sup>-5</sup>	cubic meter per second (m³/s)
	6.309x10 <sup>-2</sup>	cubic decimeter per second (dm³/s)
million gallons per day (Mgal/d)	4.381x10 <sup>-2</sup>	cubic meter per second (m <sup>3</sup> /s)
	4.381x10 <sup>1</sup>	cubic decimeter per second (dm³/s)
	Mass	
ton (short)	9.072x10 <sup>-1</sup>	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

 $F = (1.8 \times C) + 32$