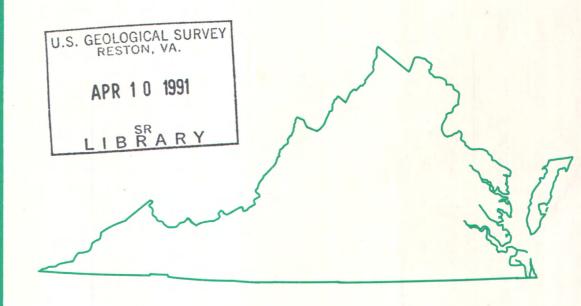


# Water Resources Data Virginia Water Year 1990

Volume 2. Ground Water and Ground-Water-Quality Records



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT VA-90-2
Prepared in cooperation with the State of Virginia
and with other agencies

# CALENDAR FOR WATER YEAR 1990

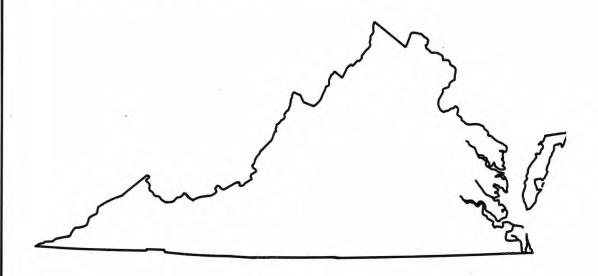
																		Z.			
										198	9										
		oci	OBI	ER					NOV	VEMI	BER					DE	CEMI	BER			
22		3 10 17 24	18 25	19 26		21	19	6 13 20	7 14 21	22	16 23	24	4 11 18	17		5 12 19	W 6 13 20 27	21		23	
							in the			199	0		10.00								
		JA	ANUA	ARY					FI	EBRI	JARY	Z				ı	MAR	СН			
S	M	Т	W	T	F	S	S	M	T	W	Т	F	S	S	М	T	W	Т	F	S	
21	1 8 15 22 29	16 23	10 17 24	18 25		20	18		20	21	1 8 15 22	9 16 23	24	18		20	7 14 21 28	22	16 23	10 17 24	
		A	APR	IL						MA	Y						JUN	E			
S	M	T	W	T	F	S	S	M	Т	W	T	F	S	S	M	T	W	Т	F	S	
22	16	17	11 18	12 19	13 20	21	20	21	15 22	16 23	24	11 18 25	19 26	17	11 18	12 19	13	21	22	23	
JULY				AUGUST					5	SEPT	CEMI	BER									
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	Т	F	S	
8 15 22	16	10 17 24	11 18	12 19	13 20	14 21	12 19	13 20	14 21	15 22	9 16 23	10 17 24	18	9 16	10 17 24	11 18	12	13 20	14 21	22	



# Water Resources Data Virginia Water Year 1990

Volume 2. Ground Water and Ground-Water-Quality Records

by Byron J. Prugh, Jr., and Fred J. Easton



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT VA-90-2 Prepared in cooperation with the State of Virginia and with other agencies

U.S. DEPARTMENT OF THE INTERIOR MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

For information on the water program in Virginia write to

Office Chief, Water Resources Division U.S. Geological Survey 3600 West Broad Street, Room 606 Richmond, Virginia 23230

or

Virginia Water Control Board Suite 210, 1936 Arlington Blvd. Charlottesville, Virginia 22903

#### PREFACE

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

Volume 1. Surface Water and Surface-Water-Quality Records

Volume 2. Ground Water and Ground-Water-Quality Records

This report (Volume 2) is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey and the Virginia Water Control Board who collected, compiled, analyzed, verified, and organized the data, and who 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 Geological Survey policy and established guidelines, the following personnel contributed significantly to the collection, computation, processing, and completion of this information:

Donna L. Belval
Melvin L. Blincoe
Allen R. Brockman
Robert W. Buck
A. Wayne Clingenpeel
William V. Daniels, Jr.
Michael R. Eckenwiler
Ilar B. Graves
Joel R. Guyer
Harold G. Henderlite
Daniel W. Henry
Clairiece G. Humphrey

Patricia A. Kingrey Ronnie E. Lawson Roger M. Moberg David L. Nelms Daniel A. Nissen Eugene D. Powell Donna R. Richardson Lary K. Rogers Floyd L. Snow Stephen L. Wheeler Howard D. Williams

This report was prepared in cooperation with the State of Virginia and with other agencies under the general supervision of Herbert J. Freiberger, Chief of the Mid-Atlantic District, and Gary S. Anderson, Chief, Virginia Office.

RE	PORT DOCUMENTATION PAGE	1. REPORT NO. USGS/WRD/HD-91/236	2.	3. Recipient's Accession No.				
4.	Title and Subtitle	a - Virginia - Water Year 199	30	5. Report Date February 8, 1991				
	Volume 2. Ground Wa	ter and Ground-Water-Quality	Records	6.				
7.	Author(s) Byron J. Prugh, Jr.	and Fred J. Easton		8. Performing Organization Rept. No. USGS-WDR-VA-90-2				
9.			10. Project/Task/Work Unit No.  11. Contract(C) or Grant(G) No.  (C)  (G)					
12.			i	13. Type of Report & Period Covered  ANNUAL - October 1, 1989, to September 30, 1990				
				14.				

#### 15. Supplementary Notes

Prepared in cooperation with the State of Virginia and with other agencies

16. Abstract (Limit: 200 words)

Water-resources data for the 1990 water year for Virginia consist of records of water levels and water quality of ground-water wells. This report (Volume 2. Ground Water and Ground-Water-Quality Records) contains water levels at 348 observation wells and water quality at 98 wells. Locations of these wells are shown on figures 3, 4, 5, and 6. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Virginia.

# 17. Document Analysis a. Descriptors

\*Virginia, \*Hydrologic data, \*Ground water, \*Water quality, Water levels, Water analyses, Chemical analyses, Water temperatures, Sampling sites

- b. Identifers/Open-Ended Terms
- c. COSATI Field/Group

18. Availability Statement No restriction on distribution.	19. Security Class (This Report)	21. No. of Pages
This report may be purchased: National Technical Information Service Springfield, VA 22161	20. Security Class (This Page) UNCLASSIFIED	399 22. Price

# CONTENTS

		Pag
List of gr Introduction Cooperation Records of Summary of Explanation Station Record Record Access to Definition Publication Selected United Station record Group Quali	round-water wells, by county or independent city, for which records are published.  on.  ollected by the State of Virginia. f hydrologic conditions on of the records. ion identification numbers tude-longitude system. rds of ground-water levels.  Data collection and computation Data presentation. rds of ground-water quality. Data collection and computation Data presentation. Remarks codes. WATSTORE data n of terms ons on Techniques of Water-Resources Investigations. U.S. Geological Survey reports on water resources in Virginia eccords, ground water ind-water levels. ity of ground water.	37
Figure 1. 2. 3. 4. 5. 6.	System for numbering wells.  Map of Virginia showing location of ground-water observation wells.  Map of southeastern Virginia showing location of ground-water observation wells.  Map of York-James peninsula and vicinity in Virginia showing location of ground-water observation wells.	
	TABLES	
Publication Selected	ons on techniques of water-resources investigations	1

# [SOW refers to the STATE OBSERVATION WELL numbering system as designated by the Virginia Water Control Board]

	Page
ACCOMACK COUNTY	
Well 64H 5 SOW 102C	24
Well 64H 6 SOW 102A	25
Well 64H 7 SOW 102B	
Well 64K 7 SOW 106C	
Well 64K 8 SOW 106B	28
Well 64K 9 SOW 106A	29
Well 64K 10 SOW 108A	30
Well 64K 11 SOW 108B	
Well 64K 12 SOW 108C	32
Well 65K 2 SOW 058	
Well 65K 23 SOW 109C	
Well 65K 24 SOW 109A	
Well 65K 25 SOW 109B	
Well 65K 26 SOW 109S	
Well 65K 27 SOW 114A	
Well 65K 28 SOW 114B	
Well 65K 29 SOW 114C	
Well 65K 30 SOW 114S	
Well 66K 2 SOW 101C	
Well 66K 3 SOW 101B	
Well 66K 4 SOW 101A	
Well 66L 1 SOW 107C	
Well 66L 2 SOW 107A	
Well 66L 3 SOW 107B	
Well 66M 16 SOW 110A	
Well 66M 17 SOW 110B	
Well 66M 18 SOW 110C	
Well 66M 19 SOW 110S	
Well 66M 23 SOW 181A	
Well 66M 24 SOW 181B	
Well 66M 25 SOW 181C	
Well 66M 26 SOW 181D	
Well 66M 27 SOW 181E	
Well 67M 2	
Well 67M 10 SOW 115A	
Well 67M 11 SOW 115B	
Well 67M 12 SOW 115C	
Well 67M 13 SOW 115D	
Well 67M 14 SOW 115E	62
AI REMARI F COUNTY	
Well 43N 1 SOW 028	63
AMELIA COUNTY	
Well 47H 1 SOW 166	64
APPOMATTOX COUNTY	
Well 40G 1 SOW 012	65
Well 41H 2	66
ARI INGTON COUNTY	
Well 53V 1	67
Well 54V 3	68
AUGUSTA COUNTY	
Well 38P 1 SOW 070	69
BUCHANAN COUNTY	
Well 14E 40	70
BIICYTNCHAM COUNTY	
Well 41B 1	71
Well 41H 3	
Well 41H 4	
CAROLINE COUNTY	
Well 52N 1	
Well 52N 5	
Well 52N 6	
Well 52P 10	77
CHARLES CITY COUNTY	
Well 53G 7	
Well 53G 14	
Well 54G 11 SOW 066	
Well 54G 13 SOW 067	81
CHESAPEAKE (INDEPENDENT CITY)	
Well 59C 29 SOW 163A	
Well 59C 30 SOW 163B.	
Well 59C 31 SOW 163C	
Well 59C 36	
Well 60B 3 SOW 090A	
Well 60B 4 SOW 090B	
Well 60C 41 SOW 164	
Well 61A 3 SOW 132	
Well 61B 2 SOW 091A	
Well 61B 5 SOW 091B	
Well 61B 6 SOW 091C	
Well 61B 7 SOW 091D	
Well 61B 8 SOW 134	94

	Page
CHESAPEAKE (INDEPENDENT CITY)Continued	
Well 61B 12 SOW 091E	. 95
Well 61B 13 SOW 091F	, , ,
Well 61B 15 SOW 091H	
Well 61B 16 SOW 091J	. 99
Well 61B 17 SOW 091K	. 100
Well 61B 18 SOW 091L	
Well 61B 19 SOW 091M	. 102
Well 51H 92	. 103
Well 51H 93	. 104
Well 51H 94	
Well 51H 95	. 107
CLARKE COUNTY	
Well 46W175	. 108
COLONIAL HEIGHTS (INDEPENDENT CITY) Well 51G 1	100
ESSEX COUNTY	
Well 55L 1	. 110
FAIRFAX COUNTY	111
Well 52U 4	112
FRANKLIN (INDEPENDENT CITY)	
Well 55B 66 SOW 145C	. 113
Well 55B 67 SOW 145D	. 114
GLOUCESTER COUNTY WELL 58F 14	115
Well 58H 6 SOW 168A	. 116
Well 58H 7 SOW 168B	. 117
Well 58H 8 SOW 168C	. 118
HALIFAX COUNTY Well 39C 1 SOW 011	119
HANOVER COUNTY	
Well 51M 11	. 120
Well 52J 10	. 121
Well 53K 16	. 123
Well 53K 19 SOW 080	. 124
HENRICO COUNTY Well 50J 1 SOW 023	105
Well 51H132 SOW 081	. 125
Well 51J 13	. 127
Well 51K 4 SOW 137	. 128
Well 52H 3 SOW 136	130
Well 52J 34	
Well 52J 35	
Well 53H 2	
HOPEWELL (INDEPENDENT CITY)	
Well 52G 1	. 135
Well 52G 15 SOW 142A	
ISLE OF WIGHT COUNTY	
Well 55B 16.	. 138
Well 55B 36 Well 55B 43	
Well 55B 62 SOW 096B	
Well 56B 5	. 142
Well 56C 1	
Well 57C 26 SOW 149B.	
Well 57C 28 SOW 149D	. 146
Well 57D 21 SOW 143A.	
Well 57D 22 SOW 143B	
Well 57E 10 SOW 144B	
Well 57E 14 SOW 144A	. 151
Well 57E 15 SOW 144C	. 152
Well 55H 20	. 153
Well 56F 1 SOW 018	. 154
Well 56G 8	
Well 56G 38	
Well 56H 22 SOW 135A	. 158
Well 56H 25 SOW 177A	. 159
Well 56H 26 SOW 177B	
Well 56H 28 SOW 177D.	
Well 56H 29 SOW 177E	. 163
Well 56H 30 SOW 177F	. 164
Well Joh 31 SUW 1335	166

and the same				Page
KING AND	QUEEN	COUN	TY 064	167
WELL	54L 5	SUM		. 168
	56J 11	SOW	073	. 169
Well :			074	. 170
KING GEON	54R 2	ONII	· · · · · · · · · · · · · · · · · · ·	. 171
KING WILL	LIAM C	OUNTY		
Well:	53K 9			. 172
Well :	56J 10	• • • • •		174
Well:	56J 18			
LANCASTE	R COUN	TY		470
Well :	59K 1	SOW	015	177
Well	59L 3			. 178
LOUDOUN (	COUNTY			
Well	49Y 1	SOW	022	180
LOUISA CO	OUNTY			
Well d	45N 1			. 181
Well Well	45N 4	· enu	056	182
MATHEWS (	COUNTY			100
Well :	59H 1			. 184
MIDDLESE	X COUN	TY	031	105
Well			031	
Well:	59J 3			
MONTGOME	RY COU	NTY	019	100
Well :	OIINTY			
Well :	39K 1	SOW	006	. 189
NEW KENT	COUNT	Y		
Well :	54H 15			190
Well :	54J 3			. 192
Well:	55H 1	SOW	017	. 193
Well :	55H 3			194
	NEWS /	TNDET	ENDENT CITY)	
Well:	58E 3			. 196
Well :	58F 1	SOM	002 171A	. 197
Well	58F 51	SOW	171B	. 199
Well:	58F 52	SOW	171C	. 200
Well	58F 53	SOW	171D	. 201
			171F	
NORFOLK	/ TNDED	ENDER	T CITY)	
Well Well	61C 1	• • • • •		. 204
Well	61C 3	• • • • •		206
NORTHAMP'	TON CO	IINTY		
Well	62G 15	SOW	121	. 207
			105A	
			105B	
	63F 25			. 211
	63F 30			
	63F 34			
	63F 35			
	63F 49		<u>,,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			104C	
			104A	
Well	63G 20	SOW	075	. 223
			104S	
	63G 23			
Well (	63G 24	SOW	1110	. 227
			1115	
			160	
Well	63H 4	SOW	103C	. 231
Well			103B	
Well Well			103A	
Well			1138	
	63J 3	SOW	113C	. 236
			112A	

	,	Page
NORTHAMPTON COUNTYContinued		
Well 64J 11 SOW 112C		239
Well 64J 13 SOW 120		240
ORANGE COUNTY		
Well 45P 1 SOW 030		011
		241
PATRICK COUNTY		
Well 30C 1 SOW 010		242
POPTSMOITH (INDEPENDENT CITY)		
Well 60C 27		243
Well 60D 2		
		277
PRINCE GEORGE COUNTY		
Well 52F 1 SOW 038		245
PRINCE WILLIAM COUNTY		
Well 49U 1		
Well 49V 1		247
Well 51S 7		
Well 52S 4		
Well 52S 5		
		231
PULASKI COUNTY		
Well 25E 1 SOW 009		
Well 25E 2 SOW 059		253
RICHMOND COUNTY		
Well 56M 7		254
DOANOVE (INDEDENDENT CITY)		
Well 31G 1 SOW 008		255
ROCKBRIDGE COUNTY Well 35K 1 SOW 063		256
RELL JOA I JOW UDJ.		430
ROCKINGHAM COUNTY		
Well 41Q 1		257
SOUTHAMPTON COUNTY		
Well 51B 3		258
Well 52A 1		259
Well 52B 8 SOW 178A		260
Well 52B 9 SOW 178B.	111	261
Well 52B 10 SOW 178C.		
Well 52B 11 SOW 178D		203
Well 52B 12 SOW 178E.		
Well 52B 13 SOW 178F		
Well 54A 1		
Well 54B 12		267
Well 54B 24 SOW 034		268
Well 54C 1		
Well 55A 3 SOW 086.		
Well 55B 51.		
Well 55C 10		
Well 55D 5		2/4
SUFFOLK (INDEPENDENT CITY)		
Well 56A 1 SOW 047		
Well 56A 9 SOW 076A		276
Well 56A 10 SOW 088A		277
Well 56A 11 SOW 089		278
Well 56A 12 SOW 088B.		
Well 56A 13 SOW 076B		
Well 56A 14 SOW 076C		
Well 57A 6 SOW 085		
Well 57B 1		
Well 57B 8.		
Well 57C 21 SOW 099A		
Well 57C 22 SOW 099B		
Well 57C 23 SOW 099C		
Well 57C 24 SOW 099D		288
Well 58A 1 SOW 036.		
Well 58A 2 SOW 042		
Well 58A 75 SOW 170		
Well 58A 77 SOW 180A		
Well 58A 78 SOW 180B		
Well 58A 80 SOW 180D		
Well 58A 81 SOW 180E		
Well 58A 82 SOW 180F		
Well 58A 83 SOW 180G		
Well 58A 84 SOW 180H		
Well 58B 13		300
Well 58B235		
Well 58B268 SOW 169A.		
Well 58B269 SOW 169B		
Well 58B270 SOW 169C		
Well 58B271 SOW 169D.		
Well 58B272 SOW 169E.		
Well 588273 SOW 169F		
Well 58C 2		
Well 58C 8		
Well 58C 53 SOW 162B		
Well 58C 56 SOW 162D		311

	Page
SUFFOLK (INDEPENDENT CITY)Continued	
Well 58C 57 SOW 141A	312
Well 58C 58 SOW 141B	
Well 58C 59 SOW 141C	
Well 58C 60 SOW 141D	
Well 58C 61 SOW 159A.	
Well 58C 62 SOW 159B	210
Well 58C 63 SOW 159CSURRY COUNTY	310
Well 56E 1	210
Well 56F 2 SOW 039.	320
Well 57E 11 SOW 094A	321
Well 57E 12 SOW 094B	
Well 57E 13 SOW 094C	
Well 57F 16 SOW 087A.	
Well 57F 24 SOW 087B.	
SUSSEX COUNTY	
Well 53D 3 SOW 048	326
Well 53D 6 SOW 179A	
Well 53D 7 SOW 179B	328
Well 53D 8 SOW 179C	320
Well 53D 9 SOW 179D.	
Well 53D 10 SOW 179E.	
Well 53D 11 SOW 179F	332
Well 53D 12 SOW 179G.	
Well 53E 5 SOW 045.	334
VIRGINIA BEACH (INDEFENDENT CITY)	004
Well 61C 23 SOW 129	335
Well 61C 25 SOW 130	336
Well 61C 27 SOW 174A	
Well 61C 28 SOW 174B.	
Well 61C 29 SOW 175.	
Well 61D 4 SOW 154	
Well 61D 5 SOW 155	
Well 61D 6 SOW 124.	
Well 62A 2 SOW 097A	
Well 62A 3 SOW 097B	
Well 62B 1 SOW 098A.	
Well 62B 2 SOW 098B	
Well 62C 2 SOW 092A	
Well 62C 3 SOW 092B.	
Well 62C 4 SOW 083.	
Well 62C 5 SOW 093	
Well 62C 6 SOW 125	351
Well 62C 7 SOW 126.	
Well 62C 9 SOW 172A.	
Well 62C 10 SOW 1/2B	
Well 62C 11 SOW 172C	
Well 62C 12 SOW 172D	
Well 63C 2 SOW 100B.	
Well 63C 3 SOW 100C	
Well 63C 4 SOW 173A.	
Well 63C 5 SOW 173B.	360
WESTMORELAND COUNTY	
Well 55P 5	361
Well 55P 9	362
Well 55Q 2	
Well 56N 1 SOW 016.	
WILLIAMSRIDG (INDEPENDENT CITY)	
Well 57G 31	365
YORK COUNTY	
Well 57G 2	366
Well 57G 17 SOW 068.	367
Well 57G 19 SOW 069.	
Well 57G 59	
Well 58G 2	370
Well 59F 1 SOW 027	
Ouality of ground water	

# WATER RESOURCES DATA - VIRGINIA, 1990

# VOLUME 2. GROUND WATER AND GROUND-WATER-QUALITY RECORDS

#### INTRODUCTION

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

This series of annual reports for Virginia began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

This report is Volume 2 in our 1990 series and includes records of water levels and water quality of ground-water wells. It contains records for water levels at 348 observation wells and water quality at 98 wells. Locations of these wells are shown on figures 3, 4, 5, and 6. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Virginia.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Virginia 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 consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report VA-90-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (804) 771-2427.

#### COOPERATION

The U.S. Geological Survey and agencies of the State of Virginia have had joint-funding agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through joint-funding agreements with the Survey are:

VIRGINIA WATER CONTROL BOARD, Richard N. Burton, executive director.

ACCOMACK COUNTY, Arthur K. Fisher, county administrator.

HENRICO COUNTY, Pat Brady, director of public utilities.

JAMES CITY COUNTY, David B. Norman, county administrator.

NORTHAMPTON COUNTY, R. Keith Bull, county administrator.

YORK COUNTY, Daniel M. Stuck, county administrator.

CITY OF NEWPORT NEWS, C. C. Crowder, director, Department of Public Utilities.

CITY OF VIRGINIA BEACH, Thomas M. Leahy, III, P.E., water resources engineer.

CITY OF WILLIAMSBURG, Frank Force, city manager.

HAMPTON ROADS PLANNING DISTRICT COMMISSION, Arthur L. Collins, executive director.

JAMES CITY SERVICE AUTHORITY, Chris Dawson, environmental engineer.

PRINCE WILLIAM HEALTH DISTRICT, Jared E. Florence, M.D., director.

Organizations that provided data are acknowledged in station descriptions.

#### RECORDS COLLECTED BY THE STATE OF VIRGINIA

In addition to data collected by the U.S. Geological Survey, there are included herein records for 185 index wells operated by the Virginia Water Control Board. These records are published as provided and are acknowledged in the "REMARKS" paragraph of each individual well. The Virginia Water Control Board is under the direction of Richard N. Burton, executive director. Published material for the ground-water wells is supplied, respectively, through the Office of Water Resources Management, William L. Woodfin, Jr., deputy executive director of operations, and Office of Surface-Water Investigations, Fred J. Easton, division director.

#### SUMMARY OF HYDROLOGIC CONDITIONS

Ground-water levels were above the long-term average in the shallow water-table aquifers across the State for most of the water year. The one exception was in the observation well at Blandy Experimental Farm in Clarke County where water levels were below the long-term average for every month except February. The trend in water levels, with few exceptions, was from record high levels in October to near-normal conditions late in the water year (fig. 1).

New high-water levels were recorded at the end of October in wells from such diverse locations as Buchanan County and Christiansburg in the southwestern part of the State to Westmoreland County and Leesburg in the northern part. At the Tyler Well in Louisa County, where fluctuations in water levels have been recorded since 1952, a new high-water level for the month was also observed (fig. 1).

The number of observed new record high-water levels decreased as the water year progressed. By March, levels in three observation wells-one at the U.S. Geological Survey National Center in Reston and the other two at Colonial Heights and at Blandy Farm in Clarke County-were below the long-term average for the month. By June, water levels in wells west of the Blue Ridge, with the exception of the Christiansburg well (fig. 1), were below average; although new high-water levels were recorded in wells farther to the east in Halifax and Louisa Counties in the Piedmont.

Water levels continued to be below average in Clarke and Buchanan Counties in July, but remained above average elsewhere despite declines of as much as several feet during the month in some wells in the central Piedmont and Coastal Plain.

At the end of the water year, water levels in the shallow water-table aquifers were continuing to decline in normal seasonal fashion, although levels were still above average in all except the extreme corners of the State in Buchanan County (southwest), Clarke County (north), and Suffolk (southeast).

Water levels in the confined aquifers in the Coastal Plain around major pumping centers, such as Franklin and West Point, continued long-term downward trends during the 1990 water year. One observation well in the Middle Potomac aquifer at Franklin has recorded a decline in water level of 110 feet since 1961 and, at the end of the 1990 water year, was 208 feet below land-surface datum.

### EXPLANATION OF THE RECORDS

The ground-water and quality-of-ground-water records published in this report are for the 1990 water year that began October 1, 1989, and ended September 30, 1990. 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 wells where the data were collected are shown in figures 3, 4, 5, and 6. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

#### Station Identification Numbers

Each well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given well and to no other. The number usually is assigned when a well is first established and is retained for that well 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.

#### 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 other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.

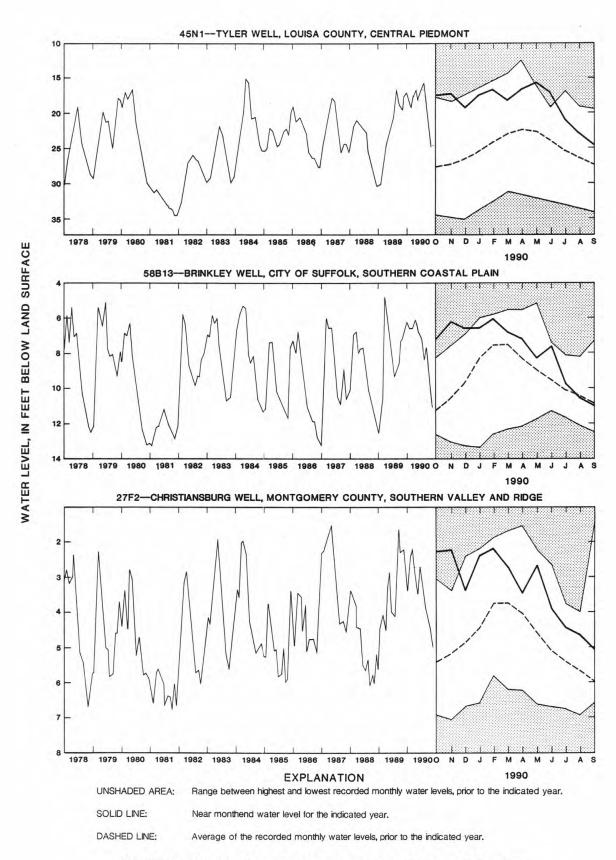


FIGURE 1.--Monthly ground-water levels at key observation wells.

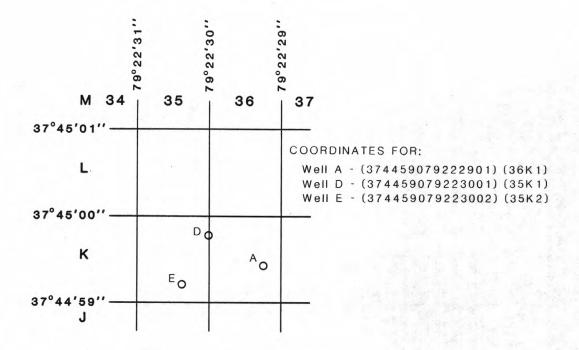


FIGURE 2 .-- System for numbering wells.

A second well-numbering system used in Virginia utilizes 7 1/2-minute quadrangles within the State. The quadrangles are numbered from west to east, and lettered from south to north, omitting the letters "I" and "O." The designation for each quadrangle is determined by the method "Read Right, Up." Wells are numbered serially within each quadrangle. This local well number is shown immediately after the primary well number.

Well records furnished by the State of Virginia also include the well number that is based on an indexing system used by the Virginia Water Control Board.

#### Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Virginia are shown in figures 3, 4, 5, and 6.

#### Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

#### Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION. -- This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

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

WELL CHARACTERISTICS. -- This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

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

DATUM. --This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

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

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

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

## 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 only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is 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 concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

#### Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special 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 statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

#### 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 well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

#### Remark Codes

The following remark codes may appear with the ground-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)
Æ	Biological organism estimated as dominant

#### ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water-data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist U.S. Geological Survey 437 National Center Reston, Virginia 22092

#### DEFINITION OF TERMS

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

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

 $\underline{\textbf{Algae}}$  are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

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.

<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.

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

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

- Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ±1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.
- Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C ±0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.
- Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ±1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Biochemical oxygen demand (BOD) 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.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

- Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of  $500^{\circ}\text{C}$  for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m<sup>3</sup>), and periphyton and benthic organisms in grams per square mile (g/m<sup>2</sup>).
- <u>Dry mass</u> refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.
- Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

<u>Chemical oxygen demand</u> (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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

<u>Color unit</u> is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

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

Hydrologic Bench Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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

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

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

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.

Methylene blue active substances (MBAS) 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</u> per gram  $(\mu/g)$  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 liter (DG/L,  $\mu$ /L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

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

Organism is any living entity.

Organisms 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  $(m^2)$ , acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organisms count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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

<u>Partial-record station</u> is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

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

Classification	Method of analysis			
Clay Silt	Sedimentation Sedimentation			
Sand	Sedimentation or sieve			
Gravel	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</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, 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.

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

<u>Picocurie</u> (PC, pCi) is one trillionth  $(1 \times 10^{-12})$  of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7 x  $10^{10}$  radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

<u>Plankton</u> is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

<u>Diatoms</u> are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

<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 by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m².time)] for periphyton and macrophytes and [mg C/(m³.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O<sub>2</sub>/(m².time)] for periphyton and macrophytes and [mg O<sub>2</sub>/(m³.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Sodium adsorption ratio (SAR) 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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with 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 water-suspended sediment sample that is retained on a 0.45  $\mu$ m 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituents.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45  $\mu$ m membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A 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"

should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

<u>Taxonomy</u> is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial 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, <u>Hexagenia limbata</u>, is the following:

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

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time weighted average 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

<u>Water year</u> is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1990, is called the "1990 water year."

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

#### PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. Application of seismic-refraction techniques to hydrologic studies, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-F1. Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS-TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. J. Matthai: USGS-TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

- 3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. Measurement of time of travel and dispersion in streams by dye tracing, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS-TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. Discharge ratings at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS-TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983.
- 3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A-15. 1984. 48 pages.
- 3-A16. Measurement of discharge using tracers, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A-16. 1985. 52 pages.
- 3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. Determination of stream reaeration coefficients by use of tracers, by F. A. Kilpatrick. R. E. Rathburn, N. Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. Levels of streamflow gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics, a programmed test for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. Regression modeling of ground-water flow, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. The principle of superposition and its application in ground-water hydraulics, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad and others, editors: USGS-TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS-TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. A modular three-dimensional finite-difference ground-water flow model, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS-TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A model for simulation of flow in singular and interconnected channels, by R. W. Schaffrannek, R. A. Baltzer, and D. E. Goldberg: USGS-TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. Installation and service manual for U.S. Geological Survey manameters, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS-TWRI Book 8, Chapter B2. 1968. 15 pages.

## SELECTED U.S. GEOLOGICAL SURVEY REPORTS ON WATER RESOURCES IN VIRGINIA

Listed below is a selection of reports on water resources in Virginia which are available through the Virginia Office of the Mid-Atlantic District at the U.S. Geological Survey, WRD, 3600 West Broad Street, Room 606, Richmond, Virginia 23230.

An index of geophysical logging in Virginia by the U.S. Geological Survey, by J. D. Mulheren, J. D. Larson, and H. T. Hopkins: U.S. Geological Survey Open-File Report 82-432. 1982. 34 pages.

Availability and quality of ground water in the Piedmont Province of Virginia, by J. D. Powell and J. M. Abe: U.S. Geological Survey Water-Resources Investigations Report 85-4235. 1985. 33 pages.

Conceptualization and analysis of ground-water flow system in the Coastal Plain of Virginia and Adjacent Parts of Maryland and North Carolina, by J. F. Harsh and R. J. Laczniak: U.S. Geological Survey Professional Paper 1404-F. 1990.

Effects of fracturing on well yields in the coalfield areas of Wise and Dickenson Counties, southwestern Virginia, by W. G. Wright: U.S. Geological Survey Water-Resources Investigations Report 85-4061. 1985. 21 pages.

Flood of November 1985 in West Virginia, Pennsylvania, Maryland, and Virginia, by Joseph B. Lescinsky: U.S. Geological Survey Open-File Report 86-486. 1987. 33 pages.

Ground-water availability along the Blue Ridge Parkway, Virginia, by H. T. Hopkins: U.S. Geological Survey Water-Resources Investigations Report 84-4168. 1984. 154 pages.

Guide to obtaining U.S. Geological Survey information, by K. Dodd, H. K. Fuller, and P. F. Clarke: U.S. Geological Survey Circular 900. 1985. 35 pages.

Hydrogeology and analysis of the ground-water flow system in the coastal plain of southeastern Virginia, by P. A. Hamilton and J. D. Larson: U.S. Geological Survey Water-Resources Investigations Report 87-4240. 1988. 175 pages.

Hydrologic conditions and trends in Shenandoah National Park, Virginia, 1983-84, by D. D. Lynch: U.S. Geological Survey Water-Resources Investigations Report 87-4131. 1987. 115 pages.

Hydrology and effects of mining in the upper Russell Fork basin, Buchanan and Dickenson Counties, Virginia, by J. D. Larson and J. D. Powell: U.S. Geological Survey Water-Resources Investigations Report 85-4238. 1986. 63 pages.

Hydrology of Area 16, Eastern Coal Province, Virginia and Temmessee, by P. W. Hufschmidt and others: U.S. Geological Survey Water-Resources Investigations Report 81-204. 1981. 67 pages.

Low-flow characteristics of streams in Virginia, by D. C. Hayes: U.S. Geological Survey Open-File Report 89-586. 1990. 80 pages.

Low flow of streams in Fairfax County, Virginia, by E. H. Mohler, Jr. and G. F. Hagan: U.S. Geological Survey Open-File Report 81-63. 1981. 30 pages.

Preliminary investigation of soil and ground-water contamination at the U.S. Army Petroleum Training Facility, Fort Lee, Virginia, September-October 1989, by W. G. Wright and J. D. Powell: U.S. Geological Survey Open-File Report 90-387. 1990.

Quality of ground water in southern Buchanan County, Virginia, by S. M. Rogers and J. D. Powell: U.S. Geological Survey Water-Resources Investigations 82-4022. 1983. 36 pages.

Relation between ground-water quality and mineralogy in the coal-producing Norton Formation of Buchanan County, Virginia, by J. D. Powell and J. D. Larson: U.S. Geological Survey Water-Supply Paper 2274. 1985. 30 pages.

Selected hydrologic data for the Powell River basin in Wise County, Virginia, by J. D. Larson: U.S. Geological Survey Open-File Report 85-186. 1985. 22 pages.

Selected publications on the water resources of Virginia, by N. R. Carrington: U.S. Geological Survey Open-File Report 86-418. 1986. 34 pages.

Sensitivity of stream basins in Shenandoah National Park to acid deposition, by D. D. Lynch and N. B. Dise: U.S. Geological Survey Water-Resources Investigations Report 85-4115. 1985. 61 pages.

Water-level hydrographs for observation wells in Virginia, by S. Farrington, N. R. Carrington, and W. V. Daniels: U.S. Geological Survey Open-File Report 84-134. 1984. 167 pages.

THIS IS A BLANK PAGE

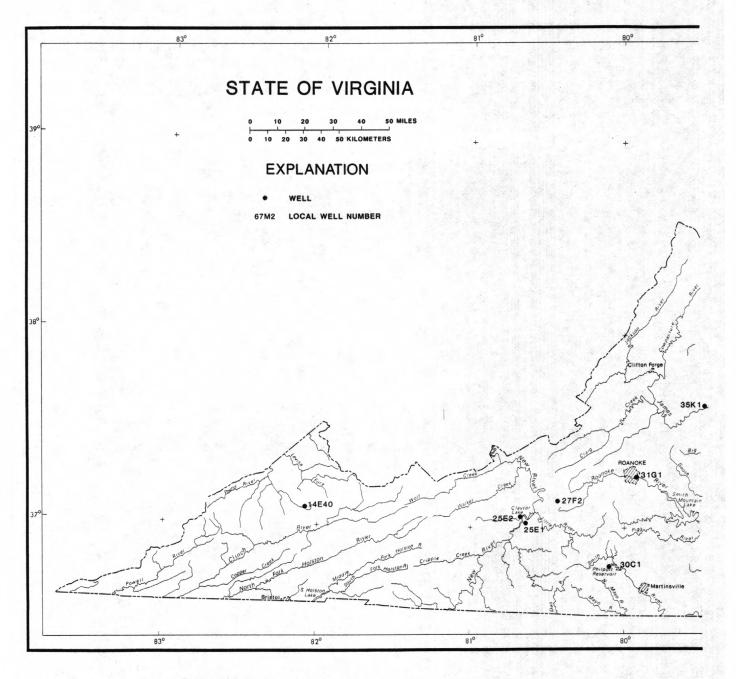
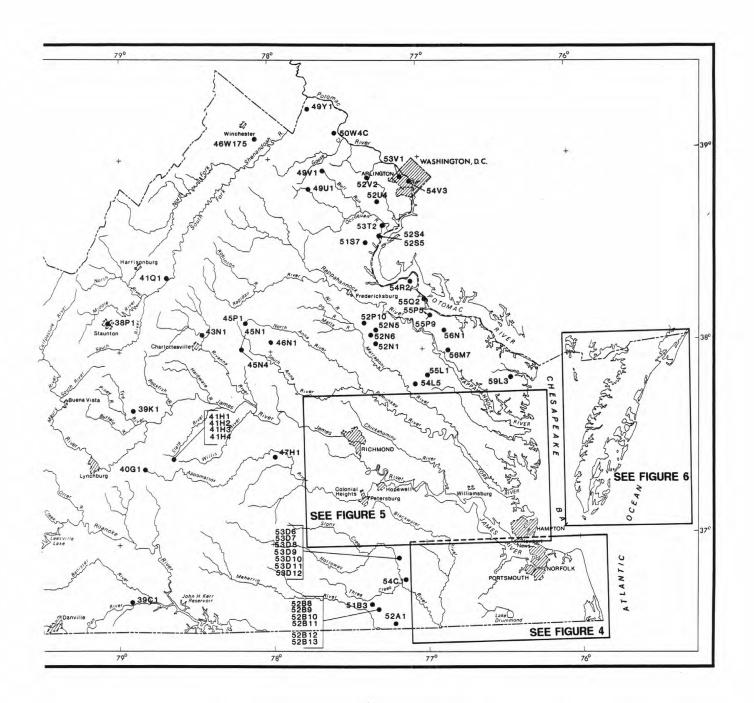


FIGURE 3.--Location of ground-water observation wells.



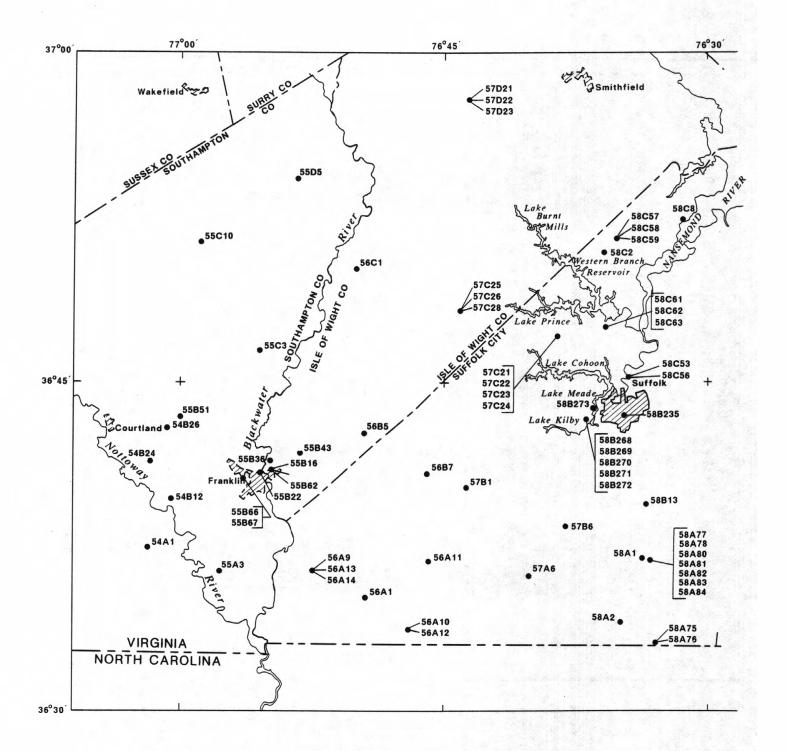
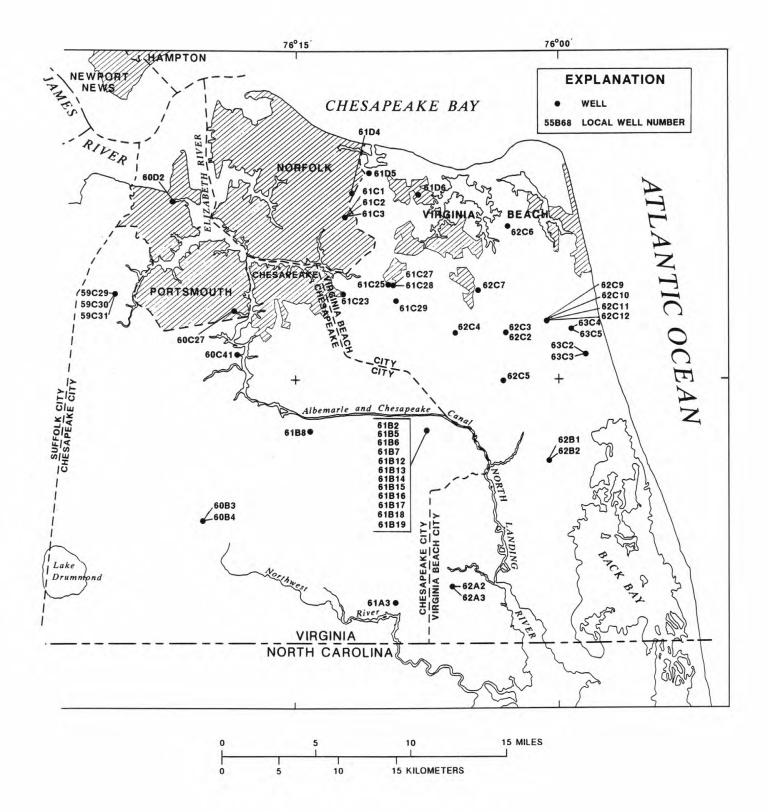


FIGURE 4.--Location of ground-water observation wells in southeastern Virginia.



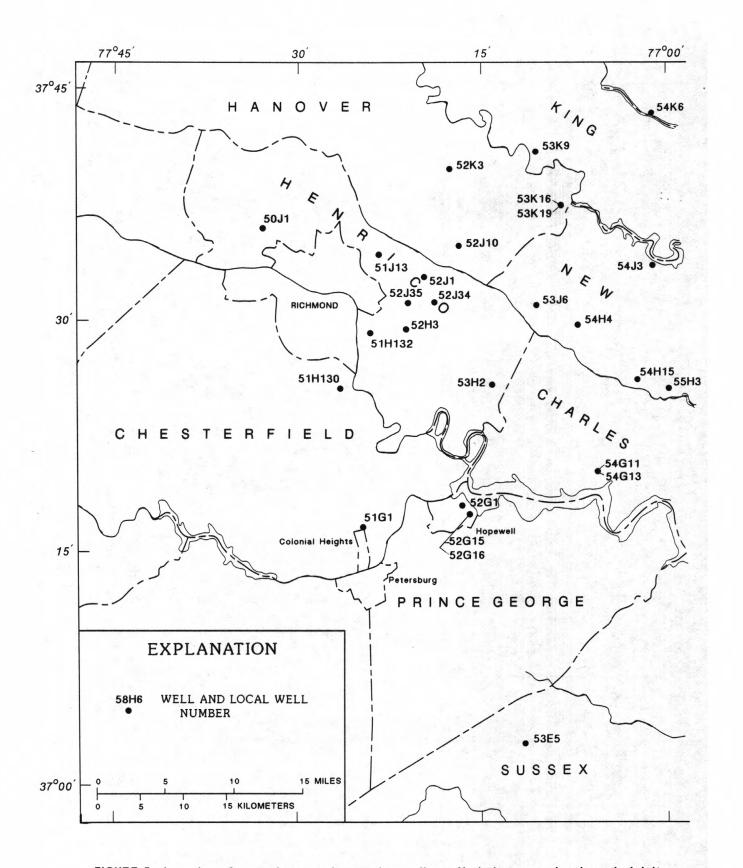
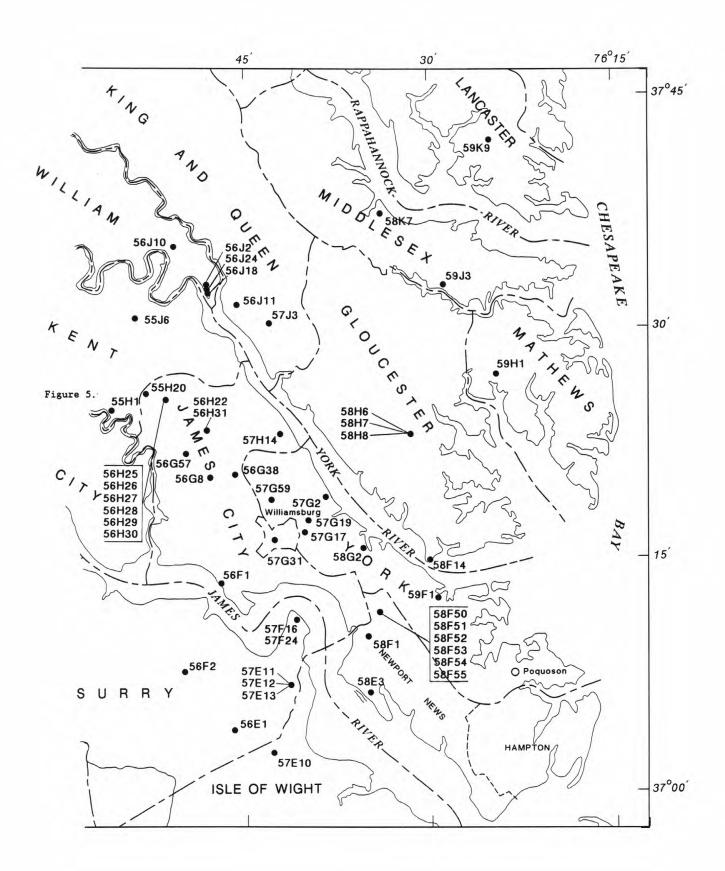


FIGURE 5.--Location of ground-water observation wells on York-James peninsula and vicinity.



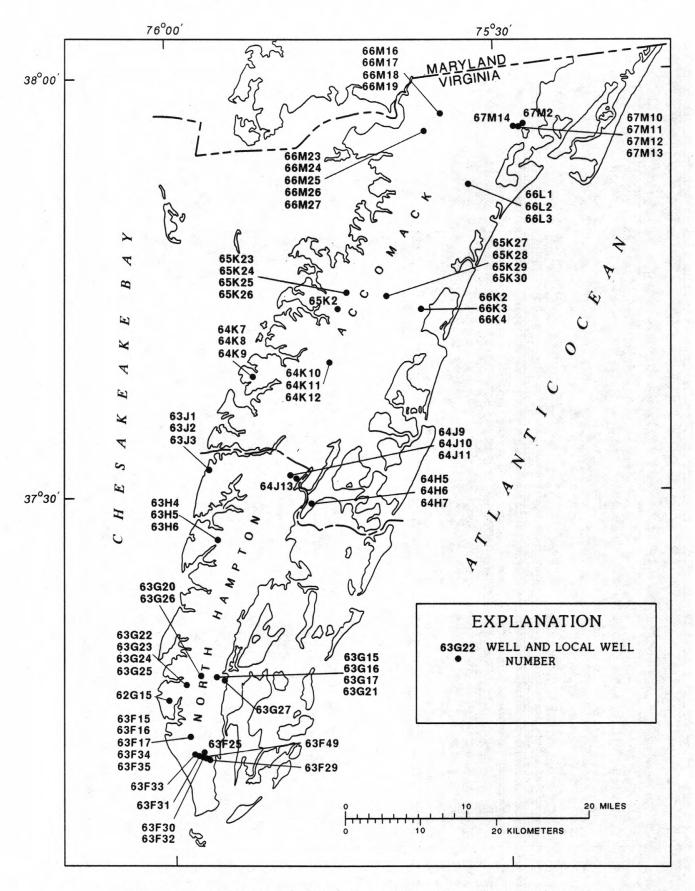


FIGURE 6.--Location of ground-water observation wells on Delmarva peninsula.

GROUND-WATER RECORDS

#### ACCOMACK COUNTY

372922076470101. Local number. 64H 5 SOW 102C.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 306 ft, screened 296 to 306 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 1, 1988; 1.1 ft thereafter.

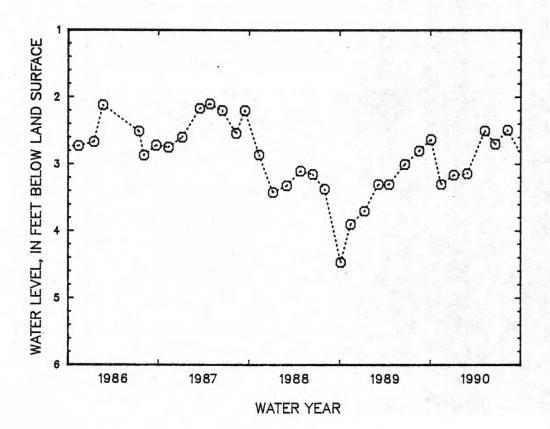
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 0.70 ft below land-surface datum, June 6, 1984; lowest measured, 7.35 ft below land-surface datum, Nov. 1, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	2.63 3.30	JAN 03	3.16	FEB 26	3.14	MAY 08	2.50	JUN 19	2.70	AUG 08	2.49
WATER Y	EAR 1990	HIGHEST	2.49	AUG 08, 1990	LOWES	T 3.30	NOV 13,	1989			



#### ACCOMACK COUNTY

372905075474002. Local number, 64H 6 SOW 102A.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 154 ft, screened 144 to 154 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

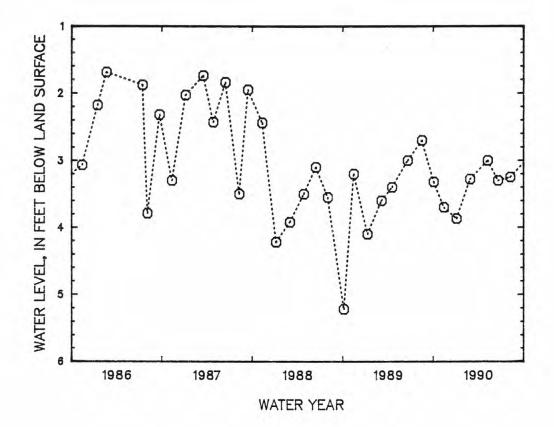
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.33 ft below land-surface datum, Oct. 30, 1984; lowest measured, 9.63 ft below land-surface datum, Sept. 1, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	3.32 3.70	JAN 03	3.87	FEB 26	3.28	MAY 08	3.00	JUN 19	3.30	AUG 08	3.25
WATER Y	EAR 1990	HIGHEST	3.00	MAY 08 1990	T.OW	EST 3 87	JAN 03	1990			



372905075474001. Local number, 64H 7 SOW 102B.

LOCATION.--Lat 37°29'21", long 75°47'05", Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

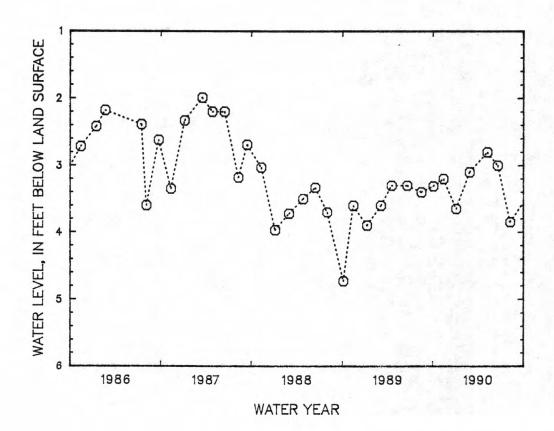
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD (REVISED).--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.19 ft below land-surface datum, July 10, 1984; lowest measured, 8.76 ft below land-surface datum, Nov. 1, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	3.31	JAN 03	3.65	FEB 26	3.10	MAY 08	2.80	JUN 19	3.00	AUG 08	3.85
WATER Y	EAR 1990	HIGHEST	2 80	MAY 08 1990	TOW	FCT 3 85	AUG OR	1990			



### ACCOMACK COUNTY

373845075522501. Local number, 64K 7 SOW 106C.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 176 ft, screened 166 to 176 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.73 ft above land-surface datum.

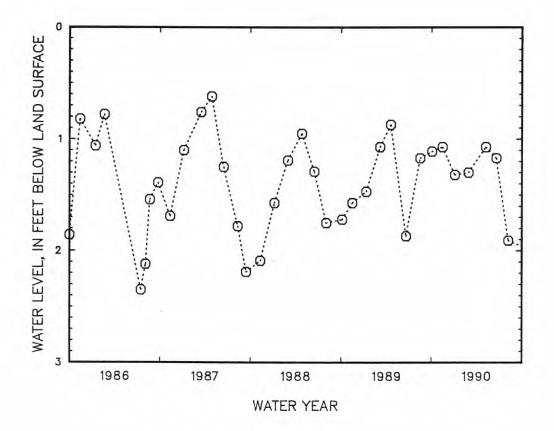
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.36 ft below land-surface datum, Dec. 11, 1978; lowest measured, 2.35 ft (corrected) below land-surface datum, July 16, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	1.11 1.07	JAN 03	1.32	FEB 27	1.30	MAY 08	1.07	JUN 19	1.17	AUG 07/	1.91
WATER Y	EAR 1990	HIGHEST	1.07	NOV 14. 1989.	MAY 08.	1990	LOWEST	1.91 AUG 07	7. 1990		



373845075522503. Local number, 64K 8 SOW 106B.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 95 ft, screened 85 to 95 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

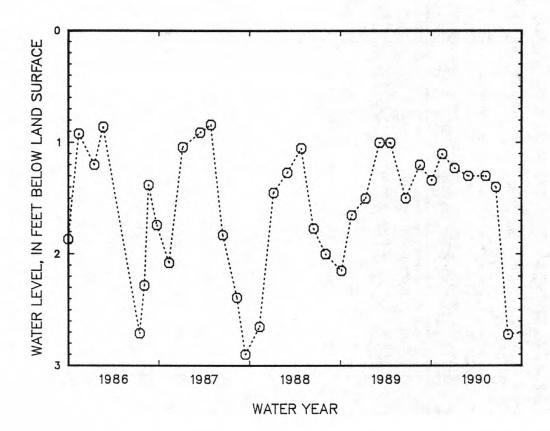
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.70 ft below land-surface datum, Apr. 21, 1983; lowest measured, 2.90 ft below land-surface datum, Sept. 14, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	1.34	JAN 03	1.23	FEB 27	1.30	MAY 08	1.30	JUN 19	1.40	AUG 07	2.72
WATER Y	EAR 1990	HIGHEST	1.10	NOV 14. 1989	T.OW	EST 2.72	AUG 07	1990			



### ACCOMACK COUNTY

373845075522502. Local number, 64K 9 SOW 106A.

LOCATION.--Lat 37°38'45", long 75°52'25", Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

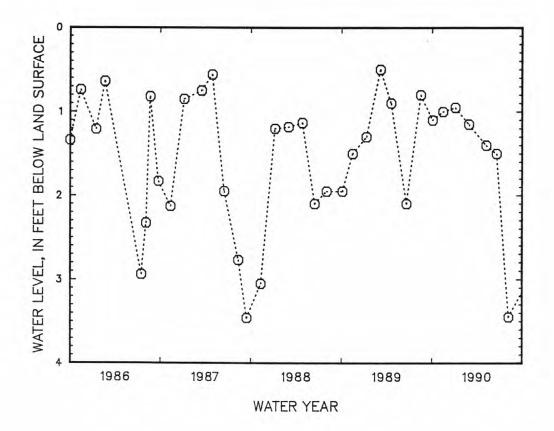
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft below land-surface datum, Mar. 7, 1989; lowest measured, 3.46 ft below land-surface datum, Sept. 14, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	1.10	JAN 03	0.95	FEB 27	1.15	MAY 08	1.40	JUN 19	1.50	AUG 07	3.45
WATER Y	EAR 1990	HIGHEST	0.95	JAN 03 1990	T.OW	FST 3 45	AUG 07	1990			



373932075452701. Local number, 64K 10 SOW 108A.

LOCATION.--Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.22 ft above land-surface datum prior to Mar. 1, 1988; 0.75 ft thereafter.

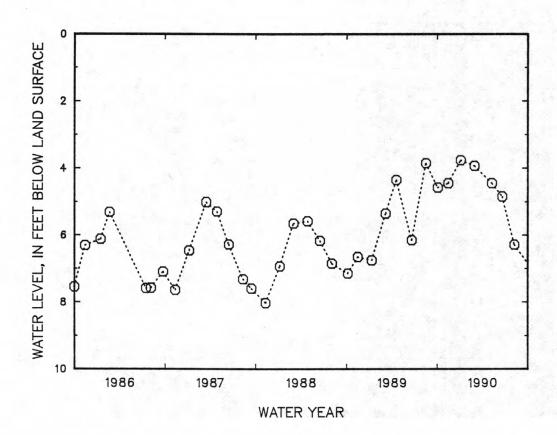
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 21, 1983; lowest measured, 15.06 ft below land-surface datum, Jan. 30, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	4.58 4.45	JAN 03	3.76	FEB 27	3.93	MAY 08	4.45	JUN 19	4.85	AUG 07	6.29
WATER Y	EAR 1990	HIGHEST	3.76	JAN 03, 1990	LOWES	ST 6.29	AUG 07, 19	990			



### ACCOMACK COUNTY

373932075452702. Local number, 64K 11 SOW 108B.

LOCATION.--Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 180 ft, screened 170 to 180 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 47 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

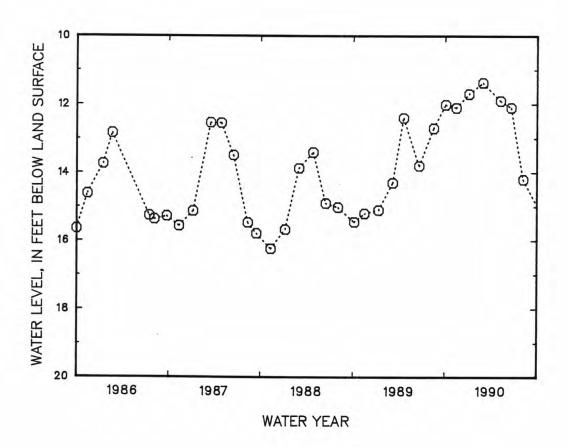
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 11.03 ft below land-surface datum, Aug. 1, 1979; lowest measured, 16.24 ft below land-surface datum, Nov. 10, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER
OCT 03 NOV 14	12.01 12.10	JAN 03	11.70	FEB 27	11.37	MAY 08	11.90	JUN 19	12.10	AUG 07	14.20
WATER Y	EAR 1990	HIGHEST	11.37	FEB 27, 199	10	LOWEST 14.20	AUG 07	1990			



373932075452703. Local number, 64K 12 SOW 108C.

LOCATION. -- Lat 37°39'32", long 75°45'27", Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 284 ft, screened 274 to 284 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

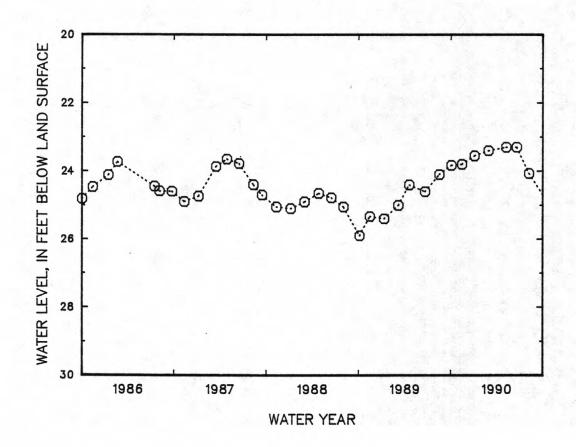
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 14.50 ft below land-surface datum, Feb. 2, 1984; lowest measured, 26.73 ft below land-surface datum, Nov. 20, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE LEV		WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	23.83 23.80	JAN 03	23.55	FEB 27 23.	40 MAY 08	23.30	JUN 19	23.30	AUG 07	24.07
WATER Y	EAR 1990	HIGHEST	23.30	MAY 08, JUN 19,	1990 LOWE	ST 24.07	AUG 07, 19	990		



#### ACCOMACK COUNTY

374324075443201. Local number, 65K 2 SOW 058.

LOCATION.--Lat 37°43'24", long 75°44'32", Hydrologic Unit 02080110, 100 ft southeast of State Highway 658, 0.3 mi northeast of intersection of State Highways 653 and 658, and 0.9 mi north of Onancock. Owner: Virginia Water Control Board.

AQUIFER .-- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 96.5 ft, diameter 6 in. from 96.5 to 187 ft, depth 187 ft, screened 97.3 to 107 ft, 116 to 126 ft, 135 to 145 ft, 162 to 182 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Aug. 20, 1980 to Oct. 1, 1985, occasional measurement with chalked tape. July 15, 1972 to Aug. 20, 1980, continuous strip-chart recorder. Prior to July 15, 1972, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.1 ft above land-surface datum.

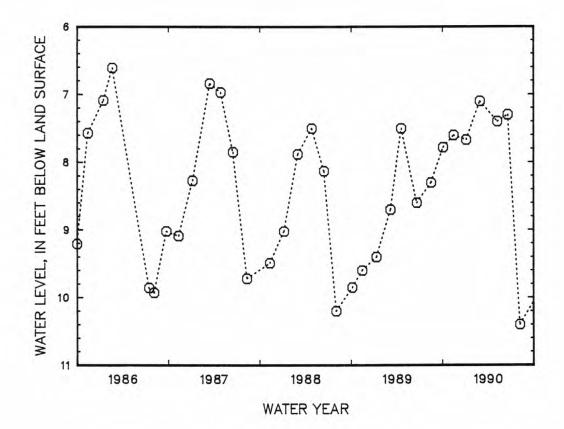
REMARKS . -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1972 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.95 ft below land-surface datum, Feb. 8, 1972; lowest measured, 10.40 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	7.78 7.60	JAN 03	7.67	FEB 27	7.10	MAY 08	7.40	JUN 19	7.30	AUG 07	10.40
WATER Y	EAR 1990	HIGHEST	7.10	FEB 27, 1990	LOWES	T 10.40	AUG 07,	1990			



374442075432501. Local number, 65K 23 SOW 109C.

LOCATION.--Lat 37°44'28", long 75°43'28", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum.

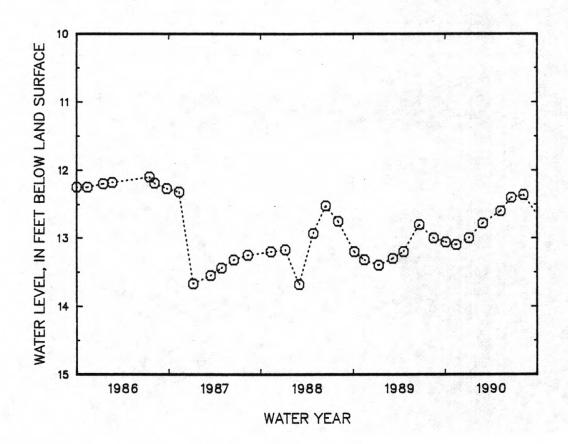
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 11.36 ft below land-surface datum, Dec. 30, 1982; lowest measured, 16.65 ft below land-surface datum, Mar. 12, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	13.06 13.10	JAN 03	13.00	FEB 27	12.78	MAY 08	12.60	JUN 19	12.40	AUG 07	12.36
WATER Y	EAR 1990	HIGHEST	12.36	AUG 07. 19	90	LOWEST 13.10	NOV 14.	1989			



#### ACCOMACK COUNTY

374442075432502. Local number, 65K 24 SOW 109A.

LOCATION.--Lat 37°44'42", long 75°43'25", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

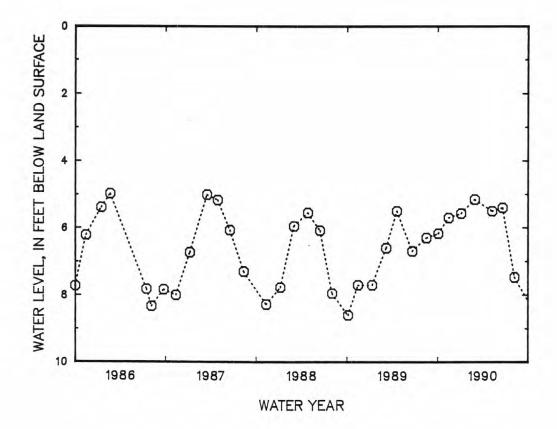
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.35 ft below land-surface datum, Apr. 21, 1983; lowest measured, 8.60 ft below land-surface datum, Oct. 5, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	6.17 5.70	JAN 03	5.57	FEB 27	5.15	MAY 08	5.50	JUN 19	5.40	AUG 07	7.47
WATER Y	EAR 1990	HIGHEST	5 15	FER 27 1990	T.OV	JEST 7 47	AUG 07	1990			



374442075432503. Local number, 65K 25 SOW 109B.

LOCATION.--Lat 37°44'42", long 75°43'25"; Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 228 ft, screened 218 to 228 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

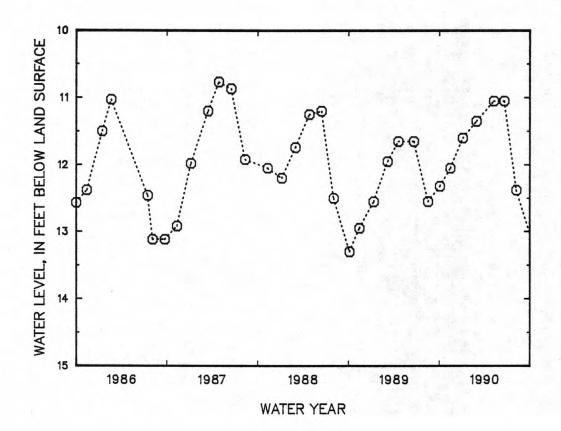
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 10.15 ft below land-surface datum, June 20, 1984; lowest measured, 13.30 ft below land-surface datum, Oct. 5, 1988.

WATER LEVEL. IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	12.32 12.05	JAN 03	11.60	FEB 27	11.35	MAY 08	11.05	JUN 19	11.05	AUG 07	12.38
WATER YE	AR 1990	HIGHEST	11.05	MAY 08. JUN	19. 1990	LOWES	ST 12.38	AUG 07, 1	990		



#### ACCOMACK COUNTY

374442075432504. Local number, 65K 26 SOW 109S.

LOCATION.--Lat 37°44'42", long 75°43'25", Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 15 to 25 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.37 ft above land-surface datum prior to Mar. 1, 1988; 0.5 ft thereafter.

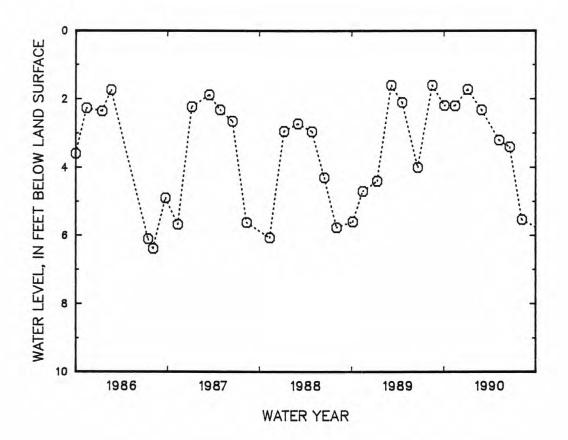
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 1.48 ft below land-surface datum, June 12, 1979; lowest measured, 6.57 ft below land-surface datum, Oct. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	2.19	JAN 03	1.72	FEB 27	2.32	MAY 08	3.20	JUN 19	3.40	AUG 07	5.54
WATER Y	EAR 1990	HIGHEST	1 72	JAN 03 1990	LOV	WEST 5 54	AUG 07	1990			



374425075400001. Local number, 65K 27 SOW 114A.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 160 ft, screened 150 to 160 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.4 ft above land-surface datum prior to Feb. 27, 1990; 1.5 ft thereafter.

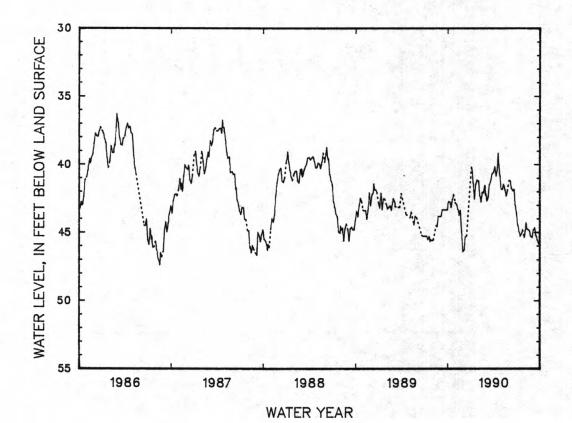
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.59 ft below land-surface datum, June 6, 1984; lowest measured, 49.98 ft below land-surface datum, Nov. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.72	42.90	46.27	40.32	42.29	42.67	40.17	41.82	41.16	44.42	44.80	44.80
10	42.75	43.28	45.33	41.32	42.75	42.43	40.84	41.48	41.74	44.92	44.72	44.67
15	43.14	43.71	45.25	42.53	42.05	41.49	40.37	41.88	41.91	45.25	44.78	45.19
20	42.56	43.39		41.49	42.08	41.23	39.85	42.31	41.84	45.10	44.85	45.52
25	42.20	44.95		41.15	41.54	40.70	40.75	41.94	42.96	44.81	45.25	45.80
EOM	42.80	46.40		41.20	42.15	40.56	41.80	41.18	43.54	45.36	45.37	46.02
WATER	YEAR 1990	ні ні	GHEST 39	9.15 APR	18, 1990	LOWE	ST 46.40	NOV 30	DEC 01,	1989		



# ACCOMACK COUNTY

374425075400002. Local number, 65K 28 SOW 114B.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

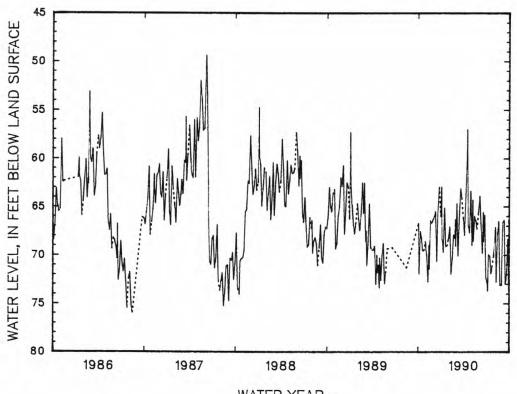
REMARKS. -- Records provided by the Virginia Water Control Board. Water level affected by local pumpage.

PERIOD OF RECORD. -- March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 49.40 ft below land-surface datum, June 6, 1987; lowest recorded, 75.95 ft below land-surface datum, Aug. 16, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.95	69.93	66.02	68.30	67.08	64.64	67.95	68.97	63.90	72.80	68.18	66.65
10	67.55	72.78	65.50	69.68	71.98	70.08	64.12	68.55	66.75	69.96	72.80	66.40
15	68.18	71.44	70.66	65.12	70.50	66.18	59.90	66.00	69.80	70.05	67.85	73.00
20	69.52	66.42	65.25	69.15	67.90	63.10	67.00	66.40	68.60	71.90	66.50	72.05
25	69.52	66.68	62.95	69.05	68.22	64.08	67.70	67.30	65.90	71.20	73.10	68.35
EOM	68.62	66.35	65.98	68.30	69.08	66.20	63.37	65.55	72.40	70.00	73.10	70.50
WATER	YEAR 199	о ні	GHEST 57	7.00 APR	16, 1990	LOWE	ST 73.70	JUL 07,	SEP 29,	1990		



WATER YEAR

374425075400003. Local number, 65K 29 SOW 114C.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 315 ft, screened 305 to 315 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Feb. 27, 1990; 1.6 ft thereafter.

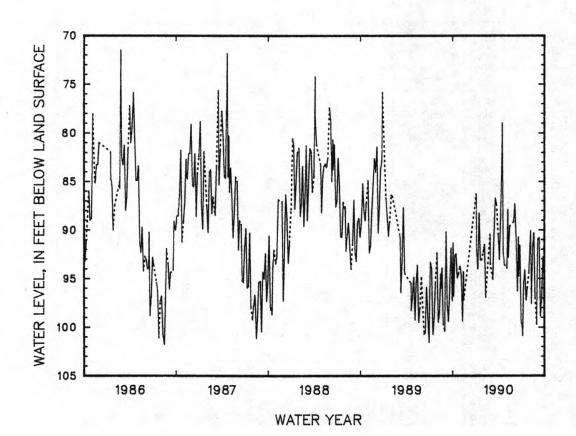
REMARKS. -- Records provided by the Virginia Water Control Board. Water level affected by local pumpage.

PERIOD OF RECORD. -- March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 71.50 ft below land-surface datum, Feb. 24, 1986; lowest recorded, 101.75 ft below land-surface datum, Aug. 16, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.82	94.50		92.02	91.48		93.08	93.92	87.30	100.00	91.30	90.90
10	92.58	99.40		94.00	96.92	95.08	88.50	92.80	90.85	95.48	97.60	90.80
15	92.46	97.20		88.25		90.40	82.38	89.60	96.30	94.15	92.05	98.90
20	94.96			93.06		86.70	92.27	31	94.72	97.25	90.30	97.20
25	94.50			93.10		87.35	93.58		91.55	95.96	97.00	92.75
EOM	93.74			92.26	93.42	90.42		89.15	99.50	94.42	99.70	95.20
WATER	YEAR 1990	HIG	SHEST 78	3.98 APR	16, 1990	LOWE	ST 100.8	5 JUL 06	, 1990			



### ACCOMACK COUNTY

374425075400004. Local number, 65K 30 SOW 114S.

LOCATION.--Lat 37°44'25", long 75°40'00", Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Mar. 1, 1988; 1.5 ft thereafter.

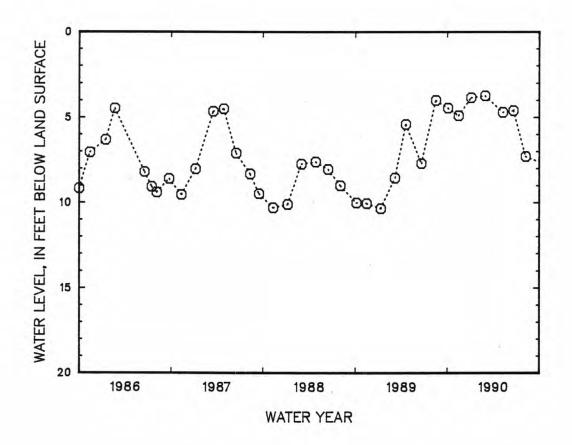
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 3.73 ft below land-surface datum, Feb. 27, 1990; lowest measured, 20.10 ft below land-surface datum, Dec. 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	4.45	JAN 03	3.84	FEB 27	3.73	MAY 08	4.70	JUN 19	4.60	AUG 07	7.29
WATER V	FAR 1990	HIGHEST	3 73	FFR 27 1990	TOW	FST 7 20	AUG 07	1990			



374320075380501. Local number, 66K 2 SOW 101C.

LOCATION.--Lat 37°43'19", long 75°36'54", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 292 ft, screened 282 to 292 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

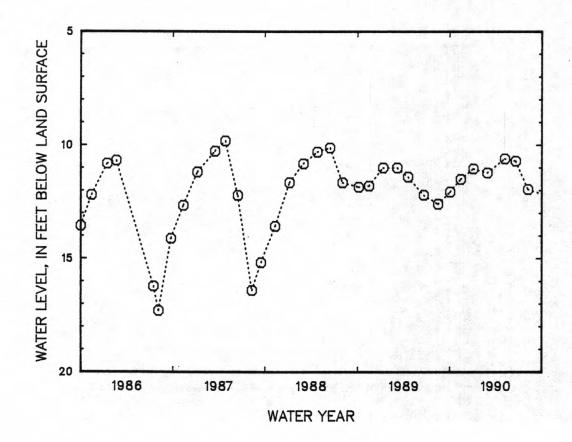
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.57 ft below land-surface datum, Apr. 25, 1984; lowest measured, 17.30 ft below land-surface datum, Aug. 5, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	12.06 11.50	JAN 03	11.04	FEB 27	11.22	MAY 07	10.60	JUN 19	10.70	AUG 07	11.95
WATER Y	EAR 1990	HIGHES'	10.60	MAY 07 199	90	LOWEST 12 06	OCT 03	. 1989			



#### ACCOMACK COUNTY

374320075365602. Local number, 66K 3 SOW 101B.

LOCATION.--Lat 37°43'20", long 75°38'05", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), 2.8 mi east of Accomac. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.36 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft thereafter.

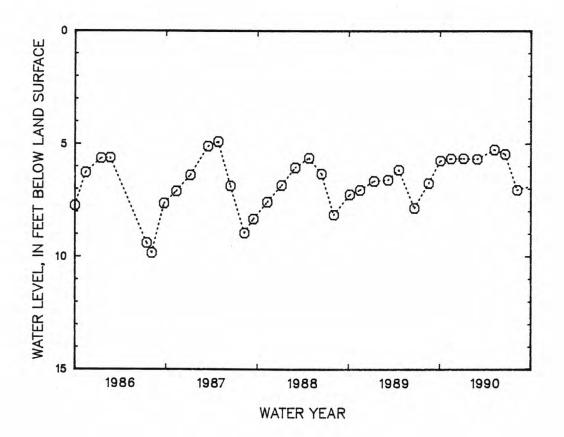
REMARKS . -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.04 ft below land-surface datum, Apr. 25, 1984; lowest measured, 9.84 ft below land-surface datum, Aug. 5, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	5.74 5.65	JAN 03	5.64	FEB 27	5.67	MAY 07	5.25	JUN 19	5.45	AUG 07	7.05
WATER Y	EAR 1990	HIGHEST	5.25	MAY 07. 1990	LOW	EST 7.05	AUG 07.	1990			



374320075365603. Local number, 66K 4 SOW 101A.

LOCATION.--Lat 37°43'20", long 75°36'56", Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 152 ft, screened 142 to 152 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft Mar. 1, 1988 to June 20, 1989; 0.00 ft June 21, 1989, to Jan. 3, 1990; 0.85 ft thereafter.

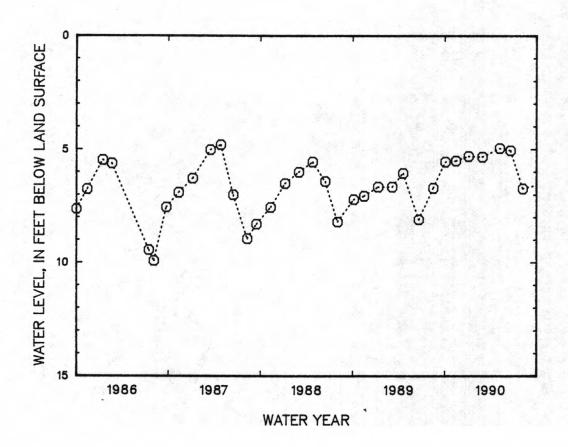
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.99 ft below land-surface datum, Apr. 25, 1984; lowest measured, 9.93 ft below land-surface datum, Aug. 5, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	5.55 5.50	JAN 03	5.30	FEB 27	5.33	MAY 07	4.95	JUN 19	5.05	AUG 07	6.73
WATER Y	EAR 1990	HIGHEST	4.95	MAY 07, 1990	LOWES	ST 6.73	AUG 07,	1990			



#### ACCOMACK COUNTY

375225075321701. Local number, 66L 1 SOW 107C.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 305 ft, screened 295 to 305 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.33 ft above land-surface datum prior to Mar. 1, 1988; 0.4 ft thereafter.

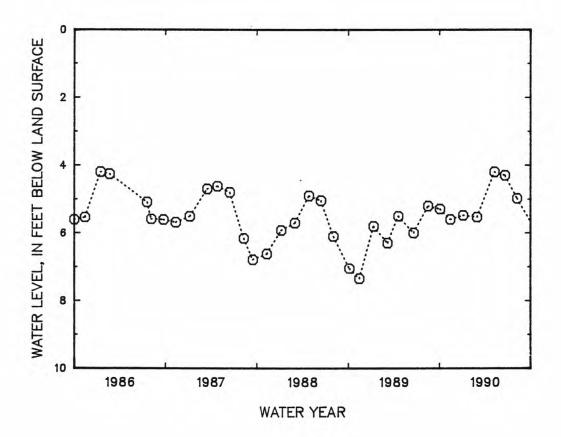
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--September 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.06 ft (revised) below land-surface datum, Jan. 4, 1984; lowest measured, 7.35 ft below land-surface datum, Nov. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	5.29 5.60	JAN 03	5.48	FEB 27	5.53	MAY 08	4.20	JUN 19	4.30	AUG 07	4,98
WATER Y	EAR 1990	HIGHEST	4 20	MAY 08 1990	1.06	EST 5 60	NOV 13	1989			



375225075321702. Local number, 66L 2 SOW 107A.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.23 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

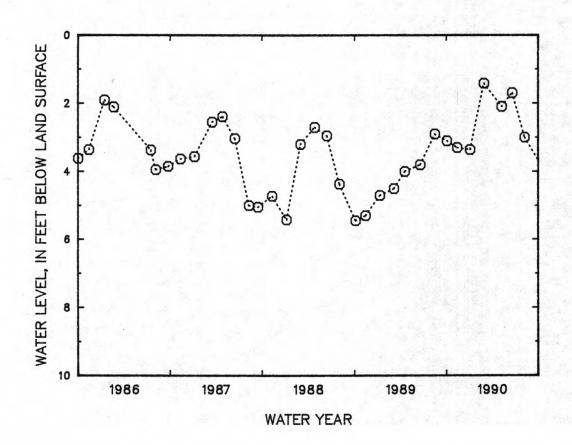
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 0.21 ft (revised) below land-surface datum, Apr. 25, 1984; lowest measured, 5.45 ft below land-surface datum, Oct. 5, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	3.10 3.30	JAN 03	3.36	FEB 27	1.42	MAY 08	2.10	JUN 19	1.70	AUG 07	3.00
WATER Y	EAR 1990	HIGHEST	1.42	FEB 27, 1990	LOWE	ST 3.36	JAN 03,	1990			



### ACCOMACK COUNTY

375225075321703. Local number, 66L 3 SOW 107B.

LOCATION.--Lat 37°52'25", long 75°32'17", Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Water Control Board.

AQUIFER .-- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 206 ft, screened 191 to 201 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum prior to June 19, 1990; 0.3 ft thereafter.

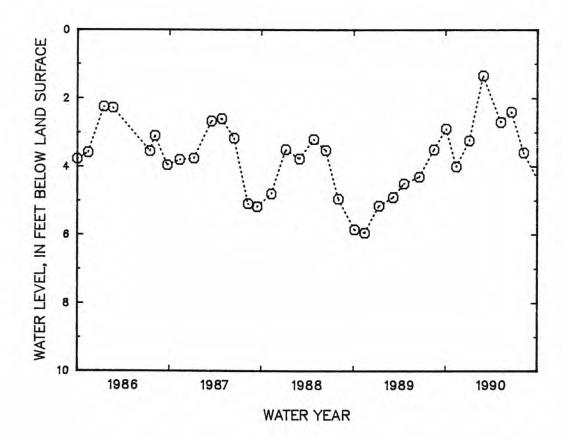
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 0.64 ft (revised) below land-surface datum Apr. 25, 1984; lowest measured, 5.95 ft below land-surface datum, Nov. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	2.89	JAN 03	3.24	FEB 27	1.34	MAY 08	2.70	JUN 19	2.40	AUG 07	3.59
WATER Y	EAR 1990	HIGHEST	1 34	FEB 27 1990	T.OM	FST 4 00	NOV 13	1989			



## ACCOMACK COUNTY

375723075344401. Local number, 66M 16 SOW 110A.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.65 ft Mar. 1, 1988, to Oct. 3, 1989; 0.00 ft Oct. 4, 1989, to Jan. 3, 1990; 1.0 ft Jan. 4, 1990, to Oct. 10, 1990; 0.70 ft thereafter.

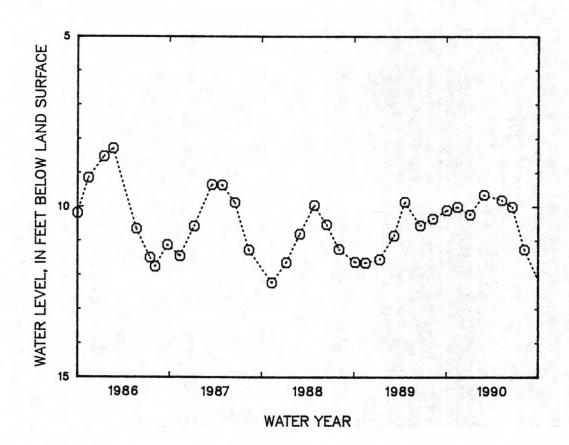
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.28 ft below land-surface datum, Feb. 19, 1986; lowest measured, 12.23 ft below land-surface datum, Nov. 10, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
0CT 03 NOV 14	10.10 10.00	JAN 03	10.23	FEB 27	9.64	MAY 08	9.80	JUN 19	10.00	AUG 07	11.26
WATER Y	EAR 1990	HIGHEST	9.64	FEB 27, 1990	LOWES	ST 11.26	AUG 07.	1990			



#### ACCOMACK COUNTY

375723075344402. Local number, 66M 17 SOW 110B.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 178 ft, screened 168 to 178 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.75 ft thereafter.

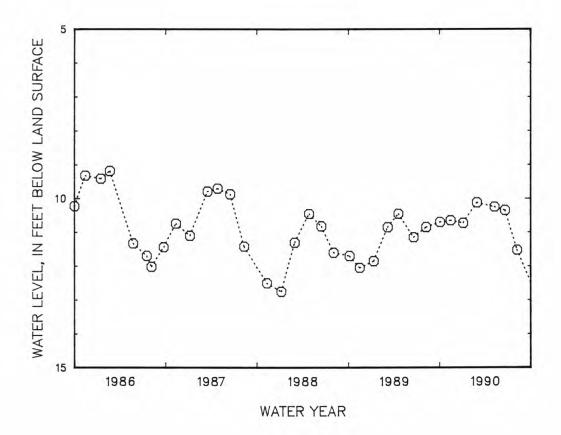
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.76 ft below land-surface datum, Apr. 1, 1980; lowest measured, 12.75 ft below land-surface datum, Jan. 6, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	10.70 10.65	JAN 03	10.73	FEB 27	10.12	MAY 08	10.25	JUN 19	10.35	AUG 07	11.53
WATER Y	EAR 1990	HIGHEST	10.12	FEB 27, 199	90	LOWEST 11.53	AUG 07	1990			



#### ACCOMACK COUNTY

375723075344403. Local number, 66M 18 SOW 110C.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.65 ft above land-surface datum.

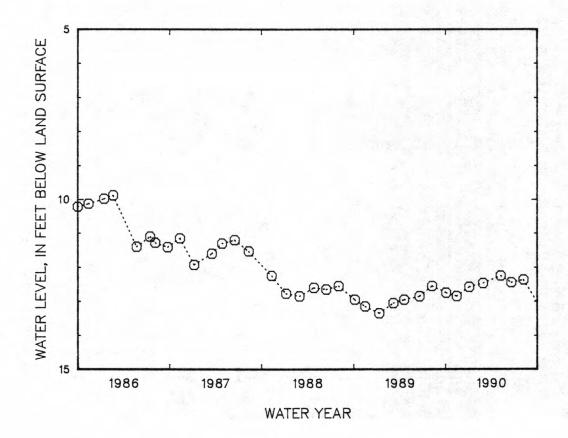
REMARKS.--Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 8.43 ft below land-surface datum, Aug. 12, 1981; lowest measured, 13.35 ft below land-surface datum, Jan. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL		ATER EVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	12.75 12.85	JAN 03	12.58	FEB 27 1	.2.47	MAY 08	12.25	JUN 19	12.45	AUG 07	12.37
WATER Y	EAR 1990	HIGHEST	12.25	MAY 08. 1990	LC	WEST 12.85	NOV 14.	1989			



### ACCOMACK COUNTY

375723075344404. Local number, 66M 19 SOW 110S.

LOCATION.--Lat 37°57'23", long 75°34'44", Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 36 ft, screened 26 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Feb. 29, 1988; 0,35 ft thereafter.

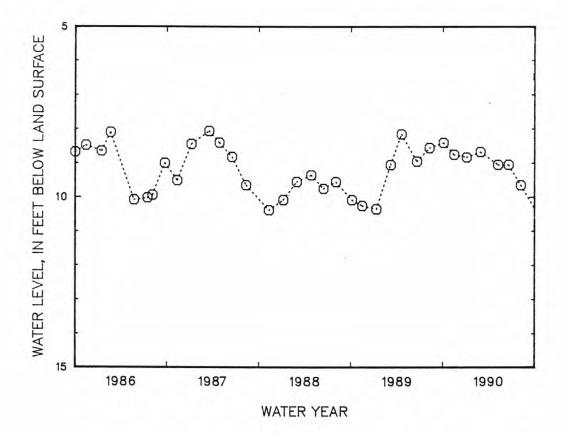
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.06 ft below land-surface datum Mar. 17, 1987; lowest measured, 11.34 ft below land-surface datum, Nov. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	8.40 8.75	JAN 03	8.83	FEB 27	8.67	MAY 08	9.05	JUN 19	9.05	AUG 07	9.65
WATER Y	EAR 1990	HIGHEST	8.40	OCT 03. 1989	LOW	EST 9.65	AUG 07.	1990			



### ACCOMACK COUNTY

375610075361801. Local number, 66M 23 SOW 181A.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Water Control Board.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4.5 in., depth 1,300 ft, screened 1,290 to 1.300 ft.

INSTRUMENTATION . -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- January 1988 to current year.

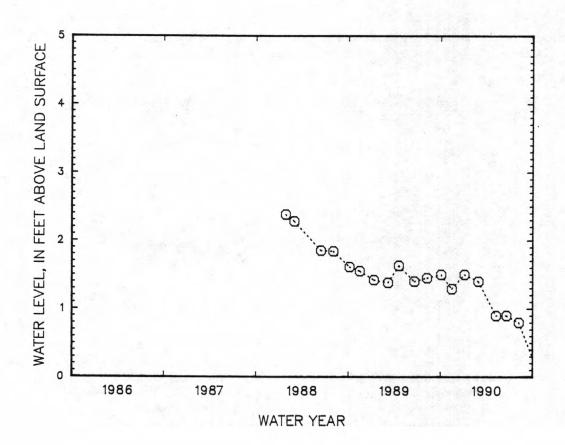
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.38 ft above land-surface datum, Jan. 26, 1988; lowest measured, 0.80 ft above land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	1.50	JAN 03	1.50	FEB 27	1.40	MAY 08	0.90	JUN 19	0.90	AUG 07	0.80

NOTE. -- Flowing well, readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST 1.50 OCT 03, 1989, JAN 03, 1990 LOWEST 0.80 AUG 07, 1990



#### ACCOMACK COUNTY

375610075361802. Local number, 66M 24 SOW 181B.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Water Control Board.

AQUIFER. -- St. Mary-Choptank aquifer of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 508 ft, screened 498 to 508 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

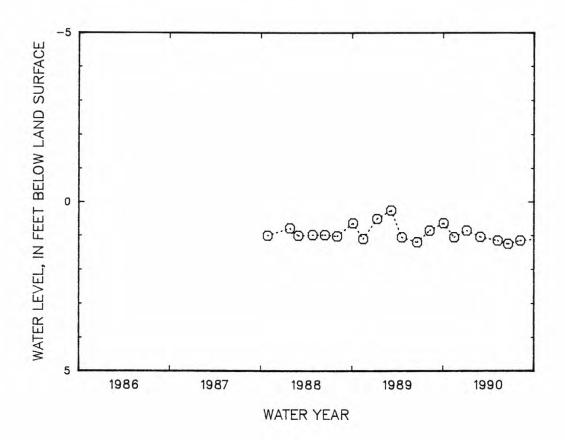
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, Mar. 7, 1989; lowest measured, 1.25 ft below land-surface datum, June 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	0.63 1.05	JAN 03	0.85	FEB 27	1.04	MAY 08	1.15	JUN 19	1.25	AUG 07	1.15
WATER Y	EAR 1990	HIGHEST	0 63	OCT 03 1989	LON	WEST 1.25	.TIIN 19	1990			



## ACCOMACK COUNTY

375610075361803. Local number, 66M 25 SOW 181C.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4.5 in., depth 340 ft, screened 330 to 340 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.95 ft above land-surface datum.

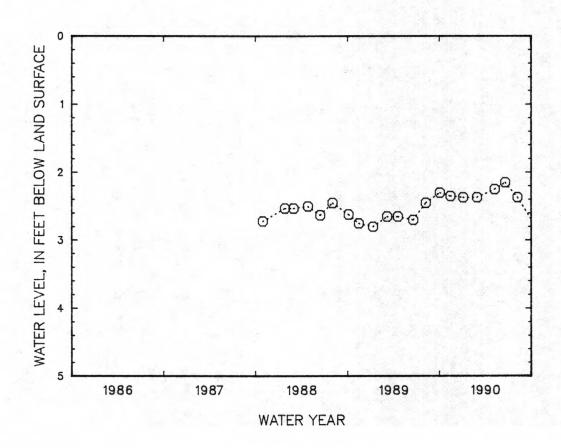
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.15 ft below land-surface datum, June 19, 1990; lowest measured, 2.80 ft below land-surface datum, Jan. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	2.30 2.35	JAN 03	2.37	FEB 27	2.37	MAY 08	2.25	JUN 19	2.15	AUG 07	2.37
WATER Y	EAR 1990	HIGHEST	2.15	JUN 19. 1990	LOWE	ST 2.37	JAN 03. F	EB 27. AUG	07. 1990		



### ACCOMACK COUNTY

375610075361804. Local number, 66M 26 SOW 181D.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4.5 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION .-- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

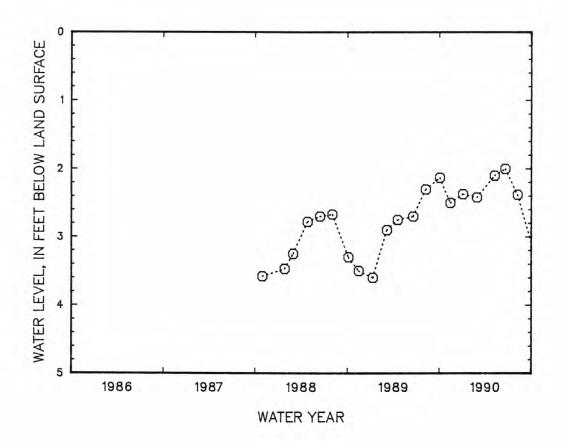
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, June 19, 1990; lowest measured, 3.60 ft below land-surface datum, Jan. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	2.13 2.50	JAN 03	2.37	FEB 27	2.42	MAY 08	2.10	JUN 19	2.00	AUG 07	2.38
WATER Y	EAR 1990	HIGHEST	2.00	JUN 19. 1990	LOW	EST 2.50	NOV 14.	1989			



# ACCOMACK COUNTY

375610075361805. Local number, 66M 27 SOW 181E.

LOCATION.--Lat 37°56'10", long 75°36'18", Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

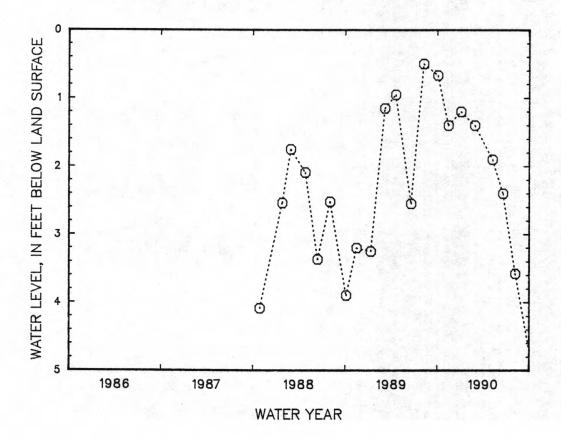
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 0.50 ft below land-surface datum, Aug. 8, 1989; lowest measured, 4.09 ft below land-surface datum, Oct. 29, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	0.67 1.40	JAN 03	1.20	FEB 27	1.40	MAY 08	1.90	JUN 19	2.40	AUG 07	3.58
WATED VE	7AP 1000	HIGHE	ST 0.67	OCT 03 10	20	OUTCT 3 59	AUG 07	1000			



### ACCOMACK COUNTY

375622075280101. Local number, 67M 2.

LOCATION.--Lat 37°56'23", long 75°28'02", Hydrologic Unit 02060010, well B31 Wallops Flight Center, 5.0 mi west of Chincoteague. Owner: National Aeronautics and Space Administration (formerly U.S. Naval Air Station, Wallops Island).

AQUIFER. -- Columbia Group sand of Pleistocene age.

WELL CHARACTERISTICS .-- Drilled unused water well, diameter 8 in., depth 60 ft, screen depth unknown.

INSTRUMENTATION . -- Monthly measurement with chalked tape by NASA personnel.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.38 ft above land-surface datum.

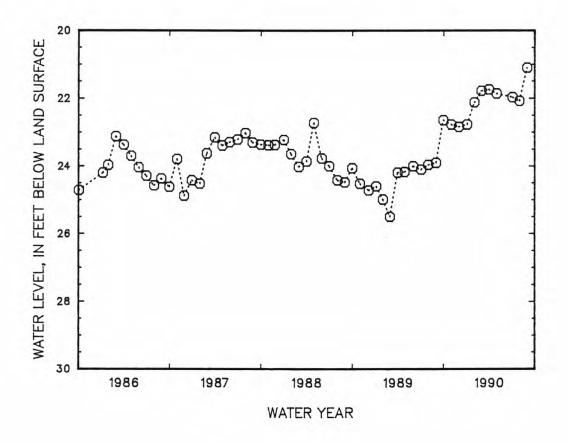
REMARKS.--Records provided by the National Aeronautics and Space Administration. Water levels for water years 1963 to 1974 should be 4.71 ft lower than previously published.

PERIOD OF RECORD . -- May 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.82 ft below land-surface datum, July 2, 1979; lowest measured, 27.02 ft below land-surface datum, Jan. 20, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31 NOV 30	22.77 22.84	JAN 02 31	22.77 22.12	FEB 28 MAR 30	21.78 21.74	APR 30 JUL 03	21.86 21.97	JUL 31	22.08	AUG 31	21.10
WATER Y	EAR 1990	HIGHEST	21 10	AUG 31 199	90	LOWEST 22.84	NOV 30	1989			



#### ACCOMACK COUNTY

375635075271501. Local number. 67M 10 SOW 115A.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 52 ft, screened 32 to 52 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum prior to Feb. 28, 1988; 1.7 ft thereafter.

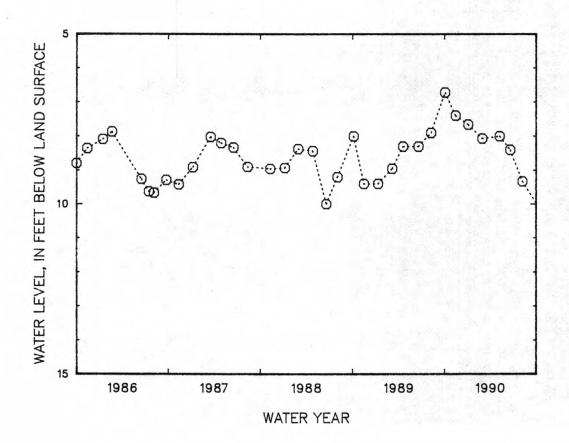
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 6.72 ft below land-surface datum, Oct. 3, 1989; lowest measured, 10.00 ft below land-surface datum, Aug. 12, 1981, June 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	6.72 7.40	JAN 03	7.66	FEB 28	8.07	MAY 08	8.00	JUN 19	8.40	AUG 07	9.33
WATER Y	EAR 1990	HIGHEST	6.72	OCT 03. 1989	LOWI	EST 9.33	AUG 07.	1990			



#### ACCOMACK COUNTY

375635075271502. Local number, 67M 11 SOW 115B.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 138 ft, screened 118 to 138 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 14 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum prior to Feb. 29, 1988; 1.9 ft thereafter.

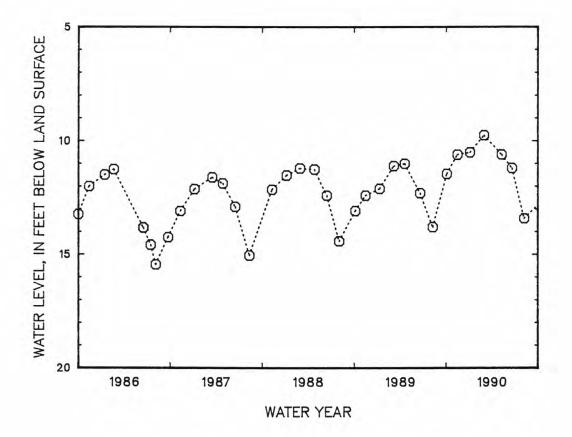
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.70 ft below land-surface datum, May 6, 1982; lowest measured, 15.45 ft below land-surface datum, Aug. 5, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	11.45 10.60	JAN 03	10.50	FEB 28	9.75	MAY 09	10.60	JUN 19	11.20	AUG 07	13.42
WATER Y	EAR 1990	HIGHEST	9.75	FEB 28. 1990	LOWI	EST 13.42	AUG 07.	1990			



375635075271503. Local number, 67M 12 SOW 115C.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 222 ft, screened 202 to 222 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Nov. 15, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.35 ft above land-surface datum.

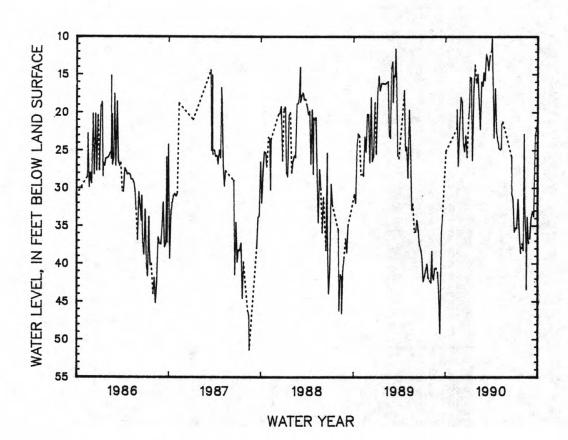
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels affected by local pumpage.

PERIOD OF RECORD. -- March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 10.28 ft below land-surface datum, Apr. 2, 1990; lowest recorded, 51.40 ft below land-surface datum, Aug. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			18.56	15.37	15.00	15.80	15.42	24.91		35.30	38.20	33.90
10			24.10	15.45	18.52	12.31	23.33	21.58		35.33	32.72	33.10
15		19.65	25.15	26.30	22.25	13.01	16.88	21.26		31.50	36.78	33.71
20		27.05	23.10	17.35	16.01	14.45	22.64		30.90	36.04	33.86	23.10
25		22.30	25.92	13.72	16.49	12.62	23.80		31.50	38.62	37.30	22.10
EOM		18.00	20.74	16.11	14.75	11.77	24.78		35.80	37.40	36.64	21.32
WATER	YEAR 1990	HIG	SHEST 10	.28 APR	02, 1990	LOWES	T 43.45	AUG 17,	1990			



# ACCOMACK COUNTY

375635075271504. Local number, 67M 13 SOW 115D.

LOCATION.--Lat 37°56'35", long 75°27'15", Hydrologic Unit 02060010, 50 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.6 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 249 ft, screened 229 to 249 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 16 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum prior to Aug. 8, 1989; 1.5 ft thereafter.

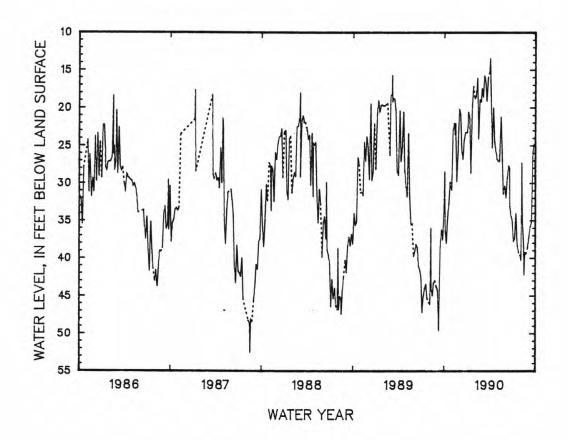
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels affected by local pumpage.

PERIOD OF RECORD. -- March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 13.45 ft below land-surface datum, Apr. 2, 1990; lowest recorded, 52.52 ft below land-surface datum, Aug. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.28	22.93	20.85	20.57	18.50	18.55	18.18	27.06	31.92	37.81	40.24	37.33
10	37.99	22.06	25.80	21.30	16.09	15.72	25.30	26.94	29.37	37.39	35.16	35.85
15	34.52	22.07	26.78	28.66	24.10	16.57	20.00	21.24	27.70	34.02	38.23	35.24
20	32.80	29.78	24.22	20.00	18.93	19.10	24.50	25.90	33.12	38.22	39.25	25.93
25	29.82	25.86	23.25	17.14	19.18	16.07	25.85	31.43	34.40	39.13	39.40	24.90
EOM	30.86	20.18	23.27	18.78	17.42	15.17	26.82	30.38	35.01	39.61	38.61	24.70
WATER	YEAR 1990	HIG	HEST 13.	45 APR 0	2, 1990	LOWES	T 42.21	AUG 17,	1990			



### ACCOMACK COUNTY

375617075273701. Local number, 67M 14 SOW 115E.

LOCATION.--Lat 37°56'17", long 75°27'37", Hydrologic Unit 02060010, 100 ft west of State Highway 175, inside fence of NASA Wallops Flight Center, 2.1 mi northeast of intersection of State Highways 175 and 798, and 2.1 mi east of Wattsville. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 280 ft, screened 260 to 280 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 26 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.3 ft above land-surface datum prior to Aug. 8, 1989; 1.5 ft thereafter.

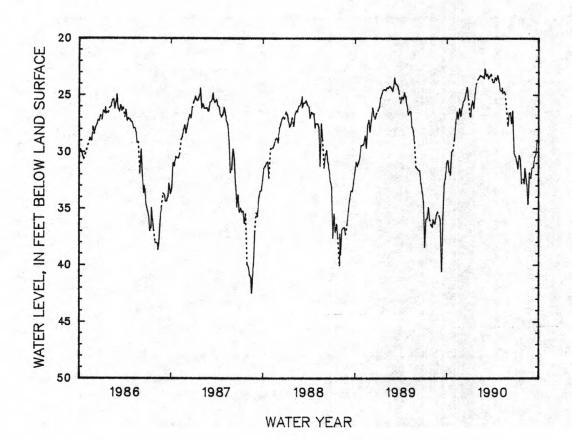
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels affected by local pumpage.

PERIOD OF RECORD. -- February 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 22.45 ft below land-surface datum, June 9, 1982; lowest recorded, 42.45 ft below land-surface datum, Aug. 17, 18, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
-,											2.	-
5	30.78	27.52	25.58	26.03	23.47	23.31	23.90	24.67	26.62	30.83	32.81	31.43
10	31.74	26.48	25.40	25.52	23.27	23.18	23.47	24.84	26.53	31.52	32.00	31.37
15	32.05	26.92	24.83	26.18	23.34	23.54	23.65	24.72	27.49	30.30	32.85	30.47
20	30.00	26.20	24.32	24.94	23.39	23.35	23.28	24.88	27.20	30.65	34.60	30.21
25	29.87	26.85	25.33	24.03	23.53	23.18	23.83		30.20	32.82	31.85	29.08
EOM	28.85	26.13	26.85	23.63	22.68	23.84	24.57	27.70	30.38	32.43	32.32	28.89
WATER	YEAR 1990	HIG	HEST 22	.55 FEB	28. 1990	LOWEST	34.62	AUG 19.	1990			



#### ALBEMARLE COUNTY

380333078264801. Local number, 43N 1 SOW 028.

LOCATION.--Lat 38°03'33", long 78°25'48", Hydrologic Unit 02080204, at Key West Subdivision, 1.1 mi east of Charlottesville. Owner: Key West Development Corporation.

AQUIFER. -- Lynchburg Formation of Precambrian age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 409 ft, cased to 52 ft, open hole 52 to

INSTRUMENTATION. --Continuous strip-chart recorder. June 25, 1974, to Apr. 10, 1981, occasional measurement with chalked tape by Virginia Water Control Board personnel. Prior to June 25, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 345 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

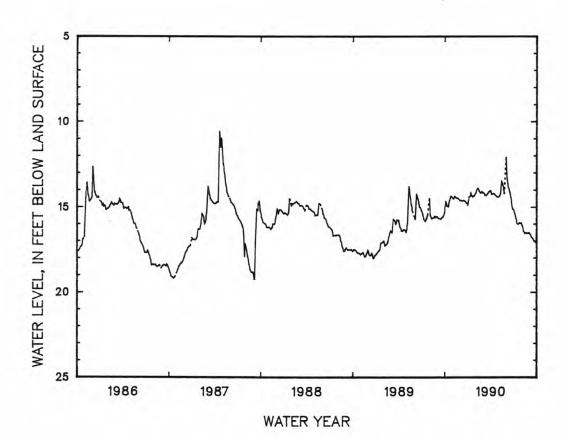
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD, -- February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 8.65 ft below land-surface datum, May 3, 1984; lowest recorded, 22.10 ft below land-surface datum, Nov. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.65	14.50	14.60	14.40	13.98	14.16	14.22	14.37	13.28	15.34	16.10	16.61
10	14.92	14.37	14.64	14.35	13.87	14.29	14.21	14.24	13.78	15.64	16.42	16.77
15	14.98	14.43	14.60	14.30	14.06	14.30	14.20	13.46	14.08	15.97	16.55	16.85
20	14.60	14.46	14.63	14.38	14.16	14.20	14.28	13.70	14.40	16.01	16.51	17.00
25	14.36	14.50	14.72	14.33	14.08	14.09	14.37	14.20	14.97	15.93	16.55	17.04
EOM	14.42	14.60	14.88	14.19	14.14	14.02	14.40		15.12	15.95	16.52	17.15
WATER	YEAR 199	о ні	GHEST 12	2.07 JUN	01, 1990	LOWE	ST 17.15	SEP 30,	1990			



### AMELIA COUNTY

372709077585801. Local number, 47H 1 SOW 166.

LOCATION.--Lat 37°27'09", long 77°58'58", Hydrologic Unit 02080207, 800 ft north of State Highway 616, 0.95 mi west of intersection of State Highways 609 and 616, and 2.3 mi east of Lodore. Owner: R. K. Anderson.

AQUIFER. -- Saprolite of Wissahickon Schist.

WELL CHARACTERISTICS. -- Dug unused water well, diameter 48 in., depth 44 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 2, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 340 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

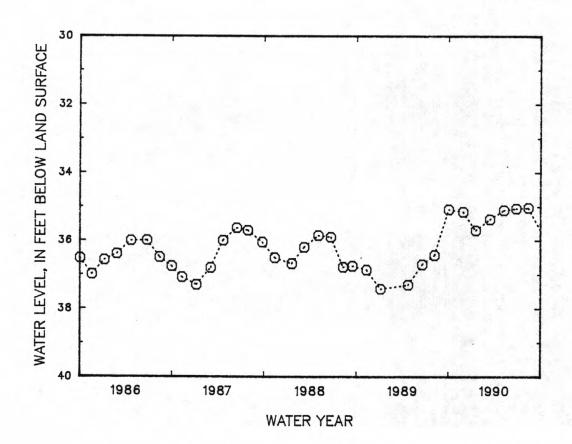
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1983 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 34.86 ft below land-surface datum, July 30, 1984; lowest measured, 37.42 ft below land-surface datum, Jan. 5, 1989.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 28	35.08 35.15	JAN 17	35.70	MAR 14	35.37	MAY 08	35.10	JUN 26	35.05	AUG 13	35.03
WATER Y	EAR 1990	HIGHEST	35.03	AUG 13. 1990		LOWEST 35.70	JAN 17.	1990			



# APPOMATTOX COUNTY

372133078493701. Local number, 40G 1 SOW 012.

LOCATION.--Lat 37°21'33", long 78°49'37", Hydrologic Unit 02080207, 0.45 mi east of State Highway 131, 300 ft north of U.S. Highway 460 in the town of Appomattox. Owner: Town of Appomattox.

AQUIFER .-- Metamorphic rock of uncertain age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 288 ft, cased to 40 ft, open hole 40 to 288 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Oct. 15, 1967, one measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 860 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

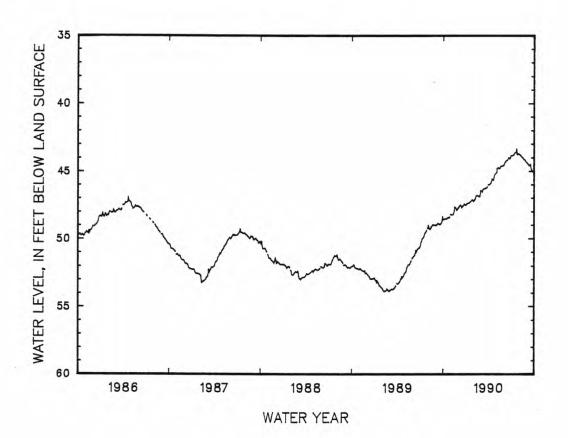
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1949, October 1967 to current year. Unpublished record available May 1949 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 34.78 ft below land-surface datum, June 13, 1973; lowest recorded, 58.21 ft below land-surface datum, Nov. 17, 18, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.55	48.21	47.58	47.40	47.09	46.45	45.97	44.79	44.36	43.84	43.78	44.44
10	48.50	48.20	47.49	47.36	46.83	46.32	45.88	44.73	44.24	43.80	43.90	44.57
15	48.52	47.92	47.67	47.32	46.79	46.28	45.57	44.79	44.17	43.65	43.98	44.50
20	48.44	47.68	47.57	47.23	46.84	46.25	45.65	44.62	43.99	43.61	44.10	44.86
25	48.45	47.88	47.43	47.10	46.88	46.22	45.25	44.62	44.06	43.76	44.18	45.00
EOM	48.20	47.74	47.51	47.22	46.44	45.99	45.15	44.55	43.84	43.71	44.33	45.14
WATER	YEAR 199	о ні	GHEST 43	3.36 JUL	22, 1990	LOWE	ST 48.58	OCT 01,	1989			



#### APPOMATTOX COUNTY

372514078394301. Local number, 41H 2.

LOCATION.--Lat 37°25'14", long 78°39'43", Hydrologic Unit 02080207, 1.0 mi south of intersection of State Highway 636 on the east side of State Highway 640, 2.8 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER. -- Candler Formation of Paleozoic age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 68 ft, diameter 1.25 in. from 68 to 73 ft, depth 73 ft, screened 68 to 73 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

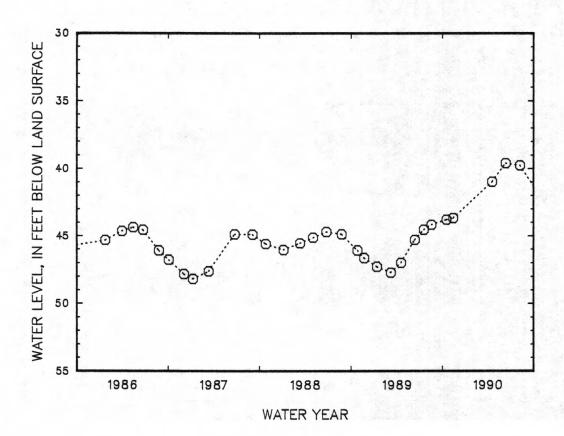
DATUM.--Elevation of land-surface datum is 640 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD. -- March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 32.99 ft below land-surface datum, May 20, 1973; lowest measured, 49.41 ft below land-surface datum, Mar. 30, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	43.80	NOV 13	43.68	APR 18	40.97	JUN 11	39.60	AUG 07	39.76
WATER YEAR 1990	HIGHEST	39.60	JUN 11,	1990 LO	OWEST 43.80	OCT 17,	1989		



### ARLINGTON COUNTY

385346077073701. Local number, 53V 1.

LOCATION.--Lat 38°53'46", long 77°07'37", Hydrologic Unit 02070010, at Langston School, 4854 Lee Highway in Arlington. Owner: Arlington County School Board.

AQUIFER. --Brandywine Formation of Pleistocene age and Bryn Mawr (?) gravel of Pliocene (?) age, overlying the Sykesville Formation of Precambrian age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 24 in., depth 35 ft, terracotta casing.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1989, bimonthly measurement with chalked tape.

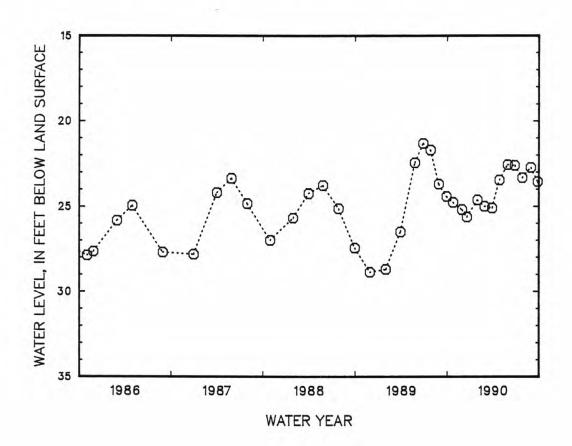
DATUM. -- Elevation of land-surface datum is 410 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Inner flange of manhole, at land-surface datum.

PERIOD OF RECORD . -- October 1931 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 17.74 ft below land-surface datum, Apr. 20, 1935; lowest measured, 34.81 ft below land-surface datum, Dec. 5, 1931.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL										
OCT 24 NOV 29	24.77 25.20	DEC 18 JAN 29	25.63 24.63	FEB 26 MAR 28	25.00 25.10	APR 26 MAY 29	23.46 22.56	JUN 26 JUL 26	22.60 23.33	AUG 29 SEP 25	22.73 23.56
WATED V	FAD 1000	HIGHES	22 56	MAY 20 100	20	TOWERT 25 63	DEC 18	1989			



### ARLINGTON COUNTY

385253077042301. Local number, 54V 3.

LOCATION.--Lat 38\*52'53", long 77\*04'23", Hydrologic Unit 02070010, at Arlington National Cemetery in Arlington.
Owner: NPS National Capitol Parks.

AQUIFER. -- Terrace gravels of Holocene age and sand of early Cretaceous age.

WELL CHARACTERISTICS. -- Dug unused water well, diameter 48 in., depth 50 ft.

INSTRUMENTATION. -- Monthly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1989, bimonthly measurement with chalked tape.

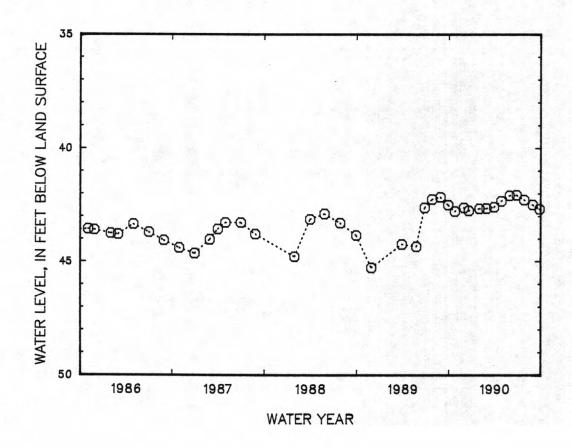
DATUM.--Elevation of land-surface datum is 205 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of brick and stone casing, 3.0 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 40.34 ft below land-surface datum, June 26, 1978; lowest measured, 45.28 ft below land-surface datum, Nov. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	· DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24 NOV 29	42.78 42.62	DEC 18 JAN 29	42.75 42.66	FEB 26 MAR 28	42.65 42.59	APR 26 MAY 29	42.33 42.08	JUN 26 JUL 26	42.06 42.27	AUG 29 SEP 25	42.49 42.68
WATER Y	EAR 1990	HIGHEST	42.06	JUN 26 19	90 T.	OWEST 42 78	OCT 24	1989			



### AUGUSTA COUNTY

382523078535501. Local number, 38P 1 SON 070.

LOCATION.--Lat 38°07'48", long 79°04'07", Hydrologic Unit 02070005, 100 ft east of State Highway 613, 0.5 mi south of intersection of State Highway 613 and U.S. Highway 11, and 0.9 mi south of Dogwood Hill. Owner: Augusta County Water Authority.

AQUIFER. -- Beekmantown Group of early Ordovician age.

WELL CHARACTERISTICS.--Drilled unusued water well, diameter 8 in. to 30 ft, diameter 6 in. from 30 to 97 ft, depth 250 ft, open hole from 97 to 250 ft.

INSTRUMENTATION. --Continuous strip-chart mecorder. Prior to Jan. 10, 1974, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 1,490 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

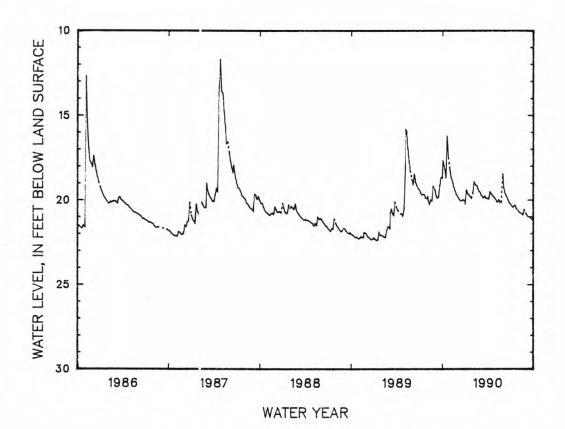
REMARKS. -- Records provided by the Virgini Water Control Board.

PERIOD OF RECORD. --December 1973 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest witer level recorded, 11.70 ft below land-surface datum, Apr. 25, 1987; lowest recorded, 27.02 ft below land-surface datum, Oct. 16, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.87	18.66	19.90	19.40	18.92	19.68	19.94	20.01	19.27	20.32	20.72	20.89
10	18.18	18.90	20.00	19.61	19.09	19.78	19.51	20.12	19.61	20.44	20.76	21.00
15	18.67	19.21	20.06	19.68	19.12	19.88	19.62	19.99	19.78	20.37	20.81	21.01
20	16.53	19.43	20.00	19.77	19.30	19.78	19.73	20.13	19.95	20.32	20.89	21.08
25	17.50	19.64	20.00	19.89	19.48	19.89	19.82	20.12	20.12	20.50	20.57	21.14
EOM	18.23	19.78	20.22	19.58	19.52	19.91	19.91	18.46	20.22	20.62	20.78	21.25
WATED	YEAR 199	0 11	GHEST 16	.22 OCT	19. 1989	LOWE	ST 21.25	SEP 30.	1000			



### BUCHANAN COUNTY

370443082022301. Local number, 14E 40.

LOCATION.--Lat 37°04'43", long 82°02'23", Hydrologic Unit 05070202, 50 ft south of the intersection of State Highways 620 and 622, at Grissom School. Owner: U.S. Geological Survey.

AQUIFER .-- Jawbone coalbed of Norton Formation of Pennsylvanian age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 60 ft, cased to 14 ft, open hole 14 to 60 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

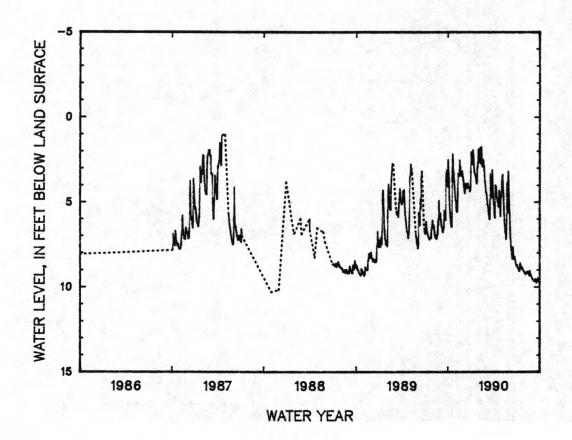
DATUM.--Elevation of land-surface datum is 1,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD. -- August 1982 to September 1983, October 1986 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.99 ft below land-surface datum, Apr. 30, 1987; lowest recorded, 11.49 ft below land-surface datum, Oct. 6, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.58	5.56	4.25	2.52	1.89	4.69	5.91	3.41	6.50	8.89	9.28	9.59
10	5.59	3.33	3.93	2.20	2.61	5.35	4.10	4.70	7.88	9.08	9.19	9.67
15	6.45	3.46	4.16	3.25	2.90	6.03	4.78	6.61	8.33	8.60	9.10	9.66
20	2.17	2.94	4.05	3.52	2.74	3.93	5.24	7.21	8.37	8.94	9.32	9.67
25	3.63	3.38		3.75	3.74	3.60	4.97	5.10	8.44	8.99	9.28	9.53
EOM	4.74	3.52	3.24	2.21	4.19	4.88	4.66	4.54	8.78	9.15	9.52	9.75
UATED	VEAD 1000	штс	UEST 1 AS	PFR 10	1000	LOWEST	0.76 51	FD 17 18	1000			



#### BUCKINGHAM COUNTY

372541078392101. Local number, 41H 1.

LOCATION.--Lat 37°25'41", long 78°39'21", Hydrologic Unit 02080207, 200 ft east of State Highway 640, 2.6 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER. -- Candler Formation of Paleozoic age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 83 ft, diameter 1.25 in. from 83 to 88 ft, depth 88 ft, screened 83 to 88 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

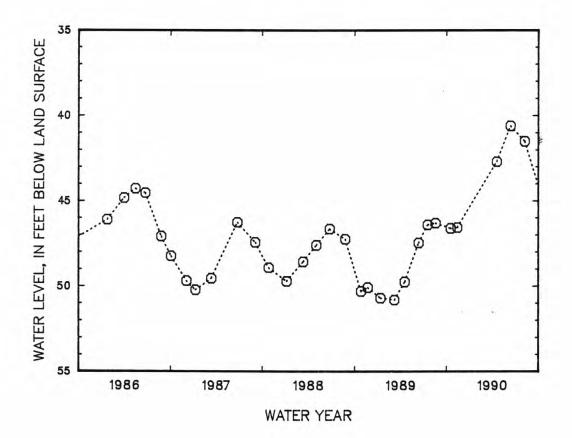
DATUM. -- Elevation of land-surface datum is 660 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

PERIOD OF RECORD. -- March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 30.95 ft below land-surface datum, May 20, 1973; lowest measured, 50.81 ft below land-surface datum, Mar. 8, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	OCT 17	46.61	NOV 13	46.56	APR 18	42.69	JUN 11	40.60	AUG 07	41.50
WATER	VEAR 1000	HIGHEST	40 60	TIN 11	1000 10	WEST AS	1 OCT 17	1080		



#### BUCKINGHAM COUNTY

372608078404601. Local number, 41H 3.

LOCATION.--Lat 37°26'08", long 78°40'46", Hydrologic Unit 02080207, 0.85 mi west of Ranger Headquarters on south side of dirt road off State Highway 636, 1.5 mi south of Sliders. Owner: U.S. Geological Survey.

AQUIFER. -- Candler Formation of Paleozoic age.

WELL CHARACTERISTICS. -- Augered observation water well, diameter 3 in. to 49 ft, diameter 1.25 in. from 49 to 54 ft, depth 54 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 683.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.3 ft above land-surface datum.

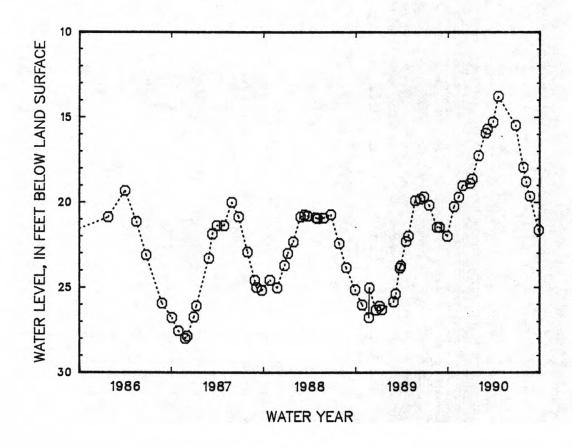
REMARKS. -- Prior to Oct. 1, 1981, well was reported as being located in Appomattox County.

PERIOD OF RECORD. -- March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 7.31 ft below land-surface datum, Apr. 12, 1973; lowest measured, 28.30 ft below land-surface datum, Oct. 17, 1977.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25 NOV 13 28	20.25 19.69 19.01	DEC 27 JAN 05 30	18.87 18.62 17.25	FEB 27 MAR 06 28	15.92 15.69 15.28	APR 18 JUN 26	13.78 15.47	JUL 27 AUG 07	17.94 18.78	AUG 22 SEP 26	19.65 21.64
WATER Y	EAR 1990	HIGHEST	13.78	APR 18 199	90	LOWEST 21 64	SEP 26	1990			



#### BUCKINGHAM COUNTY

372519078374001. Local number, 41H 4.

LOCATION.--Lat 37°25'19", long 78°37'40", Hydrologic Unit 02080207, 0.65 mi northeast of Holiday Creek, 0.85 mi southeast of State Highway 636 off State Highway 614, and 4.0 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER. -- Candler Formation of Paleozoic age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 72 ft, diameter 1.25 in. from 72 to 77 ft, depth 77 ft, screened 72 to 77 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder--60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

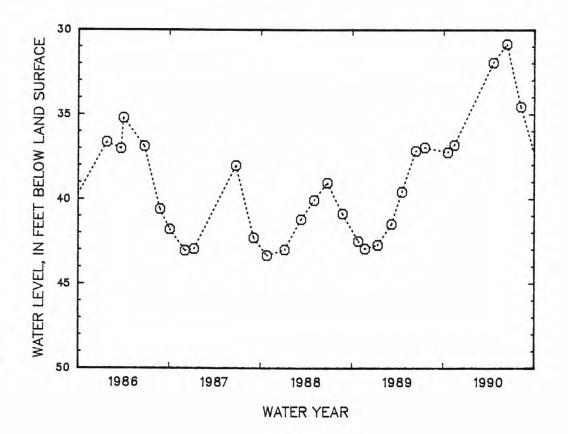
DATUM.--Elevation of land-surface datum is 647 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.45 ft below land-surface datum, May 1, 1980; lowest measured, 48.13 ft below land-surface datum, Mar. 30, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	37.24	NOV 13	36.81	APR 18	31.96	JUN 11	30.85	AUG 07	34.56
WATER YEAR 1990	HIGHEST	30.85	JUN 11,	1990 L	OWEST 37.24	OCT 18,	1989		



#### CAROLINE COUNTY

380239077193101. Local number, 52N 1.
LOCATION.--Lat 38°02'49", long 77°18'29", Hydrologic Unit 02080105, 0.2 mi north of the intersection of State
Highways 619 and 667 near the old ammunition supply point at Fort A. P. Hill near Bowling Green and 3.7 mi
southeast of the intersection of U.S. Highway 301 and South Range Road. Owner: U.S. Department of the Army. AQUIFER. -- Aquia aquifer of Paleocene age.

AQUIFER. --Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS. --Drilled unused water well, diameter 6 in., depth 278 ft, depth of screens unknown.

INSTRUMENTATION. --Semiannual measurement with chalked tape by USGS personnel. Mar. 10, 1988, to June 1, 1990, annual measurement with chalked tape. Apr. 30, 1974, to Aug. 5, 1986, bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Apr. 30, 1974, continuous strip-chart recorder.

DATUM. --Elevation of land-surface datum is 200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum. Prior to Aug. 5, 1986, measuring point was 0.3 ft above land-surface datum. Measuring point changed when the U.S. Department of Army added 1.4 ft of casing sometime between Aug. 5, 1986, and Mar. 10, 1988.

REMARKS. --Records provided by the Virginia Water Control Board prior to Aug. 5, 1986; U.S. Geological Survey after Mar. 10, 1988

Mar. 10, 1988.

PERIOD OF RECORD. -- September 1971 to August 1986, March 1988 to current year. Unpublished records available prior to August 1986 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 102.47 ft below land-surface datum, Sept. 1, 1973; lowest measured, 113.05 ft below land-surface datum, Sept. 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, MARCH TO SEPTEMBER 1988

WATER DATE LEVEL MAR 10 110.39

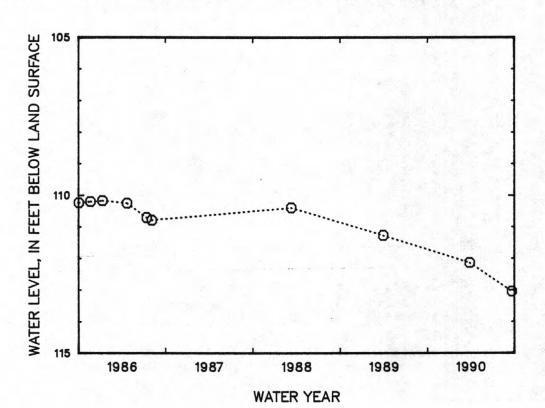
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

WATER DATE LEVEL MAR 30 111.27

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

WATER WATER DATE LEVEL DATE LEVEL MAR 27 112.14 SEP 20 113.05

HIGHEST 112.14 MAR 27, 1990 WATER YEAR 1990 LOWEST 113.05 SEP 20, 1990



### CAROLINE COUNTY

380624077172801. Local number, 52N 5.

LOCATION.--Lat 38°06'24", long 77°17'28", Hydrologic Unit 02080104, in block pumphouse under water tank at Camp Wilcox at Fort A. P. Hill, 1.1 mi north of U.S. Highway 301, and near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 6 in. to unknown depth, diameter 4 in. from unknown depth to 524 ft, depth 524 ft, screened 468 to 501 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 210 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD. -- December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 172.20 ft below land-surface datum, Dec. 16, 1971; lowest measured, 207.48 ft below land-surface datum, Mar. 19, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

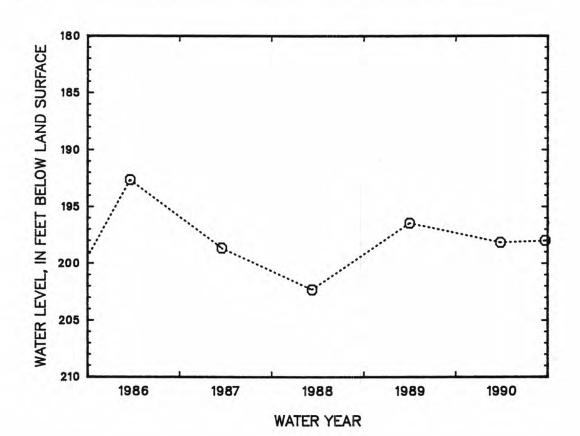
DATE WATER LEVEL MAR 31 196.45

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 27 198.17 SEP 20 198.01

WATER YEAR 1990 HIGHEST 198.01 SEP 20, 1990 LOWEST 198.17 MAR 27, 1990



### CAROLINE COUNTY

380415077194101. Local number, 52N 6.

LOCATION.--Lat 38°04'15", long 77°19'41", Hydrologic Unit 02080105, on the southwest corner of the intersection of Burke Street and Second Street in the headquarters area of Fort A. P. Hill near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 6 in. to 480 ft, diameter 3 in. from 446 to 500 ft, depth 500 ft, screened 488 to 498 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 15, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 214 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD. -- December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 158.65 ft below land-surface datum, Feb. 10, 1982; lowest measured, 207.74 ft below land-surface datum, Mar. 19, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

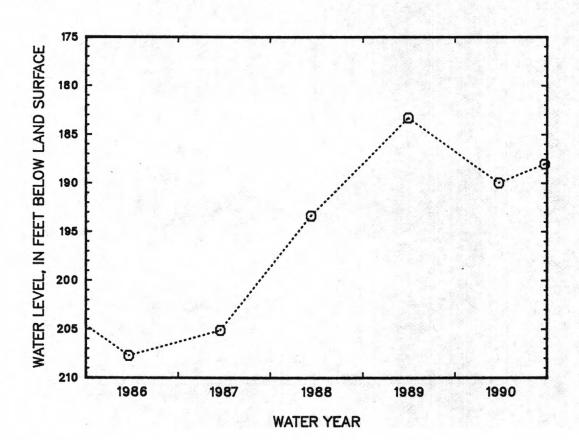
DATE WATER LEVEL
MAR 30 183.30

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

 DATE
 WATER LEVEL
 DATE
 WATER LEVEL

 MAR 23
 189.98
 SEP 20
 188.05

WATER YEAR 1990 HIGHEST 188.05 SEP 20, 1990 LOWEST 189.98 MAR 23, 1990



#### CAROLINE COUNTY

380836077211401. Local number, 52P 10.

LOCATION.--Lat 38°08'36", long 77°21'14", Hydrologic Unit 02080104, on the northwest corner of the intersection of A. P. Hill Drive and Jackson Drive, 6.8 mi northwest of the intersection of U.S. Highway 301 and A. P. Hill Drive at Liberty Corner at Fort A. P. Hill near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 702 ft, screened 544 to 552 ft, 603 to 612 ft, 648 to 657 ft, open hole 666 to 702 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 15, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 222 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

PERIOD OF RECORD. -- March 1986 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.94 ft below land-surface datum, Mar. 30, 1989; lowest measured, 116.94 ft below land-surface datum, Mar. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

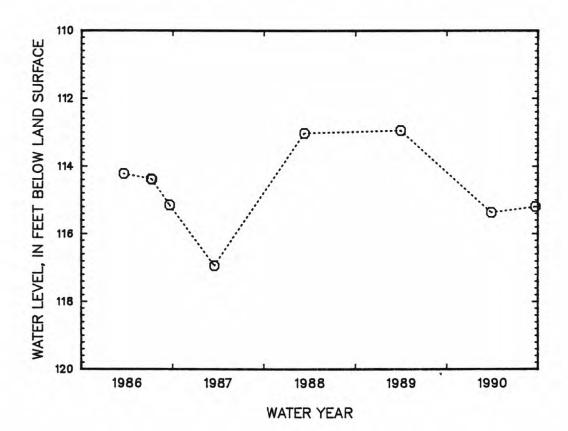
DATE WATER LEVEL
MAR 30 112.94

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 27 115.37 SEP 20 115.20

WATER YEAR 1990 HIGHEST 115.20 SEP 20, 1990 LOWEST 115.37 MAR 27, 1990



### CHARLES CITY COUNTY

372014077073001. Local number, 53G 7.

LOCATION.--Lat 37°20'14", long 77°07'30", Hydrologic Unit 02080206, 0.25 mi north of State Highway 5, 2.35 mi east of the intersection of State Highways 5 and 603, and 3.2 mi west of Charles City Courthouse. Owner: Archer H. Ruffin.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 314 ft, screened 280 to 305 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. --December 1971, December 1974, October 1983 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.48 ft below land-surface datum, Dec. 3, 1971; lowest measured, 78.54 ft below land-surface datum, Mar. 19, 1990.

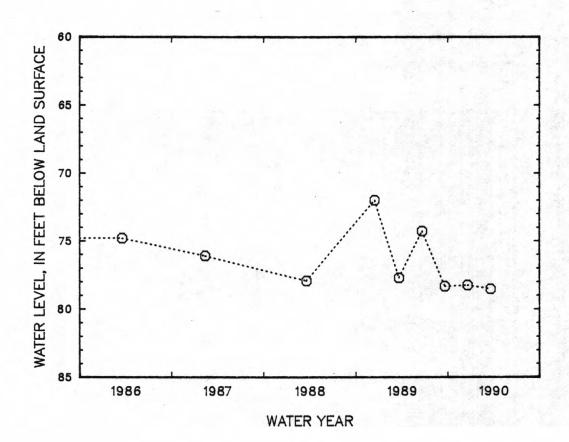
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER	DATE	WATER
DATE	LEVEL	DATE	LEVEL
DEC 18	78 26	MAR 19	78 54

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 78.26 DEC 18, 1989

LOWEST 78.54 MAR 19, 1990



#### CHARLES CITY COUNTY

371951077092001. Local number, 53G 14.

LOCATION.--Lat 37°19'51", long 77°09'20", Hydrologic Unit 02080206, 0.25 mi south of State Highway 5, 0.6 mi east of the intersection of State Highways 5 and 609, and 4.7 mi west of Charles City Courthouse. Owner: Evelyton Association.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 321 ft, screened 311 to 321 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- December 1984 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 82.00 ft below land-surface datum, Feb. 11, 1987; lowest measured, 90.28 ft below land-surface datum, June 21, 1989.

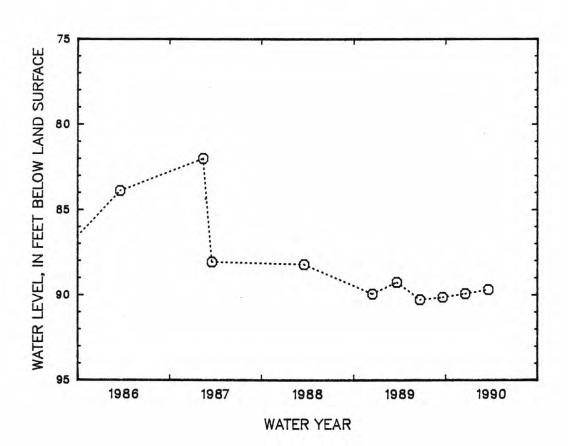
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	89.93	MAR 19	89.69

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 89.69 MAR 19, 1990

LOWEST 89.93 DEC 18, 1989



#### CHARLES CITY COUNTY

371956077055203. Local number, 54G 11 SOW 066.

LOCATION.--Lat 37°19'56", long 77°05'52", Hydrologic Unit 02080206, 0.6 mi east of Bowens Store on State Highway 5, 1.6 mi west of Charles City. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac and Middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 540 ft, screened 290 to 310 ft, 404 to 424 ft, 486 to 496 ft, 510 to 530 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. June 5, 1976, to Sept. 30, 1985, occasional measurement with chalked tape. Jan. 10, 1974, to June 5, 1976, continuous strip-chart recorder. Prior to Jan. 10, 1974, monthly measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 54 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.0 ft above land-surface datum.

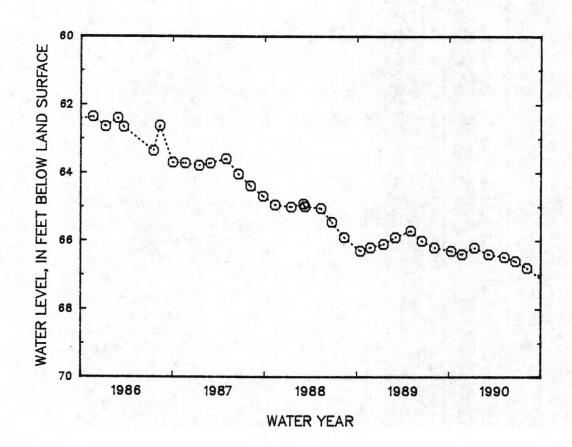
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1973 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.07 ft below land-surface datum, May 1, 1973; lowest measured, 66.80 ft below land-surface datum, Aug. 6, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DAT	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21	66.30 66.40	JAN 09	66.20	MAR 07	66.40	MAY	08 66.48	JUN 21	66.60	AUG 06	66.80
WATER Y	EAR 1990	HIGHEST	66.20	JAN 09 199	0	LOWEST 6	80 AUG 06	1990			



### CHARLES CITY COUNTY

371956076055101. Local number, 54G 13 SOW 067.

LOCATION.--Lat 37°19'56", long 77°05'51", Hydrologic Unit 02080206, 0.6 mi east of Bowens Store on State Highway 5, 1.6 mi southwest of Charles City. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 227 ft, screened 222 to 227 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.4 ft above land-surface datum.

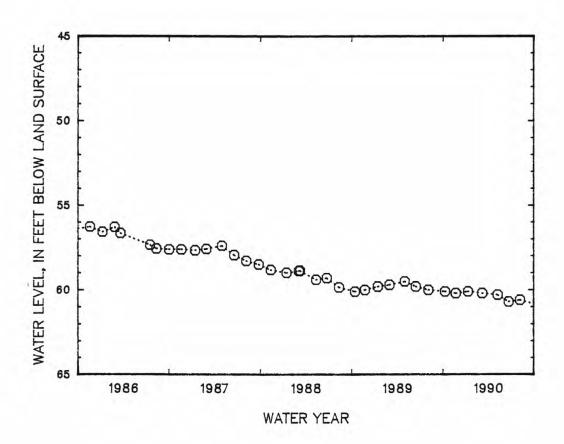
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1973 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.63 ft below land-surface datum, June 7, 1973; lowest measured, 60.70 ft below land-surface datum, June 21, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21	60.10 60.20	JAN 09	60.10	MAR 07	60.20	MAY 08	60.30	JUN 21	60.70	AUG 06	60.60
WATER V	FAR 1990	HIGHEST	60 10	OCT 09 19	RO TAN OO	1000	LOWEST	60 70 JUN	21 1990		



364852076252201. Local number, 59C 29 SOW 163A.

LOCATION.--Lat 36°48'52", long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 35 ft, screened 25 to 35 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

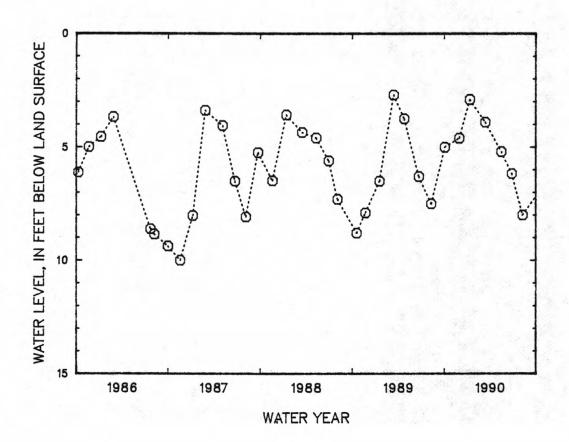
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 2.70 ft below land-surface datum, Mar. 14, 1989; lowest measured, 10.00 ft below land-surface datum, Nov. 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	5.00 4.60	JAN 10	2.90	MAR 12	3.90	MAY 15	5.20	JUN 26	6.17	AUG 08	8.00
WATER Y	EAR 1990	HIGHEST	2.90	JAN 10. 1990	LOW	EST 8.00	AUG 08.	1990			



#### CITY OF CHESAPEAKE

364852076252202. Local number, 59C 30 SOW 163B.

LOCATION.--Lat 36°48'52", long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 948 ft, screened 938 to 948 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

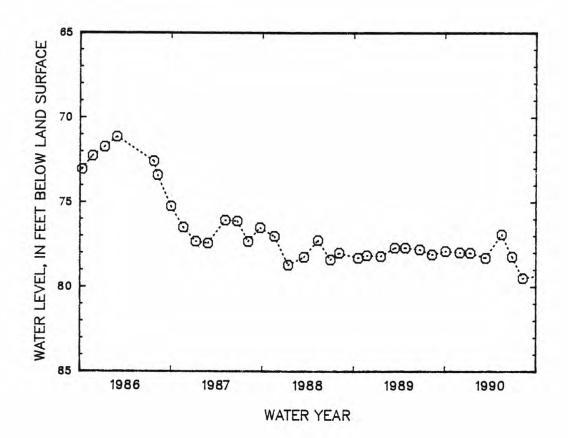
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.06 ft below land-surface datum, May 25, 1983; lowest measured, 79.50 ft below land-surface datum, Aug. 8, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	77.90 77.98	JAN 10	78.00	MAR 12	78.30	MAY 15	76.90	JUN 26	78.23	AUG 08	79.50
WATER Y	EAR 1990	HIGHEST	76 90	MAY 15 199	90	LOWEST 79 50	AUG 08	1990			



364852076252203. Local number, 59C 31 SOW 163C.

LOCATION.--Lat 36°48'52', long 76°25'22", Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 631 ft, screened 621 to 631 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Aug. 21, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

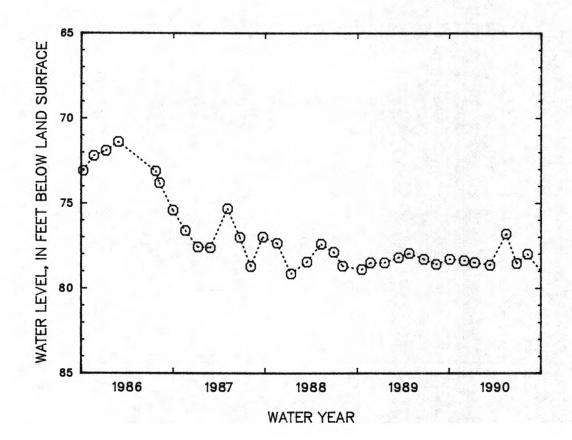
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 67.13 ft below land-surface datum, Feb. 23, 1983; lowest measured, 79.15 ft below land-surface datum, Jan. 12, 1988.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	78.30 78.38	JAN 10	78.50	MAR 12	78.65	MAY 15	76.80	JUN 26	78.55	AUG 08	78.00
WATER YE	AR 1990	HIGHEST	76.80	MAY 15. 199	00	LOWEST 78.65	MAR 12.	1990			



#### CITY OF CHESAPEAKE

364621076273201. Local number, 59C 36.

LOCATION.--Lat 36°46'21", long 76°27'32", Hydrologic Unit 02080208, 2.5 mi southwest of the intersection of U.S. Highways 13, 58, 460, and Interstate Highways 264 and 64 near Bowers Hills in the city of Chesapeake. Owner: City of Chesapeake.

AQUIFER. --Middle Potomac and Upper Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observaton water well, diameter 4 in., depth 880 ft, screened 602 to 607 ft, 659 to 664 ft, 706 to 716 ft, 800 to 805 ft, 854 to 859 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1986, to June 1, 1990, occasional measurement with chalked tape. Prior to Oct. 1, 1986, recorder by City of Chesapeake.

DATUM.--Elevation of land-surface datum is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.2 ft above land-surface datum.

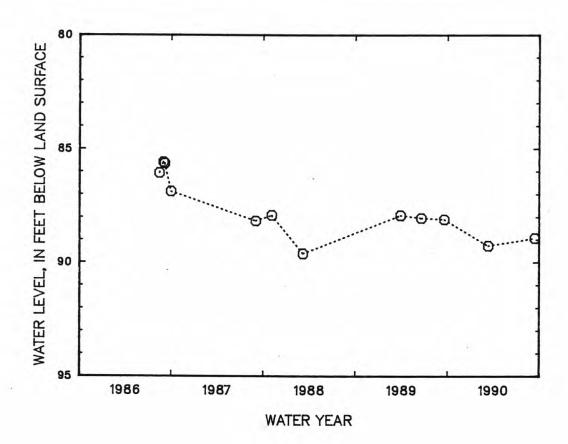
PERIOD OF RECORD. -- August 1986 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 85.46 ft below land-surface datum, Aug. 20, 25, 1986; lowest measured, 89.62 ft below land-surface datum, Mar. 7, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER
DAIL	LEVEL	DAIL	TT A FIT
MAR 12	89.27	SEP 13	88.93

WATER YEAR 1990 HIGHEST 88.93 SEP 13, 1990 LOWEST 89.27 MAR 12, 1990



363836076201701. Local number, 60B 3 SOW 090A.

LOCATION.--Lat 36°38'36", long 76°20'17", Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 855 ft, screened 824 to 834 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder. Prior to Aug. 25, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 16 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

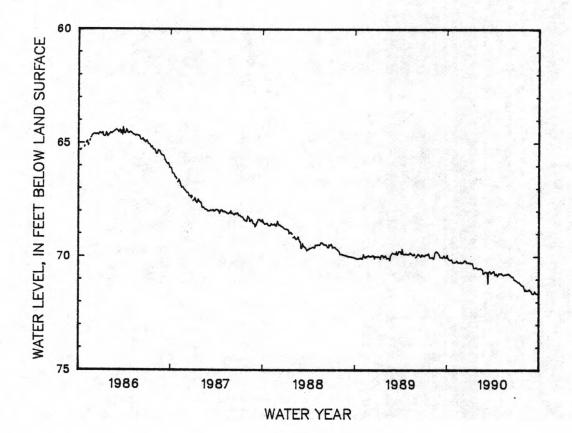
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 53.80 ft (revised) below land-surface datum July 11, 1978; lowest recorded, 71.68 ft below land-surface datum, Sept. 28-30, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.05	70.24	70.25	70.29	70.54	70.67	70.63	70.73	70.78	71.07	71.43	71.62
10	70.13	70.19	70.18	70.30	70.51	70.70	70.80	70.79	70.82	71.13	71.45	71.63
15	70.15	70.26	70.19	70.48	70.54	70.69	70.76	70.81	70.88	71.13	71.50	71.53
20	70.13	70.27	70.27	70.51	70.59	70.64	70.85	70.79	70.88	71.20	71.48	71.62
25	70.25	70.25	70.27	70.48	70.74	70.73	70.75	70.78	71.00	71.26	71.44	71.63
EOM	70.26	70.28	70.28	70.53	70.70	70.68	70.74	70.75	71.03	71.29	71.53	71.68



#### CITY OF CHESAPEAKE

363836076201702. Local number, 60B 4 SOW 090B.

LOCATION.--Lat 36°38'36", long 76°20'17", Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Water Control Board.

AQUIFER .-- Virginia Beach of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 556 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 16 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.05 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft thereafter.

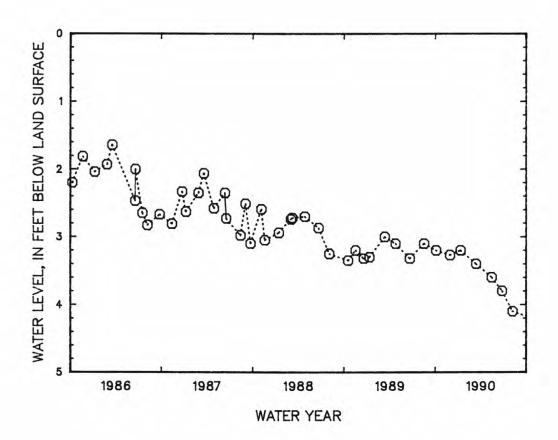
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 2.20 ft above land-surface datum, Feb. 1, 1978; lowest measured, 4.10 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.20 3.27	JAN 10	3.20	MAR 13	3.40	MAY 15	3.60	JUN 26	3.80	AUG 07	4.10
WATER Y	EAR 1990	HIGHEST	3.20	OCT 04. 1989	. JAN 10	1990	LOWEST	4.10 AUG 0	7. 1990		



364615076182101. Local number, 60C 41 SOW 164.

LOCATION.--Lat 36°46'15", long 76°18'21", Hydrologic Unit 02080208, 50 ft north of entrance road to Virginia Power powerplant, 500 ft south of Military Highway in Chesapeake. Owner: Virginia Power.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 400 ft, diameter 4 in. from 400 to 928 ft, depth 928 ft, screened 770 to 780 ft, 875 to 885 ft, 918 to 928 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Nov. 25, 1982, monthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum prior to July 15, 1987; 1.5 ft thereafter.

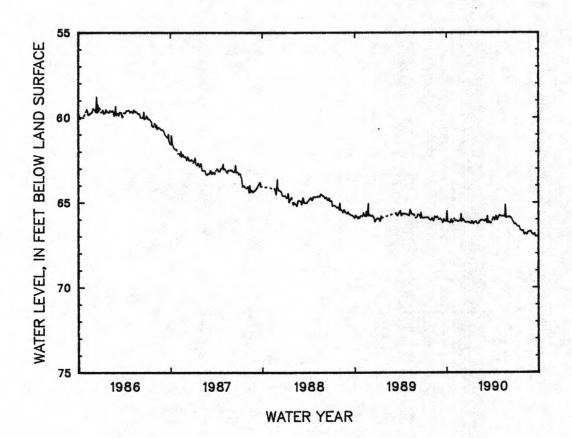
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 55.22 ft below land-surface datum, Mar. 15, 1983; lowest recorded, 67.01 ft below land-surface datum, Sept. 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	66.12	66.06	65.97	66.25	66.23	66.01	65.88	65.80	65.86	66.34	66.88	66.85
10	66.15	66.06	66.07	66.11	66.11	66.19	66.03	65.80	65.85	66.42	66.84	66.92
15	66.20	66.12	66.17	66.25	66.03	66.20	65.79	65.79	65.93	66.42	66.90	66.83
20	66.00	66.09	66.18	66.18	66.05	66.14	66.02	65.84	66.10	66.60	66.76	67.00
25	66.17	66.06	66.15	66.12	66.04	66.23	65.83	65.92	66.22	66.68	66.71	66.99
EOM	65.95	66.10	66.19	66.25	66.10	66.05	65.74	65.86	66.25	66.67	66.71	66.99
WATER	YEAR 1990	н	GHEST 65	5.12 MAY	22, 1990	LOWES	ST 67.01	SEP 19,	1990			



#### CITY OF CHESAPEAKE

363502076091201. Local number, 61A 3 SOW 132.

LOCATION.--Lat 36°35'02", long 76°09'12", Hydrologic Unit 03010205, 250 ft south of Indian Creek Road, 0.2 mi southeast of entrance to Northwest River Park, and 3.0 mi southeast of Saint Brides. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 1.5 in., depth 36 ft, screened 28 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Aug. 23, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum prior to Mar. 2, 1988; 0.15 ft thereafter.

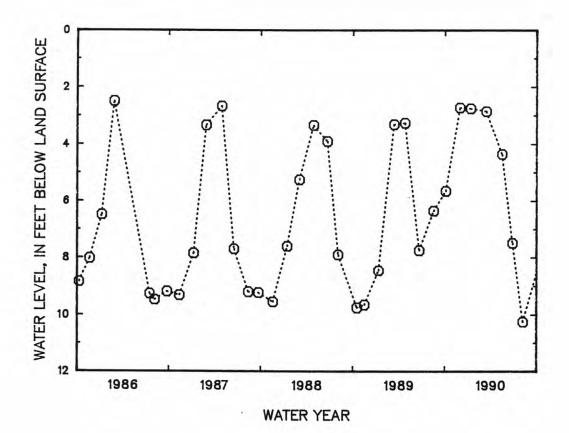
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--May 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.95 ft below land-surface datum, Jan. 24, 1980; lowest measured, 10.25 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	5.65 2.72	JAN 10	2.75	MAR 13	2.85	MAY 15	4.35	JUN 26	7.49	AUG 07	10.25
WATER Y	EAR 1990	HIGHEST	2.72	NOV 29. 1989	LOW	EST 10.25	AUG 07	1990			



364227076074701. Local number, 61B 2 SOW 091A.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 97 ft, screened 92 to 97 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.05 ft above land-surface datum prior to Jan. 11, 1989; 0.75 ft thereafter.

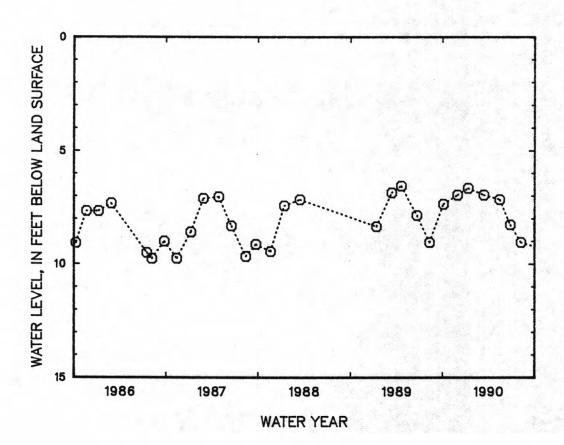
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 6.01 ft below land-surface datum, Oct. 16, 1979; lowest measured, 10.30 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	7.35 6.95	JAN 10	6.65	MAR 13	6.95	MAY 15	7.15	JUN 26	8.27	AUG 07	9.05
WATER Y	EAR 1990	HIGHEST	6.65	JAN 10. 1990	LOWES	T 9.05	AUG 07. 1	1990			



#### CITY OF CHESAPEAKE

364227076074702. Local number, 61B 5 SOW 091B.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,040 to 1,060 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

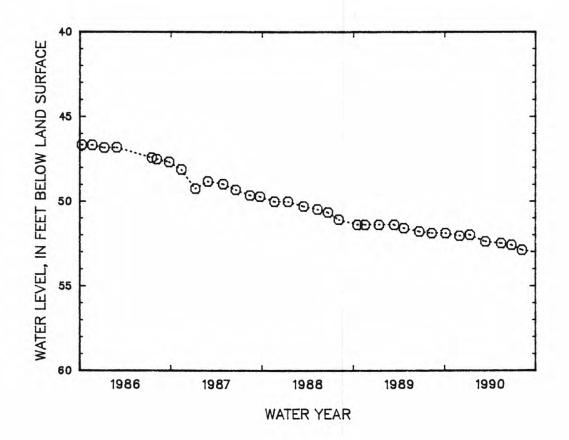
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.83 ft below land-surface datum, Aug. 28, 1980; lowest measured, 52.90 ft below land-surface datum, Aug. 7, 1990.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	51.90 52.06	JAN 10	52.00	MAR 13	52.40	MAY 15	52.50	JUN 26	52.60	AUG 07	52.90
WATER Y	EAR 1990	HIGHEST	51.90	OCT 04. 198	39	LOWEST 52.90	AUG 07	. 1990			



364227076074703. Local number, 61B 6 SOW 091C.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER .-- Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 780 ft, screened 760 to 780 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 7.0 ft above land-surface datum prior to Jan. 11, 1989; 1.2 ft thereafter.

REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

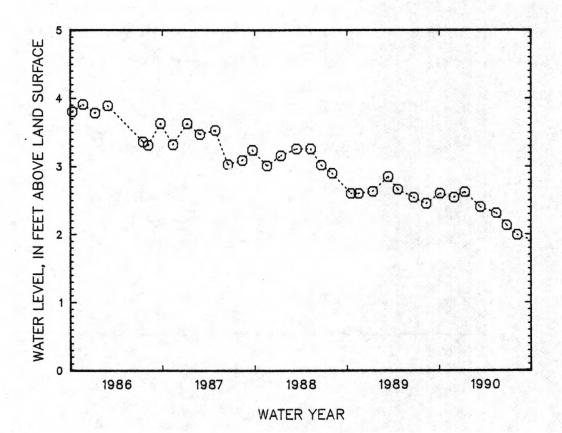
EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 6.37 ft above land-surface datum, July 26, 1979; lowest measured, 1.99 ft above land-surface datum, Aug. 7, 1990.

# WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL										
OCT 04	2.60	JAN 10	2.62	MAR 13	2.40	MAY 15	2.31	JUN 26	2.13	AUG 07	1.99

NOTE. -- Flowing well, readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST 2.62 JAN 10, 1990 LOWEST 1.99 AUG 07, 1990



### CITY OF CHESAPEAKE

364227076074704. Local number, 61B 7 SOW 091D.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 22 ft, screened 17 to 22 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

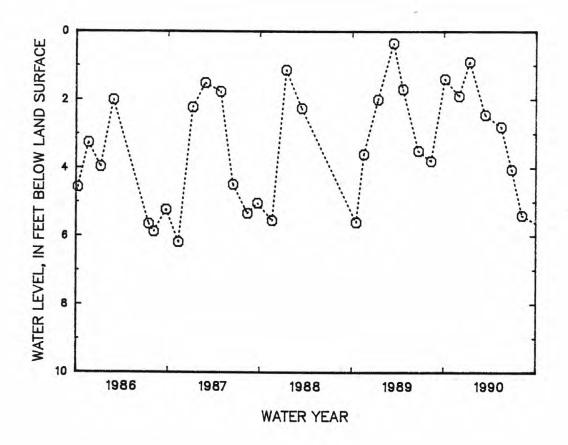
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.35 ft below land-surface datum, Mar. 13, 1989; lowest measured, 6.22 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	1.40 1.90	JAN 10	0.90	MAR 13	2.45	MAY 15	2.80	JUN 26	4.05	AUG 07	5.40
WATER Y	EAR 1990	HIGHEST	0 90	TAN 10 1990	TON	FST 5 40	AUG 07	1990			



364231076140801. Local number, 61B 8 SOW 134.

LOCATION.--Lat 36°42'31", long 76°14'08", Hydrologic Unit 03010205, at Great Bridge Junior High School, in Great Bridge. Owner: Virginia Water Control Board.

AQUIFER .-- St. Mary-Choptank aquifer of Miocene age.

WELL CHARACTERISTICS .-- Drilled unused water well, diameter 8 in., depth 100 ft, screened 84 to 94 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

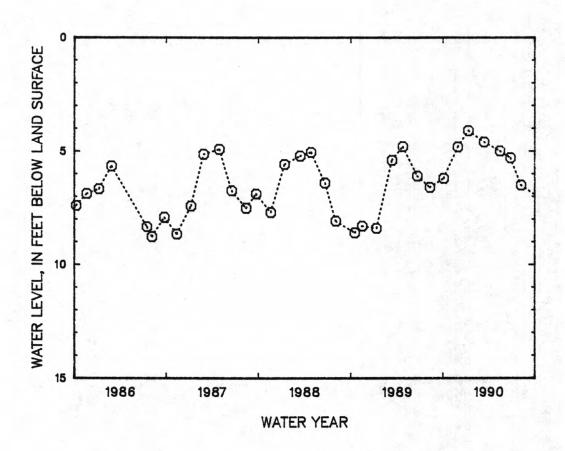
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- January 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.10 ft below land-surface datum, Jan. 10, 1990; lowest measured, 16.07 ft below land-surface datum, Sept. 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	6.20 4.82	JAN 10	4.10	MAR 13	4.60	MAY 15	5.00	JUN 26	5.30	AUG 07	6.50
WATER Y	EAR 1990	HIGHEST	4.10	JAN 10. 1990	LOWE	ST 6.50	AUG 07. 19	990			



### CITY OF CHESAPEAKE

364227076074706. Local number, 61B 12 SOW 091E.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,630 ft, diameter 2 in. from 1,630 to 1,830 ft, depth 1,830 ft, screened 1,820 to 1,830 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

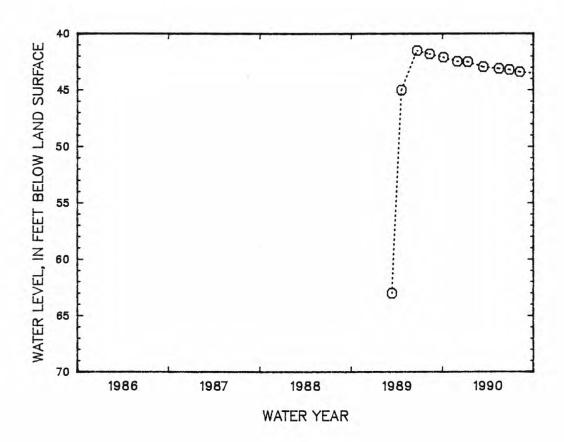
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.50 ft below land-surface datum, June 21, 1989; lowest measured, 63.00 ft below land-surface datum, Mar. 13, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	42.10 42.47	JAN 10	42.50	MAR 13	42.95	MAY 15	43.10	JUN 26	43.20	AUG 07	43.40
WATER Y	EAR 1990	HIGHEST	42.10	OCT 04 198	39	LOWEST 43 40	AUG 07	1990			



364227076074707. Local number, 61B 13 SOW 091F.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,270 ft, diameter 2 in. from 1,270 to 1,390 ft, depth 1,390 ft, screened 1,370 to 1,380 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

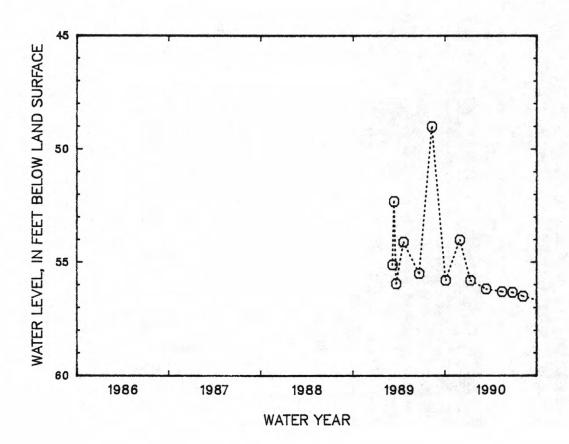
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.00 ft below land-surface datum, Aug. 10, 1989; lowest measured, 56.50 ft below land-surface datum, Aug. 7, 1990.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	55.80 54.00	JAN 10	55.80	MAR 13	56.18	MAY 15	56.30	JUN 26	56.33	AUG 07	56.50
WATER Y	EAR 1990	HIGHEST	54.00	NOV 29. 198	9	LOWEST 56.50	AUG 07	1990			



### CITY OF CHESAPEAKE

364227076074708. Local number, 61B 14 SOW 091G.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 987 ft, diameter 2 in. from 987 to 1,110 ft, depth 1,110 ft, screened 1,090 to 1,100 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

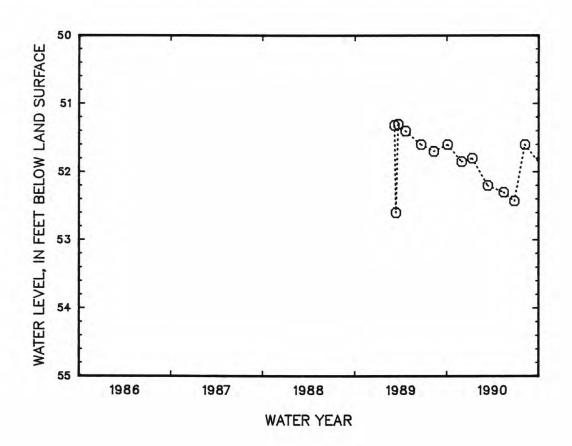
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 51.30 ft below land-surface datum, Mar. 22, 1989; lowest measured, 52.60 ft below land-surface datum, Mar. 13, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	51.60 51.85	JAN 10	51.80	MAR 13	52.20	MAY 15	52.30	JUN 26	52.43	AUG 07	51.60
WATED V	FAD 1000	нтснест	51 60	OCT 06 100	O AUG 07	1000	LOWEST	52 43 TIIN	26 1990		



#### CITY OF CHESAPEAKE

364227076074709. Local number, 61B 15 SOW 091H.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 700 ft, diameter 2 in. from 674 to 790 ft, depth 790 ft, screened 759 to 769 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1989 to current year.

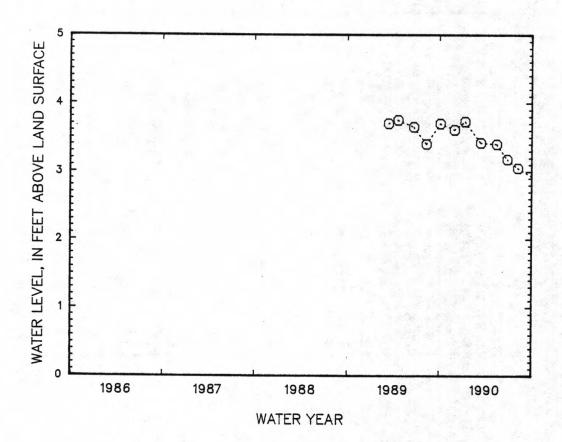
EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 3.75 ft above land-surface datum, Apr. 20, 1989; lowest measured, 3.05 ft above land-surface datum, Aug. 7, 1990.

## WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.70	JAN 10	3.73	MAR 13	3.42	MAY 15	3.40	JUN 26	3.18	AUG 07	3.05

NOTE. -- Flowing well, readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST 3.73 JAN 10, 1990 LOWEST 3.05 AUG 07, 1990



#### CITY OF CHESAPEAKE

364227076074710. Local number, 61B 16 SOW 091J.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 602 ft, diameter 2 in. from 586 to 690 ft, depth 690 ft, screened 670 to 680 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1989 to current year.

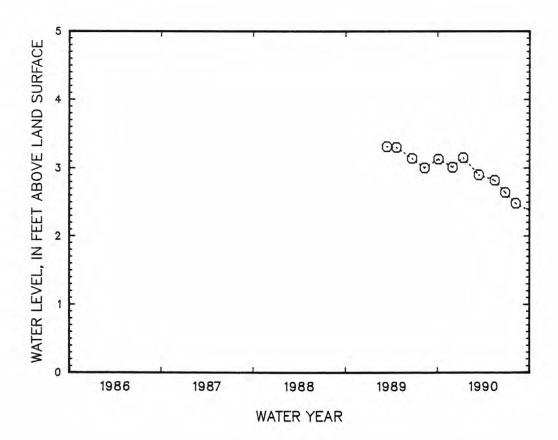
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.31 ft above land-surface datum, Mar. 13, 1989; lowest measured, 2.48 ft above land-surface datum, Aug. 7, 1990.

### WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.13	JAN 10	3.15	MAR 13	2.90	MAY 15	2.82	JUN 26	2.64	AUG 07	2.48

NOTE. -- Flowing well, readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST 3.15 JAN 10, 1990 LOWEST 2.48 AUG 07, 1990



#### CITY OF CHESAPEAKE

364227076074711. Local number, 61B 17 SOW 091K.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 78 ft, diameter 2 in. from 78 to 108 ft, depth 108 ft, screened 88 to 98 ft.

INSTRUMENTATION .-- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

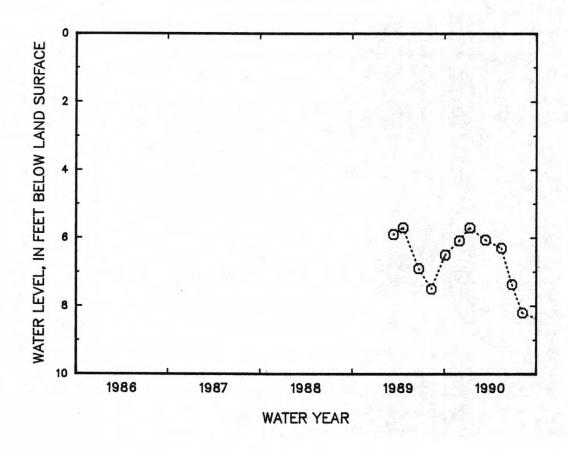
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.70 ft below land-surface datum, Apr. 20, 1989; Jan. 10, 1990; lowest measured, 8.20 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	6.50 6.08	JAN 10	5.70	MAR 13	6.06	MAY 15	6.30	JUN 26	7.37	AUG 07	8.20
WATER Y	EAR 1990	HIGHEST	5.70	JAN 10 1990	T.OV	VEST 8.20	AUG 07	1990			



### CITY OF CHESAPEAKE

364227076074712. Local number, 61B 18 SOW 091L.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 37 ft, diameter 2 in. from 37 to 67 ft, depth 67 ft, screened 57 to 67 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

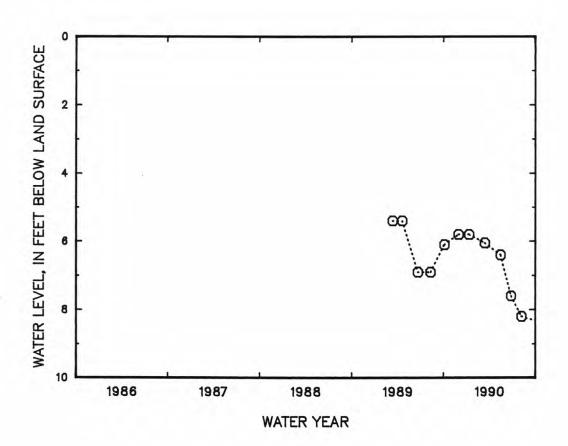
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 5.40 ft below land-surface datum, Mar. 13, Apr. 20, 1989; lowest measured, 8.20 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	6.10 5.80	JAN 10	5.80	MAR 13	6.05	MAY 15	6.40	JUN 26	7.60	AUG 07	8.20
WATER Y	EAR 1990	HIGHEST	5 80	NOV 29 1989	TAN 10	1990	LOWEST	8 20 AUG 07	1990		



#### CITY OF CHESAPEAKE

364227076074713. Local number, 61B 19 SOW 091M.

LOCATION.--Lat 36°42'27", long 76°07'47", Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION . -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

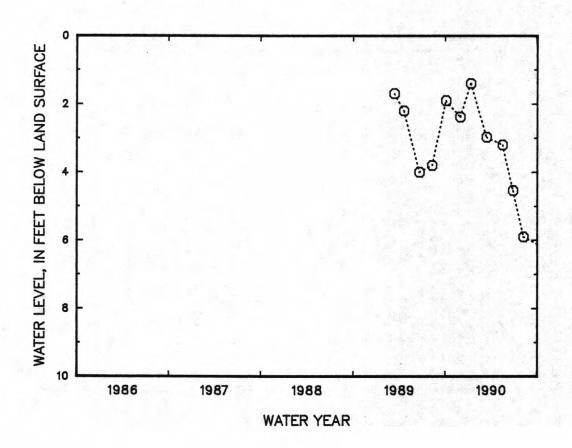
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.40 ft below land-surface datum, Jan. 10, 1990; lowest measured, 5.90 ft below land-surface datum, Aug. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	1.90 2.38	JAN 10	1.40	MAR 13	2.97	MAY 15	3.20	JUN 26	4.54	AUG 07	5.90
WATER Y	EAR 1990	HIGHEST	1.40	JAN 10 1990	T.OW	EST 5 90	AUG 07 1	990			



#### CHESTERFIELD COUNTY

372519077264701. Local number, 51H 92.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley, 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 53 ft, screened 51 to 53 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape by USGS personnel.

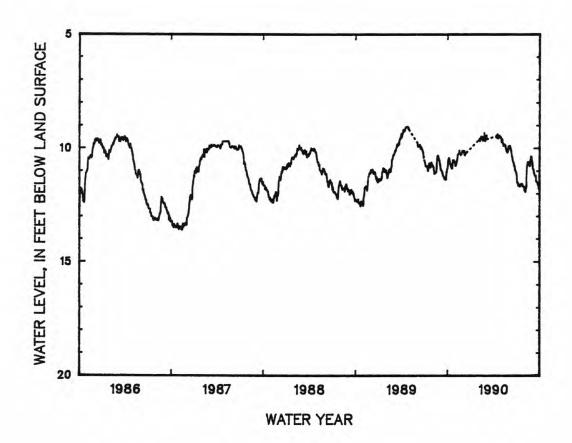
DATUM.--Elevation of land-surface datum is 102.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD. --April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 8.95 ft below land-surface datum, June 14, 1989; lowest measured, 14.35 ft below land-surface datum, Aug. 16, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

						777						
DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.44	10.62	10.12		9.67	9.60		9.62	9.96	11.49	11.91	10.92
10	10.62	10.28	10.21		9.48		9.48	9.88	10.15	11.62	11.13	11.13
15	10.82	10.15	10.18		9.53		9.42	9.87	10.49	11.59	10.61	11.21
20	10.78	10.23			9.61		9.55	10.01	10.71	11.64	10.73	11.48
25	10.51	10.24			9.67		9.48	10.19	10.98	11.64	10.62	11.62
EOM	10.64	10.15			9.54		9.56	9.95	11.10	11.75	10.56	11.80
WATER	YEAR 1990	HIG	HEST 9.27	FEB 23,	24, 1990	LO	WEST 11.	93 AUG 0	6, 1990			



#### CHESTERFIELD COUNTY

372519077264702. Local number, 51H 93.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 38 ft, screened 36 to 38 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape by USGS personnel.

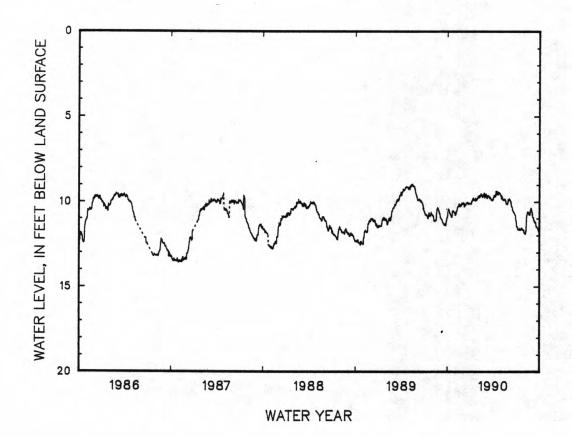
DATUM.--Elevation of land-surface datum is 102.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.9 ft above land-surface datum.

PERIOD OF RECORD. --April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 8.94 ft below land-surface datum, May 16, 1989; lowest measured, 14.65 ft below land-surface datum, Aug. 16, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.45	10.63	10.08	9.97	9.71	9.66	9.59	9.68	9.87	11.47	11.90	10.91
10	10.63	10.31	10.18	9.81	9.56	9.63	9.60	9.89	10.04	11.62	11.15	11.13
15	10.81	10.16	10.11	9.88	9.58	9.69	9.42	9.86	10.43	11.59	10.61	11.20
20	10.79	10.16	10.02	9.92	9.66	9.75	9.56	9.96	10.60	11.63	10.72	11.48
25	10.53	10.22	10.06	9.88	9.72	9.89	9.48	10.15	10.76	11.63	10.61	11.62
EOM	10.64	10.12	10.11	9.74	9.58	9.83	9.59	9.90	11.10	11.74	10.55	11.78
WATER	YEAR 1990	HTG	HEST 9 24	APR 11	1000	LOWEST	11 01	AUG OF 1	ggn			



#### CHESTERFIELD COUNTY

372519077264703. Local number, 51H 94.

LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road, 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 in Bensley. Owner: U.S. Geological Survey.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 3 in., depth 26 ft, screened 24 to 26 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape by USGS personnel.

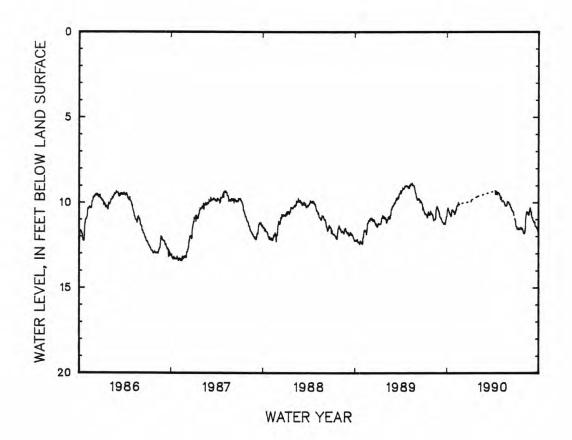
DATUM.--Elevation of land-surface datum is 102.04 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD. -- April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.82 ft below land-surface datum, May 16, 1989; lowest measured, 15.19 ft below land-surface datum, Aug. 16, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.35	10.53		9.93				9.69	10.04	11.41	11.83	10.88
10	10.53	10.21					9.41	9.92	10.15	11.53	11.08	11.07
15	10.72	10.08					9.37	9.95	10.37	11.51	10.56	11.15
20	10.69						9.52	10.09	10.51	11.55	10.67	11.41
25	10.44						9.45	10.20		11.55	10.57	11.55
EOM	10.55						9.58	9.97	11.04	11.66	10.50	11.72
WATER	YEAR 1990	HIGH	EST 9.29	APR 10,	11, 1990	LO	WEST 11.	84 AUG 0	6, 1990			



#### CHESTERFIELD COUNTY

372519077264704. Local number, 51H 95.
LOCATION.--Lat 37°25'19", long 77°26'47", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road.

Owner: U.S. Geological Survey. AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. --Drilled observation water well, diameter 3 in., depth 4.7 ft, screened 2.7 to 4.7 ft. INSTRUMENTATION.--Digital recorder--60-minute punch and monthly measurement with chalked tape by USGS personnel. DATUM.--Elevation of land-surface datum is 102.23 ft above National Geodetic Vertical Datum of 1929. Measuring

point: Top of casing, 1.9 ft above land-surface datum.

REMARKS.--Upper limit of recorded water-level data is limited by well construction.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

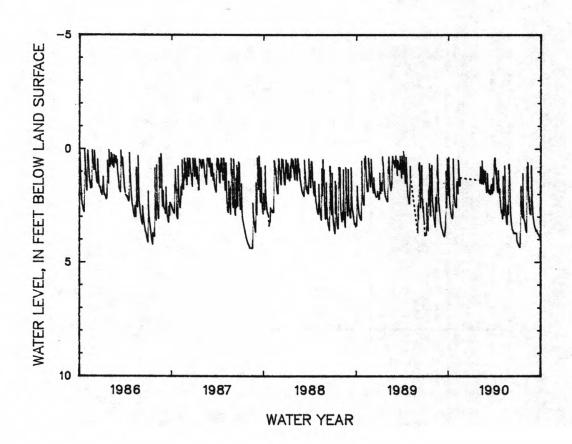
EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 0.02 ft below land-surface datum, Jan. 11, 12, 1990; lowest recorded, 4.38 ft below land-surface datum, Aug. 8-19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.70	1.76			.78	1.36	.89	1.20	2.96	4.23	3.66	3.31
10	2.68	.58			1.52	1.92	1.37	2.93	3.52	4.34	.60	3.53
15	3.00	1.62			1.50	1.99	1.85	2.47	3.72	1.65	2.34	3.59
20	. 44				1.13	1.63	1.95	3.30	3.71	2.96	2.85	3.75
25	2.10				1.30	1.89	2.41	2.88	3.73	2.84	.73	3.82
EOM	2.51				1.79	. 63	2.72	1.38	4.08	3.30	2.86	3.97

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 30	0.82 2.49	DEC 01 FEB 01	2.49 1.22	MAR 05 APR 09	1.22	MAY 09 JUN 15	2.75 3.69	JUL 17	2.42	AUG 28	1.95
WATER Y	EAR 1990	HIGHEST	0.02	JAN 11, 12,	1990	LOWEST 4.	.34 JUL 10	, 1990			



### CHESTERFIELD COUNTY

372519077264605. Local number, 51H130.
LOCATION.--Lat 37°25'19", long 77°26'46", Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highway 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER.--Petersburg granite of late Paleozoic age.
WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 96 ft, cased to 71 ft, open hole 71 to

INSTRUMENTATION. --Monthly measurements with chalked tape by USGS personnel.

DATUM. --Elevation of land-surface datum is 102.17 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.64 ft above land-surface datum.
PERIOD OF RECORD.--May 1985 to current year. Unpublished records available prior to October 1988 in files of the

Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 1.64 ft above land-surface datum, June 1, 1989; lowest measured, 3.80 ft below land-surface datum, Aug. 11, 1986.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28 NOV 30	2.25	DEC 30 JAN 31	1.50	MAR 01	*+.01 *+1.28	MAY 02 JUN 01	*+1.62 *+1.64	JUN 29 JUL 28	*+1.07 *+.17	AUG 31	*+.45

\* Flowing well; readings given are above land-surface datum.

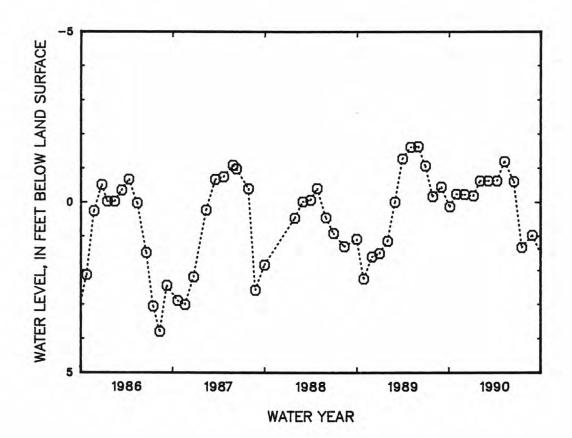
WATER YEAR 1989 HIGHEST \*+1.64 JUN 01, 1989 LOWEST 2.25 OCT 28, 1988

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	.13	DEC 01 JAN 05	*+.23 *+ 19	FEB 01 MAR 05	*+.63 *+.63	APR 09	*+.63 *+1 20	JUN 15	*+.61 1.33	AUG 28	.97

\* Flowing well; readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST \*+1.20 MAY 09, 1990 LOWEST 1.33 JUL 17, 1990



#### CLARKE COUNTY

390348078035501. Local number, 46W175.

LOCATION.--Lat 39°03'48", long 78°03'55", Hydrologic Unit 02070007, 1.5 mi east of the intersection of U.S. Highway 17/50 and U.S. Highway 340 at Blandy Experimental Farm. Owner: University of Virginia.

AQUIFER. -- Conococheague limestone of Middle Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 80.4 ft, cased to 24 ft, open hole 24 to 80.4 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

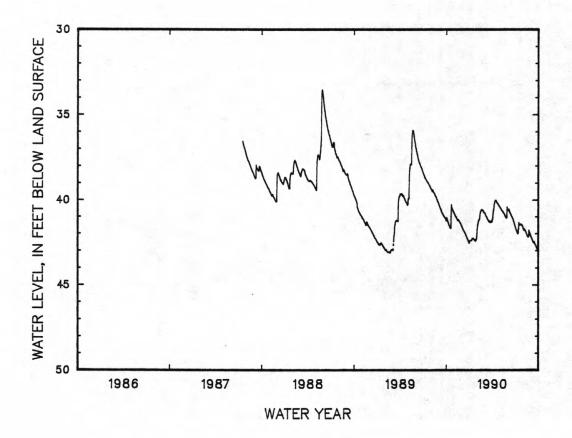
DATUM.--Elevation of land-surface datum is 600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.7 ft above land-surface datum.

PERIOD OF RECORD .-- July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 33.53 ft below land-surface datum, May 28, 1988; lowest recorded, 43.13 ft below land-surface datum, Feb. 21, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.21	40.93	41.71	42.43	41.30	40.87	40.73	40.48	40.60	41.76	41.80	42.28
10	41.42	41.04	41.86	42.38	41.11	41.02	40.17	40.62	40.72	41.96	41.83	42.47
15	41.63	41.23	42.00	42.29	40.64	41.20	40.02	40.76	40.89	41.73	41.99	42.50
20	40.99	41.23	42.18	42.35	40.62	41.31	40.16	40.87	41.05	41.50	42.16	42.68
25	40.55	41.36	42.36	42.44	40.70	41.34	40.26	41.04	41.27	41.45	41.82	42.87
EOM	40.74	41.54	42.56	41.77	40.76	41.31	40.38	40.59	41.53	41.60	42.12	43.02
WATER	YEAR 1990	HIG	HEST 40.	01 APR 1	5, 1990	LOWES	T 43.02	SEP 30,	1990			



### CITY OF COLONIAL HEIGHTS

371644077244601. Local number, 51G 1.

LOCATION.--Lat 37°16'44", long 77°24'46", Hydrologic Unit 02080207, 200 ft west of U.S. Highways 1 and 301, 0.50 mi south of the intersection of State Highway 144 and U.S. Highway 1 and 301 in Colonial Heights. Owner: Dean Whittington

AQUIFER. -- Petersburg granite of late Paleozoic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 100 ft, cased to 50 ft, open hole 50 to 100 ft.

INSTRUMENTATION .-- Monthly measurement with chalked tape by USGS personnel.

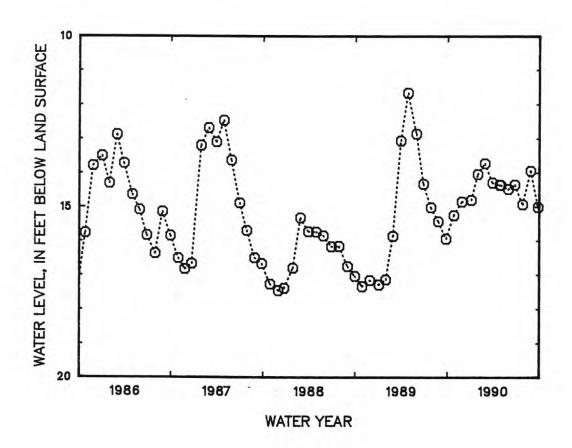
DATUM.--Elevation of land-surface datum is 57.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD . -- October 1939 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 10.73 ft below land-surface datum, Jan. 26, 1978; lowest measured, 19.26 ft below land-surface datum, Dec. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26 NOV 27 JAN 03	15.25 14.85 14.80	JAN 29 FEB 26	14.04 13.72	MAR 28 APR 26	14.29 14.36	APR 30 MAY 30	14.36 14.48	JUN 25 JUL 26	14.35 14.93	AUG 27 SEP 25	13.94 15.01
WATER Y	EAR 1990	HIGHEST	13.72	FEB 26, 199	90	LOWEST 15.25	OCT 26	1989			



#### ESSEX COUNTY

375032076583201. Local number, 55L 1.

LOCATION.--Lat 37°50'32", long 76°58'32", Hydrologic Unit 02080104, 0.4 mi northeast of the intersection of State Highway 621 and private dirt road at Retreat Farm near Millers Tavern and 0.9 mi west of the intersection of U.S. Highway 360 and State Highway 621. Owner: Edward W. Haile.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 621 ft, depth 621 ft, screened 575 to 585 ft, 615 to 621 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 162 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of lip of concrete hatchway, at land-surface datum.

PERIOD OF RECORD. -- December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 160.14 ft below land-surface datum, Mar. 1, 1973; lowest measured, 177.51 ft below land-surface datum, Sept. 18, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

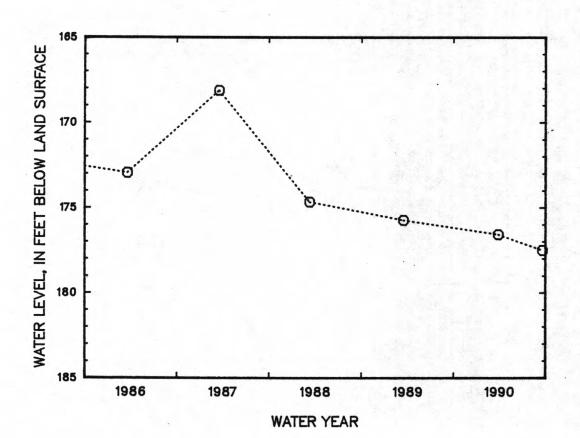
DATE WATER LEVEL
MAR 16 175.74

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 27 176.58 SEP 18 177.51

WATER YEAR 1990 HIGHEST 176.58 MAR 27, 1990 LOWEST 177.51 SEP 18, 1990



#### FAIRFAX COUNTY

384518077163501. Local number, 52U 4.

LOCATION.--Lat 38°45'18", long 77°16'35", Hydrologic Unit 02070010, 200 ft east of intersection of State Highways 641 and 643 in Springfield. Owner: Sydenstricker Church.

AQUIFER. -- Granite of undetermined age.

WELL CHARACTERISTICS. -- Dug unused water well, diameter 24 in., depth 28 ft.

INSTRUMENTATION . -- Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 340 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Hole in cement platform, 0.67 ft above land-surface datum.

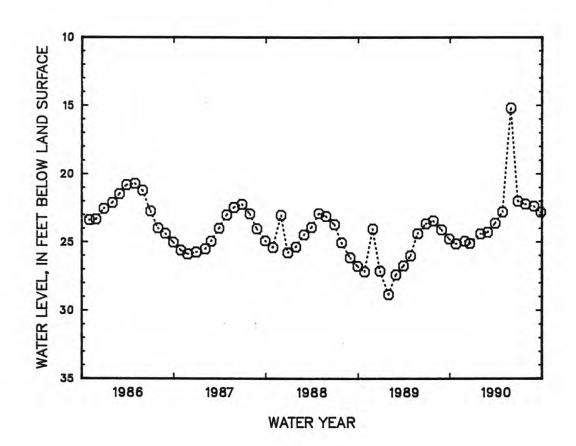
REMARKS. -- Water levels occasionally affected by local surface-water runoff into well casing.

PERIOD OF RECORD . -- May 1957 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 12.54 ft below land-surface datum, Apr. 30, 1973; lowest measured, 28.85 ft below land-surface datum, Jan. 30, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	25.14	DEC 18	25.11	FEB 26	24.28	APR 26	22.79	JUN 26	22.01	AUG 29	22.38
NOV 29	24.94	JAN 29	24.40	MAR 28	23.61	MAY 29	15.19	JUL 26	22.22	SEP 25	22.81
WATER Y	EAR 1990	HIGHEST	15.19	MAY 29 199	90	LOWEST 25 14	OCT 24	1989			



### FAIRFAX COUNTY

385638077220101. Local number, 52V 2.

LOCATION.--Lat 38°56'58", long 77°22'01", Hydrologic Unit 02070008, at U.S. Geological Survey National Center in Reston. Owner: U.S. Geological Survey.

AQUIFER. -- Manassas sandstone of Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in., depth 205 ft, cased to 35 ft, open hole 35 to 205 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 390 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD . -- October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 6.47 ft below land-surface datum, Mar. 30, 1984; lowest recorded, 18.19 ft below land-surface datum, Oct. 25, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.44			13.63	10.83	11.15	8.70	9.55	12.00	13.95	14.70	14.80
10	15.58			13.17	10.80	11.34	8.50	10.06	12.32	14.31	14.52	14.47
15	15.67				10.75	11.57	8.95	10.12	12.63	13.99	14.32	14.99
20	15.35		14.59		11.18	10.88	8.95	10.90	12.98	14.15	14.52	15.17
25	15.18		14.65		10.96	10.39	9.62	11.60	13.34	14.26	14.35	15.32
EOM		14.48	14.71	10.97	10.79	10.10	9.95	11.60	13.62	14.42	14.61	15.45
WATER	YEAR 1990	HIGH	EST 8.34	APR 04,	1990	LOWEST	15.71	CT 17, 19	89			

MATER YEAR

MATER YEAR

MATER YEAR

MATER YEAR

MATER YEAR

#### CITY OF FRANKLIN

364033076562603. Local number, 55B 66 SOW 145C.

LOCATION.--Lat 36°40'33", long 76°56'26", Hydrologic Unit 03010202, at P. D. Camp Community College in Franklin. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 360 ft, screened 350 to 360 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 34 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.58 ft above land-surface datum.

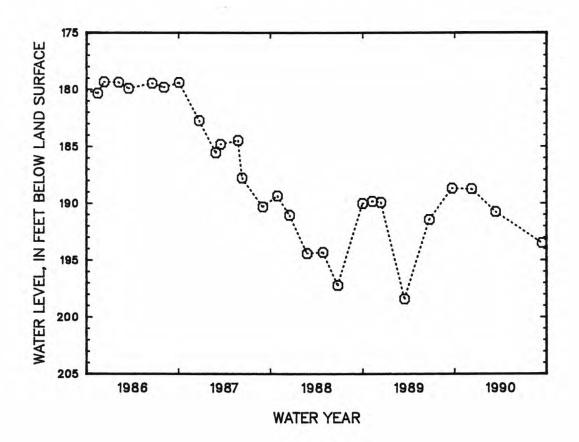
REMARKS .-- Water levels affected by local pumpage.

PERIOD OF RECORD . -- November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 175.39 ft below land-surface datum, Dec. 27, 1984; lowest measured, 198.41 ft below land-surface datum, Mar. 16, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

				DATE	WATER LEVEL	DATE	WATER LEVEL	DA	TE		TER VEL
			D	EC 07	188.72	MAR 12	190.75	SEP	12	193	. 51
WATER	YEAR	1990	HIGHEST	188 72	DEC 07	1989	LOWEST	193 51	SEP	12	1990



#### CITY OF FRANKLIN

364033076562604. Local number, 55B 67 SOW 145D.

LOCATION.--Lat 36°40'33", long 76°56'26", Hydrologic Unit 03010202, at P. D. Camp Community College in Franklin. Owner: Virginia Water Control Board.

AQUIFER. -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 34 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.15 ft above land-surface datum.

REMARKS .-- Water level affected by local pumpage.

PERIOD OF RECORD. -- November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 29.51 ft below land-surface datum, Mar. 19, 1985; lowest measured, 32.42 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	31.52	MAR 12	31.41	SEP 12	32.42
WATER YEAR 1990	HIGHEST 31.41	MAR 12,	1990	LOWEST	32.42 SEP 12	, 1990

25 WALER LEVEL IN FEET BELOW LAND SURFACE

40 1986 1987 1988 1989 1990

WATER YEAR

### GLOUCESTER COUNTY

371444076301501. Local number, 58F 14.

LOCATION.--Lat 37°14'44", long 76°30'15", Hydrologic Unit 02080107, at Gloucester Point under U.S. Highway 17 bridge in block pumphouse. Owner: County of Gloucester.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled unused public supply well, diameter 4 in. to 252 ft, diameter 2 in. from 252 to 395 ft, depth 395 ft, screened 347 to 387 ft.

INSTRUMENTATION. -- Semiannual measurement with a manometer by USGS personnel. Prior to June 15, 1990, annual measurement with a manometer.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.6 ft above land-surface datum.

PERIOD OF RECORD.--December 1972 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 6.80 ft above land-surface datum, Feb. 12, 1980; lowest measured, 26.41 ft below land-surface datum, Feb. 10, 1981 (well pumping at time of measurement).

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE WATER LEVEL
MAR 16 3.68

NOTE. -- Flowing well; reading is above land-surface datum.

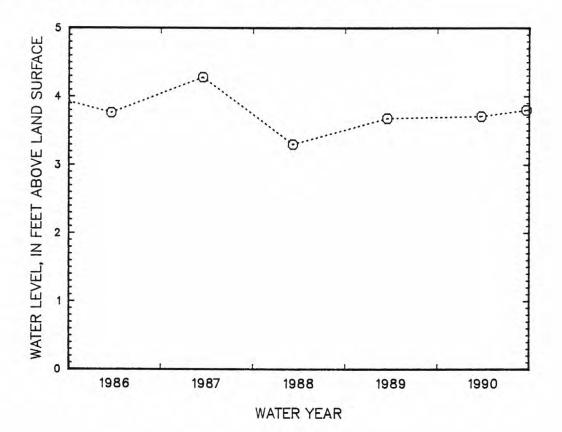
WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL DATE WATER LEVEL

MAR 23 3.71 SEP 18 3.80

NOTE. -- Flowing well; reading is above land-surface datum.

WATER YEAR 1990 HIGHEST 3.80 SEP 18, 1990 LOWEST 3.71 MAR 23, 1990



#### GLOUCESTER COUNTY

372331076312602. Local number, 58H 6 SOW 168A.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 1,300 ft, screened 1,290 to 1,300 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to June 11, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

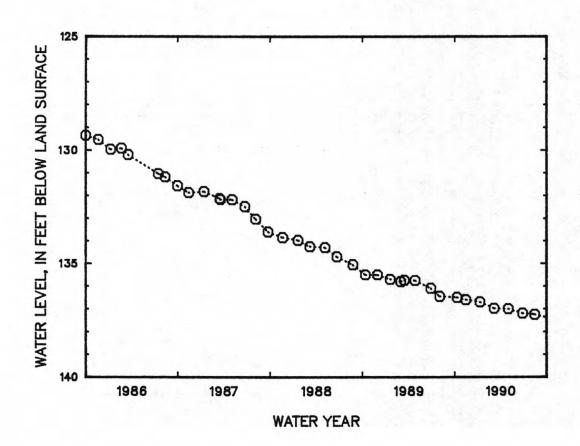
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- August 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 125.26 ft below land-surface datum, Feb. 14, 1983; lowest measured, 137.25 ft below land-surface datum, Aug. 14, 1990.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEV		WATER LEVEL	DATE	WATER LEVEL	DAT		TER VEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 136. NOV 14 136.		136.70	MAR 06	136.98	MAY	01 137	.00	JUN 27	137.20	AUG 14	137.25
WATER YEAR 1	990 HIGHES	ST 136.50	OCT 10, 19	989	LOWEST	137.25	AUG 14,	1990			



#### GLOUCESTER COUNTY

372331076312603. Local number, 58H 7 SOW 168B.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 186 ft, diameter 2 in. from 186 to 960 ft, depth 960 ft, screened 950 to 960 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

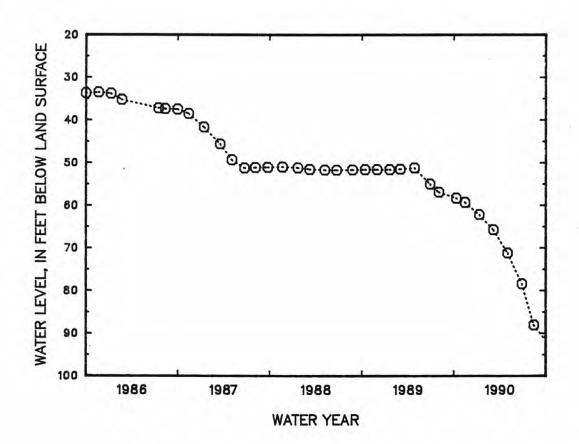
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.55 ft below land-surface datum, Nov. 20, 1985; lowest measured, 88.05 ft below land-surface datum, Aug. 14, 1990.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	58.30 59.30	JAN 09	62.14	MAR 06	65.74	MAY 01	71.20	JUN 27	78.40	AUG 14	88.05
WATER Y	EAR 1990	HIGHEST	58.30	OCT 10. 198	39	LOWEST 88.05	AUG 14	. 1990			



## GLOUCESTER COUNTY

372331076312604. Local number, 58H 8 SOW 168C.

LOCATION.--Lat 37°23'31", long 76°31'26", Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION .-- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

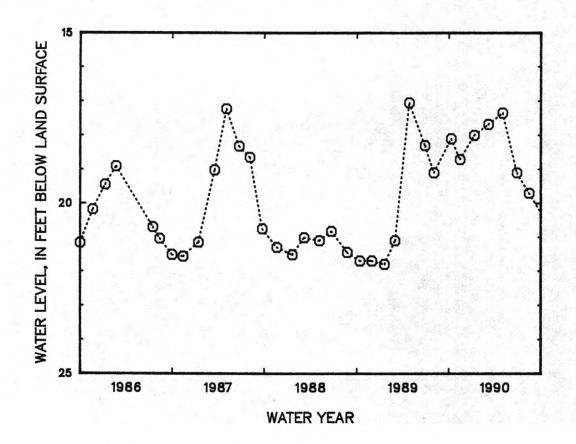
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.05 ft below land-surface datum, Apr. 27, 1989; lowest measured, 21.81 ft below land-surface datum, Sept. 23, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	18.10 18.71	JAN 09	18.00	MAR 06	17.68	MAY 01	17.35	JUN 27	19.10	AUG 14	19.70
WATER Y	EAR 1990	HIGHEST	17.35	MAY 01. 199	10	LOWEST 19.70	AUG 14	. 1990			



#### HALIFAX COUNTY

364550078562301. Local number, 39C 1 SOW 011.

LOCATION.--Lat 36°45'50", long 78°56'23", Hydrologic Unit 03010105, 0.6 mi west of intersection of U.S. Highways 501 and 360, in the town of Halifax. Owner: Town of Halifax.

AQUIFER. -- Granite and gneiss of uncertain age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 302 ft, cased to 52 ft, open hole 52 to 302 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.28 ft above land-surface datum.

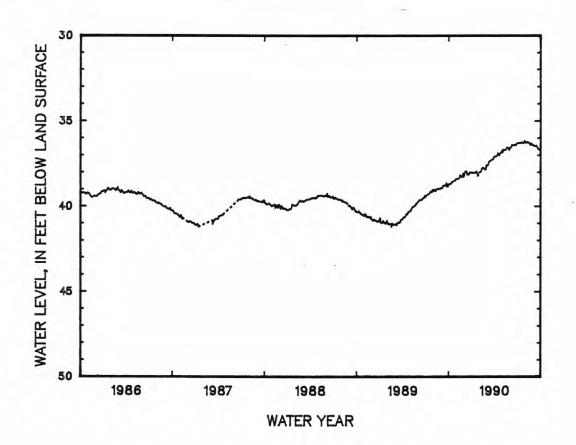
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- April 1968 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 36.16 ft below land-surface datum, July 30, 1990; lowest recorded, 45.09 ft below land-surface datum, Dec. 30, 1968.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.69	38.38	37.97	38.03	37.97	37.59	37.07	36.68	36.53	36.28	36.23	36.43
10	38.66	38.37	37.93	38.02	37.78	37.38	37.04	36.70	36,40	36.28	36.22	36.47
15	38.57	38.25	38.12	38.02	37.72	37.33	36.88	36.67	36.41	36.29	36.27	36.44
20	38.52	38.23	38.13	37.95	37.79	37.28	36.98	36.55	36.39	36.24	36.32	36.60
25	38.49	38.27	38.01	38.21	37.84	37.23	36.87	36.57	36.41	36.28	36.32	36.67
EOM	38.40	38.23	38.01	38.01	37.59	37.07	36.74	36,60	36.30	36.24	36.40	36.72
WATER	YEAR 199	0 ні	GHEST 36	3.16 JUL	30, 1990	LOWE	ST 38.71	OCT 01,	1989			



#### HANOVER COUNTY

375316077274701. Local number, 51M 11.

LOCATION.--Lat 37°53'16", long 77°27'47", Hydrologic Unit 02080106, 900 ft east of U.S. Highway 1 on a private dirt road at the North Anna River and 9.9 mi north of Ashland on U.S. Highway 1. Owner: Weyerhaeuser Inc.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 8 in., depth 175 ft, cased to 40 ft, open hole 40 to 175 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

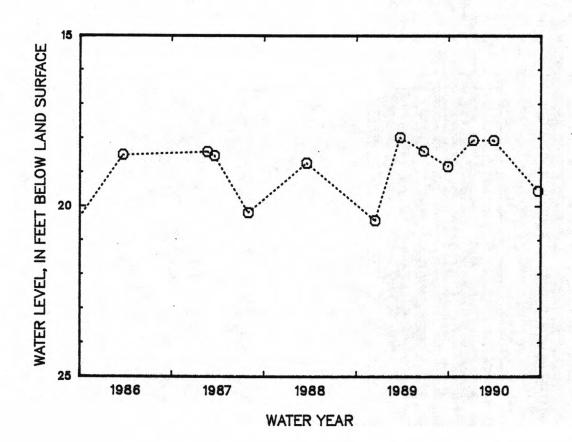
PERIOD OF RECORD. -- January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 15.77 ft below land-surface datum, Apr. 2, 1984; lowest measured, 20.58 ft below land-surface datum, July 15, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 05	18.06	MAR 27	18.07	SEP 19	19.55

WATER YEAR 1990 HIGHEST 18.06 JAN 05, 1990 LOWEST 19.55 SEP 19, 1990



#### HANOVER COUNTY

373507077171201. Local number, 52J 10.

WATER YEAR 1990

LOCATION.--Lat 37°35'07", long 77°17'12", Hydrologic Unit 02080206, 150 ft north of State Highway 156 at the Cold Harbor Visitor Center, 1.0 mi southwest of the intersection of State Highways 156 and 619, and 4.9 mi east of Mechanicsville. Owner: U.S. National Park Service.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 6 in., depth 270 ft, screened 255 to 270 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

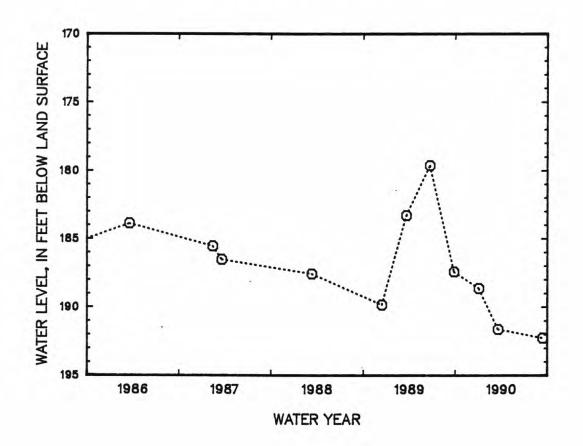
DATUM. -- Elevation of land-surface datum is 172 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.55 ft above land-surface datum.

PERIOD OF RECORD. --December 1972, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 165.75 ft below land-surface datum, Dec. 1, 1972; lowest measured, 192.27 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 02	188.64	MAR 19	191.63	SEP 12	192.27
HIGHEST	188.64	4 JAN 02,	1990	LOWEST	192.27 SEP	12, 1990



#### HANOVER COUNTY

374720077300501. Local number, 52K 3.

LOCATION.--Lat 37°40'05", long 77°17'54", Hydrologic Unit 02080106, 200 ft west of State Highway 615, 0.65 mi southwest of Studley, and 1.95 mi northwest of the intersection of State Highways 615 and 627. Owner: Sydnor Hydrodynamics.

AQUIFER. -- Lower Potomac and Middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled public supply water well, diameter 6 in., depth 426 ft, screened 355 to 365 ft, 392 to 422 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 163 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.76 ft above land-surface datum.

REMARKS. -- Water levels affected by pumpage.

PERIOD OF RECORD.--May 1970, November 1973, December 1974, January 1984 to March 1986, March 1988 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

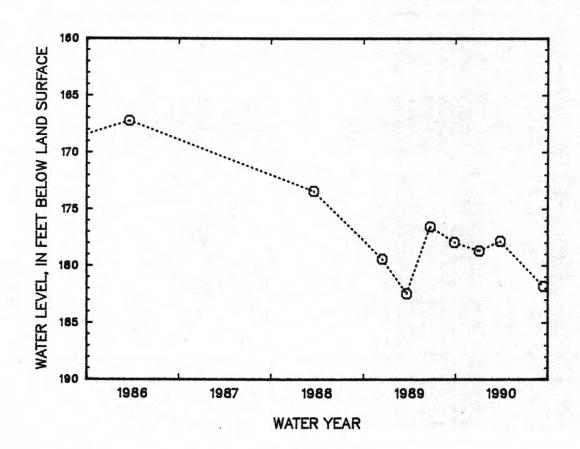
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.50 ft below land-surface datum, May 21, 1970; lowest measured, 182.46 ft below land-surface datum, Mar. 21, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
JAN 02	178.70	MAR 26	177.84	SEP 13	181.82	

WATER YEAR 1990 HIGHEST 177.84 MAR 26, 1990

LOWEST 181.82 SEP 13, 1990



#### HANOVER COUNTY

373738077082801. Local number, 53K 16.

LOCATION.--Lat 37°37'38", long 77°08'28", Hydrologic Unit 02080106, 1,000 ft northeast of the intersection of State Highways 606 and 629 at Eastern View Farm, 0.6 mi southeast of Glimps Corner, 4.7 mi east of Old Church, and 5.95 mi east of the intersection of U.S. Highway 360 and State Highway 606. Owner: John Maples.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 366 ft, screen depth unknown.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 5.3 ft below land-surface datum.

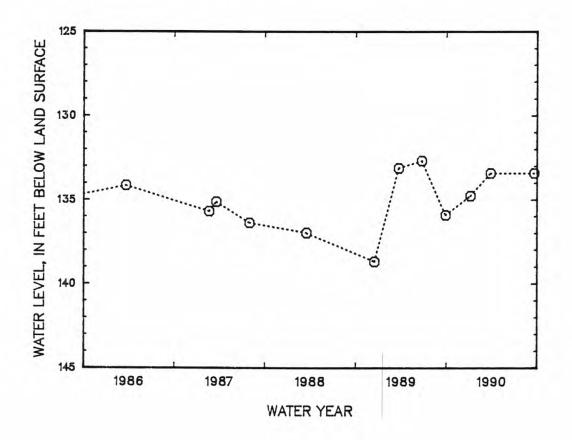
PERIOD OF RECORD. -- January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.52 ft below land-surface datum, Jan. 25, 1984; lowest measured, 138.70 ft below land-surface datum, Dec. 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
JAN 05	134.77	MAR 27	133.42	SEP 19	132.43	

WATER YEAR 1990 HIGHEST 132.43 SEP 19, 1990 LOWEST 134.77 JAN 05, 1990



### HANOVER COUNTY

373737077083201. Local number, 53K 19 SOW 080.

LOCATION.--Lat 37°37'37", long 77°08'32", Hydrologic Unit 02080106, 500 ft northeast of State Highway 606, 0.15 mi west of intersection of State Highways 606 and 629, and 4.6 mi east of Old Church. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 30 in., depth 35 ft, cased to 35 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. May 20, 1978, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to May 20, 1978, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

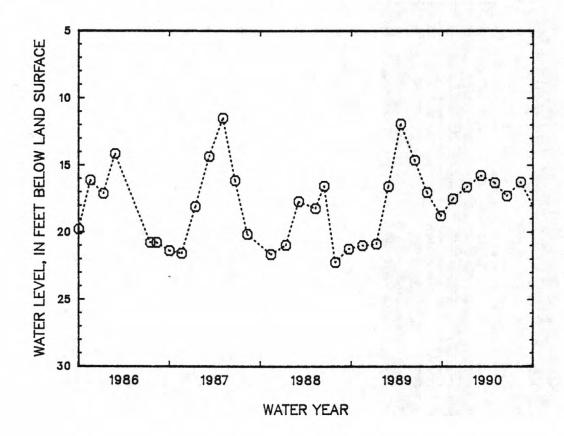
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--January 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 11.05 ft below land-surface datum, Jan. 25, 1978; lowest measured, 22.85 ft below land-surface datum, Aug. 3, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	17.50	JAN 08	16.63	MAR 05	15.76	APR 30	16.30	JUN 18	17.30	AUG 13	16.25
WATER YEA	AR 1990	HIGHEST	15.76	MAR 05 199	0	LOWEST 17 50	NOV 13.	1989			



#### HENRICO COUNTY

373607077331401. Local number, 50J 1 SOW 023.

LOCATION.--Lat 37°36'07", long 77°33'14", Hydrologic Unit 02080205, 200 ft north of Three Chopt Road, 1.0 mi southeast of intersection of Three Chopt Road and Parham Road in Richmond. Owner: E. L. Gilman.

AQUIFER. -- Petersburg granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in., depth 300 ft, cased to 68 ft, open hole 68 to 300 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. June 5, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to June 5, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 275 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.88 ft above land-surface datum.

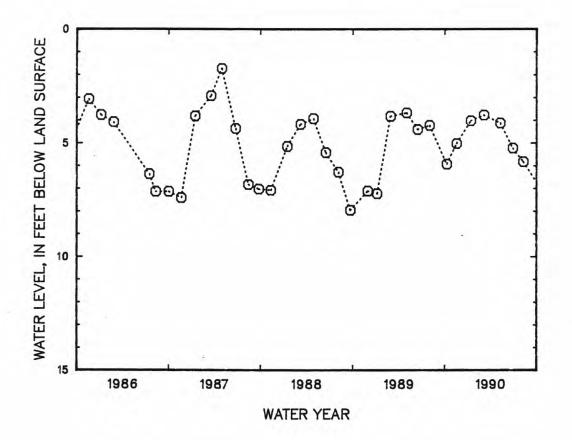
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.48 ft below land-surface datum, June 5, 1970; lowest recorded, 10.43 ft below land-surface datum, Jan. 5, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 17	5.92 5.02	JAN 12	4.02	MAR 05	3.77	MAY 09	4.12	JUN 28	5.22	AUG 09	5.82
WATER Y	EAR 1990	HIGHEST	3.77	MAR 05. 1990	LOWI	ST 5.92	OCT 09.	1989			



#### HENRICO COUNTY

372920077241001. Local number, 51H132 SOW 081.

LOCATION.--Lat 37°29'20", long 77°24'10", Hydrologic Unit 02080206, 100 ft west of State Highway 5, 2.0 mi northwest of intersection of State Highway 5 and Laburnum Avenue, and 5.3 mi southwest of Sandston. Owner: Mike Moses.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Dug unused water well, diameter 30 in., depth 40 ft, cased to 40 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

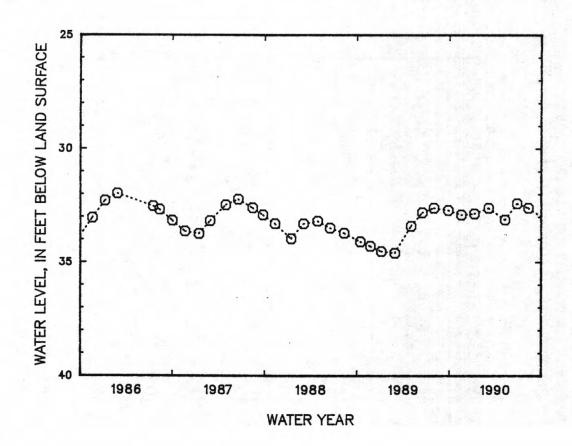
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 28.79 ft below land-surface datum, June 16, 1980; lowest measured, 35.23 ft below land-surface datum, Sept. 24, 1982.

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17	32.90	JAN 08	32.85	MAR 05	32.60	MAY 09	33.12	JUN 26	32.40	AUG 10	32.60
WATER YE	AR 1990	HIGHEST	32.40	JUN 26. 199	10	LOWEST 33.12	MAY 09.	1990			



### HENRICO COUNTY

373428077233001. Local number, 51J 13.

LOCATION.--Lat 37°34'28", long 77°23'30", Hydrologic Unit 02080206, 1,600 ft east of the intersection of U.S. Highway 360 (Mechanicsville Turnpike) and Laburnum Avenue and 500 ft south of Laburnum Avenue at water tower. Owner: Henrico County.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 275 ft, diameter 6 in. from 275 to 307 ft, depth 307 ft, screened 167 to 186 ft, 213 to 226 ft, 248 to 258 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 168 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

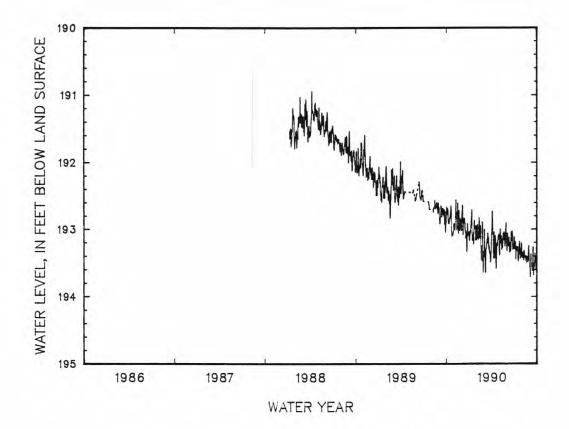
REMARKS .-- Water levels affected by local pumpage.

PERIOD OF RECORD . -- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 190.85 ft below land-surface datum, Apr. 7, 1988; lowest recorded, 193.71 ft below land-surface datum, Sept. 4, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

						DOMEDI						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	192.77	193.01	192.64	193.02	193.13	193.30	192.85	193.06	193.21	193.19	193.38	193.66
10	192.91	192.74	192.84	192.84	192.83	193.30	193.33	193.10	193.12	193.29	193.32	193.51
15	192.83	192.85	192.91	193.13	193.06	193.21	193.16	193.27	193.20	193.27	193.43	193.28
20	192.65	192.87	193.03	193.19	193.41	193.13	193.55	193.10	193.12	193.38	193.48	193.51
25	193.07	193.01	193.09	192.95	193.49	193.36	193.24	193.25	193.25	193.37	193.48	193.48
EOM	192.92	192.97	193.04	193.15	193.33	193.22	193.09	193.22	193.19	193.21	193.49	193.56
WATER	YEAR 1990	) HI	GHEST 19	2.30 NOV	16, 1989	LOW	EST 193.	71 SEP 0	4, 1990			



#### HENRICO COUNTY

373817077282501. Local number, 51K 4 SOW 137.

LOCATION.--Lat 37°38'17", long 77°28'25", Hydrologic Unit 02080206, 50 ft east of entrance to J. Sargeant Reynolds Community College, 0.9 mi west of intersection of Parham Road and U.S. Highway 1, and 0.9 mi west of Yellow Tavern. Owner: Virginia Water Control Board.

AQUIFER. -- Petersburg granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 280 ft, cased to 35 ft, open hole 35 to 280 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Sept. 9, 1980; 1.5 ft thereafter.

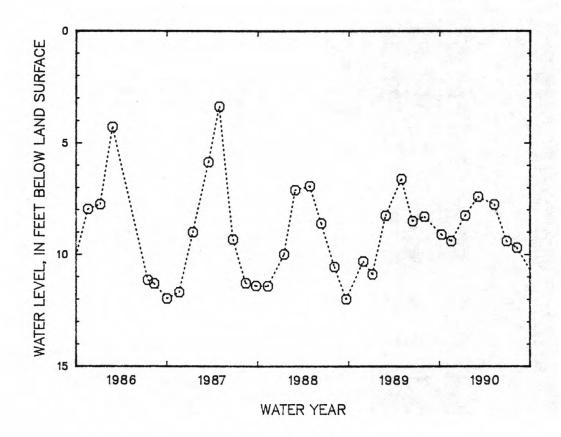
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.37 ft below land-surface datum, Apr. 30, 1987; lowest measured, 12.12 ft below land-surface datum, Oct. 6, 1981, Aug. 22, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 17	9.10 9.40	JAN 12	8.25	MAR 05	7.40	MAY 09	7.75	JUN 28	9.40	AUG 09	9.70
WATER Y	EAR 1990	HIGHEST	7.40	MAR 05, 1990	LOWES	T 9.70	AUG 09,	1990			



129

# HENRICO COUNTY

372936077211101. Local number, 52H 3 SOW 136.

LOCATION.--Lat 37°29'36", long 77°21'11", Hydrologic Unit 02080206, 100 ft west of Laburnum Avenue, 0.9 mi north of intersection of Laburnum Avenue and Darbytown Road, and 2.4 mi southwest of Sandston. Owner: Nabisco Incorporated.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 209 ft, screened 149 to 159 ft, 199 to 209 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Mar. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

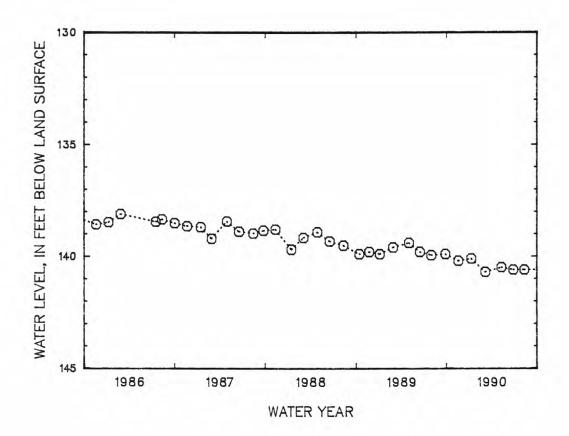
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- December 1974 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.42 ft below land-surface datum, Dec. 2, 1974; lowest measured, 140.70 ft below land-surface datum, Mar. 5, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE WATER LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	WATER LEVEL		WATER WATER LEVEL DATE LEVEL
NOV 17 140.20	JAN 08 140.10	MAR 05 140.70	MAY 09 140.49	JUN 26 1	40.60 AUG 10 140.60
WATER YEAR 1990	HIGHEST 140 10	TAN 08 1000	TOWEST 140 70 MAR 05	1990	



### HENRICO COUNTY

373301077194001. Local number, 52J 1.

LOCATION.--Lat 37°33'01", long 77°19'40", Hydrologic Unit 02080206, at the intersection of Daisy and Vine Streets, at water tower in Highland Springs. Owner: Henrico County.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 212 ft, diameter 6 in. from 212 to 306 ft, depth 306 ft, screened 212 to 306 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 172 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 197.64 ft below land-surface datum, Jan. 25, 26, 1988; lowest recorded, 203.94 ft below land-surface datum, Sept. 29, 30, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	202.03	202.44	202.24	202.80	201.80	201.57	201.22	201.42	202.13	203.33	203.53	203.80
10	202.14	202.21	202.48	202.74	201.58	201.74	201.38	201.74	202.36	203.54	203.37	203.76
15	202.22	202.17	202.61	203.00	201.55	201.53	201.32	201.93	202.53	203.43	203.46	203.52
20	202.09	202.11	202.91	202.87	201.60	201.37	201.38	202.00	202.76	203.48	203.60	203.73
25	202.42	202.32	203.16	202.57	201.64	201.54	201.27	202.05	203.03	203.57	203.44	203.85
EOM	202.41	202.18	203.05	202.12	201.75	201.53	201.34	202.00	203.16	203.46	203.66	203.94
WATER	YEAR 1990	) HI	GHEST 20	1.15 APR	04, 07,	1990	LOWEST	203.94 SE	P 29, 30,	1990		

WATER YEAR

### HENRICO COUNTY

373125077185001. Local number, 52J 34.

LOCATION.--Lat 37°31'25", long 77°18'50", Hydrologic Unit 02080206, 300 ft north of the intersection of U.S. Highway 60 (Williamsburg Road) and Finley Drive and 200 ft east of Finley Drive. Owner: Henrico County.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 165 ft, diameter 8 in. from 165 to 272 ft, depth 272 ft, screened 222 to 265 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 162 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

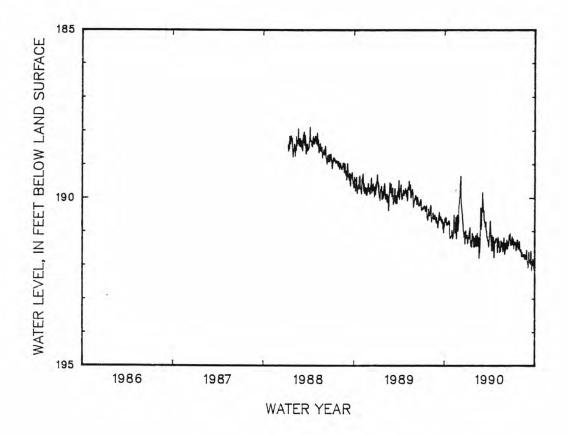
REMARKS. -- Water-level affected by local pumpage.

PERIOD OF RECORD . -- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 187.76 ft below land-surface datum, Apr. 7, 1988; lowest recorded, 192.16 ft below land-surface datum, Sept. 18, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	190.72	191.15	189.36	191.17	191.42	190.11	190.88	191.18	191.50	191.23	191.57	192.00
10	190.80	190.76	190.35	190.99	191.06	190.64	191.44	191.31	191.26	191.33	191.63	191.86
15	190.74	190.81	190.79	191.37	191.35	190.86	191.22	191.59	191.31	191.34	191.73	191.59
20	190.68	190.93	191.02	191.43	191.65	190.99	191.73	191.37	191.21	191.41	191.82	191.97
25	191.16	190.97	191.06	191.15	190.84	191.29	191.33	191.60	191.38	191.47	191.84	191.98
EOM	190.98	190.15	191.12	191.46	190.41	191.16	191.25	191.60	191.26	191.31	191.90	192.05
WATER	YEAR 1990	ні ні	GHEST 18	9.22 DEC	06, 1989	LOW	EST 192.	16 SEP 18	3, 1990			



### HENRICO COUNTY

373117077210201. Local number, 52J 35.

LOCATION.--Lat 37°31'17", long 77°21'02", Hydrologic Unit 02080206, 400 ft east of the intersection of South Laburnum Avenue and Finley Street, on Finley Street. Owner: Henrico County.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 265 ft, screened 220 to 260 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

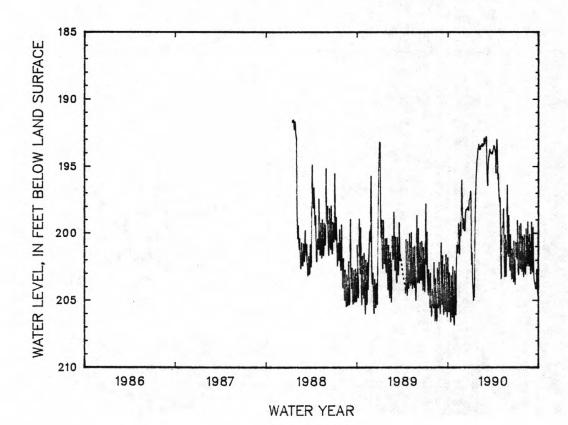
REMARKS. -- Water-level affected by local pumpage.

PERIOD OF RECORD . -- January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 191.24 ft below land-surface datum, Jan. 20, 1988; lowest recorded, 206.84 ft below land-surface datum, Oct. 27, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	205.75	202.30	199.31	202.22	193.71	192.82	193.47	203.22	200.80	201.01	200.12	201.81
10	204.95	201.44	199.15	204.02	193.49	196.41	193.76	199.44	200.12	201.37	203.03	200.97
15	203.14	200.08	198.23	204.25	193.41	194.29	193.63	200.89	203.42	199.43	201.90	203.76
20	206.25	199.18	198.03	198.13	193.40	193.82	195.88	200.13	202.94	202.66	200.25	204.11
25	205.99	197.09	197.83	195.01	193.21	193.99	197.11	201.70	201.33	202.13	202.33	203.39
EOM	204.43	199.14	196.98	193.61	193.10	193.84	198.59	200.98	203.47	201.49	203.04	204.15
WATER	YEAR 199	O HI	GHEST 19	2.68 MAR	04. 1990	LOW	EST 206.	84 OCT 2	7. 1989			



### HENRICO COUNTY

372555077153001. Local number, 53H 2.

LOCATION.--Lat 37°25'55", long 77°15'30", Hydrologic Unit 02080206, 0.7 mi south of the intersection of State Highways 156 (Willis Church Road) and 600 (Charles City Road)at the Glendale National Cemetery, 5.0 mi southwest of the city of Richmond. Owner: U.S. Department of Veterans Affairs.

AQUIFER. -- Sand of middle Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 6 in., depth 232 ft, screen depth unknown.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

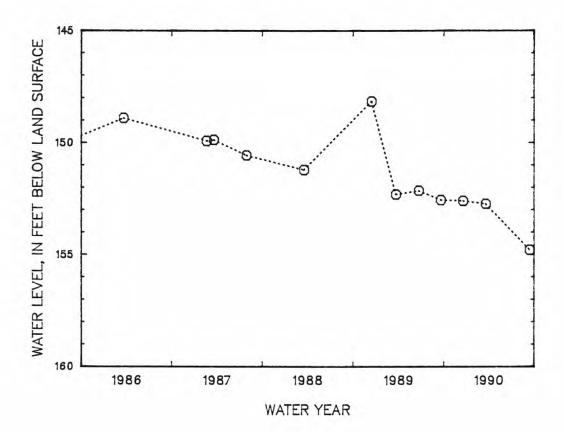
DATUM.--Elevation of land-surface datum is 128 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.95 ft below land-surface datum.

PERIOD OF RECORD. -- January 1943, November 1973, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.00 ft below land-surface datum, Jan. 1, 1943; lowest measured, 154.80 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 18	152.61	MAR 19	152.74	SEP 13	154.80
WATER YEAR 1990	HIGHEST 152.6	1 DEC 18,	1989	LOWEST	154.80 SEP	13, 1990



#### HENRICO COUNTY

372900077130001. Local number, 53H 4 SOW 072.

LOCATION.--Lat 37°29'11", long 77°14'07", Hydrologic Unit 02080206, 1.3 mi southeast of end of State Highway 345, 1.6 mi northwest of Elko. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. to 208 ft, diameter 8 in. from 208 to 292 ft, diameter 6 in. from 292 to 395 ft, depth 395 ft, screened 208 to 213 ft, 240 to 262 ft, 266 to 268 ft, 281 to 287 ft, 303 to 309 ft, 363 to 384 ft.

INSTRUMENTATION. --Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Aug. 5, 1975, to Sept. 30, 1985, occasional measurement with chalked tape. Oct. 20, 1974, to Aug. 5, 1975, continuous strip-chart recorder. Prior to Oct. 20, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum.

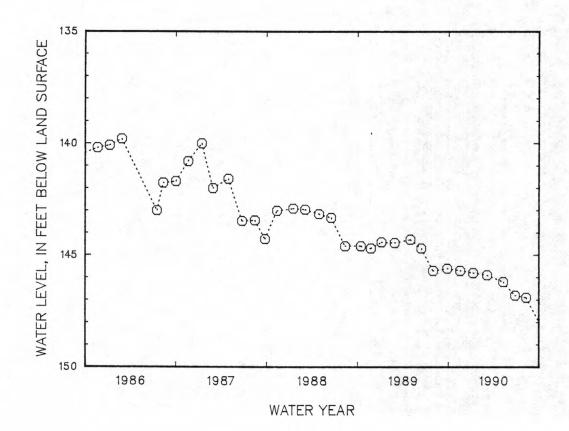
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD, -- March 1950 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.00 ft below land-surface datum, Mar. 27, 1950; lowest measured, 146.90 ft below land-surface datum, Aug. 10, 1990.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DAT	E	WATER LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17	145.70	JAN 08	145.80	MAR 05	145.90	MAY	09	146.20		JUN 26	146.80	AUG 10	146.90
WATER Y	EAR 1990	HIGHEST	145.70	NOV 17. 1	989	LOWEST	146	.90 AUG	10.	1990			



#### CITY OF HOPEWELL

371801077164201. Local number, 52G 1.

LOCATION.--Lat 37°18'01", long 77°16'42", Hydrologic Unit 02080206, 0.2 mi north of intersection of State Highways 10 and 156 in Hopewell. Owner: Virginia American Water Corporation.

AQUIFER. -- Sand of lower Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 300 ft, screen depth unknown.

INSTRUMENTATION. -- Weekly measurement with chalked tape by USGS observer.

DATUM.--Elevation of land-surface datum is 50.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.34 ft above land-surface datum.

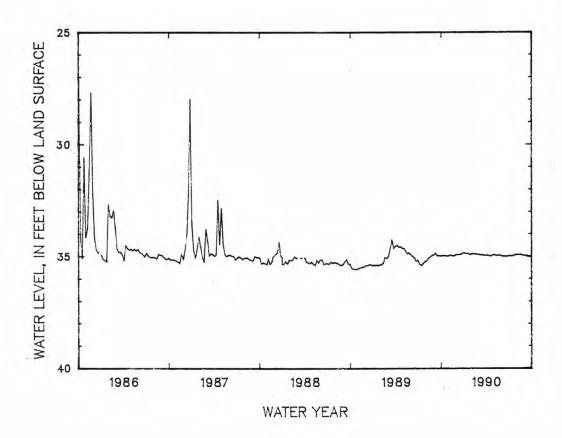
REMARKS. -- Water level affected by pumpage.

PERIOD OF RECORD . -- May 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.56 ft below land-surface datum, Sept. 7, 1979; lowest measured, 56.95 ft below land-surface datum, Aug. 14, 1943.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	34.97	DEC 08	34.92	FEB 09	34.89	APR 1	3 34.98	JUN 15	35.00	AUG 17	34.92
13	34.96	15	34.93	16	34.89	2		22	35.01	24	34.95
20	34.98	22	34.90	23	34.92	2		29	34.99	31	34.97
27	35.00	29	34.85	MAR 02	34.91	MAY 0		JUL 06	34.97	SEP 07	34.96
NOV 03	34.97	JAN 05	34.86	09	34.95	1		13	34.99	14	34.98
10	34.95	12	34.88	16	34.93	1		20	34.97	21	35.03
17	34.98	19	34.87	23	34.97	2		27	34.93	28	35.02
24	34.97	26	34.93	30	34.96	JUN O		AUG 03	34.94		
DEC 01	34.94	FEB 02	34.90	APR 06	34.95	0		10	34.94		



### CITY OF HOPEWELL

371727077160401. Local number, 52G 15 SOW 142A.

LOCATION.--Lat 37°17'27", long 77°16'04", Hydrologic Unit 02080206, 0.2 mi south of State Highway 10, 0.8 mi east of State Highway 156 in Hopewell. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 100 ft, screened 84 to 94 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

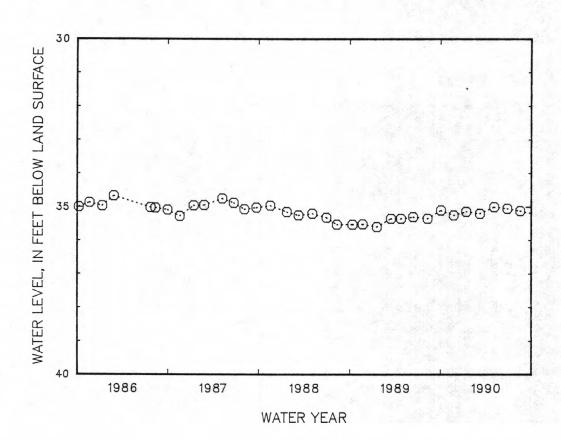
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 34.67 ft below land-surface datum, Feb. 24, 1986; lowest measured, 35.60 ft below land-surface datum, Jan. 17, 1989.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 22	35.10 35.25	JAN 11	35.14	MAR 07	35.20	MAY 03	35.00	JUN 25	35.05	AUG 16	35.12
WATER Y	EAR 1990	HIGHEST	35.00	MAY 03, 1990	LOWES	T 35.25	NOV 22,	1989			



### CITY OF HOPEWELL

371727077160402. Local number, 52G 16 SOW 142B.

LOCATION.--Lat 37°17'27", long 77°16'04", Hydrologic Unit 02080206, 0.2 mi south of State Highway 10, 0.8 mi east of State Highway 156 in Hopewell. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 164 ft, screened 154 to 164 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

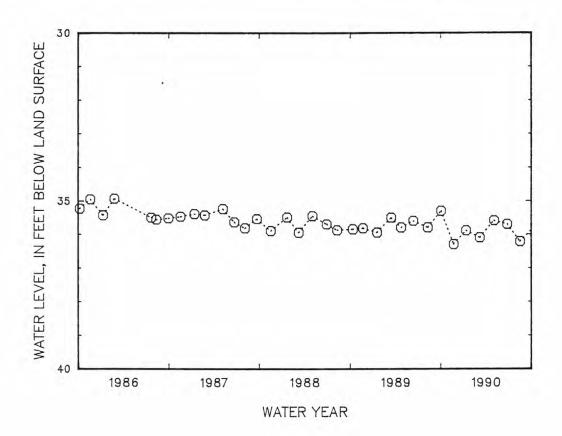
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 34.93 ft below land-surface datum, Feb. 24, 1986; lowest measured, 36.30 ft below land-surface datum, Nov. 22, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 22	35.30 36.30	JAN 11	35.89	MAR 07	36.10	MAY 03	35.59	JUN 25	35.70	AUG 16	36.22
WATER Y	EAR 1990	HIGHEST	35 30	OCT 02 198	89	LOWEST 36 30	NOV 22	1989			



### ISLE OF WIGHT COUNTY

364059076544901. Local number, 55B 16.

LOCATION.--Lat 36°40'59", long 76°54'49", Hydrologic Unit 03010202, off U.S. Highways 258 and 58, 200 ft west of the intersection of U.S. Highways 258 and 58 and Lynn Road, and 0.3 mi east of Franklin. Owner: Union Camp Corporation.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch. Prior to May 27, 1988, continuous strip-chart recorder.

DATUM. -- Elevation of land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum.

PERIOD OF RECORD . -- June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 99.00 ft below land-surface datum, Dec. 27, 1960; lowest recorded, 208.89 ft below land-surface datum, Sept. 3, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	196.75	195.81	192.70	192.85	193.84	196.36	194.42	201.40	200.21	203.30	208.16	203.88
10	196.87	195.69	192.33	192.12	194.94	195.77	193.07	198.99	200.74	204.61	206.62	202.19
15	196.79	196.13	192.90	193.20	195.30	195.70	194.22	199.53	201.19	205.53	205.86	205.52
20	197.38	196.72	194.01	192.34	195.56	195.54	192.92	199.42	202.28	207.73	207.83	207.20
25	196.55	194.26	195.98	193.12	196.44	195.35	194.59	199.32	201.72	207.22	207.90	208.06
EOM	196.11	193.42	195.49	193.05	195.85	195.33	195.56	199.77	203.95	207.65	208.08	207.98
WATER	YEAR 199	) HI	GHEST 19	1.46 DEC	10, 1989	LO	WEST 208	.89 SEP	03, 1990			

175 180 185 190 190 200 210 1986 1987 1988 1989 1990 WATER YEAR

# ISLE OF WIGHT COUNTY

364125076544801. Local number, 55B 36.

LOCATION.--Lat 36°41'25", long 76°54'48", Hydrologic Unit 03010202, on Lynn Road, 0.45 mi north of intersection with U.S. Highways 258 and 58, and 0.7 mi northeast of Franklin. Owner: Union Camp Corporation.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 860 ft, screened 720 to 725 ft, 800 to 805 ft, 855 to 860 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. September 1983 to October 1986, occasional measurement with chalked tape by USGS personnel. October 1982 to September 1983, continuous strip-chart recorder. November 1972 to October 1982, occasional measurement with chalked tape. July 1969 to November 1972, continuous strip-chart recorder. Prior to July 1969, continuous strip-chart recorder and occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 37 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.56 ft above land-surface datum.

REMARKS. -- Water level affected by local pumpage.

PERIOD OF RECORD .-- March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 156.65 ft below land-surface datum, Dec. 27, 1969; lowest measured, 219.29 ft below land-surface datum, May 18, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	194.64	194.14	194.55	194.21	192.97	193.68		194.07	193.52	194.71		198.72
10	194.45	194.26	194.39	193.83	192.96	193.93	194.24	193.98	193.44	194.98		198.08
15	194.15	194.34	194.27	193.53	193.11	194.08	194.14	193.86	193.64	195.26		197.82
20	194.00	194.42	194.15	193.39	193.17	194.20	194.12	193.63	193.86	195.49		197.97
25	193.88	194.53	194.15	193.28		194.34	194.08	193.59	194.00	195.61		198.23
EOM	193.95	194.62		193.05	193.46	194.36	193.99	193.25	194.40		198.45	198.23
WATER	YEAR 1990	ні н	GHEST 19	2.96 FEB	08-12, 1	990	LOWEST 1	98.72 SEI	05, 06,	1990		

WATER YEAR

### ISLE OF WIGHT COUNTY

364141076530701. Local number, 55B 43.

LOCATION.--Lat 36°41'46", long 76°53'07", Hydrologic Unit 03010202, off U.S. Highway 58, 2.1 mi east of Franklin. Owner: Ray A. Tillet.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled withdrawal water well, diameter 4 in., depth 315 ft, screened 305 to 315 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of well housing, 3.9 ft above land-surface datum.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 145.47 ft below land-surface datum, Aug. 12, 1974; lowest measured, 186.11 ft below land-surface datum, Mar. 8, 1988.

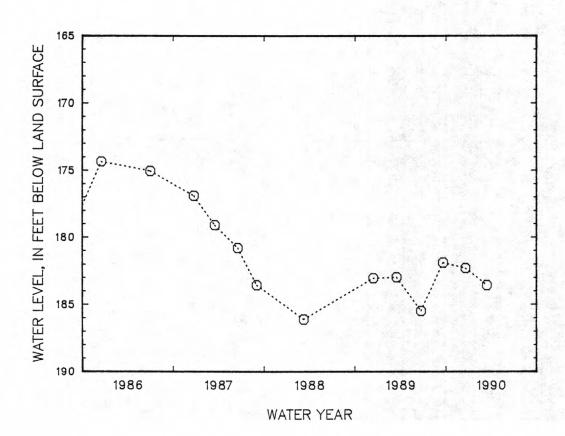
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	182 29	MAR 14	183 57

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 182.29 DEC 18, 1989

LOWEST 183.57 MAR 14, 1990



### ISLE OF WIGHT COUNTY

364101076544803. Local number, 55B 62 SOW 096B.

WATER YEAR 1990

LOCATION.--Lat 36°41'01", long 76°54'48", Hydrologic Unit 03010202, 200 ft northwest of intersection of U.S. Highways 58 and 258 and Lynn Road, 0.3 mi east of Franklin. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

HIGHEST 9.85 DEC 15, 16, 1989

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 30.77 ft, screened 25 to 30 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch. Prior to October 1984, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 27 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

PERIOD OF RECORD.--May 1979, October 1980 to September 1981, October 1982 to September 1983, October 1984 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 9.46 ft below land-surface datum, Apr. 8, 9, Aug. 19, 1989; lowest measured, 15.38 ft below land-surface datum, Oct. 17, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.29			10.17	10.37	10.29	10.28	10.54	10.47	10.69	11.16	10.73
10			10.00	10.15	10.34	10.38	10.31	10.59	10.51	10.70	11.08	10.89
15		10.50	9.90	10.24	10.36	10.45	10.34	10.59	10.64	10.86	11.08	10.98
20			9.93	10.28	10.23	10.42	10.46	10.67	10.69	10.98	11.11	11.09
25			10.03	10.28	10.27	10.50	10.44	10.65	10.84	11.09	10.64	11.14
EOM	777	745	10.13	10.34	10.24	10.44	10.51	10.46	10.93	11.11	10.67	11.16

LOWEST 11.18 AUG 08, 09, 1990

MATER YEAR

MATER YEAR

MATER TEND SURFACE

1986

1987

1988

1989

1990

WATER YEAR

#### ISLE OF WIGHT COUNTY

365300076380001. Local number, 56B 5.

LOCATION.--Lat 36°42'41", long 76°49'33", Hydrologic Unit 03010202, 0.05 mi south of U.S. Highway 58 in Carrsville. Owner: John Rose.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 6 in., depth 372 ft, screened 352 to 372 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

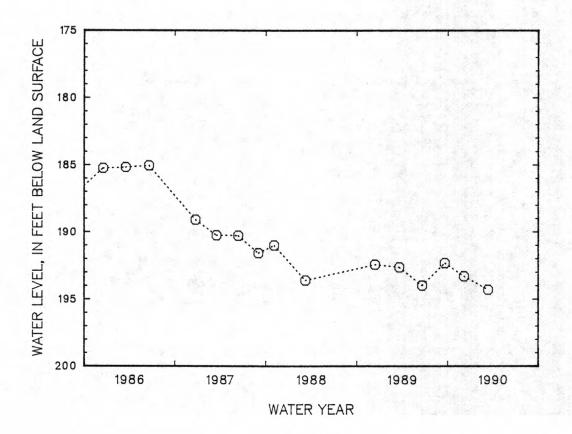
EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 163.00 ft below land-surface datum, Aug. 26, 1970; lowest measured, 194.30 ft below land-surface datum, Mar. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE LEVEL DATE LEVEL

DEC 05 193.30 MAR 12 194.30

PERIOD OCTOBER 1989 TO JUNE 1990 HIGHEST 193.30 DEC 05, 1989 LOWEST 194.30 MAR 12, 1990



### ISLE OF WIGHT COUNTY

365305076380001. Local number, 56C 1.

LOCATION.--Lat 36°50'06", long 76°50'03", Hydrologic Unit 03010202, 0.13 mi west of State Highway 614, 2.2 mi south of Zuni. Owner: Zuni Presbyterian Training Center.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 8 in., depth 434 ft, screened 418 to 434 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of pump base, 1.7 ft above land-surface datum.

REMARKS. -- Water levels affected by pumpage.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.02 ft below land-surface datum, Aug. 27, 1970; lowest measured, 161.99 ft below land-surface datum, June 16, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 18	159.21	MAR 14	159.67	SEP 11	160.53
WATER YEAR 1990	HIGHEST 159.2	21 DEC 18,	1989	LOWEST	160.53 SEF	11, 1990

### ISLE OF WIGHT COUNTY

364814076440701. Local number, 57C 25 SOW 149A.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 26 ft, screened 16 to 26 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

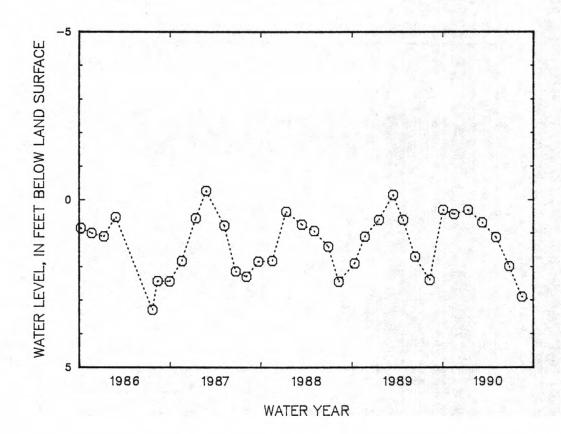
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.27 ft above land-surface datum, Feb. 23, 1987; lowest measured, 3.29 ft below land-surface datum, July 22, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	0.30	JAN 11	0.30	MAR 08	0.68	MAY 03	1.12	JUN 25	1.99	AUG 15	2.90
WATER Y	EAR 1990	HIGHEST	0.30	OCT 02. 1989.	JAN 11.	1990	LOWEST	2.90 AUG 15.	1990		



# ISLE OF WIGHT COUNTY

364814076440702. Local number, 57C 26 SOW 149B.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 380 ft, screened 370 to 380 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

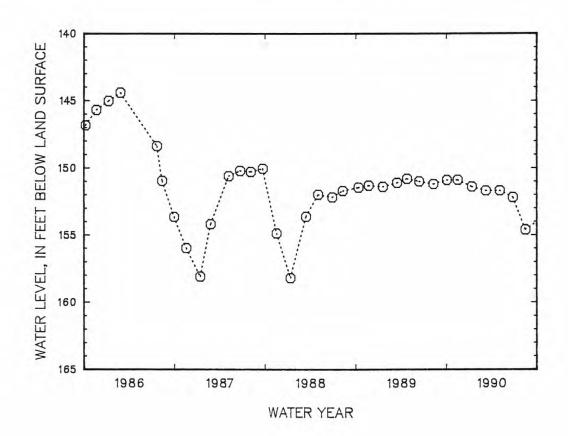
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 144.42 ft below land-surface datum, Feb. 25, 1986; lowest measured, 158.20 ft below land-surface datum, Jan. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	150.90 150.89	JAN 11	151.40	MAR 08	151.70	MAY 03	151.69	JUN 25	152.20	AUG 15	154.62
WATER Y	FAR 1990	HIGHES	T 150 80	NOV 15 1	080	TOWEST 154	62 AUG 15	1990			



#### ISLE OF WIGHT COUNTY

364814076440704. Local number, 57C 28 SOW 149D.

LOCATION.--Lat 36°48'14", long 76°44'07", Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 807 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

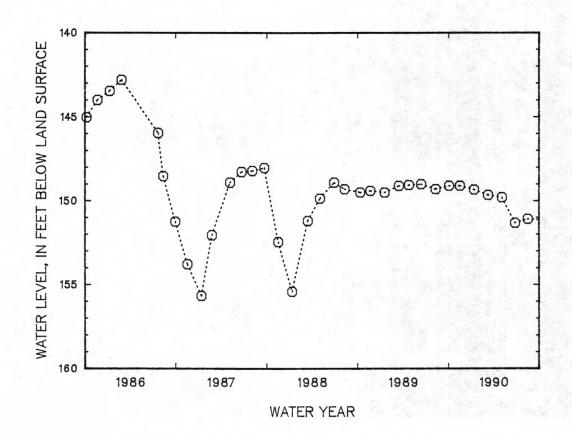
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 142.80 ft below land-surface datum, Feb. 25, 1986; lowest measured, 155.67 ft below land-surface datum, Jan. 12, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEV		WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 149. NOV 15 149.		149.33	MAR 08	149.66	MAY 03	149.80	JUN 25	151.33	AUG 15	151.10
WATER YEAR 1	90 HIGHEST	149.10	OCT 02 NO	OV 15 1989	T.OW	EST 151.33	JUN 25.	1990		



### ISLE OF WIGHT COUNTY

365751076433501. Local number, 57D 21 SOW 143A.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 650 ft, screened 640 to 650 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

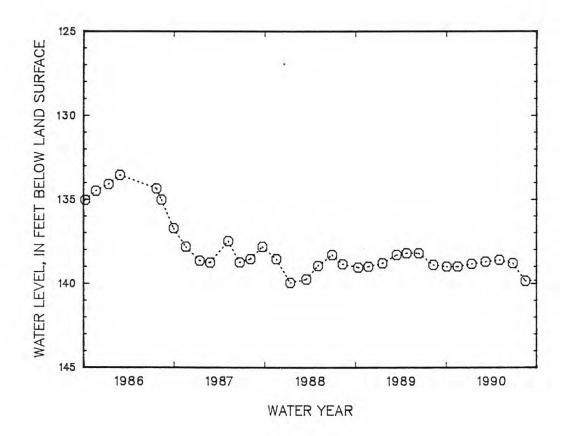
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 122.60 ft below land-surface datum, Aug. 27, 1980; lowest measured, 139.95 ft below land-surface datum, Jan. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	139.00 139.00	JAN 10	138,84	MAR 07	138.71	MAY 02	138.60	JUN 25	138.80	AUG 15	139.85
WATER Y	EAR 1990	HIGHEST	138.60	MAY 02. 1	990	LOWEST 13	9.85 AUG 15.	1990			



### ISLE OF WIGHT COUNTY

365751076433502. Local number, 57D 22 SOW 143B.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 350 ft, screened 340 to 350 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 73 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

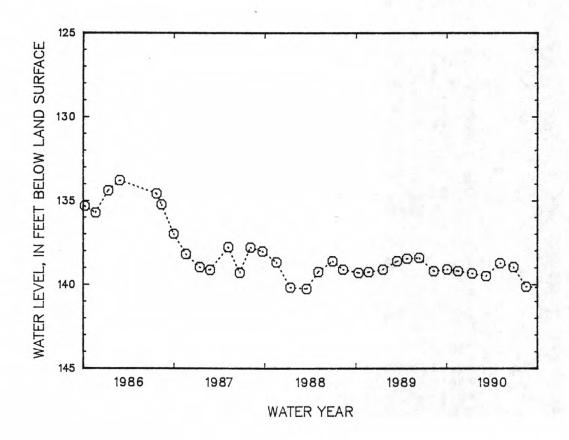
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 125.10 ft below land-surface datum, Apr. 24, May 29, 1980; lowest measured, 140.25 ft below land-surface datum, Mar. 16, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	DATE LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 139.10 NOV 15 139.20	JAN 10 139.34	MAR 07 139.50	MAY 02 138.73	JUN 25	138.96	AUG 15	140.13
WATER YEAR 1990	HIGHEST 138.73	MAY 02, 1990	LOWEST 140.13 AUG 15.	1990			



### ISLE OF WIGHT COUNTY

365751076433503. Local number, 57D 23 SOW 143C.

LOCATION.--Lat 36°57'51", long 76°43'35", Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 18 ft, screened 8 to 18 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 73 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

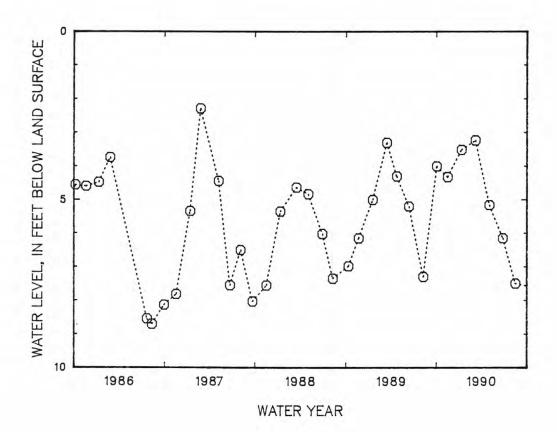
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.29 ft below land-surface datum, Feb. 23, 1987; lowest measured, 8.70 ft below land-surface datum, Aug. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	4.00 4.32	JAN 10	3.51	MAR 07	3.23	MAY 02	5.16	JUN 25	6.15	AUG 15	7.50
WATER Y	EAR 1990	HIGHEST	3.23	MAR 07. 1990	LOW	EST 7.50	AUG 15.	1990			



# ISLE OF WIGHT COUNTY

370236076425901. Local number, 57E 10 SOW 144B.

LOCATION.--Lat 37°02'36", long 76°42'59", Hydrologic Unit 02080206, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 85 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

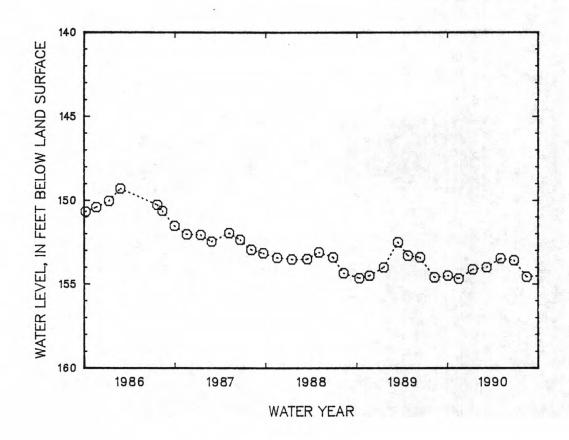
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 139.90 ft below land-surface datum, Apr. 24, July 24, 1980; lowest measured, 154.68 ft below land-surface datum, Nov. 15, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEV		WATER LEVEL		NATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 154. NOV 15 154.		154.12	MAR 07 1	54.00 M	AY 02 1	153.46	JUN 25	153.58	AUG 15	154.58
WATER YEAR 1	990 HIGHES	T 153.46 MA	Y 02, 199	LOWES	T 154.6	58 NOV 15,	1989			



#### ISLE OF WIGHT COUNTY

370253076431201. Local number, 57E 14 SOW 144A.

LOCATION.--Lat 37°02'53", long 76°43'12", Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in. to 590 ft, diameter 3 in. from 590 to 600 ft, depth 600 ft, screened 590 to 600 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

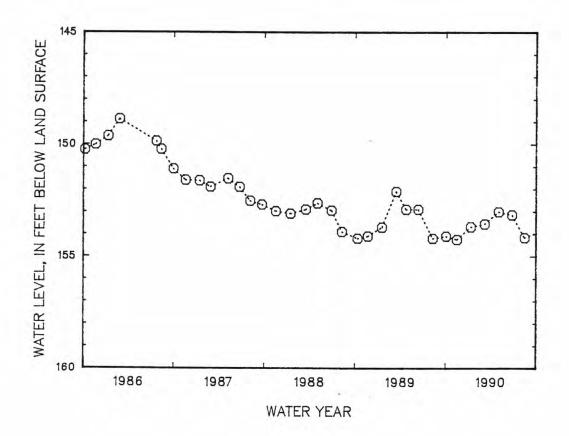
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.49 ft below land-surface datum, Apr. 24, 1980; lowest measured, 154.25 ft below land-surface datum, Nov. 15, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DAT	E	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	154.10 154.25	JAN 10	153.68	MAR 07	153,55	MAY	02	153.00	JUN 25	153.14	AUG 15	154.16
WATER Y	EAR 1990	HIGHEST	153.00	MAY 02, 1	.990	LOWEST	154.	25 NOV 15,	1989			



# ISLE OF WIGHT COUNTY

370253076431202. Local number, 57E 15 SOW 144C.

LOCATION.--Lat 37°02'53", long 76°43'12", Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

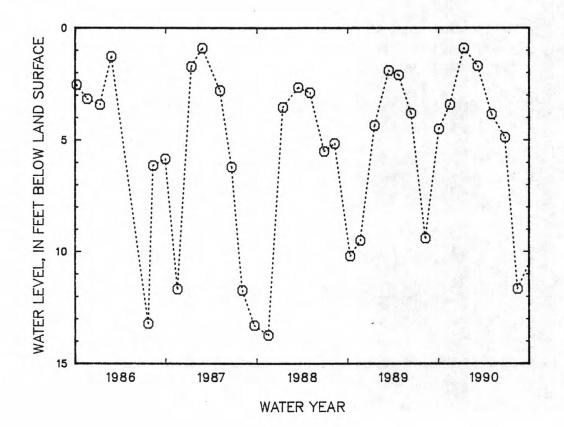
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 0.90 ft below land-surface datum, Feb. 25, 1987, Jan. 10, 1990; lowest measured, 13.73 ft below land-surface datum, Nov. 16, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	4.50 3.42	JAN 10	0.90	MAR 07	1.70	MAY 02	3.85	JUN 25	4.88	AUG 15	11.66
WATER Y	EAR 1990	HIGHEST	0.90	JAN 10. 1990	LOW	EST 11.66	AUG 15.	1990			



#### JAMES CITY COUNTY

372546076532901. Local number, 55H 20.

LOCATION.--Lat 37°25'46", long 76°53'29", Hydrologic Unit 02080206, 100 ft north of State Highway 603, 700 ft east of the pumping station at Diascund Creek Reservoir, and 0.6 mi northwest of the intersection of U.S. Highway 60 and State Highway 603 in James City County. Owner: City of Newport News.

AQUIFER. -- Lower Potomac and Middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 735 ft, depth 735 ft, screened 515 to 540 ft, 600 to 620 ft, 630 to 655 ft, 665 to 685 ft, 720 to 730 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.6 ft above land-surface datum.

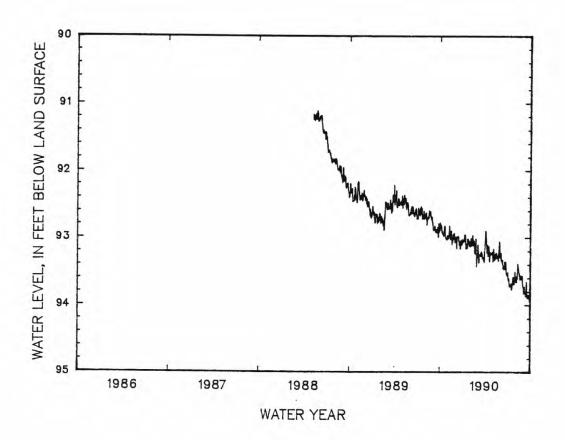
REMARKS.--Water levels for the period May to September 1988 should be 100.00 ft higher than previously published.

PERIOD OF RECORD. -- May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 90.99 ft below land-surface datum, June 4, 1988; lowest recorded, 93.94 ft below land-surface datum, Sept. 28, 29, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	92.84	93.01	92.99	93.05	93.12	93.21	92.99	93.17	93.31	93.61	93.66	93.79
10	92.93	92.91	93.00	92.98	92.97	93.26	93.18	93.25	93.33	93.70	93.46	93.80
15	92.97	92.98	92,99	93.14	93.09	93.27	93.15	93.30	93.41	93.68	93.51	93.66
20	92.85	93.02	93.06	93.14	93.23	93.24	93.33	93.30	93.41	93.68	93.61	93.87
25	93.00	92.99	93.05	93.04	93.38	93.31	93.25	93.34	93.52	93,68	93.61	93.90
EOM	92.97	93.03	93.07	93.13	93.27	93.16	93.22	93.23	93.54	93.51	93.69	93.92
WATER	YEAR 1990	HIG	HEST 92.	61 OCT (	2, 1989	LOWES	T 93.94	SEP 28,	29, 1990			



#### JAMES CITY COUNTY

371311076463601. Local number, 56F 1 SOW 018.

LOCATION.--Lat 37°13'11", long 76°46'36", Hydrologic Unit 02080206, 1,100 ft southwest of Colonial Parkway, 0.5 mi west of State Highway 682, and 0.6 mi north of Jamestown. Owner: U.S. Department of Interior, Colonial National Historical Park.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 346 ft, screened 336 to 346 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

Sept. 30, 1980, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1980, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top edge of recorder shelf, 3.15 ft above land-surface datum.

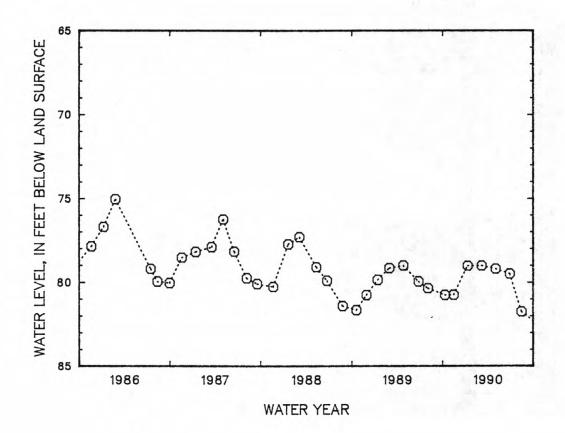
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD .-- May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.29 ft below land-surface datum, May 8, 1969; lowest measured, 81.75 ft below land-surface datum, Aug. 14, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	80.75 80.74	JAN 09	79.02	MAR 06	79.01	MAY 01	79.20	JUN 27	79.50	AUG 14	81.75
WATER Y	EAR 1990	HIGHEST	79.01	MAR 06. 199	90	LOWEST 81.75	AUG 14	. 1990			



#### JAMES CITY COUNTY

371810076473001. Local number, 56G 8.

LOCATION.--Lat 37°20'08", long 76°47'32", Hydrologic Unit 02080206, 0.55 mi east of the intersection of State Highways 611 and 614 on State Highway 611, 2.1 mi west of Lightfoot. Owner: Peninsula Boy Scout Council.

AQUIFER .-- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled withdrawal water well, diameter 4 in., depth 490 ft, screened 480 to 490 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 143 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

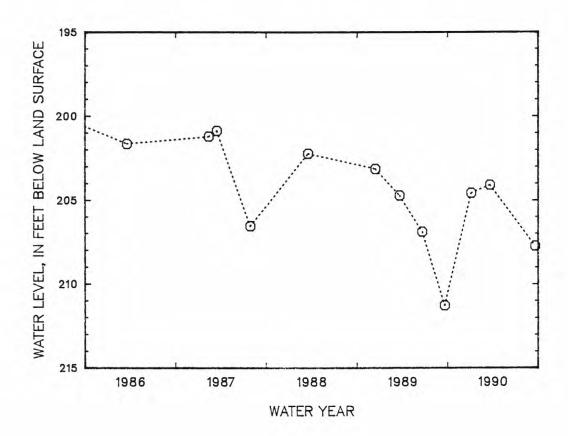
PERIOD OF RECORD.--November 1965, September 1978, January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 160.00 ft below land-surface datum, November 1965; lowest measured, 211.28 ft below land-surface datum, Sept. 19, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 04	204.57	MAR 20	204.09	SEP 18	207.75

WATER YEAR 1990 HIGHEST 204.09 MAR 20, 1990 LOWEST 207.75 SEP 18, 1990



WATER YEAR 1990

### GROUND-WATER LEVELS

### JAMES CITY COUNTY

372028076452401. Local number, 56G 38.

LOCATION.--Lat 37°20'24", long 76°45'24", Hydrologic Unit 02080206, 200 ft southwest of U.S. Highway 60 in Lightfoot, 550 ft northwest of the intersection of U.S. Highway 60 and State Highway 646. Owner: Chesapeake and Potomac Telephone Company.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 300 ft, screened 262 to 300 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, occasional measurement with chalked tape.

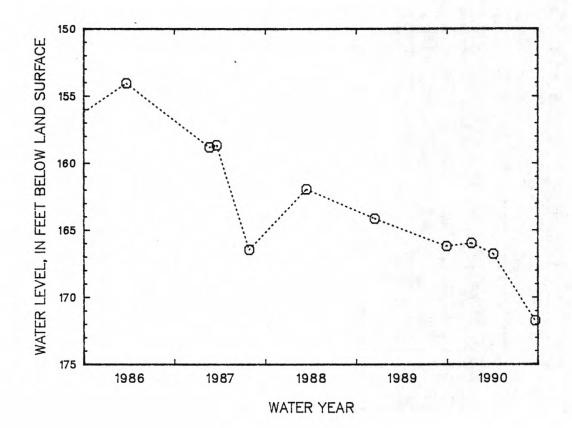
DATUM.--Elevation of land-surface datum is 122 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.53 ft below land-surface datum.

PERIOD OF RECORD.--February to September 1978, February 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 137.61 ft below land-surface datum, Feb. 9, 1978; lowest measured, 171.74 ft below land-surface datum, Sept. 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 05	165.97	APR 03	166.79	SEP 19	171.74
HIGHEST	165.9	7 JAN 05,	1990	LOWEST	171.74 SEP	19, 1990



### JAMES CITY COUNTY

372145076493201. Local number, 56G 57.

LOCATION.--Lat 37°21'45", long 76°49'32", Hydrologic Unit 02080206, 1.75 mi south of the intersection of U.S. Highway 60 and State Highway 631 (Church Lane), off a dirt road at the end of State Highway 631, and 0.10 mi north of the pump station at Little Creek Reservoir. Owner: City of Newport News.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 695 ft, depth 695 ft, screened 530 to 540 ft, 558 to 598 ft, 604 to 624 ft, 660 to 690 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 84 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 4.3 ft above land-surface datum.

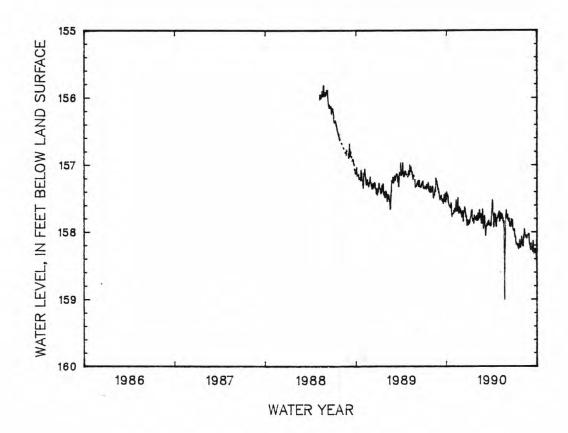
REMARKS. -- Cause of low water levels in May 1990 unknown.

PERIOD OF RECORD. -- May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 155.79 ft below land-surface datum, May 25, 1988; lowest recorded, 159.00 ft below land-surface datum, May 23, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	157.46	157.69	157.69	157.80	157.82	157.90	157.58	157.71	157.80	158.06	158.21	158.25
10	157.57	157.59	157.69	157.68	157.68	157.92	157.91	157.75	157.80	158.17	157.98	158.23
15	157.62	157,63	157.65	157.82	157.78	157.90	157.76	157.79	157.86	158.18	158.05	158.13
20	157.57	157.64	157.76	157.84	157.86	157.83	157.91	157.84	157.86	158.23	158.08	158.29
25	157.73	157.71	157.84	157.78	157.91	157.89	157.79	158.21	157.95	158,20	158.05	158.31
EOM	157.68	157.75	157.88	157.83	157.86	157.74	157.69	157.76	157.98	158.08	158.16	158.37
WATER	YEAR 1990	ні	GHEST 15	7.34 OCT	02, 1989	LOW	EST 159.	00 MAY 2	3, 1990			



### JAMES CITY COUNTY

372314076480401. Local number, 56H 22 SOW 135A.

LOCATION.--Lat 37°23'14", long 76°48'04", Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of U.S. Highway 60 and State Highway 754, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 2 in., depth 645 ft, screened 625 to 645 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point; Top of casing, 0.50 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.50 ft below land surface datum thereafter.

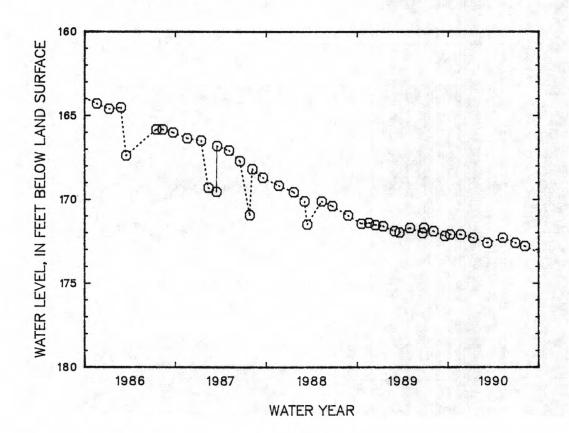
REMARKS . -- Records provided by the Virginia Water Control Board .

PERIOD OF RECORD.--March 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 154.85 ft below land-surface datum, Apr. 5, 1979; lowest measured, 172.80 ft below land-surface datum, Aug. 6, 1990.

### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21		JAN 09	172.30	MAR 07	172.60	MAY 08	172.30	JUN 28	172.60	AUG 06	172.80
WATER Y	EAR 1990	HIGHEST	172.10	OCT 09, N	OV 21, 1989	LOW	EST 172.80	AUG 06,	1990		



# JAMES CITY COUNTY

372506076511701. Local number, 56H 25 SOW 177A.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 929 ft, screened 888 to 908 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to June 28, 1988, digital recorder -- 60-minute punch.

DATUM. -- Elevation of land-surface datum is 103 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

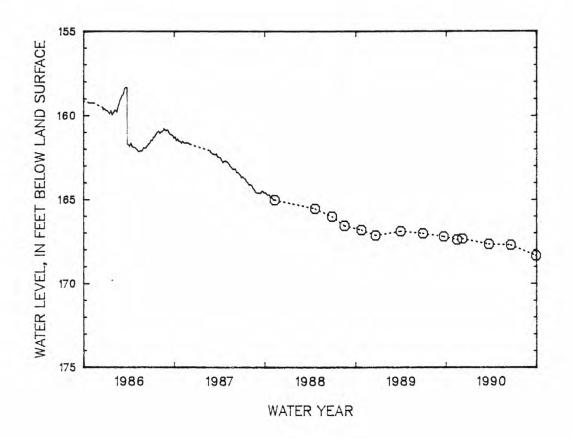
REMARKS .-- Abrupt decline in water level in March 1986 probably the result of float hangup in well.

PERIOD OF RECORD. -- April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 158.21 ft below land-surface datum, Mar. 19, 20, 1986; lowest measured, 168.36 ft below land-surface datum, Sept. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	167.40	DEC 05	167.34	MAR 22	167.67	JUN 18	167.72	SEP 28	168.36
WATER YEAR 1990	HIGHEST	167.34	DEC 05,	1989 L	OWEST 168	36 SEP 2	8, 1990		



### JAMES CITY COUNTY

372506076511702. Local number, 56H 26 SOW 177B.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 581 ft, screened 550 to 560 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1988, digital recorder -- 60-minute punch.

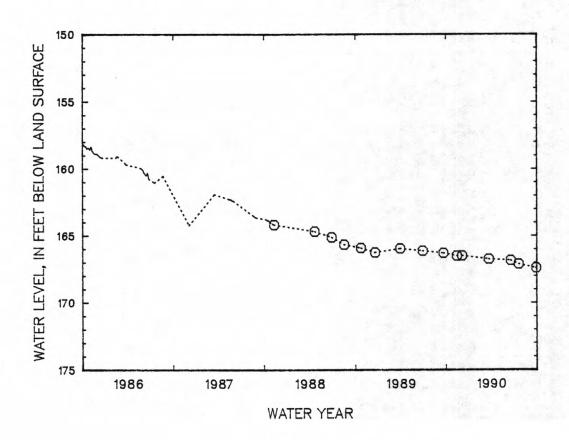
DATUM. --Elevation of land-surface datum is 103 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

PERIOD OF RECORD. --April 1985 to current year. Unpublished records prior to October 1986 and fragmentary periods of continuous record for water year 1989 available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 157.61 ft below land-surface datum, June 1, 2, 1985; lowest measured, 167.41 ft below land-surface datum, Sept. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE		TER VEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14 1	.66.51	DEC 05	166.50	MAR 22	166.75	JUN 1	8 166	.85	JUL 20	167.12	SEP 28	167.41
WATER YEA	R 1990	HIGHEST	166.50	DEC 05. 1	989	LOWEST 1	67.41	SEP 28.	1990			



## JAMES CITY COUNTY

372506076511703. Local number, 56H 27 SOW 177C.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 401 ft, screened 370 to 380 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

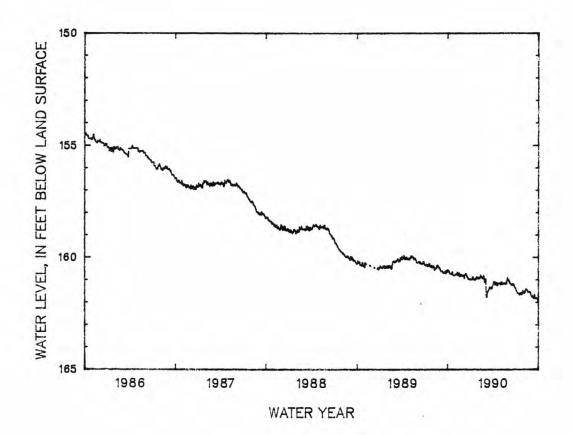
DATUM.--Elevation of land-surface datum is 103 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.95 ft above land-surface datum.

PERIOD OF RECORD. -- April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 153.47 ft below land-surface datum, June 1, 2, 1985; lowest recorded, 161.95 ft below land-surface datum, Sept. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	160.60	160.78	160.80	161.00	160.94	161.64	161.07	161.11	161.07	161.50	161.60	161.77
10	160.73	160.72	160.78	160.88	160.85	161.57	161.20	161.17	161.13	161.59	161.42	161.78
15	160.75	160.77	160.75	161.00	160.88	161.45	161.17	161.18	161.20	161.61	161.44	161.68
20	160.67	160.81	160.86	161.02	160.92	161.33	161.26	161.19	161.19	161.62	161.54	161.82
25	160.80	160.83	160.95	160.96	161.06	161.37	161.18	161.17	161.30	161.62	161.53	161.86
EOM	160.79	160.84	161.00	160.95	161.03	161.26	161.15	160.99	161.37	161.48	161.66	161.94
WATER	VEAR 1990	HT	CHEST 160	60 OCT	05 1080	T OW	FCT 161	05 SEP 2	8 1ggn			



### JAMES CITY COUNTY

372506076511704. Local number, 56H 28 SOW 177D.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168, 0.7 mi north of the intersection of State Highways 168 and 601, and on the northwest side of State Highway 601 in James City County. Owner: Virginia Water Control Board.

AQUIFER .-- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 321 ft, screened 290 to 300 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Sept. 21, 1989, digital recorder -- 60-minute punch.

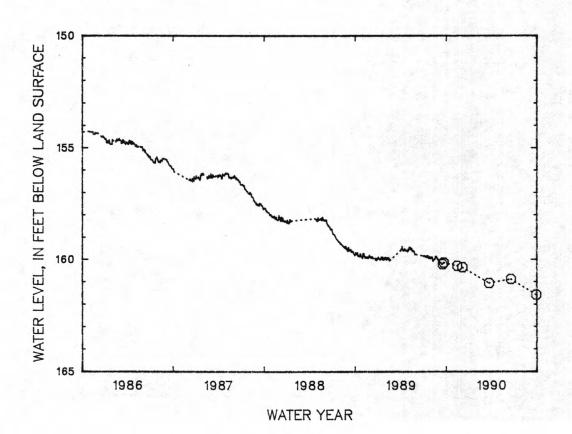
DATUM. --Elevation of land-surface datum is 193 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.90 ft above land-surface datum. Prior to Dec. 4, 1989, top of casing was 2.9 ft above land-surface datum.

PERIOD OF RECORD. --April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 153.20 ft below land-surface datum, May 31, 1985; lowest measured, 161.58 ft below land-surface datum, Sept. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	NOV 14	160.29	DEC 05	160.35	MAR 22	161.06	JUN 18	160.88	SEP 28	161.58
WATER	YEAR 1990	HIGHEST	160 29	NOV 14	1989	LOWEST	161 58 SEP	28 1990		



### JAMES CITY COUNTY

372506076511705. Local number, 56H 29 SOW 177E.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 235 ft, screened 204 to 214 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Sept. 21, 1989, digital recorder -- 60-minute punch.

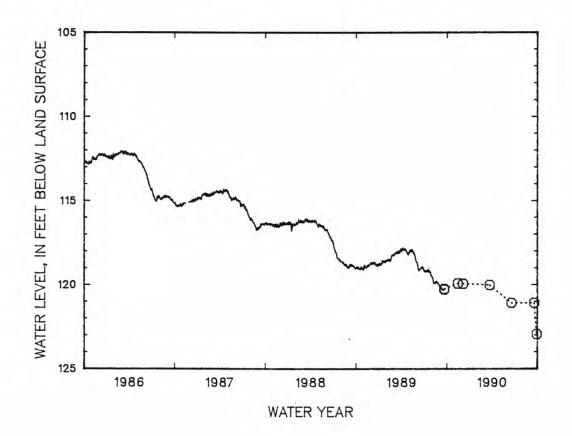
DATUM.--Elevation of land-surface datum is 103 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.75 ft above land-surface datum. Prior to Dec. 4, 1989, top of casing was 2.8 ft above land-surface datum.

PERIOD OF RECORD. -- April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.96 ft below land-surface datum, Feb. 27, 1986; lowest measured, 122.95 ft below land-surface datum, Sept. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	119.93	DEC 05	119.94	MAR 22	120.02	JUN 18	121.09	SEP 28	122.95
WATER YEAR 1990	HIGHEST	119.93	NOV 14,	1989	LOWEST	122.95 SEP	28, 1990		



### JAMES CITY COUNTY

372506076511706. Local number, 56H 30 SOW 177F.

LOCATION.--Lat 37°25'06", long 76°51'17", Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Sept. 21, 1989, digital recorder -- 60-minute punch.

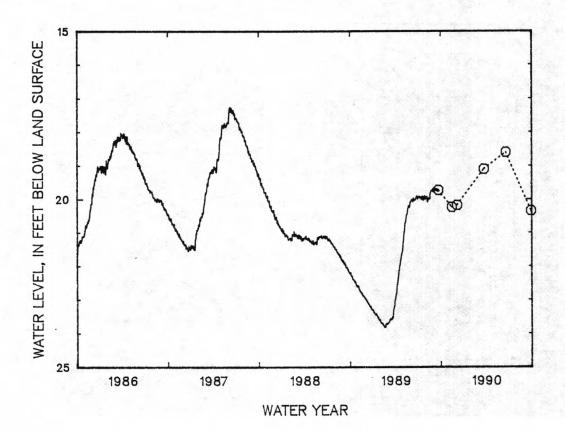
DATUM.--Elevation of land-surface datum is 103 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum. Prior to Dec. 4, 1989, top of casing was 2.9 ft above land-surface datum.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 17.25 ft below land-surface datum, June 8, 9, 12, 13, 1987; lowest recorded, 23.83 ft below land-surface datum, Feb. 16, 17, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DAT	DATE LEVEL		WATER LEVEL	DATE	DATE LEVEL		WATER LEVEL	DATE	WATER LEVEL
NOV	14 20.24	DEC 05	20.18	MAR 22	19.10	JUN 18	18.60	SEP 28	20.35
WATER YEAR 19	on Highe	ST 18 60	TIIN 18	1990 10	מדכד פח	35 SEP 28	1000		



### JAMES CITY COUNTY

372314076480402. Local number, 56H 31 SOW 135B.

LOCATION.--Lat 37°23'14", long 76°48'04", Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of State Highway 754 and U.S. Highway 50, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.2 ft below land-surface datum thereafter.

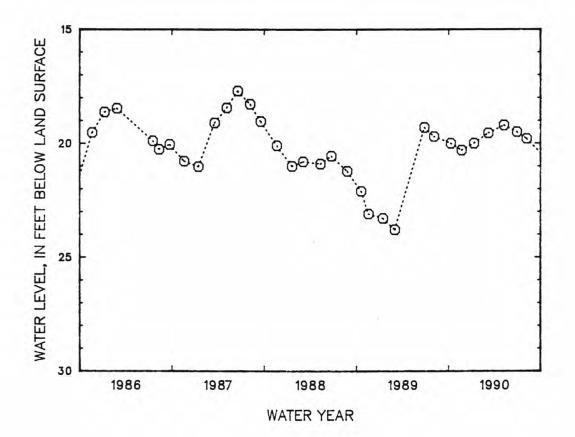
REMARKS .-- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- August 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.28 ft below land-surface datum, June 8, 1984; lowest measured, 23.80 ft below land-surface datum, Mar. 1, 1989.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21	20.00	JAN 09	20.00	MAR 07	19.55	MAY 08	19.20	JUN 28	19.50	AUG 06	19.80
WATER Y	EAR 1990	HIGHEST	19 20	MAY 08 19	90	LOWEST 20 30	NOV 21	1989			



#### JAMES CITY COUNTY

372315076415001. Local number 57H 14 SOW 095.

LOCATION.--Lat 37°23'15", long 76°41'50", Hydrologic Unit 02080107, 500 ft north of State Highway 606, 0.8 mi east of intersection of State Highway 606 and 646, and 3.3 mi east of Croaker. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 123 ft, screened 118 to 123 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Mar. 3, 1988; 1.4 ft thereafter.

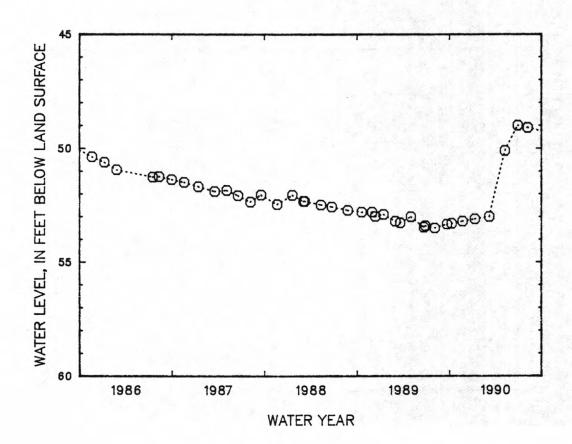
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.00 ft below land-surface datum, Sept. 21, 1978; lowest measured, 54.42 ft below land-surface datum, Nov. 9, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21	53.30 53.20	JAN 09	53.10	MAR 07	53.00	MAY 08	50.10	JUN 28	49.00	AUG 06	49.10
WATER Y	EAR 1990	HIGHES	T 49 00	TIIN 28 190	20	IOWEST 53 30	OCT 09	1989			



374328077012801. Local number, 54K 6 SOW 064.

LOCATION.--Lat 37°43'28", long 77°01'28", Hydrologic Unit 02080105, 100 ft west of State Highway 629, 0.2 mi southeast of Walkerton, and 0.25 mi south of intersection of State Highways 629 and 634. Owner: C. L. Walker.

KING AND QUEEN COUNTY

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in. to 66 ft, diameter 4 in. from 66 to 390 ft, depth 390 ft, screened 341 to 372 ft, 376 to 387 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Apr. 30, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Jan. 5, 1974, to Apr. 30, 1979, continuous strip-chart recorder. Prior to Jan. 5, 1974, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum prior to Nov. 18, 1985; 1.3 ft thereafter.

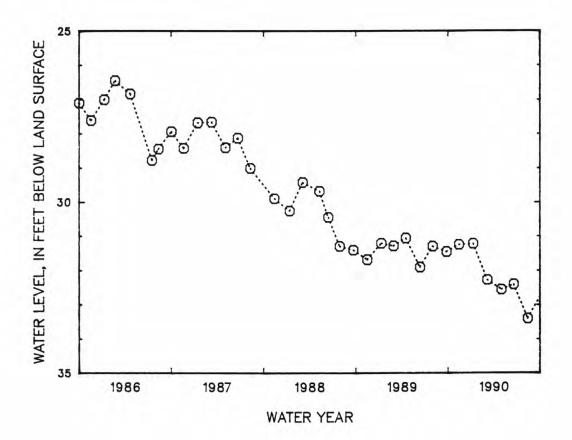
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- August 1972 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 12.82 ft below land-surface datum, Aug. 1, 1972; lowest measured, 33.40 ft below land-surface datum, Aug. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	31.24	JAN 08	31.21	MAR 05	32.27	APR 30	32.55	JUN 18	32.40	AUG 13	33.40
WATER Y	EAR 1990	HIGHEST	31 21	TAN 08 199	an	LOWEST 33 40	AUG 13	1990			



#### KING AND QUEEN COUNTY

374806077034801. Local number, 54L 5.

LOCATION.--Lat 37°48'06", long 77°03'48", Hydrologic Unit 02080105, 75 ft west of U.S. Highway 360 at St. Stephens Church and 0.4 mi southwest of the intersection of U.S. Highway 360 and State Highway 14. Owner: Nick Stolfi.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 252 ft, diameter 2 in. from 252 to 546 ft, depth 546 ft, screened 515 to 525 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 0.5 in. nipple, 5.05 ft below land-surface datum. Prior to Mar. 20, 1985, measuring point was top of casing, 5.5 ft below land-surface datum.

PERIOD OF RECORD.--June 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 133.00 ft below land-surface datum, June 8, 1970; lowest measured, 156.87 ft below land-surface datum, Sept. 18, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

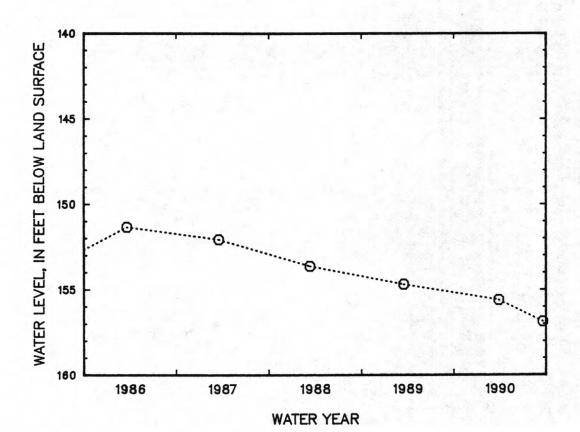
DATE LEVEL
MAR 17 154.70

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

WATER DATE LEVEL DATE LEVEL

MAR 27 155.61 SEP 18 156.87

WATER YEAR 1990 HIGHEST 155.61 MAR 27, 1990 LOWEST 156.87 SEP 18, 1990



## KING AND QUEEN COUNTY

373126076454101. Local number, 56J 11 SOW 073.

LOCATION.--Lat 37°31'26", long 76°45'41", Hydrologic Unit 02080105, at West Point Airport, 1.7 mi southeast of West Point. Owner: Chesapeake Corporation.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 1,254 ft, screened 1,233 to 1,248 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

PERIOD OF RECORD . -- November 1974 to current year.

1986

1987

WATER YEAR 1990

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.08 ft below land-surface datum, Apr. 25, 1975; lowest measured, 104.32 ft below land-surface datum, Sept. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL			DATE	DAT	WATER LEVEL		
J	AN 04	102.27	MAR 19	102.20	SEP	11	104.32
HIGHEST	102.20	MAR 19,	1990	LOWEST	104.32	SEP	11, 1990

80 WATER LEVEL, IN FEET BELOW LAND SURFACE 85 1000 P. W. O. 90 95 100 105 110 1990 1988 1989

WATER YEAR

## KING AND QUEEN COUNTY

373008076425601. Local number, 57J 3 SOW 074.

LOCATION.--Lat 37°30'08", long 76°42'56", Hydrologic Unit 02080107, off State Highway 606, 0.4 mi northeast of intersection of State Highways 606 and 605, and 2.8 mi south of Shacklefords. Owner: Chesapeake Corporation.

AQUIFER. -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 200 ft, diameter 4 in. from 200 to 760 ft, depth 760 ft, screened 741 to 756 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 51 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.20 ft above land-surface datum.

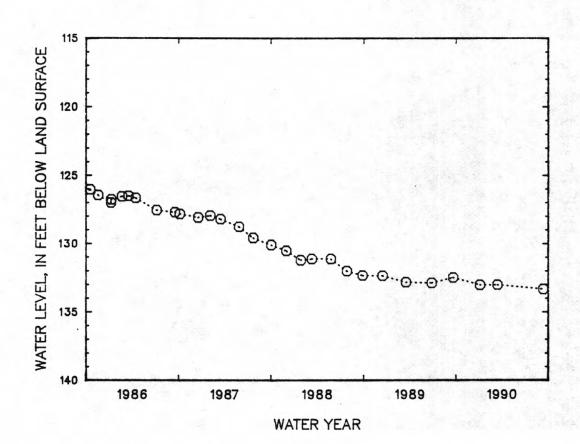
PERIOD OF RECORD. -- November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.90 ft below land-surface datum, Jan. 26, 1975; lowest measured, 133.34 ft below land-surface datum, Sept. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	LEVEL	
JAN 04	133.03	MAR 14	133.02	SEP 11	133.34	

WATER YEAR 1990 HIGHEST 133.02 MAR 14, 1990 LOWEST 133.34 SEP 11, 1990



## KING GEORGE COUNTY

382341077032401. Local number, 54R 2.

LOCATION.--Lat 38°23'41", long 77°03'24", Hydrologic Unit 02070011, 50 ft southeast of steep bank of the Potomac River, 150 ft west of State Highway 687, 1.5 mi west of the intersection of U.S. Highway 301 and State Highway 614, 1.9 mi north of the intersection of State Highways 629 and 687, and near Dahlgren. Owner: E. V. Bruchez.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 806 ft, depth 806 ft, screened 781 to 801 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. --October 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 70.00 ft below land-surface datum, Oct. 15, 1969; lowest measured, 118.80 ft below land-surface datum, Sept. 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

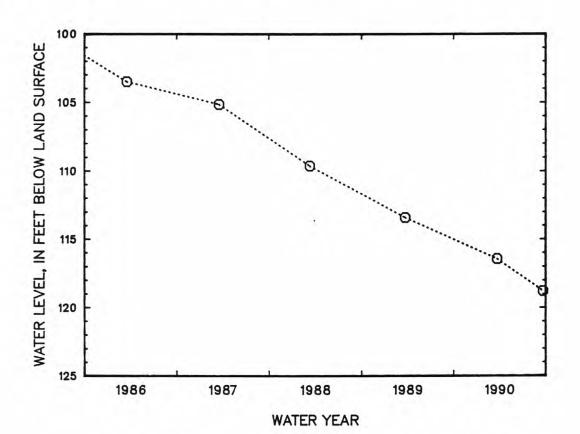
DATE LEVEL
MAR 23 113.41

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

WATER DATE LEVEL DATE LEVEL

MAR 22 116.45 SEP 20 118.80

WATER YEAR 1990 HIGHEST 116.45 MAR 22, 1990 LOWEST 118.80 SEP 20, 1990



## KING WILLIAM COUNTY

373955077000501. Local number, 53K 9.

LOCATION.--Lat 37°41'18", long 77°10'43", Hydrologic Unit 02080106, 250 ft east of the intersection of U.S. Highways 60 and 360, 0.3 mi northeast of the Pamunkey River on U.S. Highway 360, and 2.0 mi southwest of Manquin. Owner: G. O. Townsend.

AQUIFER.--Middle Potomac and Brightseat-Upper Potomac aquifers of Cretaceous-Tertiary age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 3 in., depth 290 ft, screen depth unknown.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

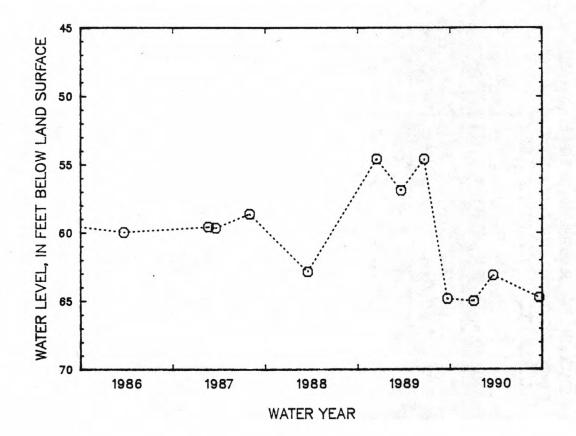
DATUM.--Elevation of land-surface datum is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.01 ft above land-surface datum.

PERIOD OF RECORD. -- August 1972, December 1975, January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 44.54 ft below land-surface datum, Aug. 17, 1972; lowest measured, 64.99 ft below land-surface datum, Jan. 2, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 02	64.99	MAR 20	63.11	SEP 19	64.74
TER YEAR 1990	HIGHEST 63.11	MAR 20.	1990	LOWEST	64.99 JAN 02	. 1990



## KING WILLIAM COUNTY

373226076481201. Local number, 56J 2.

LOCATION.--Lat 37°32'26", long 76°48'12", Hydrologic Unit 02080106, 0.1 mi west of State Highway 30, 0.3 mi north of State Highway 33, and in West Point. Owner: Chesapeake Corporation.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 18 in. to 300 ft, diameter 8 in. from 300 to 600 ft, depth 600 ft, screened 390 to 400 ft, 550 to 570 ft, 580 to 600 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

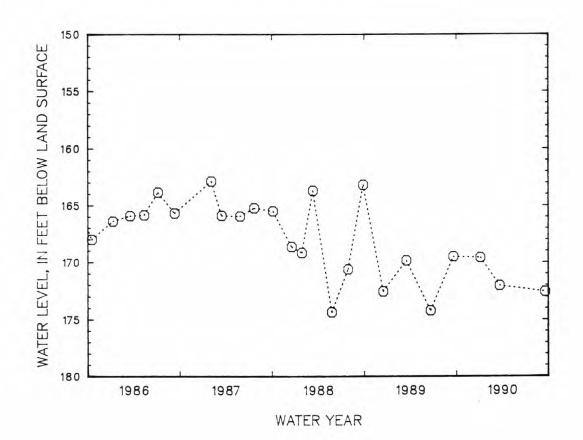
REMARKS. -- Water levels affected by local pumpage.

PERIOD OF RECORD. -- November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 141.48 ft below land-surface datum, Feb. 15, 1983; lowest measured, 174.36 ft below land-surface datum, May 25, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 04	169.59	MAR 21	172.05	SEP 18	172.59
WATER YEAR 1990	HIGHEST 169.5	9 JAN 04,	1990	LOWEST	172.59 SEP	18, 1990



## KING WILLIAM COUNTY

373459076510201. Local number, 56J 10.

LOCATION.--Lat 37°34'59", long 76°51'02", Hydrologic Unit 02080105, 100 ft northeast of State Highway 30 at the Virginia State Police office, 4.2 mi west of the intersection of State Highways 30 and 33 in West Point. Owner: Virginia Department of State Police.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 437 ft, screened 417 to 437 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

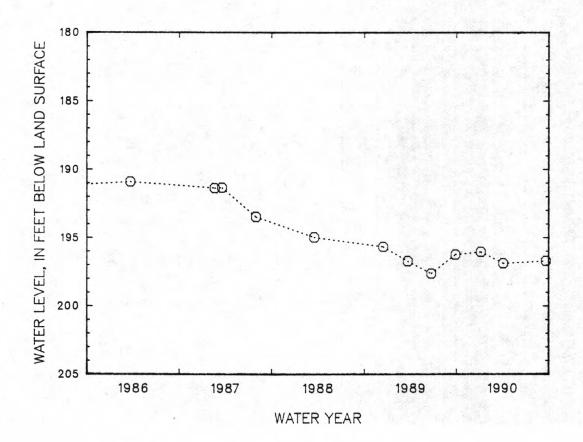
DATUM. --Elevation of land-surface datum is 101 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft below land-surface datum.

PERIOD OF RECORD. -- December 1972, December 1974, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 176.00 ft below land-surface datum, Dec. 8, 1972; lowest measured, 197.63 ft below land-surface datum, June 23, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 05	196.04	APR 03	196.88	SEP 19	196.71
WATER YEAR 1990	HIGHEST 196.0	4 JAN 05,	1990	LOWEST	196.88 APR	03, 1990



## KING WILLIAM COUNTY

373206076481201. Local number, 56J 18.

LOCATION. --Lat 37°32'06", long 76°48'12", Hydrologic Unit 02080106, near State Highway 33 at Chesapeake Corporation, in brick pump house at northeast corner of 13th and A Streets in West Point. Owner: Chesapeake Corporation.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 18 in. to 180 ft, diameter 8 in. from 165 to 446 ft, depth 446 ft, screened 210 to 240 ft, 380 to 390 ft, 405 to 445 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.45 ft above land-surface datum.

REMARKS. -- Water levels affected by local pumpage.

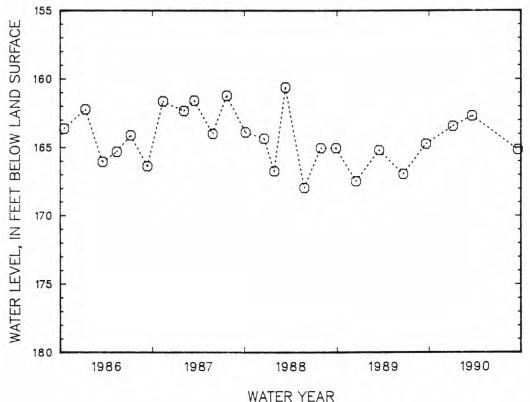
PERIOD OF RECORD. -- March 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.68 ft below land-surface datum, Dec. 29, 1978; lowest measured, 173.08 ft below land-surface datum, Feb. 23, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
JAN 04	163.43	MAR 21	162.68	SEP 18	165.15	

WATER YEAR 1990 HIGHEST 162.68 MAR 21, 1990 LOWEST 165.15 SEP 18, 1990



## LANCASTER COUNTY

374249076230101. Local number, 59K 1 SOW 015.

LOCATION.--Lat 37°42'49", long 76°23'01", Hydrologic Unit 02080104, at Lancaster County High School in Kilmarnock.
Owner: Lancaster County Public Schools.

AQUIFER. -- Upper Potomac and Brightseat-Upper Potomac aquifers of Cretaceous-Tertiary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 163 ft, diameter 2 in. from 163 to 716 ft, depth 716 ft, screened 706 to 716 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Sept. 30, 1976, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1976, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 85 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

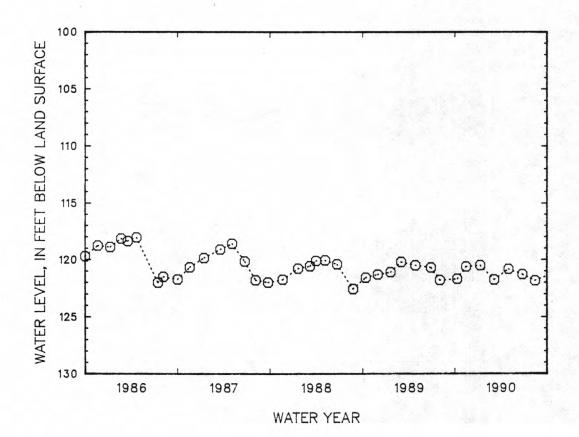
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1967 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 95.89 ft below land-surface datum, Feb. 20, 1968; lowest measured, 122.57 ft below land-surface datum, Aug. 24, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL	DATE LEVEL	DATE LEVEL	DATE LEVEL	DATE LEVEL	DATE LEVEL
OCT 10 121.70 NOV 14 120.62	JAN 09 120.50	MAR 05 121.77	MAY 01 120.83	JUN 25 121.30	AUG 14 121.85
WATER YEAR 1990	HIGHEST 120.50	JAN 09. 1990	LOWEST 121.85 AUG 14.	1990	



## LANCASTER COUNTY

374142076272701. Local number, 59K 9.

LOCATION.--Lat 37°41'42", long 76°27'27", Hydrologic Unit 02080104, on the south bank of Moran Creek, 1,000 ft northwest of the intersection of State Highway 630 and a private dirt drive, 0.8 mi west of Wesley Church, 3 mi north of Weems, 4 mi west of Kilmarnock and the intersection of State Highways 629 and 630, and near Weems. Owner: Fred Hansen.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 147 ft, diameter 2 in. from 147 to 585 ft, depth 585 ft, screened 565 to 580 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

PERIOD OF RECORD. -- September 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Sept. 16, 1969; lowest measured, 61.28 ft below land-surface datum, Sept. 21, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

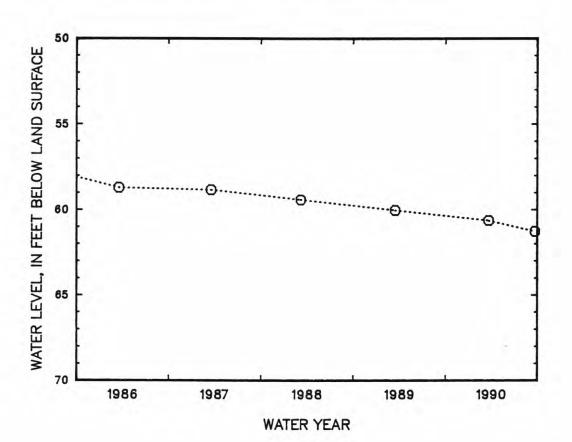
DATE WATER LEVEL
MAR 16 60.04

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER WATER
DATE LEVEL DATE LEVEL

MAR 21 60.64 SEP 21 61.28

WATER YEAR 1990 HIGHEST 60.64 MAR 21, 1990 LOWEST 61.28 SEP 21, 1990



## LANCASTER COUNTY

374941076254501. Local number, 59L 3.

LOCATION.--Lat 37°49'41", long 76°25'45", Hydrologic Unit 02080104, 100 ft southwest of State Highway 615 at Browns Store and 450 ft southeast of the intersection of State Highways 610 and 615. Owner: Meade Hinton and others.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 802 ft, depth 802 ft, screened 770 to 800 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 101 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 0.5 in. copper nipple, 1.35 ft above land-surface datum. Prior to Feb. 10, 1981, measuring point was top of casing, 0.9 ft above land-surface datum.

PERIOD OF RECORD. --April 1966 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 97.00 ft below land-surface datum, Apr. 26, 1966; lowest measured, 122.63 ft below land-surface datum, Sept. 21, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

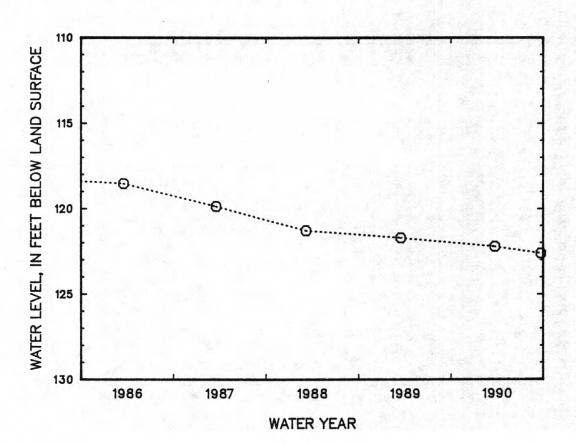
DATE WATER LEVEL
MAR 16 121.72

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 23 122.23 SEP 21 122.63

WATER YEAR 1990 HIGHEST 122.23 MAR 23, 1990 LOWEST 122.63 SEP 21, 1990



## LOUDOUN COUNTY

391542077423801. Local number, 49Y 1 SOW 022.

LOCATION.--Lat 39°15'42", long 77°42'38", Hydrologic Unit 02070008, 4.2 mi southeast of Harpers Ferry. Owner: American Telephone and Telegraph Company.

AQUIFER. -- Bedrock of Precambrian or Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.5 in., depth 516 ft, cased to 45 ft, open hole 45 to 516 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Sept. 30, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 1,100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

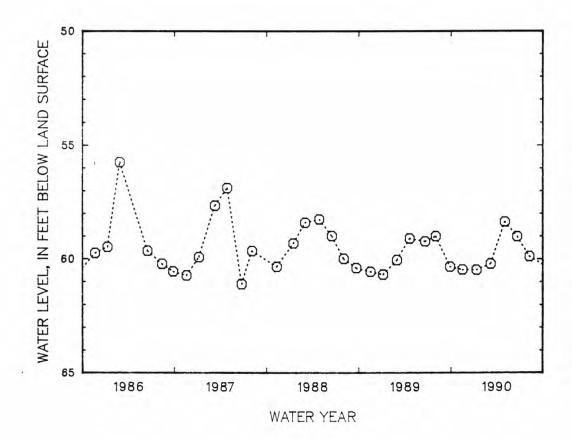
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 48.00 ft below land-surface datum, June 22, 1972; lowest measured, 61.70 ft below land-surface datum, Sept. 27, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	60.47	JAN 10	60.48	MAR 07	60.21	MAY 02	58.36	JUN 20	59.01	AUG 08	59.89
WATER Y	EAR 1990	HIGHEST	58.36	MAY 02 199	10	LOWEST 60.48	JAN 10	1990			



## LOUDOUN COUNTY

390623077314201. Local number, 50W 4C.

LOCATION.--Lat 39°06'23", long 77°31'42", Hydrologic Unit 02070008, under water tower 500 ft east of State Highway 7, 0.75 mi east of Leesburg. Owner: Town of Leesburg.

AQUIFER. -- Slightly metamorphosed Balls Bluff Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 535 ft, cased to 6 ft, open hole 6 to 535 ft.

INSTRUMENTATION. -- Monthly measurement with chalked tape by USGS personnel.

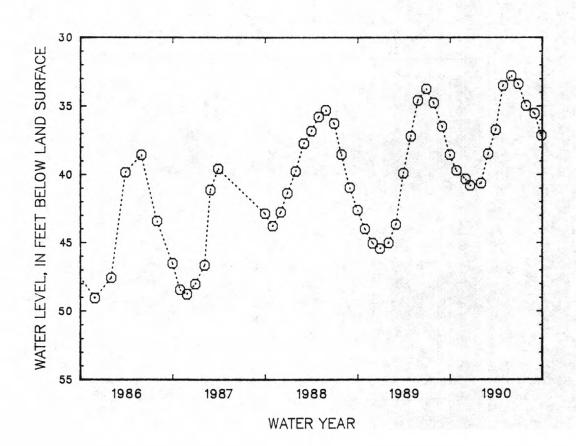
DATUM. -- Elevation of land-surface datum is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD .-- October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.78 ft below land-surface datum, May 30, 1990; lowest measured, 49.06 ft below land-surface datum, Nov. 27, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL										
OCT 25 NOV 30	39.70 40.33	DEC 18 JAN 30	40.80 40.63	FEB 27 MAR 29	38.48 36.73	APR 27 MAY 30	33.50 32.78	JUN 27 JUL 27	33.38 34.96	AUG 30 SEP 26	35.53 37.14
WATER YE	EAR 1990	HIGHEST	32.78	MAY 30. 199	10	LOWEST 40.80	DEC 18.	1989			



## LOUISA COUNTY

380217078133701. Local number, 45N 1.

LOCATION.--Lat 38°02'17", long 78°13'43", Hydrologic Unit 02080106, off State Highway 640 on Tyler property, 0.9 mi southeast of Thelma, and 3 mi southwest of Boswells Tavern. Owner: Tyler.

AQUIFER. -- Wissahickon Formation of late Precambrian (?) age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 56 ft, length of casing unknown.

INSTRUMENTATION. -- Continuous strip-chart recorder.

DATUM. -- Elevation of land-surface datum is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.95 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- July 1952 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 11.97 ft below land-surface datum, Apr. 30, 1973; lowest measured, 35.17 ft below land-surface datum, Dec. 2, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.30	17.90	17.67	18.60	17.04	17.31	17.82	17.35	15.39	18.25	21.23	23.37
10	18.17	17.80	18.11	17.95	16.57	17.58	17.49	17.15	15.40	18.85	21.61	23.72
15	18.11	17.57	18.52	17.80	16.53	17.98	17.10	17.10	15.84	19.40	22.02	23.92
20	17.81	17.32	18.90	17.78	16.76	18.21	16.99	17.10	16.30	19.80	22.42	24.28
25	17.52	17.41	19.16	17.85	17.15	18.21	16.89	17.50	17.08	20.35	22.73	24.54
EOM	17.52	17.54	19.58	17.41	16.97	18.20	17.20	15.70	17.60	20.80		24.78
WATER	YEAR 199	0 HI	GHEST 15	5.24 JUN	04, 1990	LOWE	ST 24.78	SEPT 30	, 1990			

NATER YEAR

MATER YEAR

MATER YEAR

MATER YEAR

## LOUISA COUNTY

380043078111301. Local number, 45N 4.

LOCATION.--Lat 38°00'45", long 78°11'14", Hydrologic Unit 02080106, 0.25 mi east of U.S. Highway 15, 4.1 mi south of Boswells Tavern. Owner: Virginia Department of Correction.

AQUIFER. --Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 200 ft, cased to 42 ft, open hole 42 to 200 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by USGS personnel.

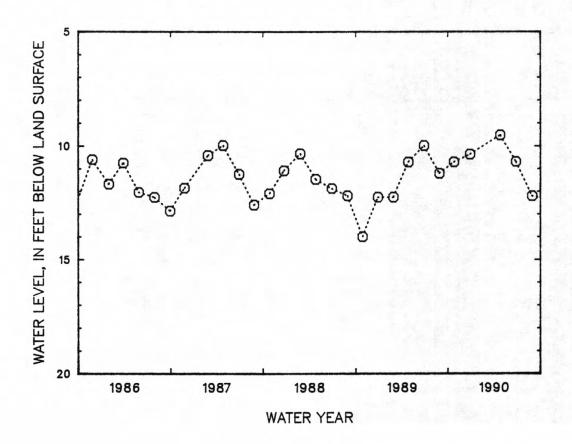
DATUM.--Elevation of land-surface datum is 415 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.3 ft above land-surface datum.

PERIOD OF RECORD. -- February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.40 ft below land-surface datum, Apr. 28, 1980; lowest measured, 14.43 ft below land-surface datum, Aug. 26, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	OCT 25	10.70	DEC 27	10.36	APR 25	9.52	JUN 26	10.69	AUG 29	12.20
WATER	YEAR 1990	HIGHEST	9 52	APR 25 1990	T.OW	EST 12 20	AUG 29	1990		



## LOUISA COUNTY

380131078001001. Local number, 46N 1 SOW 056.

LOCATION.--Lat 38°01'31", long 78°00'10", Hydrologic Unit 02080106, 200 ft northeast of intersection of U.S. Highway 33 and State Highway 208 in Louisa. Owner: Town of Louisa.

AQUIFER. -- Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 132 ft, length of casing unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Mar. 31, 1979, to Oct. 4, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 455 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

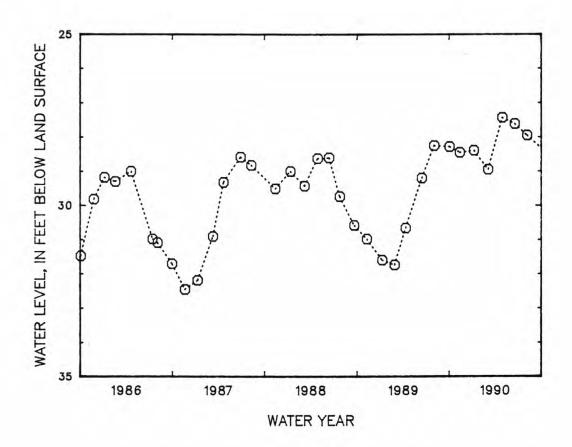
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 26.27 ft below land-surface datum, May 18, 1973; lowest measured, 34.78 ft below land-surface datum, Dec. 8, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 13	28.28 28.45	JAN 08	28.39	MAR 05	28.95	APR 30	27.43	JUN 18	27.61	AUG 06	27.95
WATER Y	EAR 1990	HIGHEST	27.43	APR 30. 199	90	LOWEST 28.95	MAR 05	1990			



## MATHEWS COUNTY

372545076240101. Local number, 59H 1.

LOCATION.--Lat 37°25'45", long 76°24'01", Hydrologic Unit 02080102, 0.5 mi south of the intersection of State Highway 617 and private dirt road at the shore line of Greenmansion Cove at North and 0.7 mi southeast of the intersection of State Highways 14 and 617. Owner: G. T. Abernathy.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled flowing water well, diameter 4 in., depth 568 ft, depth of screen unknown.

INSTRUMENTATION. -- Semiannual measurement with manometer by USGS personnel. Prior to June 15, 1990, annual measurement with manometer.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1950 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.70 ft above land-surface datum, Feb. 12, 1980; lowest measured, 1.00 ft above land-surface datum, Jan. 1, 1950.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

DATE WATER LEVEL
MAR 16 2.65

NOTE. -- Flowing well; reading is above land-surface datum.

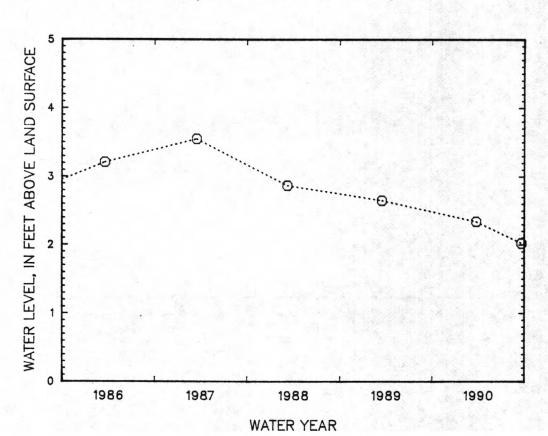
WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 23 2.34 SEP 18 2.02

NOTE. -- Flowing well; reading is above land-surface datum.

WATER YEAR 1990 HIGHEST 2.34 MAR 23, 1990 LOWEST 2.02 SEP 18, 1990



## MIDDLESEX COUNTY

373809076342501. Local number, 58K 1 SOW 031.

LOCATION.--Lat 37°38'09", long 76°34'25", Hydrologic Unit 02080104, 500 ft southeast of intersection of State Highways 227 and 602 in Urbanna. Owner: Town of Urbanna.

AQUIFER. -- Sand of undifferentiated Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 552 ft, screen depth unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Jan. 25, 1979, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to Jan. 25, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

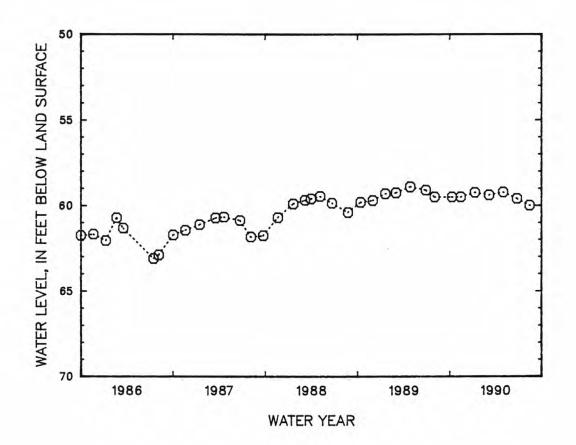
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 44.33 ft below land-surface datum, May 16, 1970; lowest measured, 63.12 ft below land-surface datum, July 16, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	59.50 59.50	JAN 09	59.24	MAR 06	59.39	MAY 01	59.22	JUN 25	59.60	AUG 14	60.00
WATER Y	EAR 1990	HIGHEST	59.22	MAY 01 199	90	LOWEST 60 00	AUG 14	1990			



## MIDDLESEX COUNTY

373802076340201. Local number, 58K 7.

LOCATION.--Lat 37°38'02", long 76°34'02", Hydrologic Unit 02080104, 1.9 mi northwest of the intersection of State Highways 33 and 227 and 0.7 mi north of intersection of State Highway 222 and private farm road near Urbanna. Owner: Strother and Alfred Scott (Rose Gill Farm).

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 6 in., depth 650 ft, screened 571 to 582 ft, 588 to 603 ft, 630 to 635 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD. -- November 1955 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 15.00 ft below land-surface datum, Nov. 29, 1955; lowest measured, 73.54 ft below land-surface datum, Mar. 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

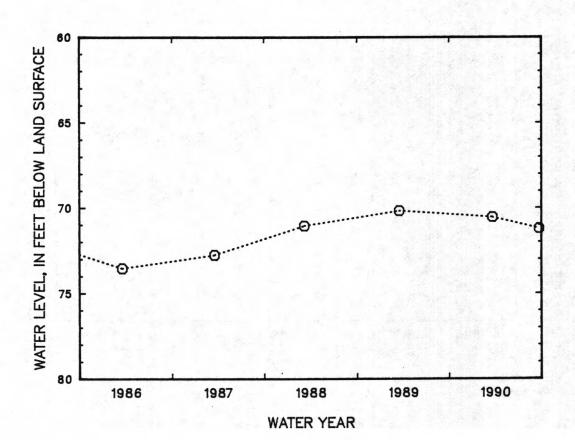
DATE WATER LEVEL MAR 17 70.17

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL DATE LEVEL

MAR 21 70.55 SEP 21 71.22

WATER YEAR 1990 HIGHEST 70.55 MAR 21, 1990 LOWEST 71.22 SEP 21, 1990



## MIDDLESEX COUNTY

373224076291001. Local number, 59J 3.

LOCATION.--Lat 37°32'24", long 76°29'10", Hydrologic Unit 02080102, 0.4 mi southeast of the intersection of State Highways 707 and 708 and 1.2 mi southwest of the intersection of State Highway 708 and private road near Grafton. Owner: Robert L. Beckwith (Woodstock Farm).

AQUIFER . -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 147 ft, diameter 2 in. from 147 to 506 ft, depth 506 ft, screened 493 to 503 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD. -- September 1963 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.00 ft below land-surface datum, Sept. 29, 1964; lowest measured, 66.29 ft below land-surface datum, Sept. 21, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

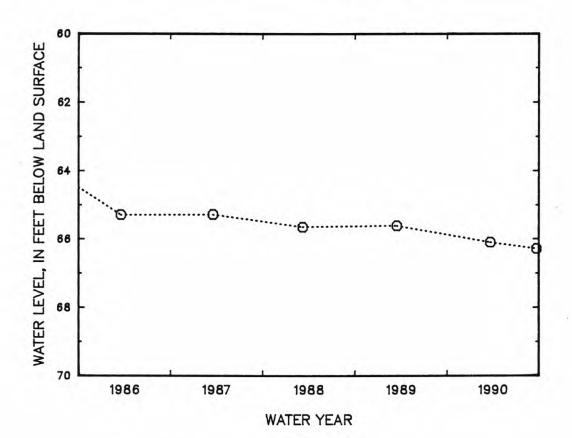
DATE WATER LEVEL
MAR 16 65.61

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER WATER
DATE LEVEL DATE LEVEL

MAR 21 66.10 SEP 21 66.29

WATER YEAR 1990 HIGHEST 66.10 MAR 21, 1990 LOWEST 66.29 SEP 21, 1990



#### MONTGOMERY COUNTY

370812080261901. Local number, 27F 2 SOW 019.

LOCATION.--Lat 37°08'12", long 80°26'19", Hydrologic Unit 05050001, off entrance road to Round Meadow Country Club, 400 ft north of State Highway 661, and 0.5 mi west of Christiansburg. Owner: Town of Christiansburg.

AQUIFER. -- Beekmantown Formation of early Ordovician age.

WELL CHARACTERISTICS .-- Drilled unused water well, diameter 10 in., depth 450 ft, length of casing unknown.

INSTRUMENTATION. -- Continuous strip-chart recorder. Prior to Apr. 5, 1969, one measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 1,970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft below land-surface datum prior to May 1, 1990; 0.43 ft above land-surface datum thereafter.

REMARKS.--Records provided by the Virginia Water Control Board. Lowest recorded water level, 7.39 ft, is a result of the Mexico earthquake of Sept. 19, 1985, but is not shown as the minimum of record since it is an earthquake-induced measurement. Prior to May 1, 1990, brief periods when water flowed over top of casing.

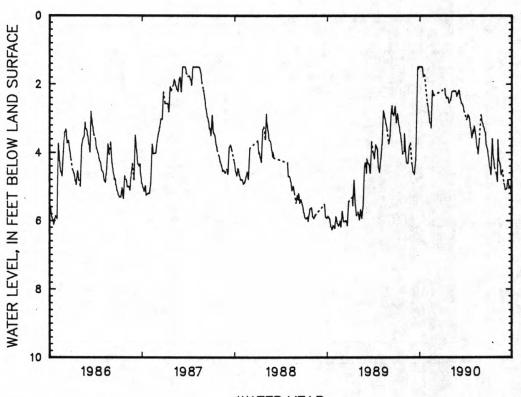
PERIOD OF RECORD.--July 1953, April 1969 to current year. Unpublished record available July 1953 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 1.50 ft below land-surface datum, several days in 1983, 1984, 1987, 1989, 1990, water flowing over top of casing; lowest recorded, 7.30 ft below land-surface datum, Dec. 5, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.50	2.78			2.23	2.19	3.03	3.23	3.10	4.42	4.85	5.09
10	1.50	3.13		2.30	2.20	2.40	2.90	3.46	3.23	4.65	4.24	5.06
15	1.78	3.28		2.41	2.20	2.55	2.96	3.83	3.38	3.60	4.33	4.81
20	1.74	2.18		2.39	2.20	2.60	3.27	4.04	3.77	4.14	4.65	5.05
25		2.33		2.55	2.35	2.78	3.57	3.62	3.87	4.45	4.53	5.00
EOM	2.56			2.47	2.28		3.35	2.89	4.13	4.61	4.92	5.18

WATER YEAR 1990 HIGHEST 1.50 OCT 01-12, 1989 LOWEST 5.18 SEPT 28-30, 1990



WATER YEAR

## NELSON COUNTY

374224078555601. Local number, 39K 1 SOW 006.

LOCATION.--Lat 37°42'24", long 78°55'56", Hydrologic Unit 02080203, 700 ft southeast of intersection of U.S. Highway 29 and State Highway 655 in Colleen. Owner: P. D. Payne.

AQUIFER. -- Lovingston (or Marshall?) Formation of Precambrian age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 275 ft, length of casing unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. June 25, 1974, to Oct. 3, 1985, occasional measurement with chalked tape. Prior to June 25, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.94 ft above land-surface datum.

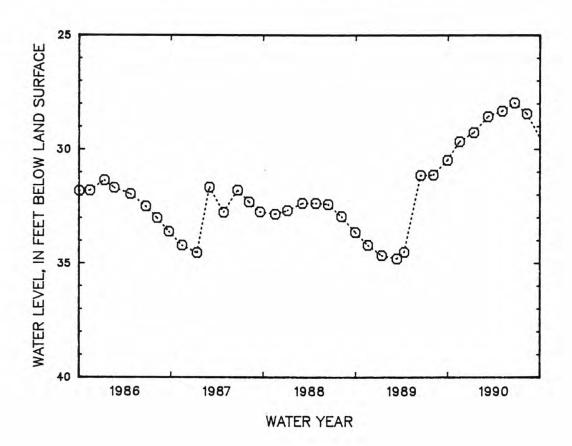
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- October 1967 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 27.08 ft below land-surface datum, June 29, 1973; lowest recorded, 35.66 ft below land-surface datum, Mar. 7, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16	29.66	JAN 11	29.26	MAR 08	28.56	MAY 03	28.32	JUN 21	27.96	AUG 09	28.44
WATED VI	FAP 1000	HICHEST	27 06	TIIN 21 100	00	TOWEST 20 66	NOV 16	1989			



## NEW KENT COUNTY

373111077104601. Local number, 53J 6.

LOCATION.--Lat 37°31'11", long 77°10'46", Hydrologic Unit 02080206, 0.18 mi south of State Highway 249 in Brookwood Manor Subdivision, 0.7 mi northeast of the intersection of Interstate Highway 64 and State Highway 249, and 2.95 mi southwest of Quinton. Owner: Thomas M. Brooks.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

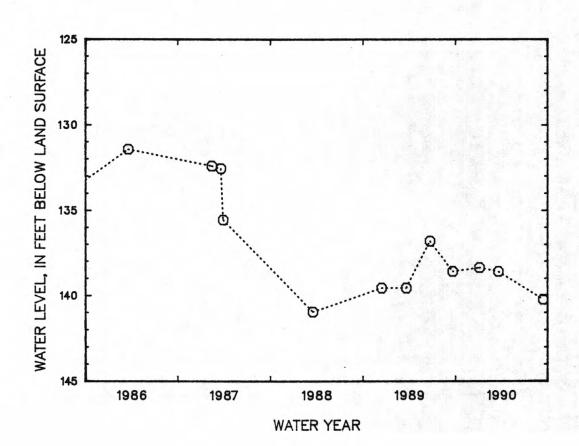
PERIOD OF RECORD. --November 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 129.91 ft below land-surface datum, Feb. 3, 1984; lowest measured, 140.95 ft below land-surface datum, Mar. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 04	138.37	MAR 20	138.60	SEP 13	140.23

WATER YEAR 1990 HIGHEST 138.37 JAN 04, 1990 LOWEST 140.23 SEP 13, 1990



## NEW KENT COUNTY

372619077021602. Local number, 54H 15.

LOCATION.--Lat 37°26'19", long 77°02'16", Hydrologic Unit 02080206, 0.45 mi southeast of the intersection of U.S. Highway 60 and State Highway 155 at Providence Forge Presbyterian Church in Providence Forge. Owner: Providence Forge Presbyterian Church.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled recharge water well, diameter 4 in., depth 283 ft, screened 263 to 283 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

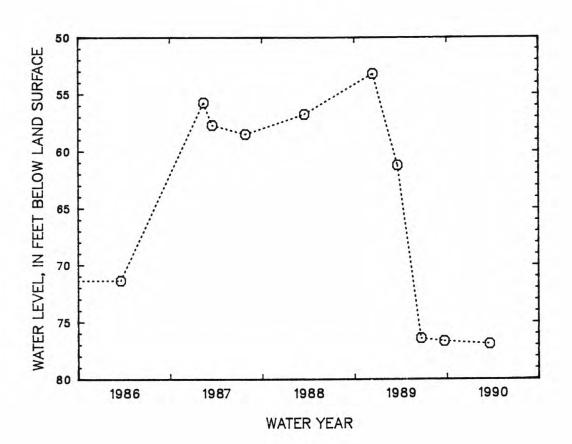
REMARKS. -- Water levels may be affected by recharge activities from local heat pump.

PERIOD OF RECORD.--December 1984 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 53.20 ft below land-surface datum, Dec. 13, 1988; lowest measured, 76.93 ft below land-surface datum, Mar. 19, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE WATER LEVEL
MAR 19 76.93



WATER YEAR 1990

## NEW KENT COUNTY

373421077012501. Local number, 54J 3.

LOCATION.--Lat 37°34'00", long 77°01'25", Hydrologic Unit 02080106, 0.8 mi northwest of the intersection of State Highway 608 and a private dirt road, 2.6 mi northwest of the intersection of State Highways 249 and 608, and 4.8 mi southeast of Tunstall. Owner: U.S. Department of the Navy.

AQUIFER. -- Sand of Eocene to Miocene age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 125 ft, screen depth unknown.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

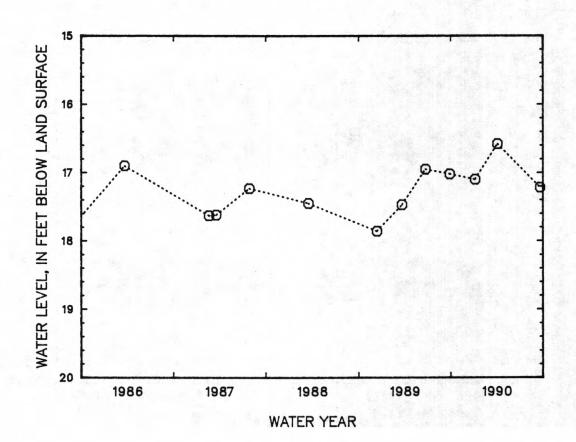
DATUM.--Elevation of land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

PERIOD OF RECORD. -- November 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 16.23 ft below land-surface datum, Mar. 30, 1984; lowest measured, 17.86 ft below land-surface datum, Dec. 13, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	JAN 05	17.10	APR 03	16.58	SEP 19	17.22
HIGHEST	16.58	APR 03,	1990	LOWEST	17.22 SEP 1	9, 1990



# GROUND-WATER LEVELS NEW KENT COUNTY

372428076561501. Local number, 55H 1 SOW 017.

LOCATION.--Lat 37°24'28", long 76°56'15", Hydrologic Unit 02080206, at city of Newport News pump station, 500 ft upstream from Walkers Dam, and 0.6 mi southeast of Walkers. Owner: City of Newport News.

AQUIFER. -- Middle Potomac and Upper Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 145 ft, diameter 4 in. from 145 to 630 ft, depth 630 ft, screened 252 to 257 ft, 339 to 344 ft, 439 to 444 ft, 615 to 625 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Apr. 5, 1979, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Apr. 5, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.7 ft above land-surface datum.

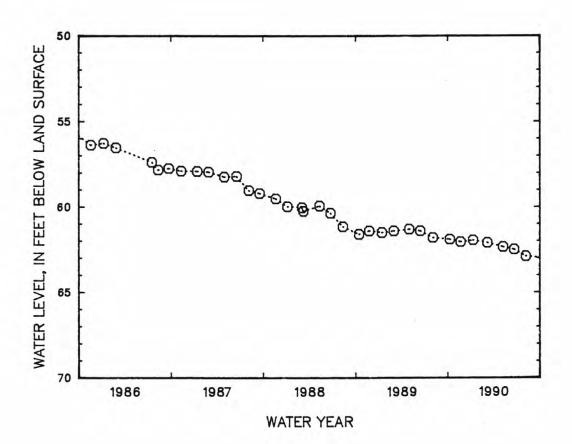
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 30.24 ft below land-surface datum, Apr. 10, 1969; lowest measured, 62.90 ft below land-surface datum, Aug. 6, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09 NOV 21	61.90 62.05	JAN 09	61.95	MAR 07	62.10	MAY 08	62.35	JUN 21	62.50	AUG 06	62.90
WATER Y	EAR 1990	HIGHEST	61.90	OCT 09 19	RQ	LOWEST 62 90	AUG 06	1990			



## NEW KENT COUNTY

372539076593401. Local number, 55H 3.

LOCATION.--Lat 37°25'39", long 76°59'36", Hydrologic Unit 02080206, 0.2 mi southwest of U.S. Highway 60, 2.8 mi east of Providence Forge. Owner: Virginia Department of Forestry.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 326 ft, screened 278 to 303 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft below land-surface datum.

REMARKS. -- Water levels may be affected by seasonal pumping of well.

PERIOD OF RECORD. --December 1972, December 1974, October 1983 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 46.90 ft below land-surface datum, Dec. 3, 1974; lowest measured, 86.89 ft below land-surface datum, July 31, 1987.

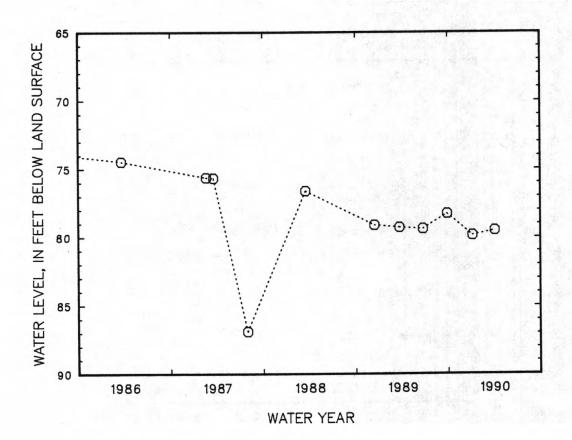
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

	WATER		WATER
DATE	LEVEL	DATE	LEVEL
JAN 05	79 86	APR 03	79 50

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 79.50 APR 03, 1990

LOWEST 79.86 JAN 05, 1990



## NEW KENT COUNTY

373024076542201. Local number, 55J 6.

LOCATION.--Lat 37°30'24", long 76°54'22", Hydrologic Unit 02080106, 0.25 mi north of State Highway 249, 4.3 mi east of New Kent Courthouse. Owner: Chad Brunskole.

AQUIFER . -- Aquia aquifer of Paleocene age.

WATER YEAR 1990

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 275 ft, screened 265 to 275 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.38 ft above land-surface datum.

PERIOD OF RECORD. -- December 1972, April 1984 to March 1986, March 1988 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 114.10 ft below land-surface datum, Dec. 7, 1972; lowest measured, 124.98 ft below land-surface datum, Dec. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE		WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
J	AN 04	123.16	MAR 19	123.29	SEP 1	3 123.71
HIGHEST	123.16	JAN 04,	1990	LOWEST	123.71 S	EP 13, 1990

110 RALEX LEVEL IN The Property of the Propert

## CITY OF NEWPORT NEWS

370645076350301. Local number, 58E 3.

LOCATION.--Lat 37°06'45", long 76°35'03", Hydrologic Unit 02080206, 4.45 mi southwest of the intersection of U.S. Highway 60 and Washington Boulevard off Mulberry Island Road at rifle range on Fort Eustis, 5.5 mi southwest of Lee Hall in the city of Newport News. Owner: U.S. Department of the Army.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 12 in. to 158 ft, diameter 4 in. from 140 to 470 ft, depth 470 ft, screened 455 to 470 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--December 1983 to July 1985, February 1987 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.15 ft below land-surface datum, Mar. 18, 1985; lowest measured, 93.00 ft below land-surface datum, Dec. 8, 1983.

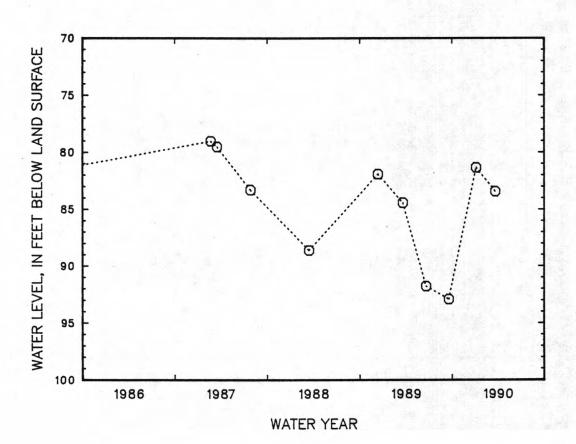
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 04	81.35	MAR 20	83.44

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 81.35 JAN 04, 1990

LOWEST 83.44 MAR 20, 1990



## CITY OF NEWPORT NEWS

371027076335601. Local number, 58F 1 SOW 002.

LOCATION.--Lat 37°10'27", long 76°33'56", Hydrologic Unit 02080206, on shore of Lee Hall Reservoir, 0.15 mi north of intersection of State Highway 105 and U.S. Highway 60, and 0.65 mi northeast of Fort Eustis in Newport News. Owner: City of Newport News.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 431.3 ft, diameter 8 in. from 431.3 to 443 ft, diameter 6 in. from 443 to 497 ft, depth 497 ft, screened 476 to 493 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

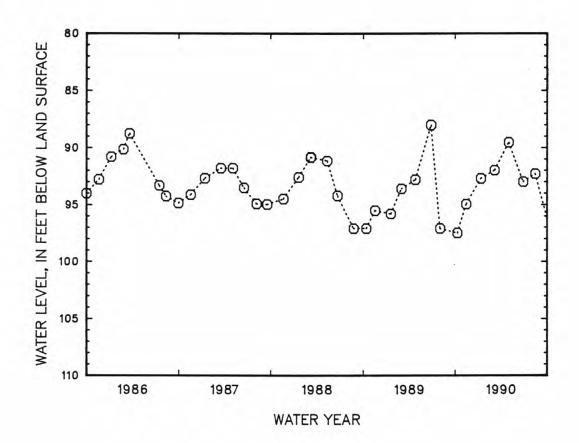
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--January 1968 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.76 ft below land-surface datum, May 10, 1969; lowest measured, 97.50 ft below land-surface datum, Oct. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	97.50 94.95	JAN 11	92.70	MAR 06	91.98	MAY 01	89.53	JUN 27	93.00	AUG 14	92.30
WATER Y	EAR 1990	HIGHE	ST 89.53	MAY 01. 1	990	LOWEST 97	.50 OCT 1	0. 1989			



371208076341101. Local number, 58F 50 SOW 171A.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,236 ft, screened 1,205 to 1,215 ft. INSTRUMENTATION.--Digital recorder--60-minute punch.

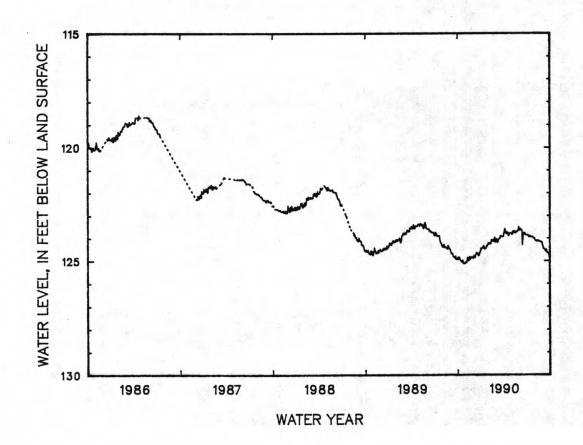
DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 117.05 ft below land-surface datum, Mar. 20, 1985; lowest recorded, 125.12 ft below land-surface datum, Oct. 24, 25, 31, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.88	125.07	124.79	124.45	124.23	124.08	123.59	123.82	123.58	123.86	124.11	124.47
10	124.95	124.86	124.77	124.39	124.19	124.11	123.79	123.75	123.63	123.94	124.14	124.51
15	125.01	124.96	124.65	124.47	124.10	124.01	123.80	123.76	124.02	123.91	124.12	124.57
20	125.02	124.93	124.72	124.46	124.08	123.90	123.89	123.73	123.76	123.95	124.13	124.63
25	125.12	124.87	124.75	124.37	124.06	123.92	123.78	123.69	123.82	123.96	124.16	124.67
EOM	125.12	124.85	124.56	124.23	124.17	123.87	123.77	123.57	123.86	123.99	124.23	124.85
WATER	YEAR 1990	нто	GHEST 12	3 57 MAY	31 1990	T.OW	EST 125	12 OCT 2	4 25 31	1989		



199

## CITY OF NEWPORT NEWS

371208076341102. Local number, 58F 51 SOW 171B.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 851 ft, screened 820 to 830 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

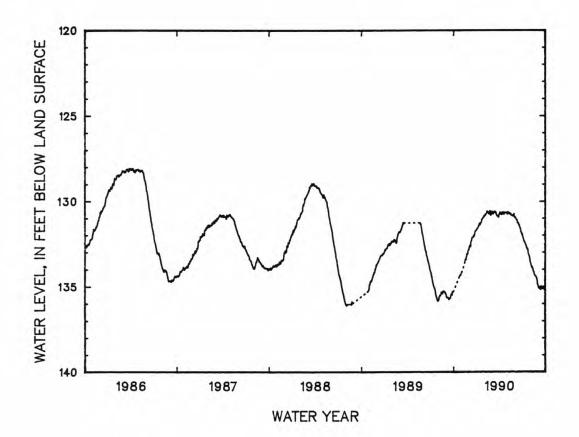
DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 126.35 ft below land-surface datum, Mar. 23-25, 1985; lowest recorded, 136.10 ft below land-surface datum, Aug. 4, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			132.59	131.55	130.78	130.66	130.67	130.63	130.99	132.14	133.73	135.07
10			132.32	131.38	130.59	130.61	130.73	130.66	131.09	132.39	133.86	135.13
15		133.58	132.12	131.34	130.63	130.62	130.63	130.75	131.26	132.55	134.13	134.99
20		133.39	132.00	131.21	130.71	130.72	130.74	130.83	131.48	132.76	134.35	135.11
25	134.39	133.09	131.84	130.98	130.79	130.87	130.66	130.87	131.75	133.03	134.45	135.14
EOM		132.86	131.67	130.87	130.71	130.79	130.64	130.90	131.95	133.36	134.84	135.18
WATER	YEAR 1990	HI	GHEST 130	0.59 FEB	10, 1990	LOW	EST 135.	18 SEP 30	0, 1990			



371208076341103. Local number, 58F 52 SOW 171C.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 537 ft, screened 527 to 537 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

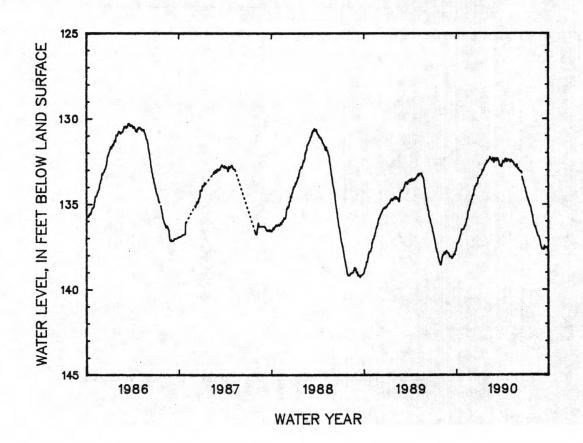
DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 128.12 ft below land-surface datum, Mar. 23, 1985; lowest recorded, 139.28 ft below land-surface datum, Sept. 16, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	137.30	136.24	134.45	133.29	132.42	132.36	132.48	132.43	132.97	134.32	136.20	137.65
10	137.20	135.88	134.16	133.10	132.23	132.31	132.50	132.47	133.04	134.63	136.32	137.63
15	136.90	135.59	133.96	133.03	132.34	132.37	132.34	132.58	133.10	134.82	136.62	137.46
20	136.61	135.28	133.81	132.86	132.41	132.61	132.50	132.71	133.49	135.07	136.86	137.55
25	136.50	135.04	133.63	132.66	132.51	132.72	132.40	132.81	133.83	135.37	137.01	137.57
EOM	136.40	134.73	133.43	132.53	132.42	132.68	132.42	132.86	134.04	135.80	137.41	137.64
WATER	VEAR 1990	. шт	CHEST 13	12 FFR	10 1000	TOW	FCT 137	68 SED 1	2 1000			



371208076341104. Local number, 58F 53 SOW 171D.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 343 ft, screened 333 to 343 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

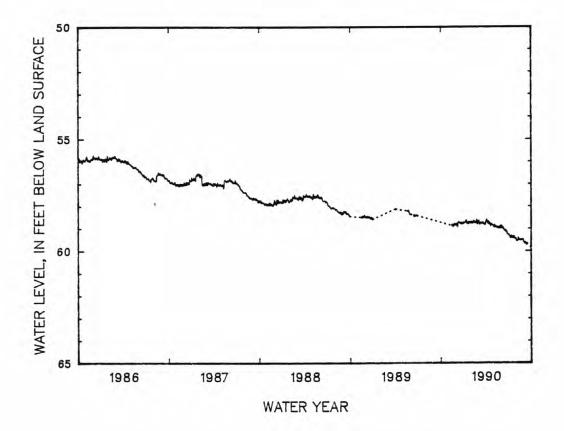
DATUM.--Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD. -- July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 55.18 ft below land-surface datum, Feb. 2, 1985; lowest recorded, 59.85 ft below land-surface datum, Sept. 29, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			58.79	58.73	58.76	58.74	58.65	58.88	58.94	59.33	59.56	59.66
10			58.74	58.66	58.68	58.75	58.76	58.92	58.97	59.41	59.43	59.69
15		58.87	58.73	58.76	58.71	58.78	58.75	58.95	59.07	59.36	59.52	
20		58.87	58.74	58.79	58.73	58.73	58.88	58.99	59.13	59.43	59.53	
25		58.85	58.75	58.74	58.78	58.80	58.84	59.00	59.24	59.43	59.49	
EOM		58.84	58.77	58.75	58.72	58.72	58.86	58.95	59.28	59.46	59.59	59.83
WATER	YEAR 1990	HIG	HEST 58.	55 FEB 2	4, 1990	LOWEST	59.85	SEP 29,	1990			



371208076341105. Local number, 58F 54 SOW 171E.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 88 ft, screened 78 to 88 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

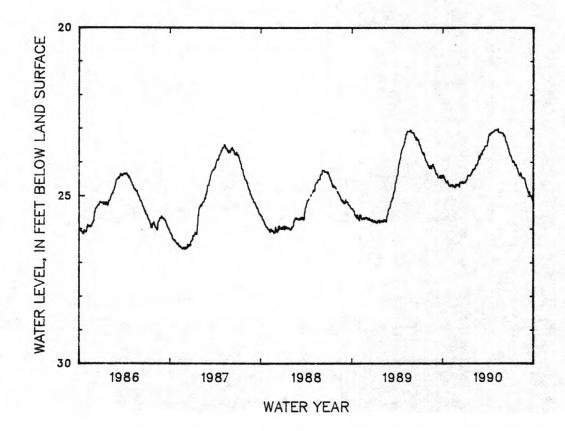
DATUM. --Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.92 ft below land-surface datum, May 10, 1990; lowest recorded, 26.59 ft below land-surface datum, Nov. 23, 24, 30, Dec. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.40	24.69	24.67	24.52	24.18	23.73	23.16	23.04	23.18	23.87	24.37	24.78
10	24.51	24.67	24.60	24.40	24.15	23.66	23.18	23.03	23.32	24.00	24.32	24.88
15	24.58	24.72	24.58	24.40	24.08	23.61	23.12	23.10	23.40	23.99	24.45	24.88
20	24.58	24.73	24.58	24.40	23.94	23.53	23.10	23.12	23.53	24.08	24.47	24.99
25	24.64	24.69	24.61	24.34	23.88	23.50	23.08	23.12	23.67	24.12	24.47	25.08
EOM	24.71	24.68	24.60	24.24	23.83	23.40	23.04	23.15	23.79	24.27	24.64	25.17



## CITY OF NEWPORT NEWS

371208076341106. Local number, 58F 55 SOW 171F.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi south of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

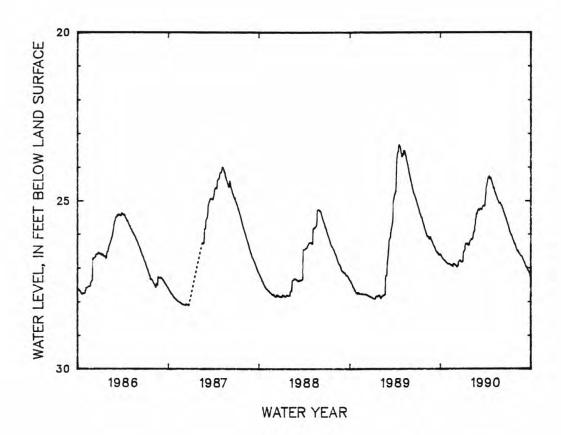
DATUM. -- Elevation of land-surface datum is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

PERIOD OF RECORD. -- June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.30 ft below land-surface datum, Apr. 18, 19, 1989; lowest recorded, 28.10 ft below land-surface datum, Dec. 10, 11, 22-24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.63	26.88	26.93	26.50	26.15	25.25	24.55	24.59	25.15	25.84	26.46	26.84
10	26.70	26.89	26.94	26.29	26.08	25.22	24.36	24.74	25.25	25.98	26.49	26.94
15	26.75	26.92	26.82	26.29	25.90	25.25	24.26	24.86	25.36	26.04	26.57	26.99
20	26.77	26.93	26.76	26.30	25.54	25.16	24.33	24.97	25.48	26.15	26.63	27.09
25	26.82	26.88	26.81	26.32	25.38	25.14	24.38	25.07	25.60	26.24	26.64	27.16
EOM	26.86	26.90	26.81	26.17	25.29	24.98	24.51	25.08	25.72	26.34	26.76	27.28
WATER	YEAR 1990	HIC	SHEST 24.	24 APR :	15-17, 199	O LC	WEST 27.	.28 SEP 3	0, 1990			



#### CITY OF NORFOLK

365223076122101. Local number, 61C 1.

LOCATION.--Lat 36°52'23", long 76°12'21", Hydrologic Unit 02080108, at Moores Bridge Filter Plant, 0.3 mi east of intersection of State Highway 165 and U.S. Highway 13 in Norfolk. Owner: City of Norfolk.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 6 in., depth 970 ft, screened 900 to 960 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: Inner edge of manhole at land-surface datum. Prior to Oct. 29, 1987, measuring point at top of casing, 3.15 ft above land-surface datum.

REMARKS. -- Water level affected by pumping and recharge operations in nearby wells May 18, 1971, to Nov. 5, 1973.

PERIOD OF RECORD. -- January 1968 to June 1990 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.70 ft below land-surface datum, Feb. 17, 1968; lowest measured, 59.61 ft below land-surface datum, Mar. 22, 1990.

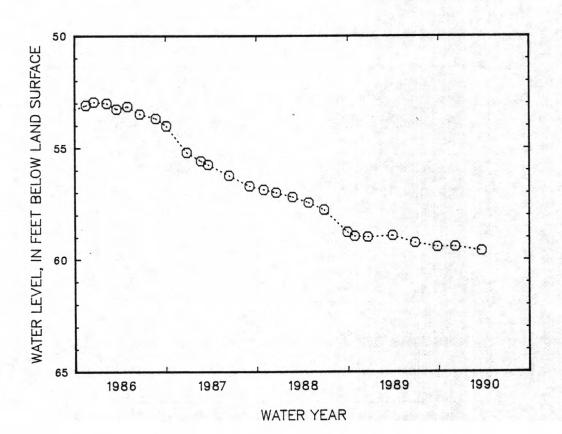
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

	WATER		WATER	
DATE	LEVEL	DATE	LEVEL	
DEC 06	59.42	MAR 22	59.61	

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 59.42 DEC 06, 1989

LOWEST 59.61 MAR 22, 1990



# CITY OF NORFOLK

365221076121302. Local number, 61C 2.

LOCATION.--Lat 36°52'21", long 76°12'15", Hydrologic Unit 02080108, at Moores Bridge Filter Plant, 0.3 mi east of intersection of State Highway 165 and U.S. Highway 13 in Norfolk. Owner: U.S. Geological Survey.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 1,000 ft, screened 900 to 990 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13.47 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 4.3 ft above land-surface datum.

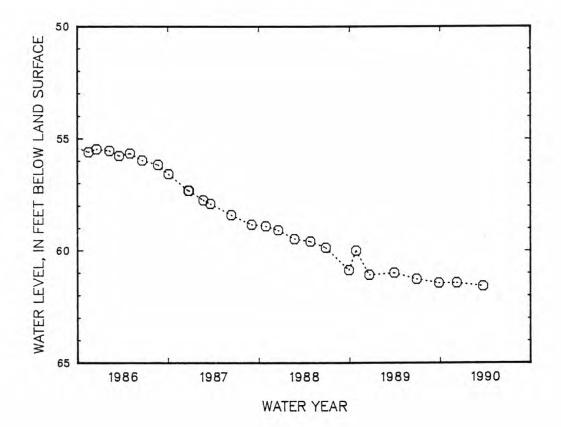
PERIOD OF RECORD.--October 1968 to February 1984, October 1985 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 15.8 ft below land-surface datum, Oct. 8, 1968; lowest measured, 61.58 ft below land-surface datum, Mar. 22, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

	WATER		WATER
DATE	LEVEL	DATE	LEVEL
DEC 06	61.43	MAR 22	61.58

PERIOD OCTOBER 1989 TO JUNE 1990 HIGHEST 61.43 DEC 06, 1989 LOWEST 61.58 MAR 22, 1990



WATER YEAR 1990

### CITY OF NORFOLK

365221076121303. Local number, 61C 3.

LOCATION.--Lat 36°52'21", long 76°12'15", Hydrologic Unit 02080108, at Moores Bridge Filter Plant, 0.3 mi east of intersection of State Highway 165 and U.S. Highway 13 in Norfolk. Owner: U.S. Geological Survey.

AQUIFER .-- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 991 ft, screened 900 to 980.7 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.22 ft above land-surface datum.

PERIOD OF RECORD. -- February 1969 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.30 ft below land-surface datum, Feb. 19, 1969; lowest measured, 57.45 ft below land-surface datum, Sept. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

D	ATE	WATER LEVEL	DAT	E	WATER LEVEL		DATE	WATER LEVEL
DE	C 06	56.56	MAR	22	57.42	S	EP 27	57.45
HIGHEST	56.56	DEC 06,	1989		LOWEST	57.45	SEP 2	7, 1990

45 LAND SURFACE 50 BELOW 55 FEET Z WATER LEVEL, 60 65 1990 1986 1987 1988 1989 WATER YEAR

## NORTHAMPTON COUNTY

371543076003401. Local number, 62G 15 SOW 121.

LOCATION.--Lat 37°15'43", long 76°00'34", Hydrologic Unit 02080110, 100 ft southwest of State Highway 642, 0.5 mi south of intersection of State Highways 184 and 642, and 0.7 mi southeast of Cape Charles. Owner: Brown and Root Corporation.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 190 ft, screened 180 to 190 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board.

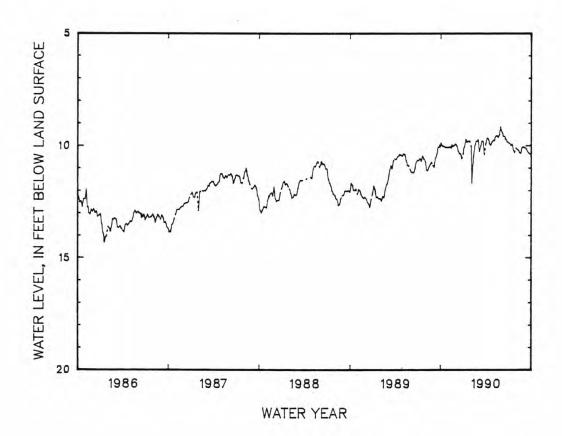
PERIOD OF RECORD. -- November 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 9.16 ft below land-surface datum, May 29, 30, 1990; lowest recorded, 14.31 ft below land-surface datum, Jan. 16, 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.96	10.07	10.01	10.04	11.16	10.25	9.66	9.77	9.41	9.89	10.17	10.08
10	10.02	10.04	10.22	9.70	10.50	10.03	9.68	9.58	9.57	9.98	10.20	10.13
15	10.03	9.97	10.35	9.83	10.01	9.81	9.91	9.55	9.59	9.94	10.31	10.25
20	10.07	10.02	10.35	9.80	9.80	9.79	9.97	9.61	9.70	10.19	10.33	10.32
25	10.07	9.98	10.57	9.79	9.80	10.39	9.84	9.51	9.82	10.30	10.08	10.36
EOM	10.07	9.92	10.36	10.01	9.73	9.91	9.75	9.28	9.86	10.10	10.05	10.45
EOM	10.07	9.92	10.36	10.01	9.73	9.91	9.75	9.28	9.86	10.10	10.05	10.45

WATER YEAR 1990 HIGHEST 9.16 MAY 29, 30, 1990 LOWEST 11.68 FEB 03, 1990



371307075583501. Local number, 63F 15 SOW 105A.

LOCATION.--Lat 37°13'07", 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 31.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelf, 1.1 ft above land-surface datum prior to July 21, 1987; 1.4 ft thereafter.

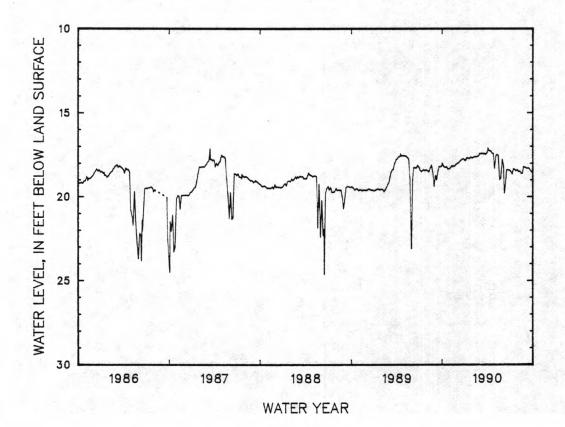
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 13.44 ft below land-surface datum, Apr. 12, 1982; lowest recorded, 24.62 ft below land-surface datum, June 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.10	18.26	17.99	17.80	17.64	17.43	17.21	17.61	18.20	18.50	18.50	18.29
10	18.21	18.15	17.91	17.67	17.60	17.40	17.26	17.50	19.70	18.65	18.49	18.30
15	18.25	18.16	17.84	17.70	17.62	17.44	17.28	17.52	18.91	18.33	18.60	18.29
20	18.21	18.18	17.77	17.70	17.60	17.41	17.40	19.01	18.40	18.38	18.59	18.40
25	18.33	18.09	17.73	17.63	17.55	17.47	17.41	18.90	18.41	18.45	18.21	18.50
EOM	18.32	18.01	17.78	17.68	17.43	17.37	18.30	17.78	18.42	18.40	18.24	18.59
WATER	YEAR 199	O HIG	HEST 1	7.10 APR	04, 1990	LOWES	T 19.81	JUN 08,	1990			



### NORTHAMPTON COUNTY

371307075583502. Local number, 63F 16 SOW 105C.

LOCATION.--Lat 37°13'07", long 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 285 ft, screened 275 to 285 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.16 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.1 ft above land-surface datum.

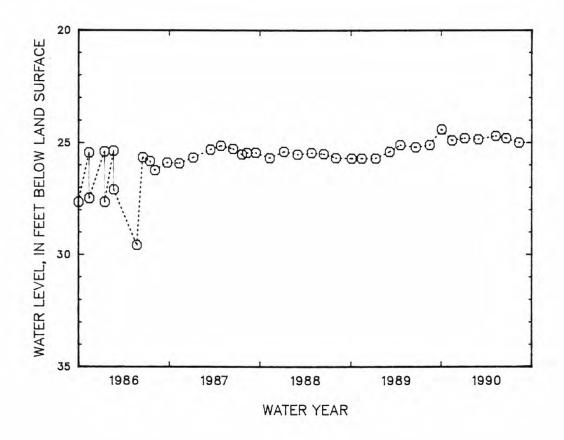
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.91 ft below land-surface datum, Jan. 9, 1979; lowest measured, 29.58 ft below land-surface datum, May 23, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	24.40 24.90	JAN 02	24.80	FEB 26	24,85	MAY 07	24.70	JUN 18	24.80	AUG 09	25.00
WATER Y	EAR 1990	HIGHEST	24.40	OCT 2. 1989	LOW	EST 25.00	AUG 09.	1990			



371307075583503. Local number, 63F 17 SOW 105B.

LOCATION.--Lat 37°13'07", long 75°58'35", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 196 ft, screened 186 to 196 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.5 ft above land-surface datum.

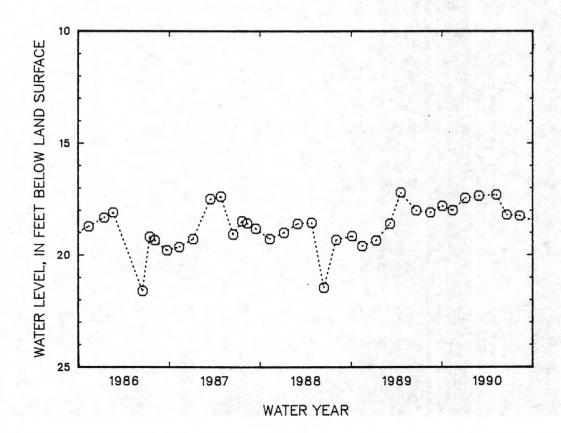
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.78 ft below land-surface datum, Apr. 25, 1984; lowest measured, 21.68 ft below land-surface datum, Feb. 11, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	17.80 18.00	JAN 02	17.45	FEB 26	17.35	MAY 07	17.30	JUN 18	18.20	AUG 09	18.25
WATER YE	EAR 1990	HIGHEST	17.30	MAY 07, 199	90 LC	WEST 18.25	AUG 09	, 1990			



371145075565901. Local number, 63F 25.

LOCATION.--Lat 37°11'45", long 75°56'59", Hydrologic Unit 02080110, 0.4 mi east of State Highway 600 and 0.9 mi northeast of the intersection of State Highways 600 and 646 at Townsend along Walls Landing Creek. Owner: U.S. Geological Survey.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 2 in., depth 7 ft, screened 4 to 7 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch. Prior to Nov. 13, 1987, bimonthly measurement with chalked tape by USGS personnel.

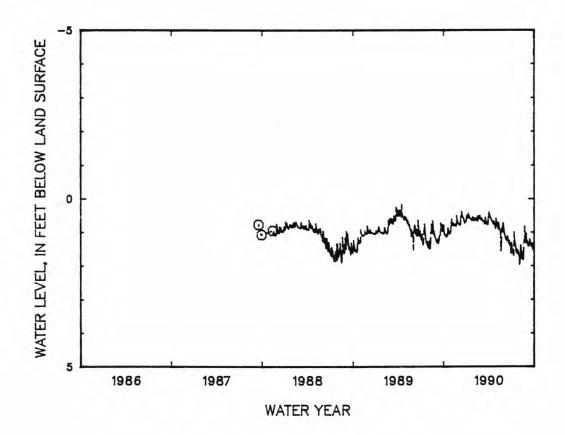
DATUM.--Elevation of land-surface datum is 12.38 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.03 ft above land-surface datum, Apr. 15, 1989; lowest recorded, 1.96 ft below land-surface datum, Aug. 4, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.03	.76	.77	. 57	.60	.61	.51	.79	1.08	1.60	1.90	1.35
10	1.09	.73	. 53	.49	. 64	.66	.60	. 88	1.22	1.68	1.49	1.32
15	1.10	.80	.49	. 57	.65	.74	. 67	.91	1.13	1.28	1.64	1.26
20	.88	. 80	. 57	. 62	.55	.64	.76	1.55	1.28	1.50	1.61	1.41
25	1.01	. 63	.73	. 63	. 58	.75	.79	.99	1.38	1.62	. 95	1.49
EOM	. 96	.74	. 66	.61	.61	. 56	. 59	. 87	1.63	1.66	1.16	1.32
WATER	YEAR 1990	HIG	HEST 0 26	TAN 01	MAD 31	APP 03	AUG 03 1	aan	IOWEST 1	96 AUG	1990	



371121075565001. Local number, 63F 29.
LOCATION.--Lat 37°11'21", long 75°56'50", Hydrologic Unit 02080110, 0.15 mi from the end of a private dirt road, 0.5 mi southeast of the intersection of State Highway 600 and a private dirt road, 0.5 mi northeast of the intersection of State Highway 600 and 646, and 0.7 mi northeast of Townsend. Owner: U.S. Geological Survey.

intersection of State Highway 500 and 545, and 0.7 mi northeast of lownsend. Owner. 5.3. Geological Sales, AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 9.5 ft, screened 6.5 to 9.5 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. Dec. 8, 1988, to July 20, 1990, digital recorder--60-minute punch. Prior to Dec. 8, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.8 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records available prior to October 1987 in files of

the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 0.41 ft below land-surface datum, Apr. 3, 1990; lowest measured, 5.26 ft below land-surface datum, Sept. 29, 1987.

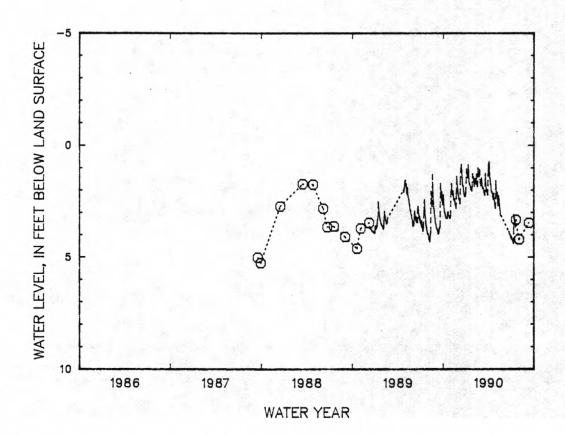
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JULY 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.83	1.99	2.44	1.44	1.50	1.62	1.25	2.27		4.22		
10	3.11	2.14	1.19	1.09	1.68	1.87	1.74	2.68		4.36		
15	3.25	2.45	1.21	1.71	1.83	2.19	2.08	2.71		3.33		
20	2.98	2.62	1.79	1.93	1.22	1.51	2.40	3.15				
25	3.16	1.55	2.24	1.86	1.52	2.05	2.51		3.97			
EOM	3.15	2.15	2.11	1.62	1.71	1.04	1.58		4.14			

## WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JULY TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 20	3.33	AUG 02	4.21	SEP 10	3.47

WATER YEAR 1990 HIGHEST 0.41 APR 03, 1990 LOWEST 4.39 JUL 11, 1990



### NORTHAMPTON COUNTY

371128075572101. Local number, 63F 30.
LOCATION.--Lat 37°11'28",long 75°57'21", Hydrologic Unit 02080110, 50 ft east of intersection of State Highway 600 and a private dirt road, 0.5 mi northeast of intersection of State Highways 600 and 646, and 0.75 mi northeast of Townsend. Owner: U.S. Geological Survey.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 15 ft, screened 12 to 15 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. Dec. 8, 1988, to July 20, 1990, digital recorder--60-minute punch. Prior to Dec. 8, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.55 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 7.74 ft below land-surface datum, Apr. 24-28, 1989; lowest measured, 11.81 ft below land-surface datum, Sept. 2, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JULY 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.26			8.68	8.42	8.15	8.27	8.33	8.74	9.08		
10	9.30			8.63	8.41	8.15	8.09	8.43	8.81	9.17		
15	9.33		9.13	8.48	8.44	8.19	8.03	8.49	8.87	9.24		
20	9.34		8.85	8.39	8.30	8.22	8.07	8.55	8.93			
25			8.72	8.32	8.22	8.38	8.14	8.63	8.99			
EOM			8.69	8.37	8.19	8.43	8.24	8.69	9.03			

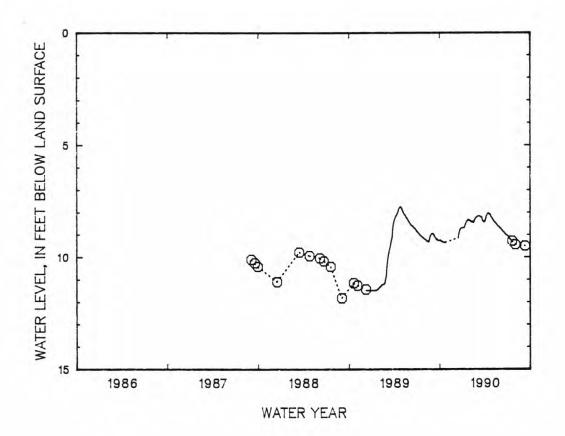
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JULY TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 20	9.28	AUG 02	9.44	SEP 10	9.50

WATER YEAR 1990

HIGHEST 8.02 APR 18, 1990

LOWEST 9.50 SEP 10, 1990



371136075580201. Local number, 63F 31.
LOCATION.--Lat 37°11'36", long 75°58'02", Hydrologic Unit 02080110, 200 ft southeast of the intersection of U.S.
Highway 13 and a private dirt road, 0.5 mi north of the intersection of U.S. Highway 13 and State Highway 646,
and 0.6 mi northwest of Townsend. Owner: U.S. Geological Survey.

and 0.6 mi northwest of Townsend. Owner: U.S. Geological Survey.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 12 ft, screened 9 to 12 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. Jan. 22, 1988, to June 21, 1990, digital recorder--60-minute punch. Prior to Jan. 22, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.79 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.8 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records prior to October 1987 available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 4.43 ft below land-surface datum, Apr. 4, 1990; lowest recorded, 9.12 ft below land-surface datum, Jan. 10-14, Feb. 18-21, 1989.

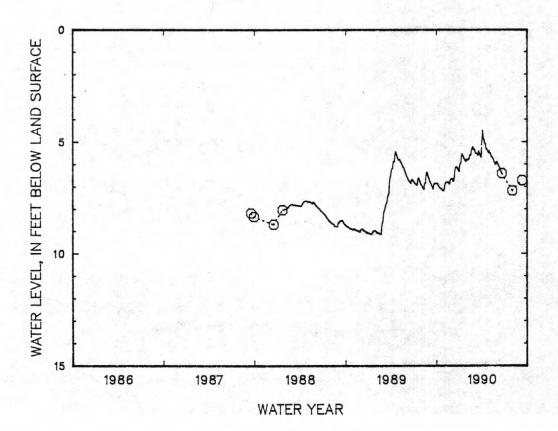
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.86	6.88	6.65	5.96	5.77	5.41	4.54	5.49	6.00			
10	6.95	6.79	6.72	5.65	5.73	5.50	4.87	5.64	6.10			
15	7.05	6.79	6.25	5.61	5.58	5.58	5.06	5.72	6.25			
20	7.09	6.83	6.11	5.74	5.31	5.41	5.30	5.85	6.38			
25	7.17	6.73	6.16	5.82	5.29	5.56	5.40	5.99				
EOM	7.18	6.64	6.30	5.80	5.29	5.49	5.48	5.89				

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, JUNE TO SEPTEMBER 1990

	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
JUN 21	6.40	AUG 02	7.18	SEP 10	6.71

WATER YEAR 1990 HIGHEST 4.43 APR 04, 1990 LOWEST 7.18 OCT 30, 31, 1989, AUG 02, 1990



### NORTHAMPTON COUNTY

371136075574801. Local number, 63F 32.

LOCATION.--Lat 37°11'36", long 75°57'48", Hydrologic Unit 02080110, 0.3 mi southeast of intersection of U.S. Highway 13 and a private dirt road, 0.5 mi north of intersection of U.S. Highway 13 and State Highway 646, and 0.6 mi northwest of Townsend. Owner: U.S. Geological Survey.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 12 ft, screened 9 to 12 ft.

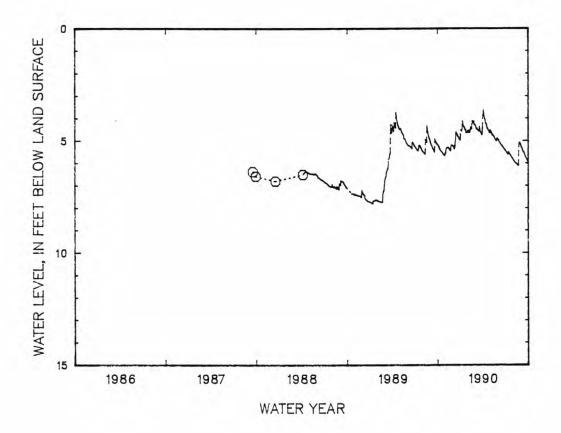
INSTRUMENTATION. -- Digital recorder -- 60-minute punch. Prior to Apr. 6, 1988, bimonthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 28.95 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.4 ft above land-surface datum.

PERIOD OF RECORD,--September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.33 ft below land-surface datum, Apr. 3, 1990; lowest recorded, 7.80 ft below land-surface datum, Jan. 11, 12, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES SEP DAY OCT NOV DEC FEB APR MAY JUN JUL AUG JAN MAR 5.38 5.29 5.31 5.39 5.02 5.12 5.51 5.59 5.31 5.24 5.92 5.26 4.55 4.62 4 41 3.76 4.61 5.47 4.50 5.36 5.25 5.98 10 4.14 4.53 4.02 4.76 5.21 5.27 5.46 4.47 4.23 4.80 5.56 6.03 15 4.62 4.36 4.45 4.46 20 5.53 4.75 4.50 4.19 5.63 6.10 5.73 4.90 25 4.65 5.84 5.63 5.23 4.83 4.62 4.26 5.01 5.36 5.73 5.11 5.66 5.20 4.55 5.42 5.83 5.18 4.97 4.61 4.93 4 . 2.8 4.44 WATER YEAR 1990 HIGHEST 3.33 APR 03, 1990 LOWEST 6.10 AUG 20-23, 1990



### NORTHAMPTON COUNTY

371145075580301. Local number, 63F 33.

LOCATION.--Lat 37°11'45", long 75°58'03", Hydrologic Unit 02080110, 100 ft east of U.S. Highway 13, 0.6 mi north of the intersection of U.S. Highway 13 and State Highway 646, and 0.9 mi northwest of Townsend. Owner: U.S. Geological Survey.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 2 in., depth 13 ft, screened 10 to 13 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. Jan. 22, 1988, to Aug. 15, 1989, digital recorder--60-minute punch and bimonthly measurement with chalked tape. Prior to Jan. 22, 1988, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 29.03 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 2.3 ft above land-surface datum.

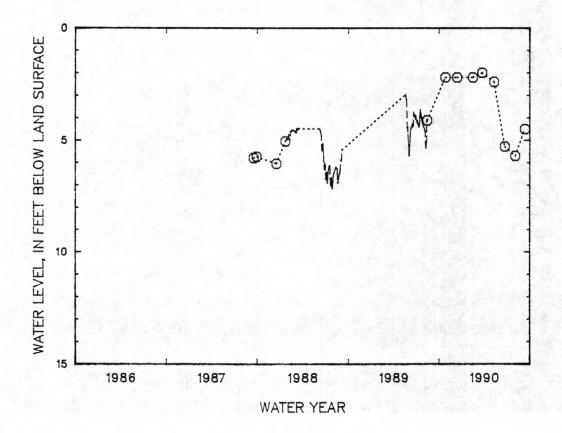
REMARKS. -- Water levels affected by local pumpage.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.99 ft below land-surface datum, Mar. 22, 1990; lowest recorded, 7.16 ft below land-surface datum, July 28, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26 DEC 12	2.20	FEB 13 MAR 22	2.20	MAY 09	2.40	JUN 21	5.28	AUG 02	5.70	SEP 10	4.50
WATER Y	EAR 1990	HIGHEST	1.99	MAR 22. 1990	LOWES	T 5.70	AUG 02. 1	.990			



### NORTHAMPTON COUNTY

371307075583601. Local number, 63F 34.

LOCATION.--Lat 37°13'07", long 75°58'36", Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.35 mi west of intersection of U.S. Highway 13 and State Highway 644, and 1.55 mi northwest of Capeville. Owner: U.S. Geological Survey.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 2 in., depth 13 ft, screened 10 to 13 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Water Control Board personnel.

Aug. 16 to Sept. 30, 1989, bimonthly measurement with chalked tape by USGS personnel. Jan. 22, 1988, to Aug 16, 1989, digital recorder--60-minute punch. Prior to Jan. 22, 1988, bimonthly measurement with chalked tape.

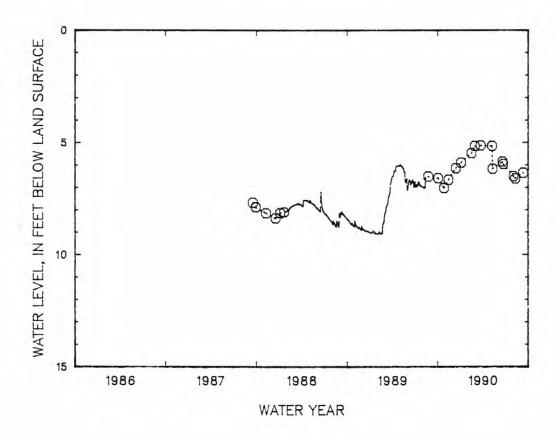
DATUM. -- Elevation of land-surface datum is 31.15 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.85 ft above land-surface datum.

PERIOD OF RECORD. -- September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.13 ft below land-surface datum, Mar. 22, 1990; lowest recorded, 9.08 ft below land-surface datum, Feb. 4, 5, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 26 NOV 13	6.58 7.02 6.65	DEC 12 JAN 02 FEB 13	6.14 5.89 5.47	FEB 26 MAR 22 MAY 07	5.15 5.13 5.15	MAY 09 JUN 18 21	6.17 5.85 5.96	AUG 02 09	6.50 6.60	SEP 10	6.35
	EAR 1990	HIGHEST	5.13	MAR 22, 1990	LOWE			1989			



### NORTHAMPTON COUNTY

371301075584401. Local number, 63F 35.

LOCATION.--Lat 37°13'01", long 75°58'44", Hydrologic Unit 02080109, 0.1 mi south of intersection of State Highway 644 and a private dirt road, 0.45 mi west of intersection of U.S. Highway 13 and State Highway 644, and 1.5 mi northwest of Capeville. Owner: U.S. Geological Survey.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 2 in., depth 13 ft, screened 10 to 13 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by USGS personnel. Jan. 22 to Dec. 8, 1988, digital recorder--60-minute punch. Prior to Jan. 22, 1988, bimonthly measurement with chalked tape.

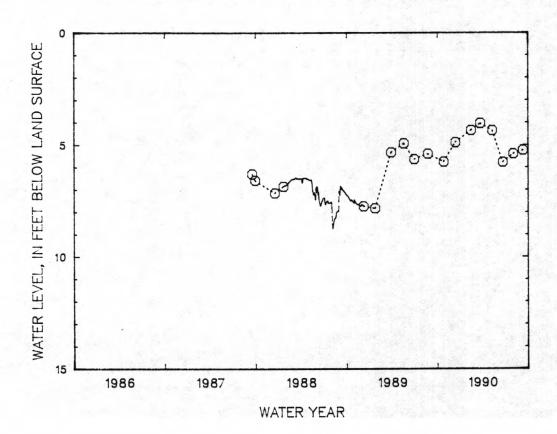
DATUM.--Elevation of land-surface datum is 29.50 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing 1.7 ft above land-surface datum.

PERIOD OF RECORD. -- September 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.04 ft below land-surface datum, Mar. 22, 1990; lowest recorded, 8.74 ft below land-surface datum, Aug. 6, 7, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26 DEC 12	5.76 4.89	FEB 13 MAR 22	4.35	MAY 09	4.36	JUN 21	5.78	AUG 02	5.40	SEP 10	5.24
WATER YE	FAR 1990	HIGHEST	4 04	MAP 22 100	) IOWE	ST 5 78	TIIN 21 1	i aan			



## NORTHAMPTON COUNTY

371125075570205. Local number, 63F 49.

LOCATION.--Lat 37°11'25", long 75°57'02", Hydrologic Unit 02080110, 0.35 mi southeast of the intersection of State Highway 600 and a private dirt road, 0.5 mi northeast of the intersection of State Highways 600 and 646, and 0.6 mi northeast of Townsend. Owner: U.S. Geological Survey.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 17 ft, screened 14 to 17 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

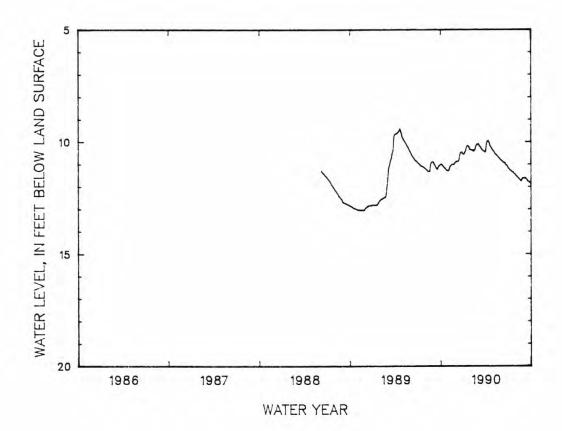
DATUM.--Elevation of land-surface datum is 27.35 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.8 ft above land-surface datum.

PERIOD OF RECORD . -- June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 9.41 ft below land-surface datum, Apr. 19-22, 1989; lowest measured, 13.05 ft below land-surface datum, Nov. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.01	11.22	10.87	10.50	10.38	10.13	10.09	10.43	10.84	11.21	11.54	11.61
10	11.06	11.07	10.87	10.40	10.37	10.22	9.96	10.53	10.89	11.28	11.60	11.64
15	11.13	11.03	10.75	10.20	10.38	10.32	10.02	10.60	10.94	11.32	11.66	11.69
20	11.19	11.01	10.49	10.19	10.20	10.37	10.19	10.65	10.99	11.35	11.73	11.76
25	11.26	11.00	10.45	10.25	10.12	10.41	10.29	10.73	11.06	11.41	11.72	11.81
EOM	11.29	10.92	10.54	10.36	10.10	10.45	10.38	10.80	11.15	11.47	11.62	11.86
WATER	YEAR 1990	HIG	HEST 9.93	APR 10,	11, 1990	LO	WEST 11.	86 SEP 3	0, 1990			



371709075560801. Local number, 63G 15 SOW 104C.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 310 ft, screened 300 to 310 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.24 ft above land-surface datum prior to Nov. 10, 1986; 1.75 ft thereafter.

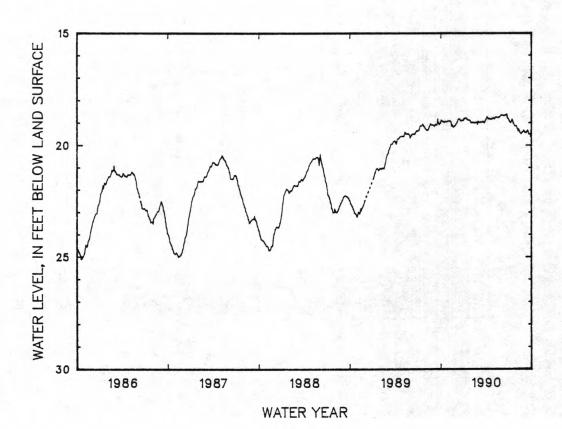
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.38 ft below land-surface datum, Apr. 10, 1979; lowest measured, 27.96 ft below land-surface datum, Oct. 8, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.92	18.92	19.00	18.82	18.98	18.98	18.74	18.82	18.66	18.95	19.25	19.43
10	18.95	18.94	18.85	18.78	19.00	18.97	18.82	18.75	18.68	18.99	19.30	19.43
15	18.97	19.10	18.84	18.84	19.00	18.97	18.81	18.75	18.67	18.86	19.42	19.35
20	18.95	19.20	18.91	18.88	18.99	18.94	18.85	18.77	18.66	19.03	19.50	19.50
25	18.95	19.16	18.90	18.88	18.98	19.00	18.83	18.74	18.78	19.14	19.43	19.50
EOM	18.92	19.09	18.89	19.00	18.95	18.87	18.78	18.66	18.83	19.15	19.35	19.59
WATER	YEAR 199	0 ні	GHEST 18	3.62 JUN	23. 24.	1990	LOWEST	19.60 SEE	28. 1990			



### NORTHAMPTON COUNTY

371709075560802. Local number, 63G 16 SOW 104B.

LOCATION.--Lat 37°17'09", 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Feb. 29, 1988; 0.9 ft thereafter.

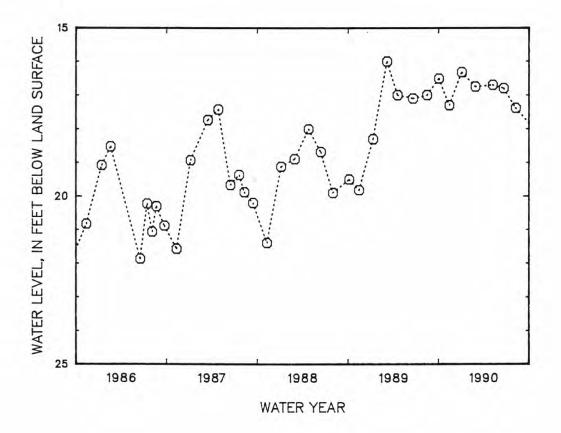
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.93 ft below land-surface datum, May 25, 1983; lowest measured, 23.47 ft below land-surface datum, Oct. 8, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	16.51 17.30	JAN 02	16.32	FEB 26	16.75	MAY 07	16.70	JUN 20	16.80	AUG 08	17.38
WATER Y	EAR 1990	HIGHEST	16.32	JAN 02. 199	90	LOWEST 17.38	AUG 08	. 1990			



371709075560803. Local number, 63G 17 SOW 104A.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.05 ft above land-surface datum prior to Feb. 29, 1988; 0.5 ft thereafter.

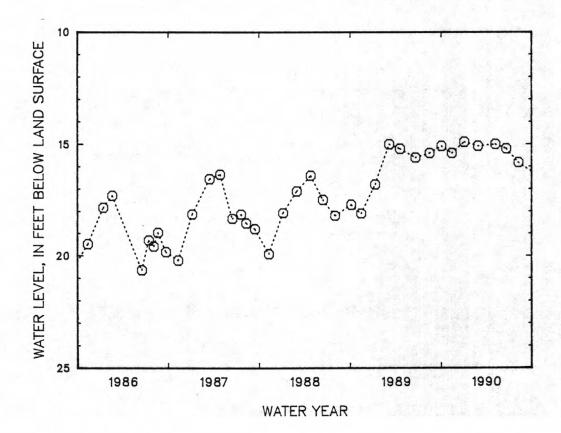
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 14.45 ft below land-surface datum, Apr. 13, 1978; lowest measured, 21.99 ft below land-surface datum, Oct. 8, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	15.08 15.40	JAN 02	14.90	FEB 26	15.08	MAY 07	15.00	JUN 20	15.20	AUG 08	15.82
WATER Y	EAR 1990	HIGHEST	14.90	JAN 02, 199	90	LOWEST 15.82	AUG 08,	1990			



### NORTHAMPTON COUNTY

371735075572601. Local number, 63G 20 SOW 075.

LOCATION.--Lat 37°17'35", long 75°57'26", Hydrologic Unit 02080101, at Kane Miller Corporation plant 0.4 mi north of State Highway 639, 0.7 mi northwest of intersection of State Highways 637 and 639, and 0.9 mi east of Cheriton. Owner: Kane Miller Corporation.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 20 in. to 56 ft, diameter 10 in. from 56 to 240 ft, depth 240 ft, screened 56 to 61 ft, 95 to 100 ft, 160 to 165 ft, 188 to 193 ft, 210 to 215 ft, 235 to 240 ft.

INSTRUMENTATION .-- Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.6 ft above land-surface datum.

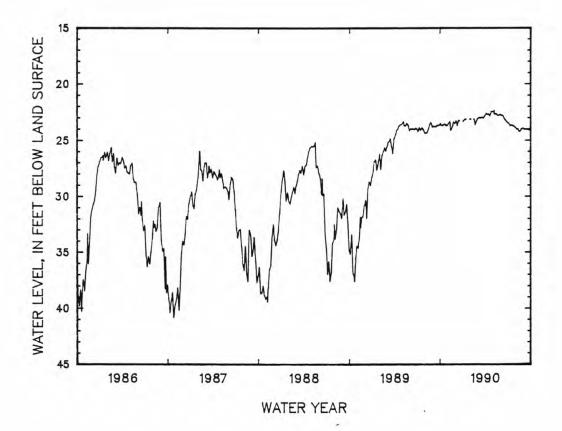
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1974 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.37 ft below land-surface datum, May 6, 1990; lowest recorded, 85.57 ft below land-surface datum, Aug. 5, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.62	23.50	23.27	23.22		23.02	22.62	22.44	22.78	23.52	24.00	24.01
10	23.68	23.33	23.67	23.12		22.99	22.70	22.65	22.82	23.70	24.00	24.01
15	23.63	24.07	23.25		23.11	22.99	22.68	22.68	23.01	23.66	24.19	24.00
20	23.55	23.80			23.61	22.96	22.81	22.78	23.18	23.70	24.20	24.06
25	23.67	23.39			23.30	23.00	22.45	22.80	23.32	23.76	24.01	24.05
EOM	23.65	23.48			23.14	22.81	22.45	22.72	23.43	23.86	23.93	24.17
WATER	YEAR 199	о ні	GHEST 22	.37 MAY	06, 1990	LOWE	ST 24.20	AUG 16,	17, 20,	1990		



371709075560804. Local number, 63G 21 SOW 104S.

LOCATION.--Lat 37°17'09", long 75°56'08", Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 36 ft, screened 26 to 36 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum.

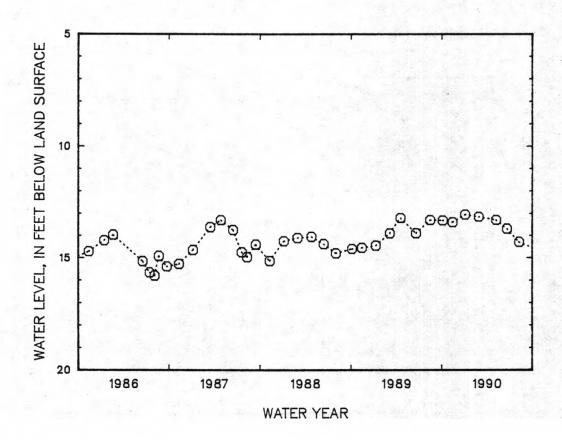
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.25 ft below land-surface datum, Nov. 23, 1979; lowest measured, 16.35 ft below land-surface datum, Nov. 15, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 13	13.32 13.40	JAN 02	13.05	FEB 26	13.15	MAY 07	13.30	JUN 20	13.70	AUG 08	14.30
WATER Y	EAR 1990	HIGHEST	13 05	JAN 02 199	90	LOWEST 14 30	AUG 08	1990			



### NORTHAMPTON COUNTY

371653075584801. Local number, 63G 22 SOW 111A.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 150 ft, screened 140 to 150 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Apr. 27, 1987; 1.60 ft Apr. 27, 1987, to Feb. 29, 1988; 1.1 ft Mar. 1, 1988, to June 19, 1989; 0.80 ft thereafter.

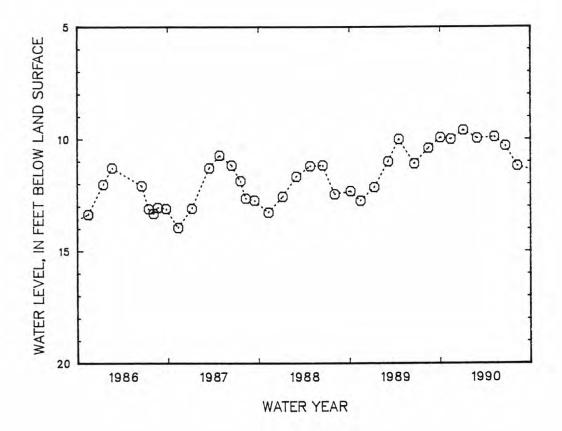
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.80 ft below land-surface datum, Feb. 2, 1984; lowest measured, 14.51 ft below land-surface datum, Feb. 17, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	9.93 10.00	JAN 02	9.60	FEB 26	9.96	MAY 07	9.90	JUN 20	10.30	AUG 08	11.20
WATER Y	EAR 1990	HIGHEST	9.60	JAN 02. 1990	LOWE	ST 11.20	AUG 08.	1990			



371653075584802. Local number, 63G 23 SOW 111B.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.42 ft above land-surface datum prior to July 20, 1987; 1.56 ft thereafter.

REMARKS.--Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 11.01 ft below land-surface datum, Dec. 30, 1982; lowest measured, 22.47 ft below land-surface datum, Sept. 15, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.47	12.10	12.03	12.12	11.99	11.80	11.52	11.61		12.79	13.27	13.26
10	12.49	11.93	11.92	12.00	11.90	11.80	11.66	11.81		12.97	13.36	13.22
15	12.47	12.05	11.98	12.11	11.90	11.78	11.67	11.87		12.92	13.49	13.10
20	12.30	12.17	12.02	12.11	12.03	11.68	11.80	11.95	12.23	13.02	13.44	13.10
25	12.31	12.12	12.05	11.99	12.12	11.71	11.68		12.48	13.20	13.20	13.01
EOM	12.24	12.06	12.18	12.01	11.84	11.63	11.59		12.75	13.17	13.22	13.08
WATER	YEAR 1990	о ні	GHEST 11	.38 APR	03. 1990	LOWE	ST 13.50	AUG 16-	18, 1990			

MATER LEVEL, IN FEET BELOW LAND SURFACE 20 1986 1987 1988 1989 1990

WATER YEAR

227 GROUND-WATER LEVELS NORTHAMPTON COUNTY

371653075584803. Local number, 63G 24 SOW 111C.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 330 ft, screened 320 to 330 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.67 ft above land-surface datum prior to Feb. 28, 1988; 1.95 ft thereafter.

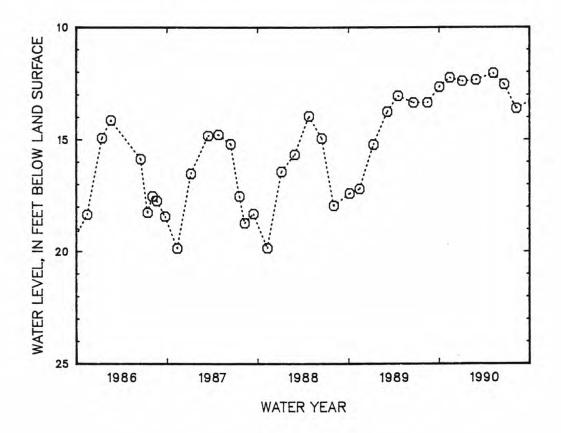
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 12.01 ft below land-surface datum, Feb. 17, 1981; lowest measured, 22.71 ft below land-surface datum, Sept. 15, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	12.66 12.25	JAN 02	12.40	FEB 26	12.35	MAY 07	12.05	JUN 20	12.55	AUG 08	13.61
WATER Y	EAR 1990	HIGHEST	12.05	MAY 07, 199	90	LOWEST 13.61	AUG 08	1990			



### NORTHAMPTON COUNTY

371653075584804. Local number, 63G 25 SOW 111S.

LOCATION.--Lat 37°16'53", long 75°58'48", Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 1.5 in., depth 70 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.64 ft above land-surface datum.

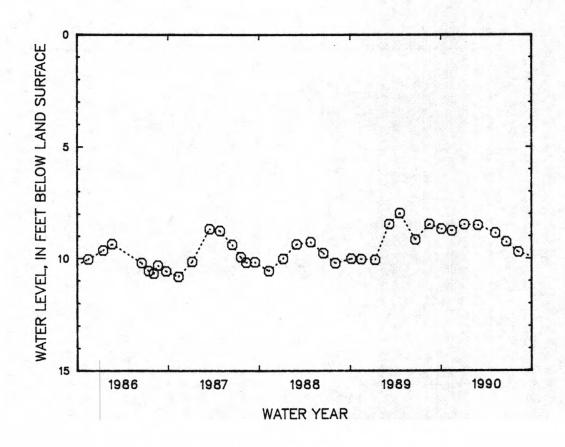
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.96 ft below land-surface datum, Apr. 18, 1989; lowest measured, 10.82 ft below land-surface datum, Nov. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	8.68 8.76	JAN 02	8.48	FEB 26	8.51	MAY 07	8.86	JUN 20	9.26	AUG 08	9.72
WATER Y	EAR 1990	HIGHEST	8.48	JAN 02, 1990	LOWES	T 9.72	AUG 08,	1990			



### NORTHAMPTON COUNTY

371726075572801. Local number, 63G 26 SOW 160.

LOCATION.--Lat 37°17'26", long 75°57'28", Hydrologic Unit 02080110, at Kane Miller Corporation plant, 0.4 mi north of State Highway 639, 0.7 mi northwest of intersection of State Highways 637 and 639, and 0.8 mi east of Cheriton. Owner: Kane Miller Corporation.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 2 in., depth 320 ft, screened 310 to 320 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 34 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

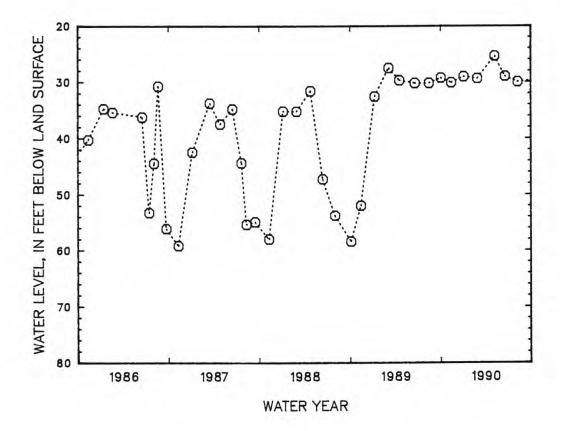
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.99 ft below land-surface datum, July 23, 1980; lowest measured, 74.90 ft below land-surface datum, Oct. 16, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	29.26 30.10	JAN 02	29.05	FEB 26	29.40	MAY 07	25.40	JUN 18	29.00	AUG 08	29.98
WATER Y	EAR 1990	HIGHEST	25.40	MAY 07. 19	90	LOWEST 30.10	NOV 13	. 1989			



371710075552201. Local number, 63G 27 SOW 161.

LOCATION.--Lat 37°17'10", long 75°55'22", Hydrologic Unit 02080110, 15 ft south of State Highway 639, 100 ft southeast of intersection of State Highways 639 and 1801, and at town of Oyster. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 2 in., depth 185 ft, screened 175 to 185 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5.5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

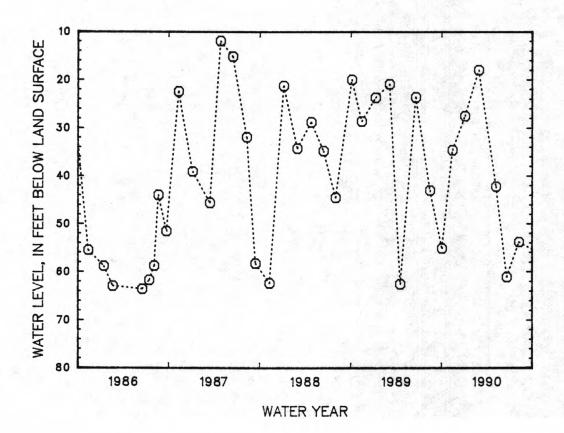
REMARKS. -- Records provided by the Virginia Water Control Board. Water level affected by local pumpage.

PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.45 ft below land-surface datum, Dec. 5, 1980; lowest measured, 70.91 ft below land-surface datum, Dec. 18, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 13	55.14 34.60	JAN 02	27.50	FEB 26	17.95	MAY 07	42.20	JUN 20	61.10	AUG 08	53.80
WATER Y	EAR 1990	HIGHEST	17.95	FEB 26. 1990	)	LOWEST 61.10	JUN 20	. 1990	. 18		



### NORTHAMPTON COUNTY

372705075555901. Local number, 63H 4 SOW 103C.

LOCATION.--Lat 37°27'06", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 235 ft, screened 225 to 235 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar 1, 1988; 0.8 ft thereafter.

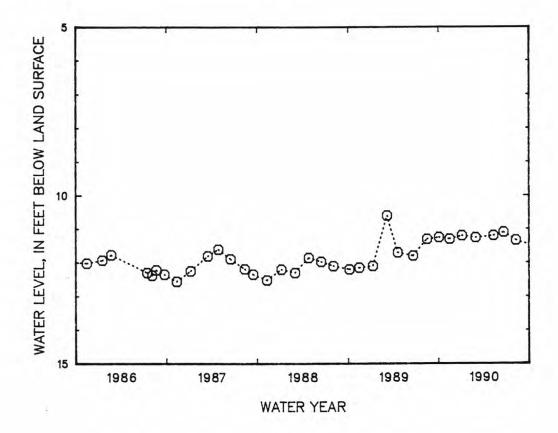
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 10.15 ft below land-surface datum, May 1, 1979; lowest measured, 12.56 ft below land-surface datum, Nov. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	11.25 11.30	JAN 02	11.20	FEB 26	11.26	MAY 09	11.20	JUN 19	11.10	AUG 08	11.34
WATER Y	EAR 1990	HIGHEST	11.10	JUN 19. 199	90 1	LOWEST 11.34	AUG 08	1990			



372705075555902. Local number, 63H 5 SOW 103B.

LOCATION.--Lat 37°27'05", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 132 ft, screened 122 to 132 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.55 ft above land-surface datum prior to Mar. 1, 1988; 1.25 ft thereafter.

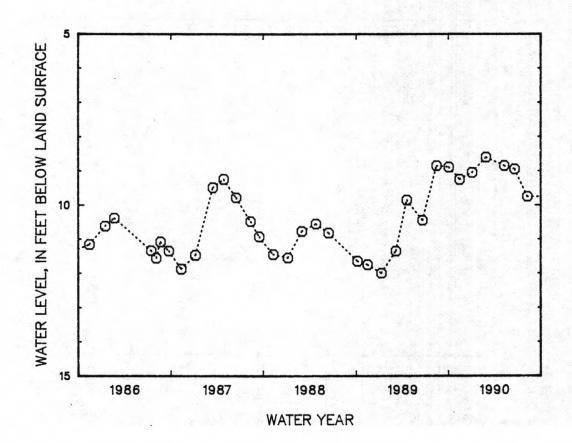
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 6.90 ft below land-surface datum, Feb. 1, 1979; lowest measured, 12.00 ft below land-surface datum, Jan. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	8.89 9.25	JAN 02	9.05	FEB 26	8.60	MAY 09	8.85	JUN 19	8.95	AUG 08	9.75
WATER Y	EAR 1990	HIGHEST	8.60	FEB 26. 1990	LOWES:	9.75	AUG 08.	1990			



### NORTHAMPTON COUNTY

372705075555903. Local number, 63H 6 SOW 103A.

LOCATION.--Lat 37°27'05", long 75°55'59", Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

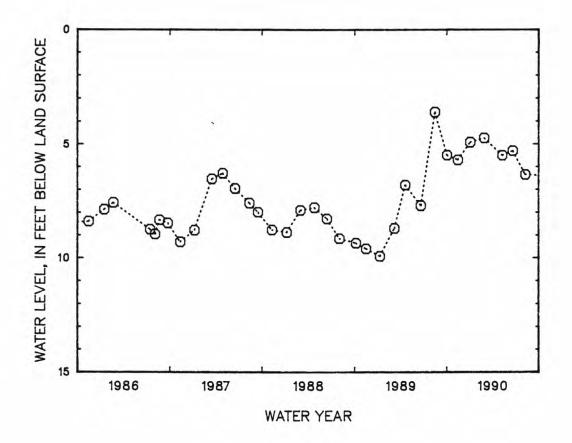
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 1.94 ft below land-surface datum, Aug. 2, 1979; lowest measured, 9.93 ft (revised) below land-surface datum, Jan. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	5.49 5.70	JAN 02	4.92	FEB 26	4.74	MAY 09	5.50	JUN 19	5.30	AUG 08	6.35
WATER Y	EAR 1990	HIGHEST	4.74	FEB 26. 1990	LOWES	T 6.35	AUG 08.	1990			



### NORTHAMPTON COUNTY

373230075541001. Local number, 63J 1 SOW 113A.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 120 ft, screened 110 to 120 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.32 ft above land-surface datum prior to Oct. 6, 1988; 1.5 ft thereafter.

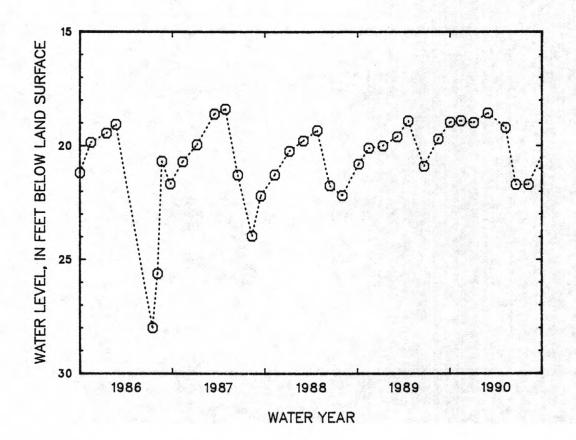
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 17.79 ft below land-surface datum, Apr. 21, 1983; lowest measured, 28.00 ft below land-surface datum, July 15, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	18.96 18.90	JAN 03	18.98	FEB 28	18.56	MAY 09	19.20	JUN 19	21.70	AUG 08	21.70
WATER Y	EAR 1990	HIGHEST	18.56	FEB 28, 199	90	LOWEST 21.70	JUN 19	. AUG 08. 1	990		



### NORTHAMPTON COUNTY

373230075541002. Local number, 63J 2 SOW 113B.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.40 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 225 ft, screened 215 to 225 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.52 ft above land-surface datum prior to Oct. 6, 1988; 1.3 ft thereafter.

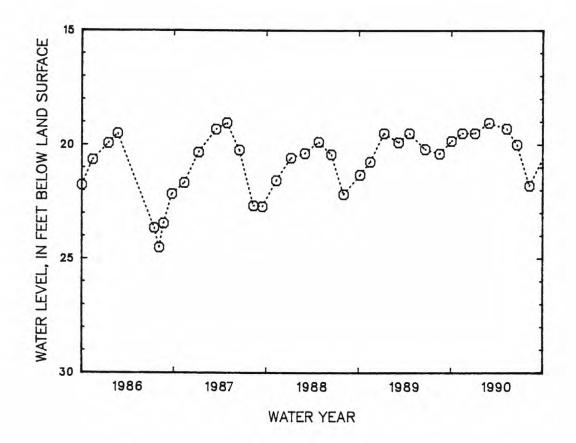
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 18.20 ft below land-surface datum, Apr. 21, 1983; lowest measured, 24.52 ft below land-surface datum, Aug. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	19.84 19.50	JAN 03	19.50	FEB 28	19.05	MAY 09	19.30	JUN 19	20.00	AUG 08	21.80
WATER Y	EAR 1990	HIGHEST	19 05	FER 28 19	90	LOWEST 21 80	AUG 08	1990			



373230075541003. Local number, 63J 3 SOW 113C.

LOCATION.--Lat 37°32'16", long 75°54'07", Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.44 ft above land-surface datum.

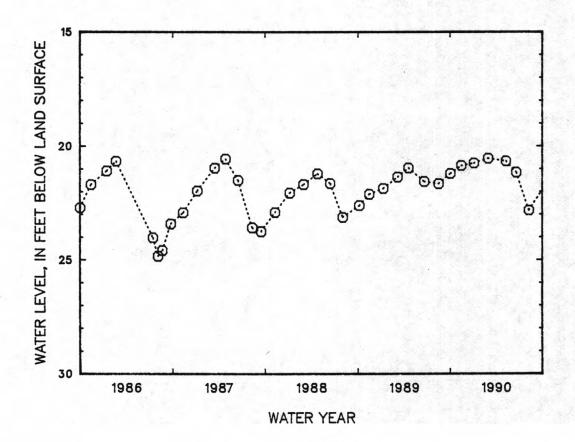
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.26 ft (revised) below land-surface datum, Apr. 21, 1983; lowest measured, 24.84 ft below land-surface datum, Aug. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 14	21.21 20.86	JAN 03	20.75	FEB 28	20.54	MAY 09	20.66	JUN 19	21.16	AUG 08	22.83
WATER YE	AR 1990	HIGHEST	20.54	FEB 28, 199	0	LOWEST 22.83	AUG 08	1990			



### NORTHAMPTON COUNTY

373059075484501. Local number, 64J 9 SOW 112A.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 660 and 600, and 0.3 mi west of Willis Wharf. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 135 ft, screened 125 to 135 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Feb. 29, 1988; 0.7 ft thereafter.

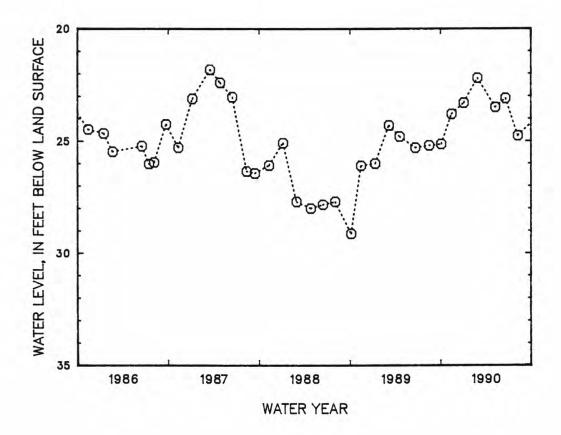
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 21.25 ft below land-surface datum, Oct. 29, 1981; lowest measured, 33.57 ft below land-surface datum, July 18, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	25.14 23.80	JAN 02	23.30	FEB 26	22.20	MAY 09	23.50	JUN 19	23.10	AUG 08	24.77
WATER Y	EAR 1990	HIGHEST	22.20	FEB 26, 199	90	LOWEST 25.14	OCT 03	, 1989			



373059075484502. Local number, 64J 10 SOW 112B.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 210 ft, screened 200 to 210 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Aug. 12, 1987; 1.6 ft thereafter.

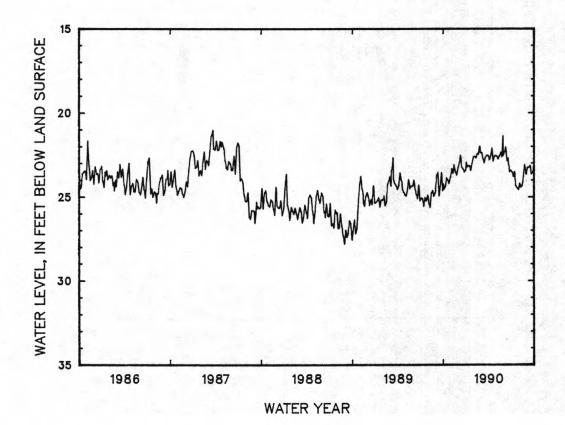
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 21.02 ft below land-surface datum, Mar. 22, 1987; lowest measured, 31.29 ft below land-surface datum, Oct. 1, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.53	23.33	22.98	23.22	22.58	22.34	22.79	22.58	22.34	23.53	24.21	23.26
10	24.40	23.58	22.53	23.16	22.67	22.72	22.56	22.74	22.05	23.78	24.42	23.25
15	23.87	23.26	23.22	23.16	22.43	22.98	22.09	22.56	22.86	23.52	24.34	23.15
20	23.99	23.54	23.34	23.43	22.45	22.65	22.89	22.35	22.97	24.34	23.79	23.64
25	24.19	23,70	23.52	23.00	22.00	22.52	22.56	22.60	23.52	24.46	23.10	23.57
EOM	23.84	23.27	23.41	22.62	22.34	22.54	22.54	22.53	23.44	24.57	23.65	23.25
WATER	YEAR 1990	н	GHEST 21	.37 MAY	29, 1990	LOWE	ST 24.75	OCT 06,	07, 1989			



### NORTHAMPTON COUNTY

373059075484503. Local number, 64J 11 SOW 112C.

LOCATION.--Lat 37°30'59", long 75°48'45", Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 313 ft, screened 303 to 313 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Apr. 27, 1987; 0.65 ft thereafter.

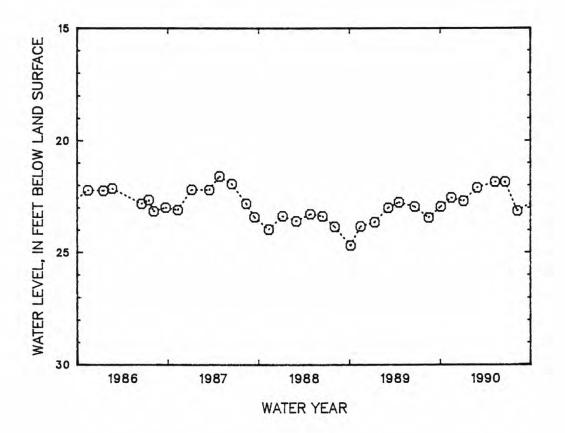
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.78 ft below land-surface datum, Mar. 29, 1984; lowest measured, 35.70 ft below land-surface datum, Dec. 5, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 14	22.95 22.55	JAN 02	22.70	FEB 26	22.11	MAY 09	21.85	JUN 19	21.85	AUG 08	23.15
WATER Y	EAR 1990	HIGHEST	21.85	MAY 09. JUN	N 19. 1990	LOWES	ST 23.15	AUG 08. 1	990		



373046075482501. Local number, 64J 13 SOW 120.

LOCATION.--Lat 37°30'46", long 75°48'25", Hydrologic Unit 02080110, at American Original Corporation plant, 10 ft east of State Highway 603, 0.1 mi northeast of intersection of State Highways 603 and 660, and 0.3 mi south of Willis Wharf. Owner: American Original Corporation.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 8 in., depth 105 ft, screened 95 to 105 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Aug. 31, 1985, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 0.7 ft above land-surface datum prior to Aug. 11, 1987; 1.5 ft thereafter.

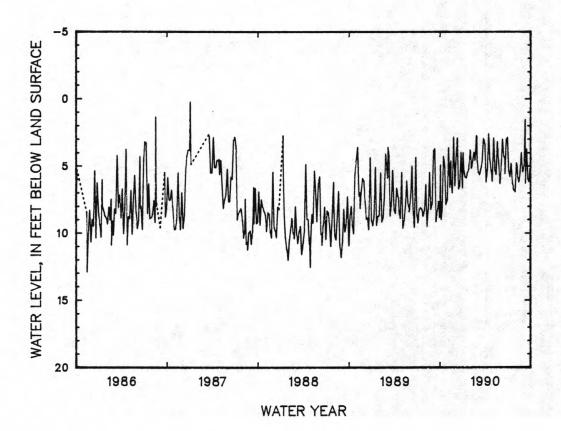
REMARKS. -- Records provided by the Virginia Water Control Board. Water level affected by local pumpage.

PERIOD OF RECORD. -- August 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.24 ft below land-surface datum, Jan. 2, 1987; lowest measured, 17.90 ft below land-surface datum, Dec. 1, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.31	3.62	4.35	5.32	5.15	5.48	6.20	2.91	5.01	5.38	4.75	4.96
10	8.32	6.60	2.92	5.80	4.63	5.64	5.34	5.32	2.99	5.80	5.82	6.28
15	4.26	6.19	6.72	5.88	3.98	5.21	2.59	5.62	4.30	4.82	6.18	3.72
20	4.95	6.98	6.52	5.49	4.53	4.72	4.52	3.18	5.57	6.25	5.52	6.00
25	7.88	2.84	3.98	5.25	2.74	2.94	5.32	4.59	2.98	6.78	4.00	6.17
EOM	7.52	6.48	6.64	3.81	4.62	3.35	6.13	6.31	2.88	6.92	5.44	4.90
WATER	YEAR 1990	HIC	GHEST 1.5	5 SEP 09	, 1990	LOWEST	8.98	OCT 06, 1	989			



#### ORANGE COUNTY

381002078094201. Local number, 45P 1 SOW 030.

LOCATION.--Lat 38°10'02", long 78°09'42", Hydrologic Unit 02080106, off U.S. Highway 15, 2.3 mi north of Gordonsville. Owner: M. L. Johnson.

AQUIFER. -- Phyllite of Evington Group of Cambrian or Precambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 98 ft, length of casing unknown.

INSTRUMENTATION. -- Continuous strip-chart recorder.

DATUM. -- Elevation of land-surface datum is 480 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum.

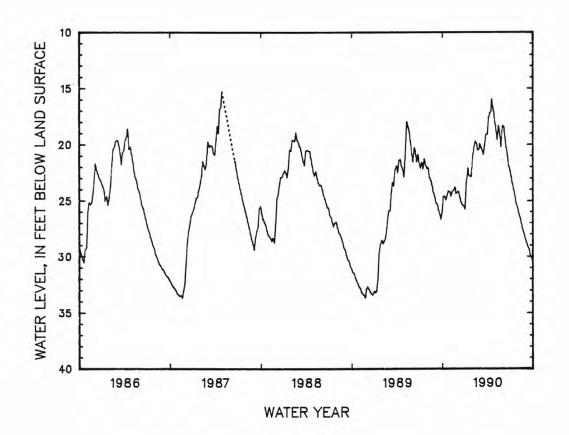
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- February 1965 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 11.83 ft below land-surface datum, Apr. 10, 1973; lowest recorded, 35.90 ft below land-surface datum, Jan. 31, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.60	24.58	24.18	23.39	20.20	20.27	17.60	18.70	18.37	22.86	26.13	28.73
10	24.63	24.19	24.65	22.60	19.72	20.50	17.20	19.57	19.29	23.50	26.50	29.10
15	24.91	24.06	25.10	22.70	19.88	20.87	17.05	18.35	20.27	24.00	27.00	29.31
20	24.56	23.86	25.36	22.82	20.50	20.18	16.49	19.05	20.98	24.51	27.53	29.83
25	24.15	24.35	25.47	22.87	20.43	19.12	16.99	20.21	21.90	25.21	27.87	30.10
EOM	24.21	24.26	25.75	21.02	19.95	19.08	17.97	18.35	22.29	25.63	28.39	30.40
WATER	YEAR 1990	HIG	HEST 15	5.94 APR	17, 1990	LOWEST	30.40	SEP 30,	1990			



# · PATRICK COUNTY

364732080070301. Local number, 30C 1 SOW 010.

LOCATION.--Lat 36°47'32", long 80°07'03", Hydrologic Unit 03010103, 300 ft west of State Highway 623, 1.0 mi northeast of intersection of State Highways 57 and 623, and 6.2 mi west of Philpott. Owner: Commonwealth of Virginia.

AQUIFER .-- Lynchburg Group of late Proterozoic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.25 in., depth 250 ft, cased to 9 ft, open hole 9 to 250 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 1,060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

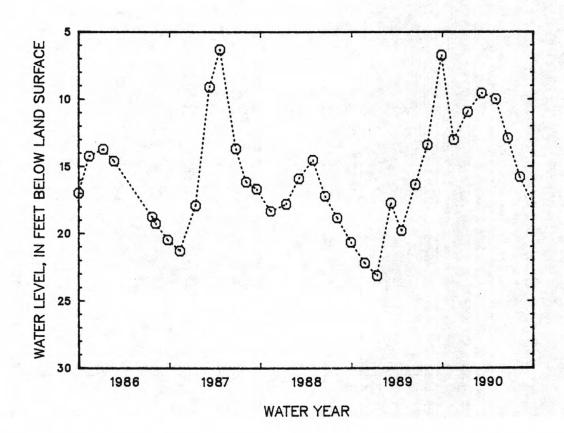
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1966 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 6.04 ft below land-surface datum, Apr. 4, 1973; lowest measured, 23.15 ft below land-surface datum, Jan. 10, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	NATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	13.02	JAN 09	10.95	MAR 06	9.55	MAY 02	9.98	JUN 19	12.90	AUG 07	15.80
WATER YEAR	R 1990	HIGHEST	9.55	MAR 06. 1990	LOWES	T 15.80	AUG 07.	1990			



# CITY OF PORTSMOUTH

364823076181501. Local number, 60C 27.

LOCATION.--Lat 36°48'23", long 76°18'15", Hydrologic Unit 02080208, 100 ft east of State Highway 239 (Victory Boulevard), 0.1 mi south of the intersection of State Highway 239 (Victory Boulevard) and State Highway 337 (Elem Avenue) in the city of Portsmouth. Owner: U.S. Department of the Navy.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 2 in., depth 908 ft, screened 903 to 908 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, occasional measurement with chalked tape.

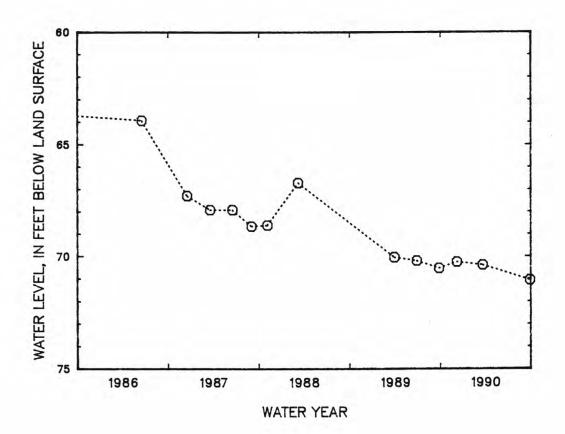
DATUM.--Elevation of land-surface datum is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.65 ft below land-surface datum, June 19, 1985; lowest measured, 71.06 ft below land-surface datum, Sept. 27, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL DATE		WATER LEVEL		WATER LEVEL
	DEC 06	70.25	MAR 20	70.39	SEP 27	71.06
WATER YEAR 1990	HIGHEST 70.25	DEC 06,	1989	LOWEST	71.06 SEP 27	, 1990



### CITY OF PORTSMOUTH

365313076215101. Local number, 60D 2.

LOCATION.--Lat 36°53'13", long 76°21'51", Hydrologic Unit 02080208, 1.1 mi east of the main gate of the U.S. Naval Supply Center on Main Street in Building 285, 2.0 mi northwest of West Norfolk in the city of Portsmouth, and 2.25 mi north of the intersection of U.S. Highway 17 and Cedar Lane (Craney Island Road). Owner: U.S. Department of the Navy.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 170 ft, diameter 4 in. from 170 to 565 ft, depth 565 ft, screened 545 to 565 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

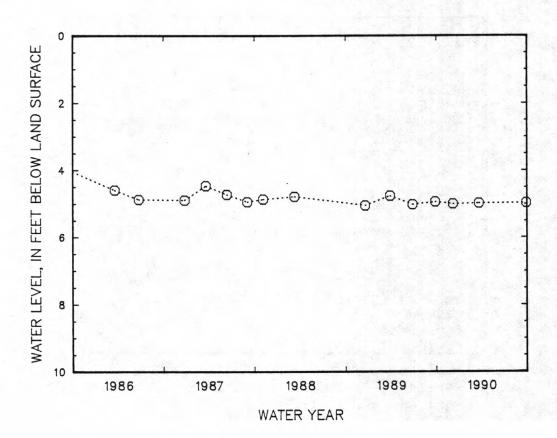
PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 4.01 ft below land-surface datum, Sept. 18, 1985; lowest measured, 5.05 ft below land-surface datum, Dec. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

2.32	WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
DEC 06	5.00	MAR 20	4.98	SEP 27	4.97

WATER YEAR 1990 HIGHEST 4.97 SEP 27, 1990 LOWEST 5.00 DEC 06, 1989



#### PRINCE GEORGE COUNTY

371315077171901. Local number, 52F 1 SOW 038.

LOCATION.--Lat 37°13'15", long 77°17'19", Hydrologic Unit 03010202, 0.1 mi north of State Highway 106 in Prince George. Owner: Prince George County.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 180 ft, cased to 170 ft, open hole 170 to 180 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. May 25, 1974, to Oct. 9, 1985, occasional measurement with chalked tape. Jan. 31, 1971, to May 25, 1974, continuous strip-chart recorder. Prior to Jan. 31, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 132 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.4 ft above land-surface datum.

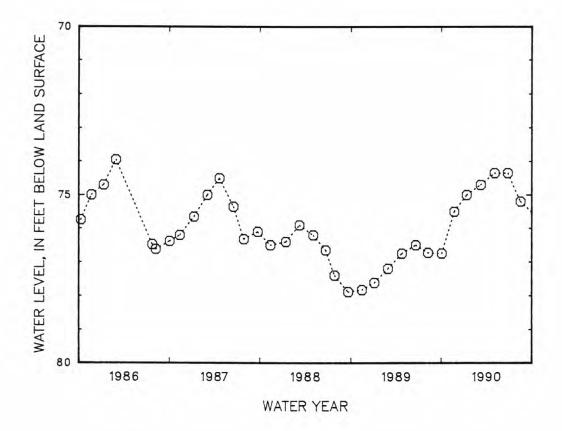
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.32 ft below land-surface datum, Feb. 4, 1980; lowest measured, 77.89 ft below land-surface datum, Sept. 20, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 22	76.75 75.50	JAN 11	75.00	MAR 08	74.70	MAY 03	74.35	JUN 25	74.35	AUG 16	75.20
WATER Y	EAR 1990	HIGHEST	74.35	MAY 03, JUN	25. 1990	LOWES	T 76.75	OCT 03, 1	989		



# PRINCE WILLIAM COUNTY

384931077420301. Local number, 49U 1.

LOCATION.--Lat 38°49'30", long 77°42'08", Hydrologic Unit 02070010, 500 ft north of State Highway 55, 0.8 mi east of Thoroughfare Gap, and 3.7 mi west of Haymarket. Owner: Virginia Department of Transportation.

AQUIFER. -- Shale and sandstone of Newark Group of Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 345 ft, cased to 20 ft, open hole 20 to 345 ft.

INSTRUMENTATION. --Monthly measurement with chalked tape by USGS personnel. Prior to February 1980, continuous strip-chart recorder.

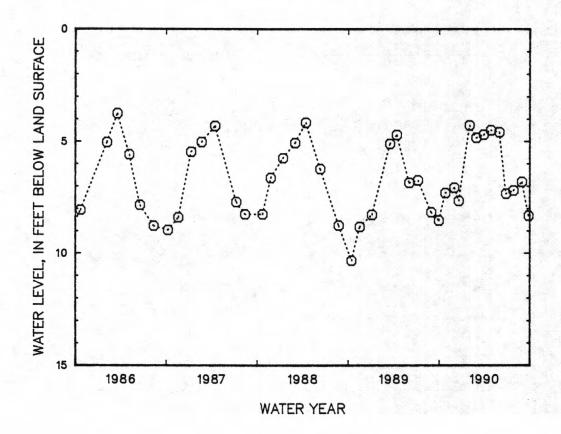
DATUM.--Elevation of land-surface datum is 383 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD. --October 1968 to current year. Unpublished records available prior to May 1969 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.59 ft below land-surface datum, Mar. 19, 1975; lowest measured, 10.33 ft below land-surface datum, Oct. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25 NOV 30	7.30 7.06	DEC 18 JAN 30	7.65 4.27	FEB 26 MAR 28	4.83	APR 26 MAY 30	4.49	JUN 26 JUL 26	7.33 7.19	AUG 29 SEP 25	6.80 8.32
WATER Y	EAR 1990	HIGHEST	4 27	JAN 30 1990	LOW	EST 8 32	SEP 25	1990			



# PRINCE WILLIAM COUNTY

385607077381101. Local number, 49V 1.

LOCATION.--Lat 38°56'07", long 77°38'11", Hydrologic Unit 02070010, near intersection of State Highways 600 and 615, 2.8 mi south of Aldie. Owner: J. H. Hutchison.

AQUIFER. -- Shale and sandstone of Newark Group of Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 165 ft, cased to 10 ft, open hole 10 to 165 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 420 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum. Readings from 1979 to 1981 should be 0.7 ft lower than previously published.

PERIOD OF RECORD . -- November 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.85 ft below land-surface datum, Oct. 12, 1979; lowest recorded, 12.28 ft below land-surface datum, July 12, 13, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

							0.70					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.14	9.77	9.78	9.08	8.07	8.94	7.87	8.76	8.90	10.56		
10	10.32	9.82	9.98	8.93	8.19	9.13	7.78	9.11	9.44	10.67		
15	10.38	9.96	10.02	8.85	8.19	9.37	8.17	8.49	9.81	9.49		
20	9.81	9.73	10.02	8.96	8.70	9.04	8.57	8.99	9.84	9.34		
25	9.67	9.82	10.17	9.17	8.80	8.73	8.88	9.46	9.99	9.00		
EOM	9.79	9.95	10.34	7.87	8.71	8.34	8.99	8.30	10.44	9.52	9.50	10.48
WATER	YEAR 1990	HIG	HEST 7.64	APR 10,	1990	LOWEST	10.79	JUL 11,	1990			

MATER YEAR

MATER YEAR

MATER TEND SURFACE

15

1986

1987

1988

1989

1990

WATER YEAR

#### PRINCE WILLIAM COUNTY

383423077245901. Local number, 51S 7.

LOCATION.--Lat 38°34'23", long 77°24'59", Hydrologic Unit 02070011, in Prince William Forest Park, 700 ft north of State Highway 619, 0.7 mi southeast of Belfair Crossroads, and 4.6 mi south of Independent Hill. Owner: National Park Service.

AQUIFER. -- Wissahickon Formation of Paleozoic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 490 ft, cased to 50 ft, open hole 50 to 490 ft.

INSTRUMENTATION.--Digital recorder--60-minute punch. Recorder installed Dec. 21, 1982. Prior to Dec. 21, 1982, manual measurements with chalked tape by USGS personnel. Manual readings only published prior to 1985 water year. Recorded readings for 1985 water year published in addition to manual readings.

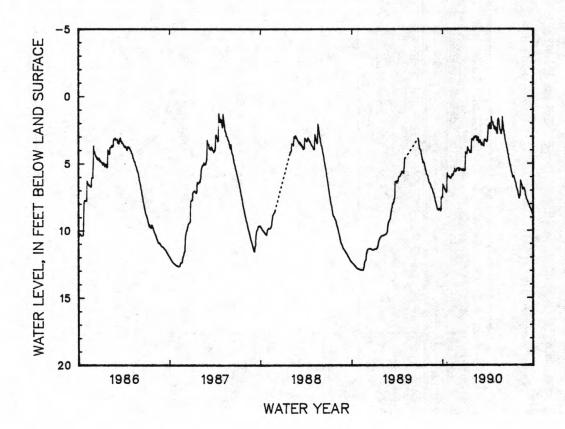
DATUM.--Elevation of land-surface datum is 295 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD. -- September 1973 to November 1975, December 1977 to current year. Unpublished records available prior to December 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.14 ft below land-surface datum, Apr. 20, 1983; lowest recorded, 12.95 ft below land-surface datum, Nov. 16, 17, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	YAM	JUN	JUL	AUG	SEP
5	6.61	6.04	5.31	4.25	3.05	3.49	2.31	2.37	2.56	5.54	7.59	7.65
10	6.85	5.81	5.37	3.79	2.98	3.55	2.05	2.76	3.14	5.95	7.15	7.91
15	7.07	5.76	5.45	3.97	3.03	3.69	2.40	1.76	3.61	5.93	6.55	8.09
20	6.08	5.39	5.43	4.10	3.30	3.20	1.91	2.46	4.10	6.32	6.91	8.37
25	5.92	5.55	5.42	4.16	3.44	3.29	2.17	2.78	4.63	6.72	6.82	8.57
EOM	5.97	5.36	5.51	3.14	3.31	3.23	2.34	1.78	5.13	7.14	7.36	8.82
WATER	YEAR 1990	HIG	HEST 1.00	MAY 29.	1990	LOWEST	8.82 SE	P 30. 199	90			
								20.00				



# PRINCE WILLIAM COUNTY

383634077151301. Local number, 52S 4.

LOCATION.--Lat 38°36'34", long 77°15'13", Hydrologic Unit 02070010, 193 ft east of Richmond, Fredericksburg, and Potomac (RFP) railroad tracks, 1.1 mi southeast of the intersection of U.S. Highway 1 and State Highway 636 (Featherstone Road), 1.4 mi south of the intersection of State Highway 636 (Featherstone Road) and RFP railroad tracks, and near Woodbridge. Owner: District of Columbia Department of Sanitary Engineering.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 10 in., depth 186 ft, screened 156 to 176 ft INSTRUMENTATION. --Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1980, to Sept. 30, 1989, annual measurement with chalked tape. July 10, 1978, to Sept. 30, 1980, bimonthly measurement with chalked tape. Aug. 1, 1971, to July 10, 1978, continuous strip-chart recorder. Prior to Aug. 1, 1971, occasional measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.9 ft above land-surface datum. Measuring point change from 3.30 ft above land-surface datum Aug. 28, 1978.

PERIOD OF RECORD. -- June 1969 to current year. EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 17.17 ft below land-surface datum, Apr. 28, 1973; lowest measured, 22.17 ft below land-surface datum, July 1, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER TO SEPTEMBER

WATER
LEVEL
19.15
18.89
18.40
18.87
18.54
18.80
18.67
18.43
18.77
19.27

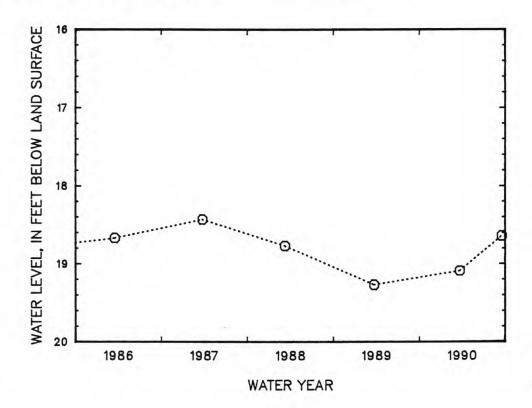
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

WATER WATER DATE LEVEL DATE LEVEL MAR 22 19.09 SEP 17 18.64

WATER YEAR 1990

HIGHEST 18.64 SEP 17, 1990

LOWEST 19.09 MAR 22, 1990



# PRINCE WILLIAM COUNTY

383634077151302. Local number, 52S 5.

LOCATION.--Lat 38°36'34", long 77°15'13", Hydrologic Unit 02070010, 193 ft east of Richmond, Fredericksburg, and Potomac (RFP) railroad tracks, 1.1 mi southeast of the intersection of U.S. Highway 1 and State Highway 636 (Featherstone Road), 1.4 mi south of the intersection of State Highway 636 (Featherstone Road) and RFP railroad tracks, and near Woodbridge. Owner: District of Columbia Department of Sanitary Engineering. AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

AQUIFER. --Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. --Drilled observation water well, diameter 6 in., depth 114 ft, screened 95 to 105 ft.

INSTRUMENTATION. --Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1980, to Sept. 30, 1989, annual measurement with chalked tape. Prior to Oct. 1, 1980, bimonthly measurement with chalked tape.

DATUM. --Elevation of land-surface datum is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD. --July 1969 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 16.44 ft below land-surface datum, Apr. 1, 1980; lowest measured, 19.62 ft below land-surface datum, Jan. 9, 1981.

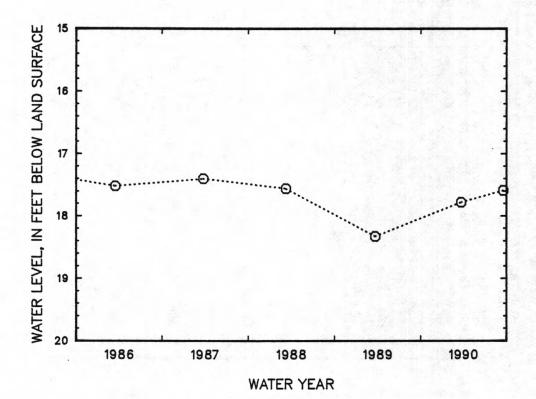
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER TO SEPTEMBER

WATER YEAR	DATE	WATER LEVEL
1001	*** ** ***	10.00
1981	JAN 09, 1981	19.62
	FEB 09, 1981	17.80
1982	FEB 05, 1982	19.21
1983	FEB 15, 1983	18.02
1984	JAN 30. 1984	17.27
1985	MAR 19, 1985	17.30
1986	MAR 17, 1986	17.52
1987	MAR 25, 1987	17.40
1988	MAR 09, 1988	17.56
1989	MAR 23, 1989	18.33

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	WATER		WATER
DATE	LEVEL	DATE	LEVEL
MAR 22	17.78	SEP 17	17.59

WATER YEAR 1990 HIGHEST 17.59 SEP 17, 1990 LOWEST 17.78 MAR 22, 1990



#### PRINCE WILLIAM COUNTY

383830077135502. Local number, 53T 2 SOW 029.

LOCATION.--Lat 38°38'30", long 77°13'55", Hydrologic Unit 02070010, at U.S. Army Woodbridge Research Facility, 1.5 mi east of Woodbridge. Owner: U.S. Department of the Army.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 162 ft, screened 130 to 156 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Sept. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

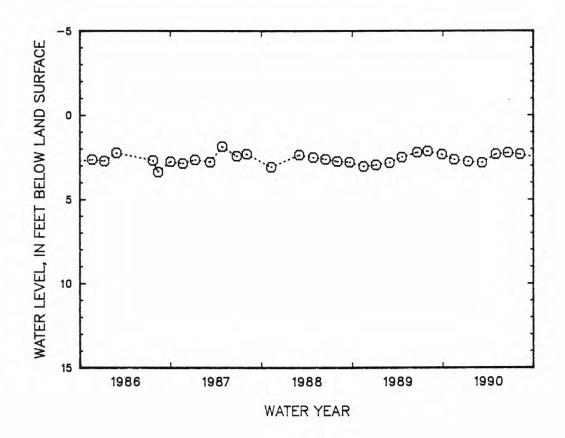
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 1.60 ft below land-surface datum, Apr. 4, 1973; lowest measured, 10.35 ft below land-surface datum, Oct. 12, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	2.63	JAN 09	2.75	MAR 06	2.82	MAY 01	2.31	JUN 19	2.23	AUG 07	2.32
WATER V	FAR 1990	HIGHEST	2 23	TIIN 10 1000	T OWN	FST 2 82	MAP OF	1990			



#### PULASKI COUNTY

370254080374401. Local number, 25E 1 SOW 009.

LOCATION.--Lat 37°02'54", long 80°37'44", Hydrologic Unit 05050001, 300 ft east of State Highway 100, 0.3 mi south of intersection of State Highways 682 and 700, and 1.1 mi south of Dublin. Owner: Commonwealth of Virginia.

AQUIFER. -- Elbrook Formation of middle to late Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 318 ft, cased to 56 ft, open hole 56 to 318 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 1,880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

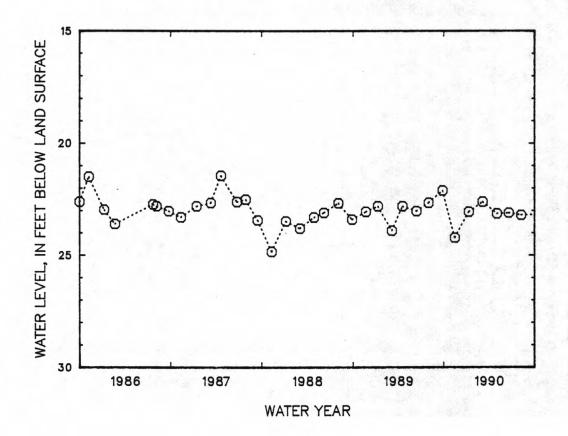
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.15 ft below land-surface datum, Mar. 31, Apr. 30, 1975; lowest measured, 27.25 ft below land-surface datum, Dec. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	24.22	JAN 09	23.05	MAR 05	22.60	MAY 01	23.13	JUN 18	23.10	AUG 07	23.20
WATER YEA	R 1990	HIGHEST	22.60	MAR 05 199	00	LOWEST 24.22	NOV 14.	1989			



### PULASKI COUNTY

370516080411501. Local number, 25E 2 SOW 059.

LOCATION.--Lat 37°05'16", long 80°41'15", Hydrologic Unit 05050001, 400 ft east of State Highway 100, 0.5 mi south of Dublin. Owner: Town of Dublin.

AQUIFER. -- Conococheague Formation of late Cambrian age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 370 ft, length of casing unknown.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. July 20, 1974, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 2,170 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

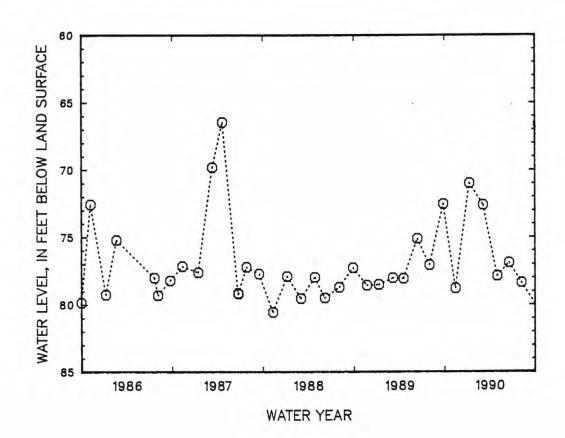
REMARKS.--Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- April 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 60.00 ft below land-surface datum, Mar. 18, 1973; lowest measured, 82.50 ft below land-surface datum, Oct. 5, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	78.78	JAN 09	70.98	MAR 05	72.60	MAY 01	77.88	JUN 18	76.90	AUG 07	78.37
WATER Y	EAR 1990	HIGHEST	70.98	JAN 09 199	90	LOWEST 78 78	NOV 14	1989			



#### RICHMOND COUNTY

375755076505601. Local number, 56M 7.

LOCATION.--Lat 37°57'55", long 76°50'56", Hydrologic Unit 02080104, 400 ft west of State Highway 634 near Warsaw and 2.7 mi west of the intersection of State Highways 624 and 634. Owner: Robert H. Mallory.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 105 ft, diameter 2 in. from 105 to 456 ft, depth 456 ft, screened 398 to 408 ft, 429 to 439 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

PERIOD OF RECORD. -- November 1965 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 9.00 ft below land-surface datum, Nov. 5, 1965; lowest measured, 33.35 ft below land-surface datum, Sept. 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

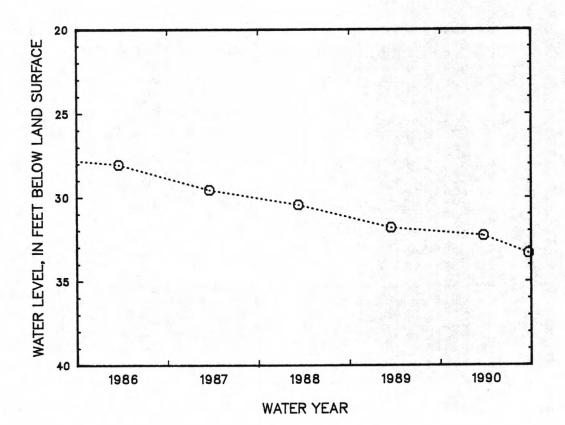
DATE WATER LEVEL MAR 16 31.82

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

 DATE
 WATER LEVEL
 DATE
 WATER LEVEL

 MAR 23
 32.30
 SEP 20
 33.35

WATER YEAR 1990 HIGHEST 32.30 MAR 23, 1990 LOWEST 33.35 SEP 20, 1990



# CITY OF ROANOKE

371653079552101. Local number, 31G 1 SOW 008.

LOCATION.--Lat 37°16'53", long 79°55'21", Hydrologic Unit 03010101, 700 ft south of intersection of 10th Street and Orange Avenue in Roanoke. Owner: Nelson-Roanoke Corporation.

AQUIFER. -- Rome Formation of Cambrian age. Prior to 1974, reported as Elbrook Formation.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 6 in., depth 48 ft, length of casing unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. July 20, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 930 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.94 ft above land-surface datum.

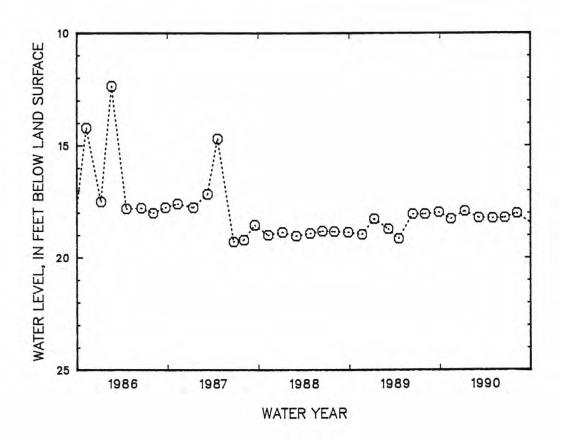
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- August 1966 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 12.36 ft below land-surface datum, Feb. 18, 1986; lowest measured, 23.15 ft below land-surface datum, May 23, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	18.26	JAN 08	17.91	MAR 05	18.21	APR 30	18.23	JUN 18	18.21	AUG 06	18.01
WATER Y	EAR 1990	HIGHEST	17 91	TAN 08 100	10	IOWEST 18 26	NOV 13	1080			



#### ROCKBRIDGE COUNTY

373758079271601. Local number, 35K 1 SOW 063.

LOCATION.--Lat 37°37'58", long 79°27'16", Hydrologic Unit 02080202, 0.35 mi northwest of intersection of State Highways 130 and 684 in Glasgow. Owner: Town of Glasgow.

AQUIFER. -- Rome Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 695 ft, cased to 101 ft, open hole from 101 to 695 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 745 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

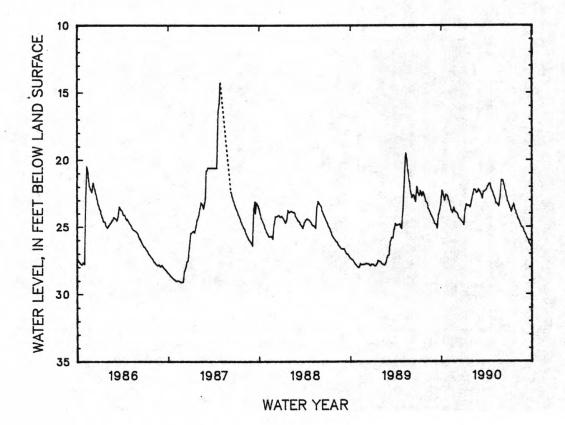
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- June 1972 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 14.27 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 29.13 ft below land-surface datum, Dec. 13, 14, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.27	23.32	24.00	23.75	22.60	22.32	21.97	22.88	21.49	23.58	24.30	25.57
10	22.60	23.73	24.30	23.32	22.20	22.53	21.80	23.20	21.80	23.87	24.52	25.80
15	23.01	23.93	24.41	23.39	22.21	22.85	21.72	23.32	22.23	23.52	24.78	25.96
20	22.58		24.54	23.40	22.43	22.38	22.14	23.46	22.64	23.29	25.01	26.24
25	22.62	23.83	24.64	23.51	22.35	22.31	22.35	22.86	23.08	23.70	25.05	26.39
EOM	22.96	23.92	24.87	23.06	22.18	22.20	22.66	21.50	23.30	24.03	25.37	26.57
WATER	YEAR 199	0 ні	GHEST 2:	1.49 JUN	05, 1990	LOW	EST 26.57	SEP 30,	1990			



# ROCKINGHAM COUNTY

382150078424001. Local number, 410 1.

LOCATION.--Lat 38°21'50", long 78°42'40", Hydrologic Unit 02070005, at Virginia Department of Transportation garage, 1.3 mi southeast of McGaheysville. Owner: U.S. Geological Survey.

AQUIFER. -- Conococheague Formation of late Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6.25 in., depth 310 ft, cased to 131 ft, open hole 131 to 310 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

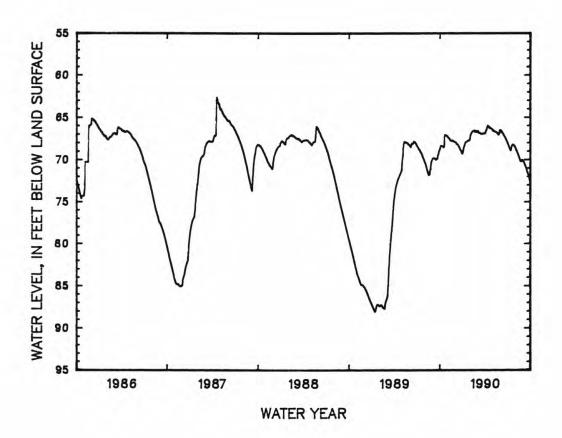
DATUM.--Elevation of land-surface datum is 1,105 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top edge of recorder shelf, 3.5 ft above land-surface datum.

PERIOD OF RECORD . -- August 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 60.38 ft below land-surface datum, Dec. 26, 1972; lowest recorded, 88.08 ft below land-surface datum, Jan. 14, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.41	67.45	68.00	68.61	66.84	66.76	66.50	66.56	66.62	68.37	68.87	70.37
10	68.40	67.63	68.18	68.10	66.64	66.85	66.04	66.67	66.83	68.76	69.22	70.74
15	68.50	67.77	68.36	67.89	66.57	66.96	66.06	66.78	67.10	68.81	69.60	71.16
20	67.28	67.75	68.65	67.80	66.71	66.97	66.27	66.89	67.36	68.28	70.07	71.64
25	67.13	67.83	68.96	67.74	66.72	66.93	66.34	67.06	67.69	68.29	70.19	71.99
EOM	67.23	67.91	69.29	67.20	66.67	66.87	66.47	66.53	68.04	68.51	70.13	72.67
WATER	YEAR 1990	HIC	HEST 65.	88 APR 1	10, 1990	LOWES	72.67	SEP 30,	1990			



#### SOUTHAMPTON COUNTY

364109077230701. Local number, 51B 3.

LOCATION.--Lat 36°41'09", long 77°23'07", Hydrologic Unit 03010201, 150 ft west of the intersection of State Highway 615 and U.S. Highway 58, 0.5 mi south of Adams Grove. Owner: U.S. Geological Survey.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 253 ft, screened 165 to 175 ft, open hole 175 to 253 ft.

INSTRUMENTATION. -- Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 126 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.2 ft above land-surface datum.

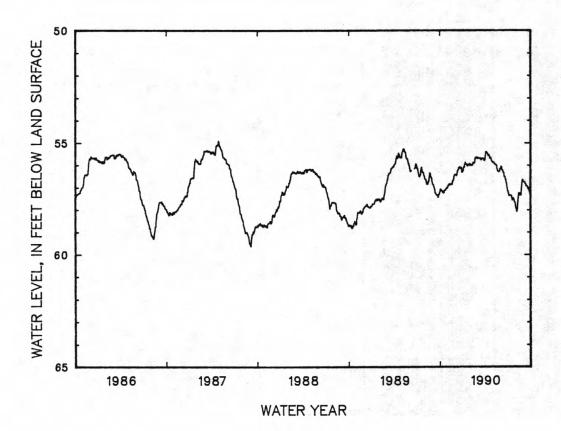
PERIOD OF RECORD. --October 1974 to current year. Unpublished records available prior to July 1975 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 54.21 ft below land-surface datum, Apr. 30, 1978; lowest recorded, 60.03 ft below land-surface datum, Oct. 24, 25, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.09	56.89	56.41	56.08	55.99	55.67	55.39	55.89	56.07	57.31	58.04	56.75
10	57.14	56.84	56.32	55.96	55.98	55.69	55.46	55.94	56.22	57.35	57.73	56.83
15	57.23	56.83	56.20	55.94	55.90	55.75	55.56	55.99	56.36	57.37	57.25	56.93
20	57.13	56.82	56.07	56.02	55.67	55.70	55.68	56.21	56.55	57.53	57.33	57.04
25	57.08	56.67	56.12	55.97	55.66	55.70	55.73	56.29	56.79	57.54	57.02	57.16
EOM	57.02	56.42	56.31	55.96	55.66	55.76	55.84	56.18	57.13	57.76	56.69	57.29

WATER YEAR 1990 HIGHEST 55.38 APR 06, 07, 1990 LOWEST 58.08 AUG 06, 1990



# SOUTHAMPTON COUNTY

363410077150801. Local number, 52A 1.

WATER YEAR 1990

LOCATION.--Lat 36°34'10", long 77°15'08", Hydrologic Unit 03010204, along Seaboard Coastline railroad, 0.15 mi northwest of intersection of State Highways 195 and 701 in Branchville. Owner: L. W. Grizzard.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled withdrawal water well, diameter 4 in., depth 217 ft, screened 204 to 217 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 44 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD. -- September 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.85 ft below land-surface datum, Sept. 9, 1970; lowest measured, 50.82 ft below land-surface datum, Sept. 25, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	49.45	MAR 15	49.25	SEP 25	50.82
HIGHEST	49.25	MAR 15,	1990	LOWEST	50.82 SEP 25	, 1990

MATER YEAR

WATER YEAR

MATER YEAR

MATER YEAR

WATER YEAR 1990

#### SOUTHAMPTON COUNTY

363916077201001. Local number, 52B 8 SOW 178A.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of the intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 316 ft, screened 285 to 295 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Oct. 1, 1988, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

PERIOD OF RECORD. -- March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.30 ft below land-surface datum, Mar. 15, 1990; lowest measured, 70.15 ft below land-surface datum, Oct. 14, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	69.54	MAR 15	69.30	SEP 25	69.68
HIGHEST	69.30	MAR 15,	1990	LOWEST	69.68 SEP 25	, 1990

MATER LEVEL, IN FEET BELOW LAND SURFACE

22

1986

1987

1988

1989

1990

WATER YEAR

#### SOUTHAMPTON COUNTY

363916077201002. Local number, 52B 9 SOW 178B.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 329 ft, screened 298 to 308 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Oct. 1, 1987, to Sept. 30, 1988, annual measurements with chalked tape. Prior to Oct. 1, 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

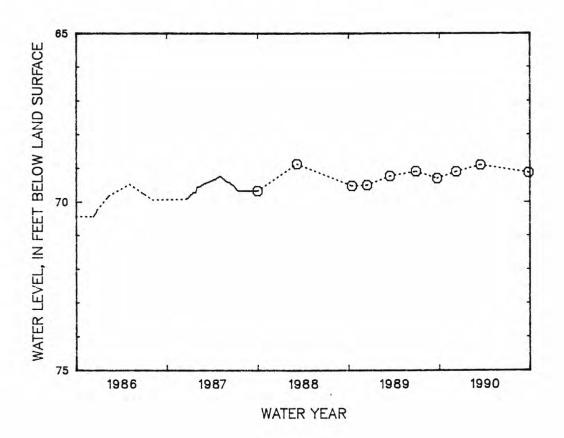
PERIOD OF RECORD. -- December 1985 to current year.

WATER YEAR 1990

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.87 ft below land-surface datum, Mar. 7, 1988; lowest recorded, 70.44 ft below land-surface datum, Dec. 10-12, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DAT	Œ	WATER LEVEL		DATE	WATER LEVEL
	DEC 07	69.10	MAR	15	68.90	S	EP 25	69.13
HIGHES	ST 68.90	MAR 15,	1990		LOWEST	69.13	SEP 2	5, 1990



# SOUTHAMPTON COUNTY

363916077201003. Local number, 52B 10, SOW 178C.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 233 ft, screened 218 to 228 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Oct. 1, 1987, to Sept. 30, 1988, annual measurement with chalked tape. Prior to Oct. 1, 1987, digital recorder--60-minute punch.

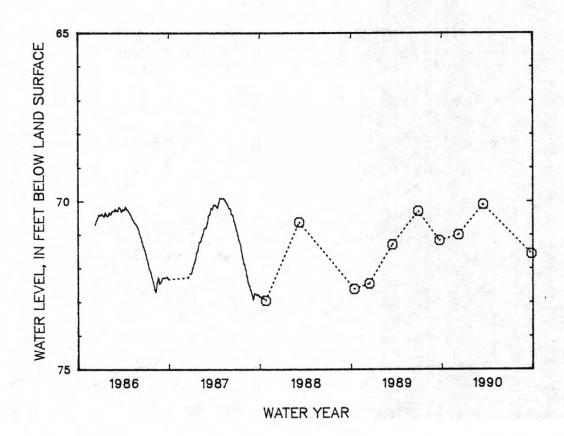
DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.9 ft above land-surface datum.

PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 69.75 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 72.97 ft below land-surface datum, Oct. 1, 24, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	71.00	MAR 15	70.09	SEP 25	71.57
WATER YEAR 1990	HIGHEST 70.09	MAR 15.	1990	LOWEST	71.57 SEP 25	. 1990



# SOUTHAMPTON COUNTY

363916077201004. Local number, 52B 11 SOW 178D.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 190 ft, screened 160 to 170 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Oct. 1, 1987, to Sept. 30, 1988, annual measurement with chalked tape. Prior to October 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.1 ft above land-surface datum.

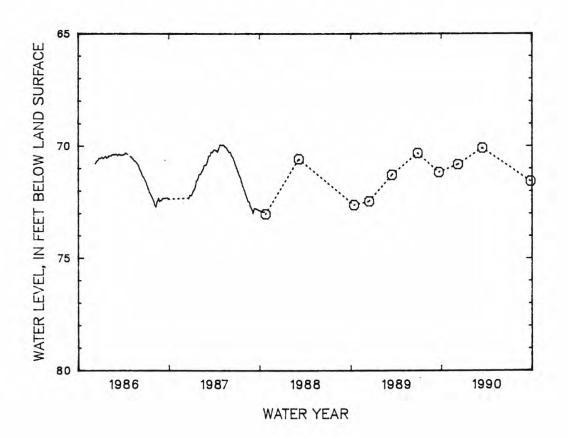
PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 69.81 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 73.03 ft below land-surface datum, Oct. 25, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 07	70.82	MAR 15	70.08	SEP 25	71.57

WATER YEAR 1990 HIGHEST 70.08 MAR 15, 1990 LOWEST 71.57 SEP 25, 1990



# SOUTHAMPTON COUNTY

363916077201005. Local number, 52B 12 SOW 178E.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Sept. 30, 1988, to June 1, 1990, quarterly measurement with chalked tape. Oct. 1, 1987, to Sept. 30, 1988, annual measurement with chalked tape. Prior to Oct. 1, 1987, digital recorder--60-minute punch.

DATUM. -- Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

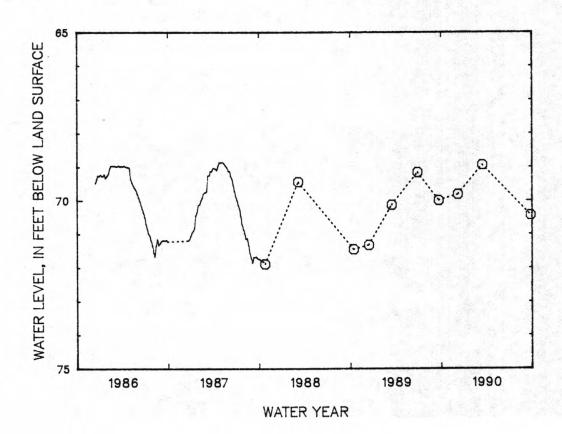
PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 68.75 ft below land-surface datum, Apr. 16, 1987; lowest recorded, 71.90 ft below land-surface datum, Oct. 23, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 07	69.82	MAR 15	68.94	SEP 25	70.44

WATER YEAR 1990 HIGHEST 68.94 MAR 15, 1990 LOWEST 70.44 SEP 25, 1990



# SOUTHAMPTON COUNTY

363916077201006. Local number, 52B 13 SOW 178F.

LOCATION.--Lat 36°39'16", long 77°20'10", Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 65 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Semiannual measurements with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Oct. 1, 1987, to Sept. 30, 1988, annual measurement with chalked tape. Prior to Oct. 1, 1987, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

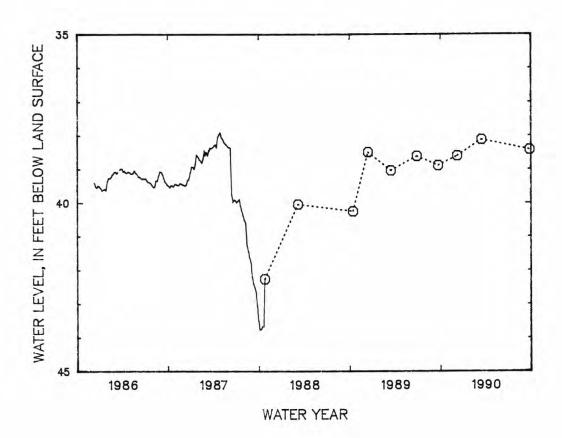
PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 37.90 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 43.77 ft below land-surface datum, Oct. 6-9, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DEC 07 38.60 MAR 15 38.12 SEP 25 38.40	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
	DEC 07	38.60	MAR 15	38.12	SEP 25	38.42	

WATER YEAR 1990 HIGHEST 38.12 MAR 15, 1990 LOWEST 38.60 DEC 07, 1989



#### SOUTHAMPTON COUNTY

363722077014601. Local number, 54A 1.

LOCATION.--Lat 36°37'22", long 77°01'46", Hydrologic Unit 03010201, 100 ft west of State Highway 681, 0.5 mi north of intersection of State Highways 672 and 681, and 2.4 mi north of Sunbeam. Owner: William Britt.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 254 ft, screened 244 to 254 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

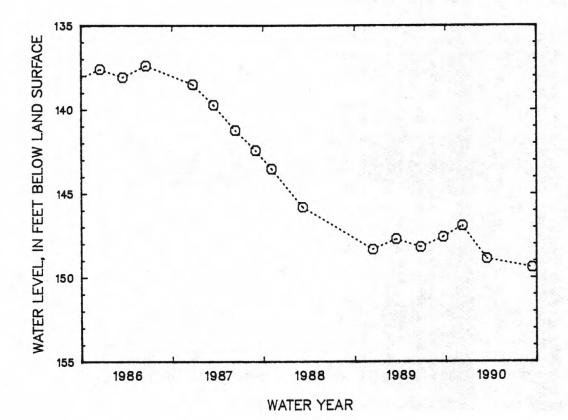
DATUM. --Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.03 ft above land-surface datum.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.40 ft below land-surface datum, Aug. 17, 1970; lowest measured, 149.40 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL		DAT	E	WATER LEVEL	
	DEC 07	146.91	MAR 15	148.88		SEP	13	149.40	
ATED VEAD 1000	HIGHEST 146 C	1 DEC 07	1000	LOUPET	140	40	CED	12 1000	^



#### SOUTHAMPTON COUNTY

363942077002701. Local number, 54B 12.

LOCATION.--Lat 36°39'42", long 77°00'27", Hydrologic Unit 03010201, off State Highway 650, 0.9 mi north of town of Delaware, and 1.8 mi northeast of Handsom. Owner: L. W. Overby.

AQUIFER .-- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 236 ft, screened 226 to 236 ft.

INSTRUMENTATION.--Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 23 ft above National Geodetic Vertical Datum of 1929, from topograhic map. Measuring point: Top of casing, 1.8 ft above land-surface datum.

PERIOD OF RECORD. -- September 1970 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.17 ft below land-surface datum, Dec. 29, 1970; lowest measured, 158.17 ft below land-surface datum, June 16, 1989.

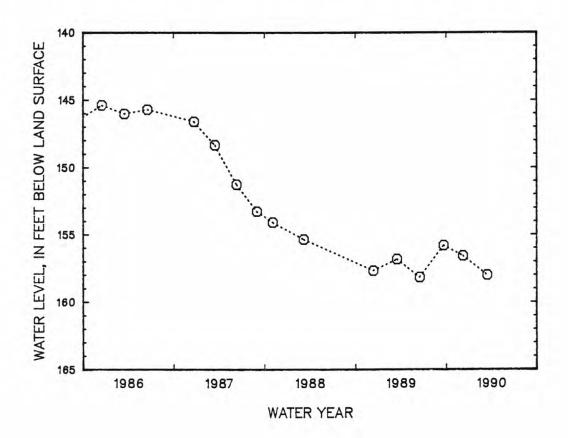
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

	WATER		WATER
DATE	LEVEL	DATE	LEVEL
DEC 07	156 57	MAR 15	158 01

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 156.57 DEC 07, 1989

LOWEST 158.01 MAR 15, 1990



#### SOUTHAMPTON COUNTY

364121077013701. Local number, 54B 24 SOW 034.

LOCATION.--Lat 36°41'21", long 77°01'37", Hydrologic Unit 03010201, off U.S. Highway 58, 1.7 mi southeast of Courtland. Owner: Clarence Pittman.

AQUIFER. -- Sand of middle Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 71 ft, diameter 2 in. from 71 to 224 ft, depth 224 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

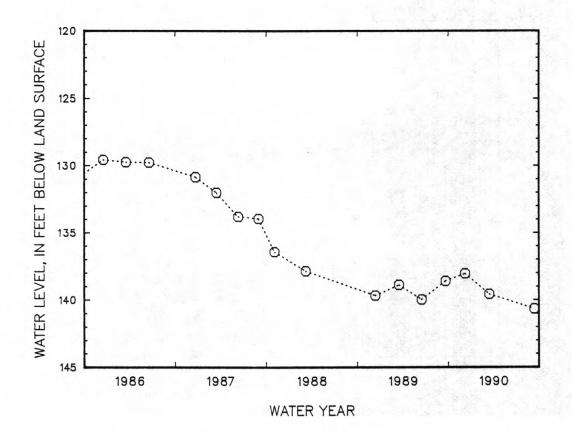
DATUM.--Elevation of land-surface datum is 29 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD. -- September 1970 to August 1974, December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.82 ft below land-surface datum, Dec. 29, 1970; lowest measured, 140.66 ft below land-surface datum, Sept. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DA	TE	WATER LEVEL
	DEC 07	138.04	MAR 14	139.57	SEP	11	140.66
WATER YEAR 1990	HIGHEST 138.0	4 DEC 07,	1989	LOWEST	140.66	SEP	11, 1990



#### SOUTHAMPTON COUNTY

364706077072301. Local number, 54C 1.

LOCATION.--Lat 36°47'06", long 77°07'23", Hydrologic Unit 03010201, 0.25 mi northwest of intersection of State Highways 35 and 713 in Sebrell. Owner: Norfolk and Western Railway.

AQUIFER. -- Sand of middle Cretaceous age.

WELL CHARACTERISTICS .-- Drilled unused water well, diameter 10 in., depth 344 ft, screen depth unknown.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 58.4 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, at land-surface datum.

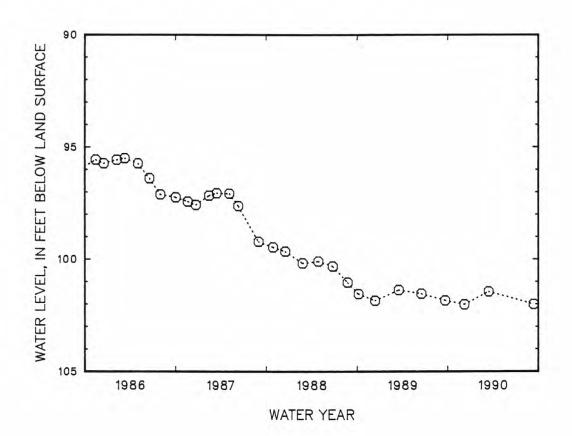
PERIOD OF RECORD.--1907, July 1938, April 1940 to December 1946, October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 15.00 ft below land-surface datum, 1907; lowest measured, 102.02 ft below land-surface datum, Dec. 7, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 07	102.02	MAR 14	101.44	SEP 11	102.01	

WATER YEAR 1990 HIGHEST 101.44 MAR 14, 1990 LOWEST 102.02 DEC 07, 1989



WATER YEAR 1990

# SOUTHAMPTON COUNTY

363632076580101. Local number, 55A 3 SOW 086.

LOCATION.--Lat 36°36'32", long 76°58'01", Hydrologic Unit 03010201, 0.1 mi southeast of intersection of State Highways 687 and 689, 4.0 mi southwest of Franklin. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 745 ft, screened 714 to 724 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 11, 1988; 1.3 ft thereafter.

REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

PERIOD OF RECORD.--March 1977, October 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

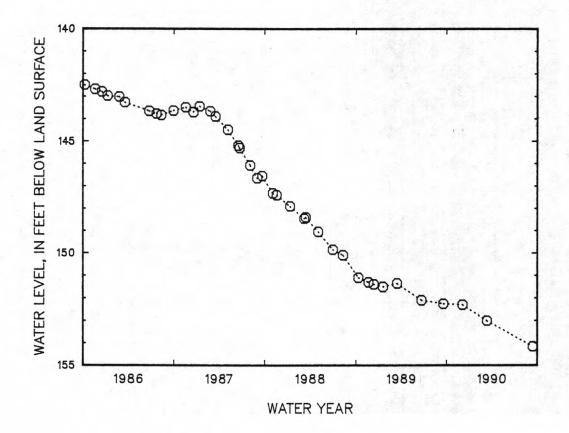
EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 125.00 ft below land-surface datum, Mar. 18, 1977; lowest measured, 154.16 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL DATE LEVEL DATE LEVEL DATE LEVEL

DEC 04 152.30 MAR 12 153.01 SEP 12 154.16

HIGHEST 152.30 DEC 04, 1989 LOWEST 154.16 SEP 12, 1990



# SOUTHAMPTON COUNTY

364321076595401. Local number, 55B 51.

LOCATION.--Lat 36°43'22", long 76°59'55", Hydrologic Unit 03010201, off State Highway 611, 2.2 mi northwest of Hunterdale. Owner: Owen Wade.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 332 ft, screened 322 to 327 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 66 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of sanitary seal, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- August to December 1970, November 1972 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 154.15 ft below land-surface datum, Dec. 29, 1970; lowest measured, 181.88 ft below land-surface datum, June 16, 1989.

WATER LEVEL. IN FEET BELOW LAND-SURFACE DATUM. OCTOBER 1989 TO JUNE 1990

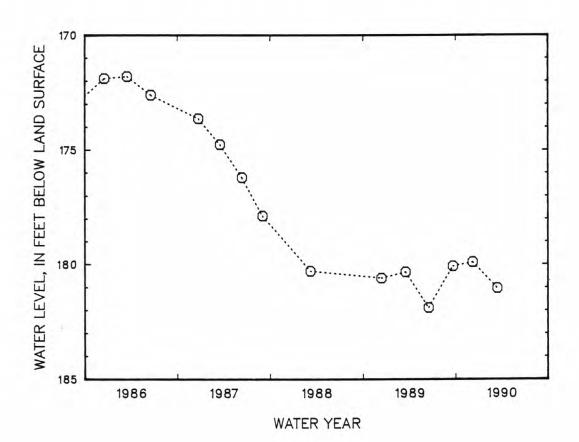
DATE LEVEL DATE LEVEL

DEC 07 179.90 MAR 14 181.04

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 179.90 DEC 07, 1989

LOWEST 181.04 MAR 14, 1990



# SOUTHAMPTON COUNTY

364628076552701. Local number, 55C 3.

LOCATION.--Lat 36°46'28", long 76°55'27", Hydrologic Unit 03010202, off State Highway 635 at Black Creek Baptist Church, 0.2 mi north of Black Creek, and 1.5 mi west of Burdette. Owner: Black Creek Baptist Church.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 312 ft, screened 300 to 312 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 57 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling breather pipe, 1.6 ft above land-surface datum.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

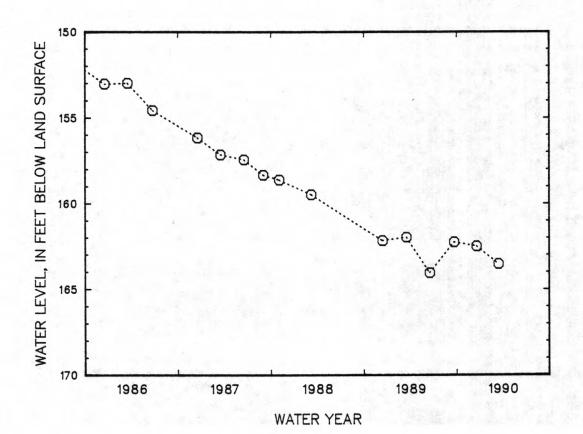
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.80 ft below land-surface datum, Dec. 29, 1970; lowest measured, 164.06 ft below land-surface datum, June 16, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL DATE LEVEL

DEC 18 162.50 MAR 14 163.54

WATER YEAR 1990 HIGHEST 162.50 DEC 18, 1989 LOWEST 163.54 MAR 14, 1990



#### SOUTHAMPTON COUNTY

365120076585101. Local number. 55C 10.

LOCATION.--Lat 36°51'20", long 76°58'51", Hydrologic Unit 03010202, 100 ft west of State Highway 616, 0.3 mi south of Berlin. Owner: R. L. Hurrup.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 326 ft, screened 316 to 326 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

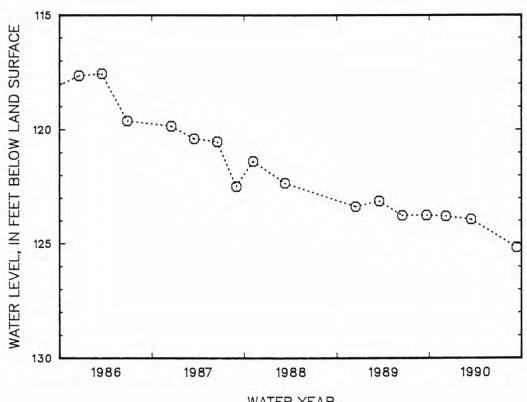
PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 94.62 ft below land-surface datum, Aug. 21, 1970; lowest measured, 125.17 ft below land-surface datum, Sept. 11, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL		DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 05	123.80	MAR 15	123.94	SEP 11	125.17

WATER YEAR 1990 HIGHEST 123.80 DEC 05, 1989 LOWEST 125.17 SEP 11, 1990



WATER YEAR

### SOUTHAMPTON COUNTY

365415076535201. Local number, 55D 5.

LOCATION.--Lat 36°54'15", long 76°53'20", Hydrologic Unit 03010202, off State Highway 616, 0.25 mi southwest of intersection of State Highway 616 and U.S. Highway 460 in Ivor. Owner: Town of Ivor.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 8 in., depth 450 ft, screened 384 to 394 ft, 425 to 440 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, semiannual measurement with chalked tape.

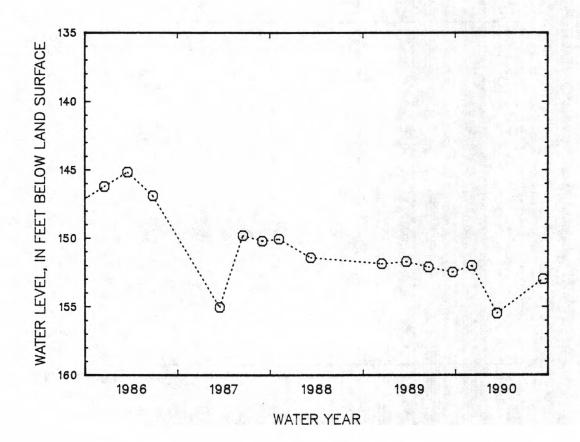
DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of water-level access line, 1.75 ft above land-surface datum.

PERIOD OF RECORD. --October 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 120.47 ft below land-surface datum, Nov. 2, 1970; lowest measured, 155.49 ft below land-surface datum, Mar. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 05	152.02	MAR 13	155.49	SEP 11	153.00
WATER YEAR 1990	HIGHEST 152.0	2 DEC 05,	1989	LOWEST	155.49 MAR	13, 1990



# CITY OF SUFFOLK

363511076492901. Local number, 56A 1 SOW 047.

LOCATION.--Lat 36°35'11", long 76°49'29", Hydrologic Unit 03010203, at intersection of State Highways 666 and 667, 0.5 mi southeast of Cleopus. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac, Middle Potomac, and Upper Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,149.5 ft, screened 401 to 406 ft, 495 to 500 ft, 628 to 633 ft, 727 to 732 ft, 989 to 999 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 37 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

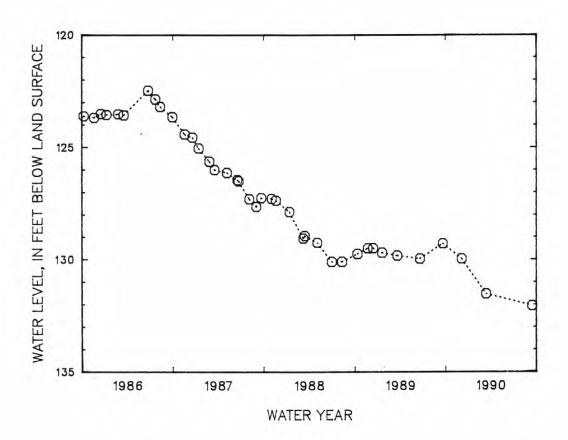
PERIOD OF RECORD. -- June 1971 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 101.00 ft below land-surface datum, Nov. 15, 1973; lowest measured, 132.06 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DAT	E	WATER LEVEL	DA'	re	WATER LEVEL
DEC 04	129.97	MAR	12	131.53	SEP	13	132.06

WATER YEAR 1990 HIGHEST 129.97 DEC 04, 1989 LOWEST 132.06 SEP 13, 1990



#### CITY OF SUFFOLK

363625076522601. Local number, 56A 9 SOW 076A.

LOCATION.--Lat 36°36'25", long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 8.1 mi south of Holland. Owner: Virginia Water Control Board.

AQUIFER .-- Lower Potomac, Middle Potomac, and Upper Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 519 ft, screened 452 to 457 ft, 500 to 505 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum prior to Jan. 12, 1988; 2.0 ft thereafter.

REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

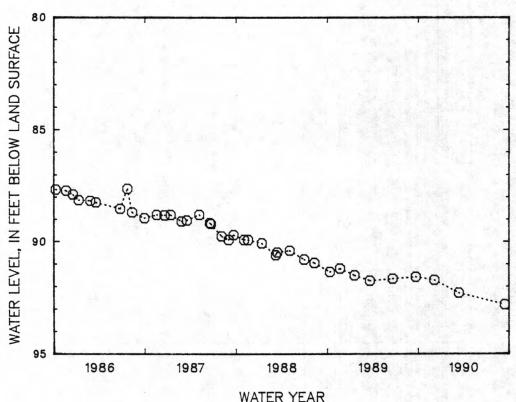
PERIOD OF RECORD. -- July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.99 ft below land-surface datum, Jan. 8, 1979; lowest measured, 92.80 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	91.71	MAR 12	92.28	SEP 13	92.80

WATER YEAR 1990 HIGHEST 91.71 DEC 04, 1989 LOWEST 92.80 SEP 13, 1990



#### CITY OF SUFFOLK

363345076470201. Local number, 56A 10 SOW 088A.

LOCATION.--Lat 36°33'45", long 76°47'02", Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,050 to 1,060 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, semiannual measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

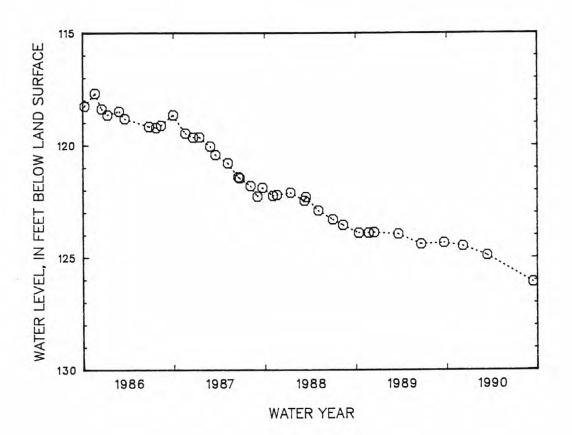
PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.70 ft below land-surface datum, June 30, 1980; lowest measured, 125.09 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 04	124.48	MAR 12	124.90	SEP 13	126.09	

WATER YEAR 1990 HIGHEST 124.48 DEC 04, 1989 LOWEST 126.09 SEP 13, 1990



363653076455401. Local number, 56A 11 SOW 089.

LOCATION.--Lat 36°36'53", long 76°45'54", Hydrologic Unit 03010203, off State Highway 616, 1.1 mi east of Holy Neck Church, and 3.4 mi north of Somerton. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 861 ft, screened 830 to 840 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 79 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Nov. 18, 1987; 0.6 ft Nov. 18, 1987, to Jan. 12, 1988; 1.3 ft thereafter.

REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

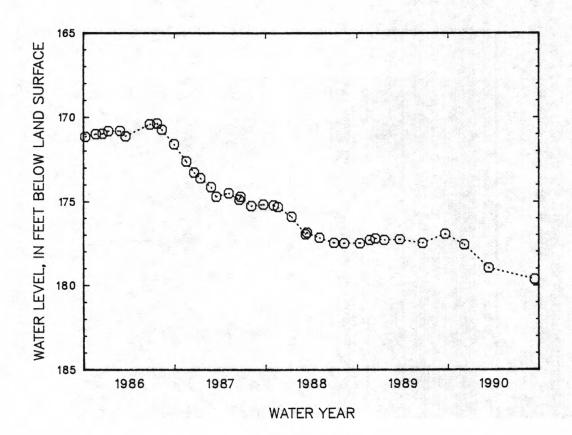
PERIOD OF RECORD. -- August 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 154.00 ft below land-surface datum, Aug. 9, 1977; lowest measured, 179.65 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	177.58	MAR 12	178.97	SEP 13	179.65

WATER YEAR 1990 HIGHEST 177.58 DEC 04, 1989 LOWEST 179.65 SEP 13, 1990



#### CITY OF SUFFOLK

363345076470202. Local number, 56A 12 SOW 088B.

LOCATION.--Lat 36°33'45", long 76°47'02", Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 580 ft, screened 570 to 580 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

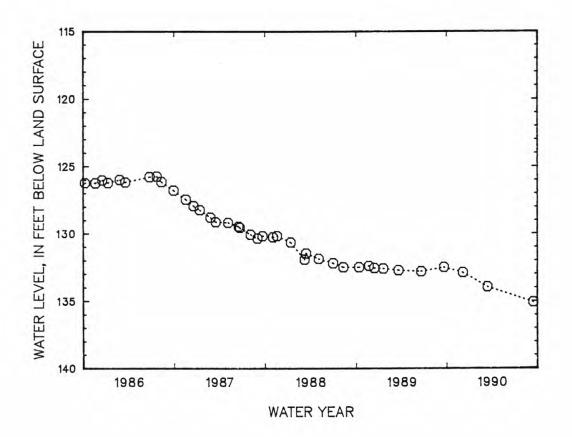
PERIOD OF RECORD.--June 1977 to November 1982, June 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.00 ft below land-surface datum, June 30, 1977; lowest measured, 135.08 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 04	132.90	MAR 12	133.95	SEP 13	135.08	

WATER YEAR 1990 HIGHEST 132.90 DEC 04, 1989 LOWEST 135.08 SEP 13, 1990



WATER YEAR 1990

#### CITY OF SUFFOLK

363625076522602. Local number, 56A 13 SOW 076B.

LOCATION.--Lat 36°36'25", long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 802 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Jan. 12, 1988; 0.8 ft thereafter.

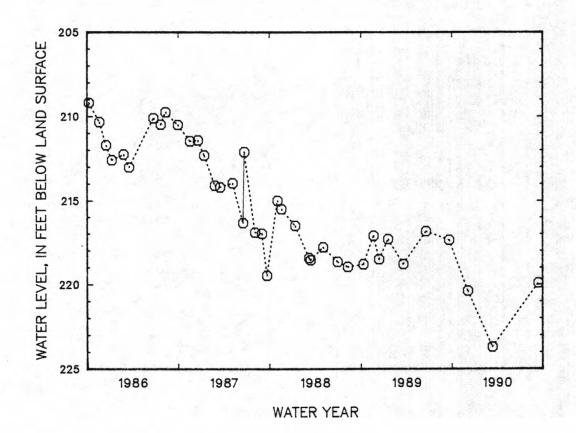
REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

PERIOD OF RECORD. -- May 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 204.34 ft below land-surface datum, Oct. 26, 1982; lowest measured, 223.70 ft below land-surface datum, Mar. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 04	220.38	MAR 12	223.70	SEP 13	219.91
HIGHES	219.9	1 SEP 13,	1990	LOWEST	223.70 MAR	12, 1990



#### CITY OF SUFFOLK

363625076522603. Local number, 56A 14 SOW 076C.

LOCATION.--Lat 36°36'25", long 76°52'26", Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 735 ft, screened 730 to 735 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.2 ft thereafter.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

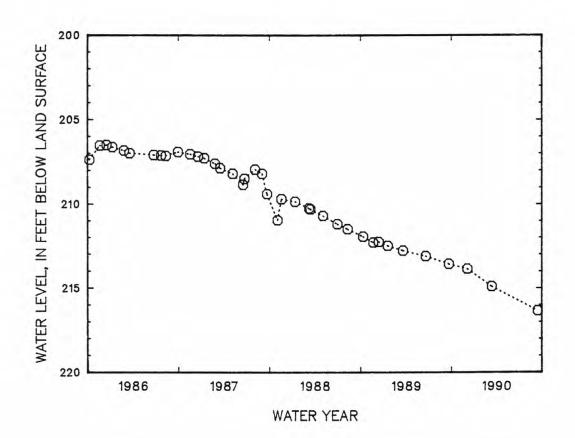
PERIOD OF RECORD. -- March 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 205.62 ft below land-surface datum, Mar. 7, 1979; lowest measured, 216.35 ft below land-surface datum, Sept. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 04	213.87	MAR 12	214.91	SEP 13	216.35	

WATER YEAR 1990 HIGHEST 213.87 DEC 04, 1989 LOWEST 216.35 SEP 13, 1990



363611076400901. Local number, 57A 6 SOW 085.

LOCATION.--Lat 36°36'11", long 76°40'09", Hydrologic Unit 03010203, at Virginia Department of Transportation shop off U.S. Highway 13, 0.3 mi northeast of Whaleyville. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac and Middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,095 ft, screened 660 to 665 ft, 833 to 838 ft, 988 to 993 ft, 1,069 to 1,074 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 73 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.25 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

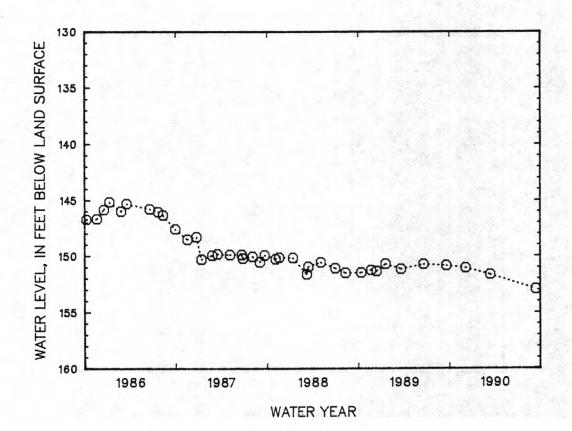
PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 137.54 ft below land-surface datum, Mar. 22, 1978; lowest measured, 152.95 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	151.05	MAR 13	151.65	SEP 12	152.95

WATER YEAR 1990 HIGHEST 151.05 DEC 04, 1989 LOWEST 152.95 SEP 12, 1990



## CITY OF SUFFOLK

364013076434601. Local number, 57B 1.

WATER YEAR 1990

LOCATION.--Lat 36°40'13", long 76°43'46", Hydrologic Unit 03010202, at the Virginia Swine Evaluation Station, 0.2 mi east of State Highway 610, and 2.3 mi southwest of Lummis. Owner: Virginia Cooperative Extension Service.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

1986

1987

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 496 ft, screened 472 to 496 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

PERIOD OF RECORD. -- August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.09 ft below land-surface datum, Aug. 26, 1970; lowest measured, 164.17 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 05	161.71	MAR 13	162.58	SEP 12	164.17
HIGHEST 161.7	1 DEC 05,	1989	LOWEST	164.17 SEP	12, 1990

1988

WATER YEAR

1990

1989

## CITY OF SUFFOLK

363834076382301. Local number, 57B 8.

LOCATION.--Lat 36°38'27", long 76°38'05", Hydrologic Unit 03010205, 0.3 mi southwest of State Highway 664, 0.8 mi southeast of U.S. Highway 13, and 1.1 mi south of Nurneysville. Owner: Soren F. Andresen.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled flowing water well, diameter 2 in., depth 65 ft, screened 50 to 65 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with a manometer. Prior to Dec. 1, 1988, bimonthly measurement with a manometer.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: At land-surface datum.

PERIOD OF RECORD. -- March 1975, November 1977 to current year. Unpublished records available March 1975 in files of the Geological Survey.

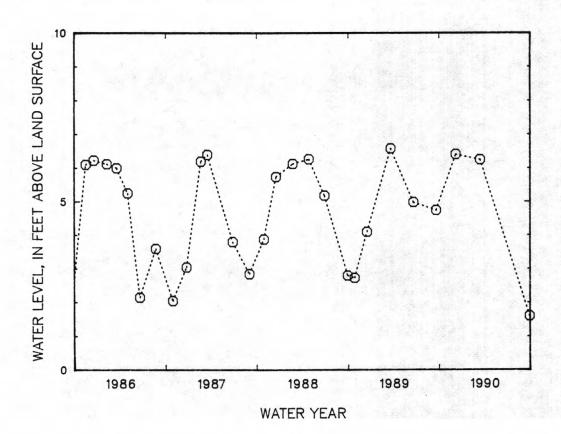
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.58 ft above land-surface datum, Mar. 20, 1989; lowest measured, at land-surface datum, Sept. 26, 1980.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	WATER		WATER	WATER			
DATE	ATE LEVEL I		LEVEL	DATE	LEVEL		
DEC 06	6.41	MAR 13	6.25	SEP 27	1.60		

NOTE. -- Flowing well; readings given are above land-surface datum.

WATER YEAR 1990 HIGHEST 6.41 DEC 06, 1989 LOWEST 1.60 SEP 27, 1990



#### CITY OF SUFFOLK

364703076383701. Local number, 57C 21 SOW 099A.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Water Control Board.

AQUIFER .-- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 248 ft, screened 238 to 248 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan. 12, 1988; 1.1 ft thereafter.

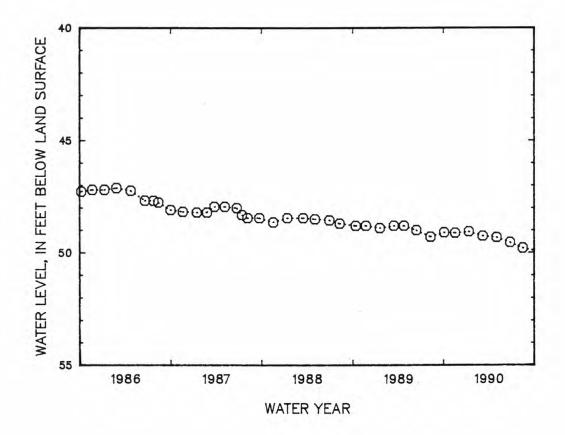
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 46.32 ft below land-surface datum, Apr. 19, 1984; lowest measured, 49.80 ft below land-surface datum, Aug. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	49.10 49.12	JAN 10	49.06	MAR 07	49.26	MAY 02	49.32	JUN 25	49.55	AUG 15	49.80
WATER Y	EAR 1990	HIGHEST	49.06	JAN 10, 199	0	LOWEST 49.80	AUG 15	1990			



364703076383702. Local number, 57C 22 SOW 099B.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 694 ft, screened 684 to 694 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder. Prior to Aug. 5, 1981, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. --Elevation of land-surface datum is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.0 ft above land-surface datum prior to July 14, 1987; 1.7 ft thereafter.

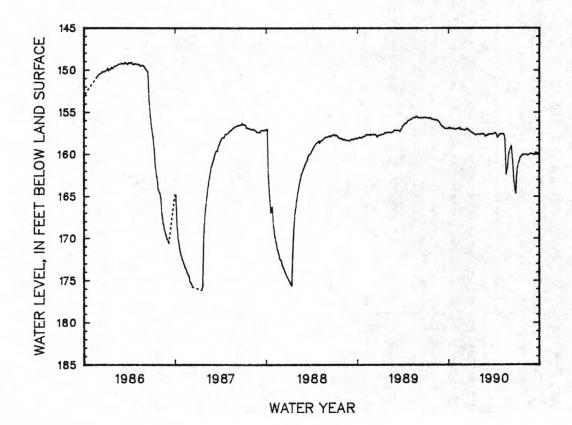
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- February 1980 to current year. Unpublished records available prior to August 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.24 ft below land-surface datum, Feb. 18, 1980; lowest recorded, 176.13 ft below land-surface datum, Jan. 13, 14, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	156.80	156.94	157.10	157.45	157.62	157.68	157.40	157.55	159.28	161.58	160.00	159.98
10	156.89	156.86	157.02	157.50	157.56	157.62	157.55	157.55	158.97	160.89	160.02	160.01
15	156.92	156.95	156.92	157.65	157.58	157.61	157.95	158.12	160.59	160.40	160.08	159.76
20	156.90	157.04	157.07	157.68	157.59	157.54	157.80	162.42	163.00	160.20	159.99	159.81
25	156.98	157.01	157.20	157.61	157.84	157.60	157.59	161.65	164.20	160.01	159.90	159.84
EOM	156.99	157.08	157.34	157.62	157.80	157.55	157.55	159.90	163.30	160.00	159.89	159.87
LIATET	VEAD 10	00 17	TOWERS 1	FC 77 000			mam 164	C. 7177	1000			
MAILE	YEAR 19	90 H.	IGHEST 1	56.77 OC	03, 1989	a TO	WEST 164	.64 JUN .	28, 1990			



## CITY OF SUFFOLK

364703076383703. Local number, 57C 23 SOW 099C.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Water Control Board.

AQUIFER .-- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 478 ft, screened 468 to 478 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Feb. 15, 1986, to Sept. 30, 1988, continuous strip-chart recorder. Prior to Feb. 15, 1986, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

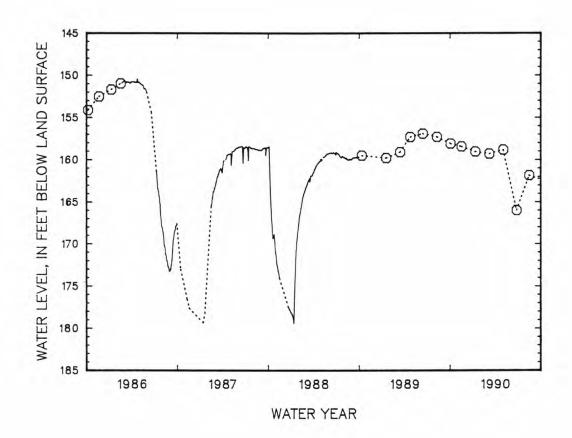
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- February 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 147.67 ft below land-surface datum, Nov. 5, 1984; lowest measured, 179.38 ft below land-surface datum, Jan. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DAT		ATER EVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16		JAN 10	159.05	MAR 07	159.30	MAY	02 158	8.83	JUN 25	166.00	AUG 15	161.85
WATER Y	EAR 1990	HIGHEST	158.10	OCT 03. 1	989	LOWEST	166.00	JUN 25.	1990			



## CITY OF SUFFOLK

364703076383704. Local number, 57C 24 SOW 099D.

LOCATION.--Lat 36°47'03", long 76°38'37", Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar. 25, 1987; 2.0 ft Mar. 25, 1987, to Jan. 12, 1988; 1.3 ft Jan. 13, 1988, to June 25, 1990; 0.3 ft thereafter.

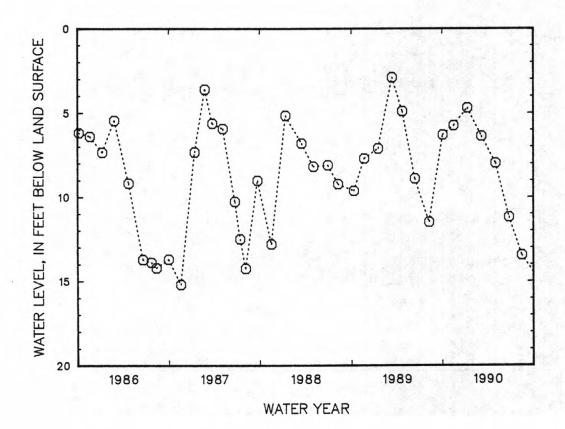
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 2.90 ft below land-surface datum, Mar. 14, 1989; lowest measured, 15.20 ft below land-surface datum, Nov. 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	6.30 5.74	JAN 10	4.70	MAR 07	6.38	MAY 02	7.98	JUN 25	11.20	AUG 15	13.46
WATER Y	EAR 1990	HIGHEST	4.70	JAN 10, 1990	LOWE	ST 13.46	AUG 15,	1990			



#### CITY OF SUFFOLK

363704076334501. Local number, 58A 1 SOW 036.

LOCATION.--Lat 36°37'02", long 76°33'45", Hydrologic Unit 03010205, 200 ft west of State Highway 604, 1.9 mi east of Cypress Chapel. Owner: Union Camp Corporation.

AQUIFER. -- Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Jetted unused water well, diameter 3 in., depth 420 ft, screened 410 to 420 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 32 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum prior to Jan. 12, 1988; 2.1 ft thereafter.

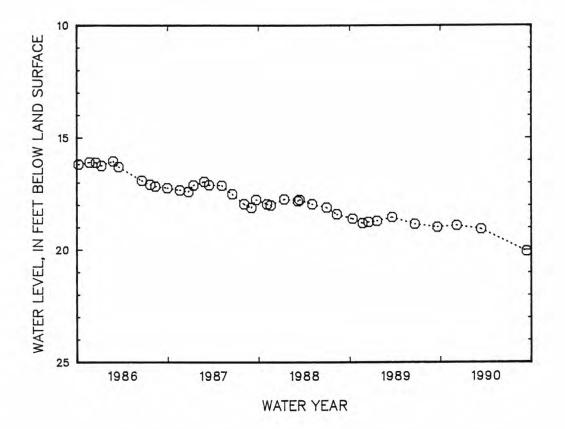
REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

PERIOD OF RECORD.--January 1938, February 1960, September 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 0.05 ft below land-surface datum, Jan. 1, 1938; lowest measured, 20.06 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 05	18.90	MAR 13	19.06	SEP 12	20.06
WATER YEAR 1990	HIGHEST 18.90	DEC 05,	1989	LOWEST	20.06 SEP 12	, 1990



WATER YEAR 1990

## CITY OF SUFFOLK

363408076350001. Local number, 58A 2 SOW 042.

LOCATION.--Lat 36°34'08", long 76°35'00", Hydrologic Unit 03010205, 200 ft southwest of intersection of State Highways 32 and 678, 1.3 mi north of North Carolina State line, and 3.4 mi south of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac, Middle Potomac, Upper Potomac, and Virginia Beach aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 1,920 ft, screened 481 to 486 ft, 730 to 735 ft, 947 to 952 ft, 1,115 to 1,120 ft, 1,222 to 1,227 ft, 1,427 to 1,432 ft, 1,537 to 1,542 ft, 1,874 to 1,879 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 58 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

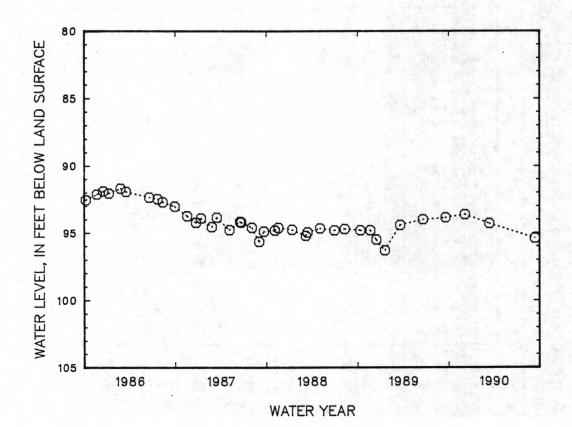
REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

PERIOD OF RECORD. -- December 1971 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.52 ft below land-surface datum, Dec. 1, 1971; lowest measured, 96.30 ft below land-surface datum, Jan. 18, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 05	93.62	MAR 13	94.30	SEP 12	95.40
HIGHEST	93.62	DEC 05,	1989	LOWEST	95.40 SEP 12	, 1990



#### CITY OF SUFFOLK

363303076330201. Local number, 58A 75 SOW 170.

LOCATION.--Lat 36°33'03", long 76°33'02", Hydrologic Unit 03010205, 100 ft north of North Carolina State line, 0.4 mi east of Desert Road, and 5.0 mi southeast of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 535 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. July 1, 1985, to Feb. 28, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

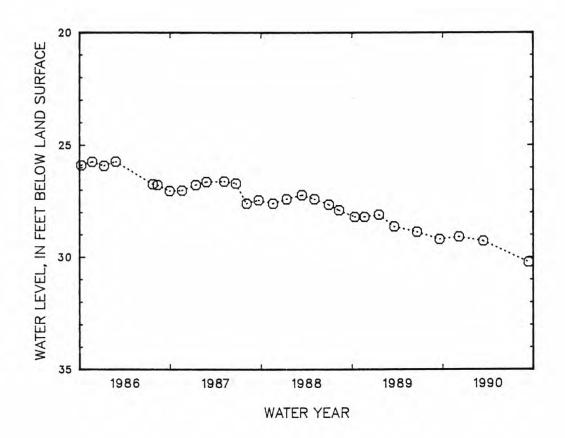
PERIOD OF RECORD. -- July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.52 ft below land-surface datum, July 11, 1985; lowest measured, 30.23 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 05	29.09	MAR 13	29.28	SEP 12	30.23

WATER YEAR 1990 HIGHEST 29.09 DEC 05. 1989 LOWEST 30.23 SEP 12. 1990



363655076332002. Local number, 58A 77 SOW 180A.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,158 ft, diameter 3 in. from 1,136 to 1,209 ft, depth 1,209 ft, screened 1,199 to 1,209 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 34.02 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

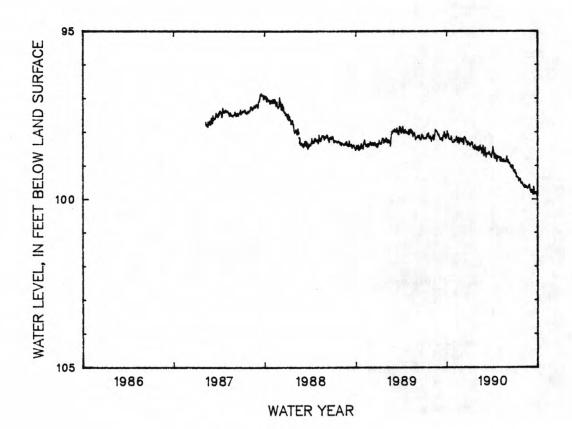
PERIOD OF RECORD .-- February 1987 to current year.

REVISED RECORDS. -- WDR VA-89-1: 1987.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 96.83 ft below land-surface datum, Sept. 30, 1987; lowest recorded, 99.91 ft below land-surface datum, Sept. 28, 29, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	98.07	98.26	98.20	98.37	98.57	98.62	98.54	98.76	98.90	99.22	99.61	99.79
10	98.20	98.22	98.15	98.31	98.43	98.64	98.74	98.83	98.92	99.33	99.58	99.80
15	98.22	98.26	98.18	98.47	98.51	98.66	98.70	98.88	99.02	99.36	99.61	99.63
20	98.15	98.27	98.28	98.49	98.62	98.59	98.87	98.88	99.06	99.40	99.67	99.81
25	98.29	98.23	98.29	98.44	98.68	98.70	98.76	98.90	99.15	99.50	99.63	99.85
EOM	98.24	98.28	98.34	98.54	98.61	98.62	98.75	98.85	99.19	99.51	99.70	99.89
WATER	YEAR 1990	HIG	HEST 97	92 OCT 0	2 1080	I OWEST	99 91	SEP 28	29 1990			



363655076332003. Local number, 58A 78 SOW 180B.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in. to 811 ft, diameter 2 in. from 766 to 880 ft, depth 880 ft, screened 850 to 860 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

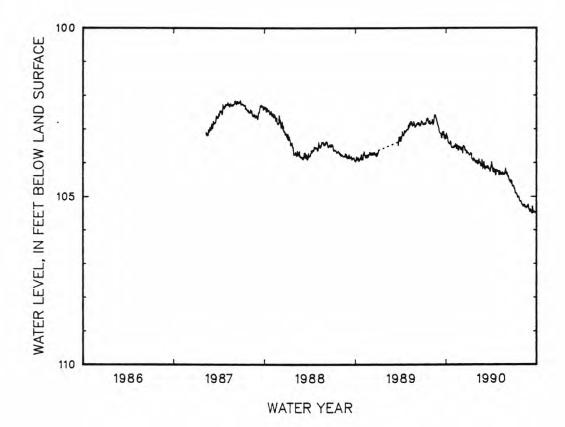
DATUM. -- Elevation of land-surface datum is 34.02 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD. -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.14 ft below land-surface datum, June 5, 27, 1987; lowest recorded, 105.51 ft below land-surface datum, Sept. 12, 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	102 00	100 51	100 50	100 70						10/ 70	105.05	105 //
5	103.23	103.54	103.56	103.76	104.04	104.10	104.08	104.25	104.36	104.76	105.25	105.44
10	103.38	103.45	103.50	103.73	103.94	104.13	104.25	104.30	104.40	104.89	105.25	105.45
15	103.44	103.58	103.54	103.90	104.01	104.16	104.21	104.34	104.52	104.94	105.26	105.30
20	103.38	103.60	103.63	103.94	104.09	104.11	104.37	104.35	104.57	105.01	105.33	105.46
25	103.54	103.55	103.66	103.92	104.14	104.21	104.25	104.35	104.67	105.11	105.30	105.47
EOM	103.53	103.60	103.72	104.01	104.09	104.15	104.25	104.30	104.71	105.15	105.36	105.50
SACTOR												
WATER	YEAR 1990	) HI	GHEST 10:	3.08 OCT	02, 1989	LOW	EST 105.	51 SEP 13	2, 13, 199	90		



363655076332004. Local number, 58A 79 SOW 180C.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER .-- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 670 ft, diameter 2 in. from 657 to 710 ft, depth 710 ft, screened 700 to 710 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

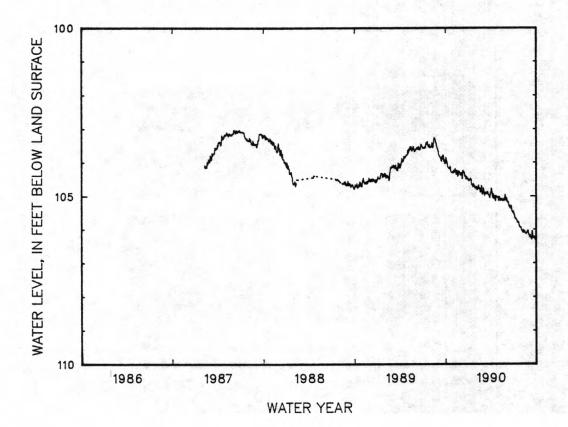
DATUM.--Elevation of land-surface datum is 33.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.4 ft above land-surface datum.

PERIOD OF RECORD. -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 102.72 ft below land-surface datum, May 11, 1987; lowest recorded, 106.33 ft below land-surface datum, Sept. 28, 29, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	103.96	104.29	104.32	104.53	104.81	104.87	104.85	105.05	105.13	105.54	106.05	106.23
10	104.13	104.27	104.25	104.49	104.72	104.90	105.02	105.09	105.17	105.67	106.03	106.25
15	104.18	104.32	104.30	104.66	104.79	104.93	105.00	105.12	105.29	105.72	106.06	106.05
20	104.13	104.37	104.40	104.72	104.86	104.88	105.14	105.13	105.34	105.78	106.12	106.23
25	104.29	104.29	104.43	104.69	104.92	104.99	105.03	105.13	105.44	105.90	106.09	106.28
EOM	104.28	104.36	104.49	104.78	104.86	104.93	105.03	105.07	105.49	105.94	106.14	106.31
WATER	YEAR 1990	) HI	GHEST 10	3.83 OCT	02, 03,	1989	LOWEST	106.33 S	EP 28, 29	, 1990		



295

#### CITY OF SUFFOLK

363655076332005. Local number, 58A 80 SOW 180D.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER .-- Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 397 ft, diameter 2 in. from 388 to 440 ft, depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 34.26 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.3 ft above land-surface datum.

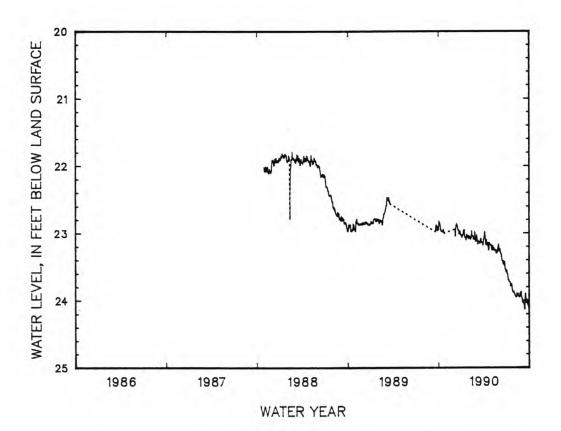
REMARKS. -- Low-water levels in February 1988 were caused by pumping of well for water-quality samples.

PERIOD OF RECORD . -- June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.55 ft below land-surface datum, June 17, 1987; lowest recorded, 24.13 ft below land-surface datum, Sept. 12, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.85		22.94	23.03	23.08	23.09	23.02	23.21	23.27	23.61	23.93	24.03
10	22.95		22.89	22.96	23.02	23.12	23.16	23.25	23.32	23.70	23.95	24.06
15	22.97		22.88	23.06	23.04	23.15	23.15	23.26	23.42	23.73	23.90	23.90
20	22.95		22.95	23.09	23.08	23.08	23.25	23.29	23.45	23.76	23.94	24.02
25			22.98	23.05	23.09	23.14	23.17	23.28	23.52	23.85	23.90	24.07
EOM			23.03	23.08	23.08	23.09	23.19	23.22	23.58	23.88	23.95	24.12
WATER	YEAR 1990	HIG	HEST 22.	81 OCT 0	2, 03, 19	89 L	OWEST 24	.13 SEP	12, 1990			



363655076332006. Local number, 58A 81 SOW 180E.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 309 ft, diameter 2 in. from 298 to 329 ft, depth 329 ft, screened 319 to 329 ft.

INSTRUMENTATION . -- Digital recorder -- 60-minute punch .

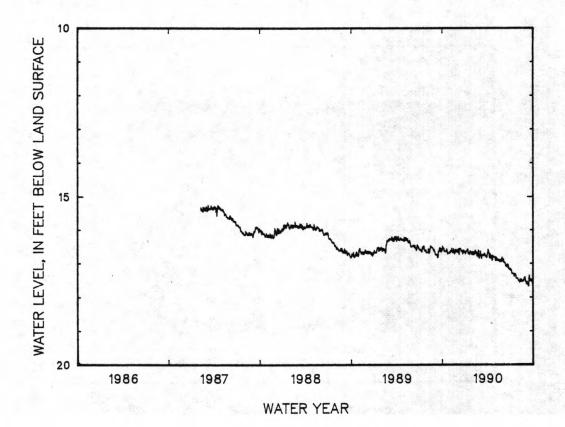
DATUM. -- Elevation of land-surface datum is 34.00 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.4 ft above land-surface datum.

PERIOD OF RECORD. -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 15.07 ft below land-surface datum, Feb. 23, 1987; lowest recorded, 17.67 ft below land-surface datum, Sept. 12, 13, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.55	16.66	16.58	16.65	16.74	16.75	16.67	16.83	16.95	17.20	17.52	17.59
10	16.64	16.61	16.56	16.60	16.63	16.75	16.81	16.88	16.98	17.29	17.48	17.61
15	16.64	16.64	16.59	16.71	16.69	16.77	16.78	16.92	17.07	17.31	17.48	17.36
20	16.58	16.67	16.63	16.73	16.77	16.71	16.91	16.95	17.09	17.33	17.52	17.48
25	16.69	16.65	16.63	16.66	16.81	16.79	16.81	16.95	17.15	17.43	17.47	17.53
EOM	16.66	16.65	16.65	16.73	16.74	16.72	16.82	16.91	17.19	17.45	17.52	17.57
WATER	YEAR 1990	HIG	HEST 16.	39 OCT 0	2. 1989	LOWES	T 17.67	SEP 12.	13. 1990			



363655076332007. Local number, 58A 82 SOW 180F.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Chickahominy-Piney Point aquifer of Eocene-Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 274 ft, diameter 2 in. from 262 to 306 ft, depth 306 ft, screened 286 to 306 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 33.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

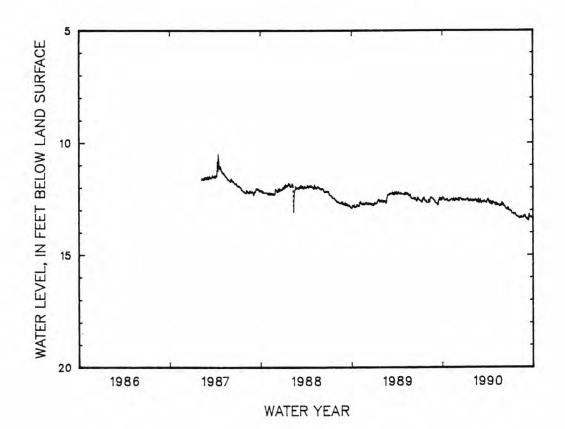
REMARKS. -- Low-water levels in February 1988 were caused by pumping of well for water-quality samples.

PERIOD OF RECORD . -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.12 ft below land-surface datum, Apr. 13, 1987; lowest recorded, 13.97 ft below land-surface datum, Feb. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

							17.3 73.					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.46	12.53	12.48	12.53	12.59	12.60	12.56	12.70	12.79	13.04	13.34	13.40
10	12.54	12.51	12.46	12.49	12.51	12.61	12.66	12.75	12.83	13.13	13.30	13.43
15	12.55	12.54	12.49	12.59	12.57	12.63	12.64	12.77	12.93	13.15	13.29	13.19
20	12.49	12.57	12.52	12.59	12.62	12.57	12.75	12.82	12.93	13.17	13.33	13.30
25	12.58	12.53	12.52	12.54	12.66	12.64	12.66	12.79	12.99	13.26	13.27	13.34
EOM	12.56	12.53	12.53	12.59	12.59	12.57	12.68	12.73	13.03	13.29	13.33	13.39
WATER	YEAR 1990	HIG	HEST 12.	36 OCT 0	2, 1989	LOWEST	13.47	SEP 12,	13, 1990			



363655076332008. Local number, 58A 83 SOW 180G.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 145 ft, diameter 2 in. from 135 to 165 ft, depth 165 ft, screened 155 to 165 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 33.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

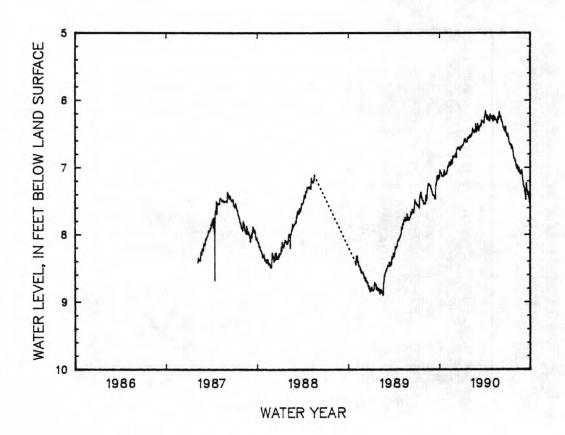
REMARKS.--Low-water levels in April 1987 were caused by pumping of well for water-quality samples.

PERIOD OF RECORD . -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.09 ft below land-surface datum, May 29, 1990; lowest recorded, 8.90 ft below land-surface datum, Feb. 16, 17, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.07	6.99	6.79	6.65	6.53	6.40	6.21	6.26	6.28	6.54	6.98	7.28
10	7.12	6.94	6.72	6.58	6.45	6.39	6.27	6.29	6.33	6.64	6.97	7.39
15	7.13	6.94	6.70	6.62	6.45	6.37	6.26	6.29	6.41	6.66	7.00	7.23
20	7.04	6.93	6.70	6.61	6.46	6.30	6.31	6.33	6.44	6.70	7.08	7.36
25	7.09	6.86	6.69	6.56	6.46	6.32	6.25	6.28	6.48	6.82	7.06	7.44
EOM	7.06	6.84	6.67	6.55	6.42	6.25	6.25	6.22	6.54	6.90	7.17	7.53
WATED	VFAR 1990	HTG	HEST 6 00	MAY 20	1000	LOWEST	7 53 51	FP 20 30	1990			



363655076332009. Local number, 58A 84 SOW 180H.

LOCATION.--Lat 36°36'55", long 76°33'20", Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

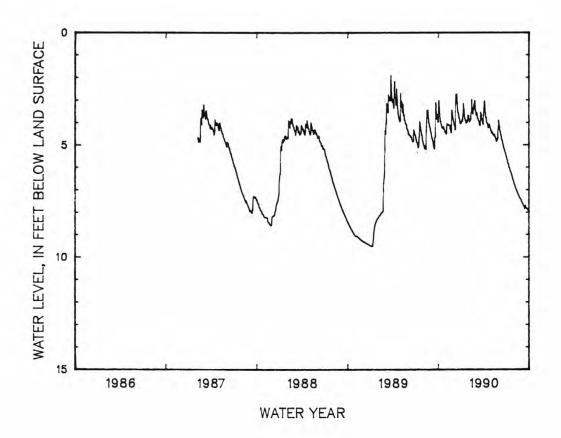
DATUM.--Elevation of land-surface datum is 33.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD. -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.47 ft below land-surface datum, Mar. 24, 1989; lowest recorded, 9.52 ft below land-surface datum, Jan. 5-9, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.48	4.10	4.13	3.93	3.90	3.65	3.42	4.45	4.40	5.69	6.85	7.63
10	3.95	4.09	2.76	3.37	3.56	3.92	3.76	4.54	4.63	5.91	7.00	7.76
15	4.21	4.13	3.09	3.83	3.56	4.11	4.04	4.63	4.92	6.11	7.14	7.70
20	4.19	4.26	3.61	3.98	3.19	3.60	4.21	4.74	5.14	6.25	7.28	7.82
25	4.33	3.52	3.88	3.96	3.39	3.92	4.19	4.78	5.34	6.47	7.39	7.89
EOM	4.46	3.92	4.01	3.88	3.60	3.58	4.37	4.03	5.52	6.69	7.52	7.97
WATER	YEAR 1990	HIGH	HEST 2.18	OCT 02,	1989	LOWEST	7.97 SI	EP 30, 199	90			



### CITY OF SUFFOLK

363928076332901. Local number, 58B 13.

LOCATION.--Lat 36°39'28", long 76°33'29", Hydrologic Unit 03010205, 700 ft east of State Highway 642, 4.0 mi south of Suffolk. Owner: Melvin Brinkley.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Dug unused water well, diameter 22 in., depth 15 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

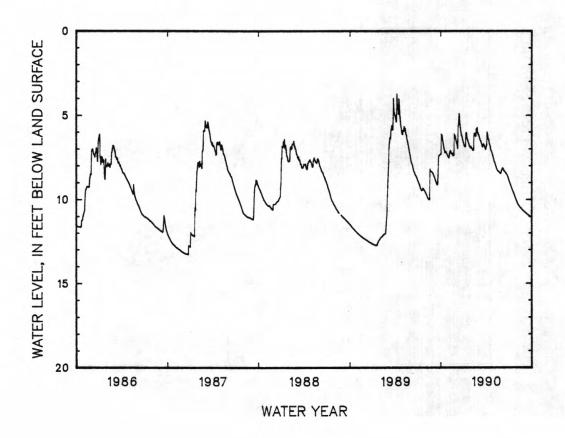
DATUM. -- Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.9 ft above land-surface datum.

PERIOD OF RECORD. -- March 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.95 ft below land-surface datum, May 25, 1979; lowest recorded, 13.44 ft below land-surface datum, Jan. 23-26, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.16	7.31	6.72	6.86	7.06	6.31	6.06	7.79	8.14	9.03	10.26	10.78
10	6.57	7.14	5.63	6.07	7.01	6.53	6.43	8.04	8.26	9.25	10.37	10.84
15	7.03	7.29	5.03	6.39	6.12	6.80	6.73	8.27	8.36	9.46	10.47	10.91
20	7.19	7.39	5.87	6.64	5.83	6.74	7.09	8.34	8.46	9.64	10.55	10.96
25	7.25	6.16	6.24	6.85	5.93	6.84	7.29	8.42	8.62	9.83	10.63	11.01
EOM	7.45	6.40	6.63	6.92	6.04	6.97	7.56	8.33	8.83	10.07	10.71	11.07
WATER	YEAR 1990	HIG	HEST 4.72	DEC 13,	1989	LOWEST	11.07	SEP 30, 19	990			



#### CITY OF SUFFOLK

364328076345201. Local number, 58B235.

LOCATION.--Lat 36°43'30", long 76°34'51", Hydrologic Unit 02080208, in the Planters Peanut Plant, 0.3 mi southeast of intersection of State Highway 337 and U.S. Highway 13 in Suffolk. Owner: Planters Peanut Company.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 254 ft, diameter 8 in. from 254 to 422 ft, diameter 6 in. from 422 to 570 ft, depth 570 ft, screened 530 to 561.6 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 53 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD. -- August 1919, November 1977 to June 1990 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.0 ft below land-surface datum, Aug. 4, 1919; lowest measured, 153.21 ft below land-surface datum, Dec. 23, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

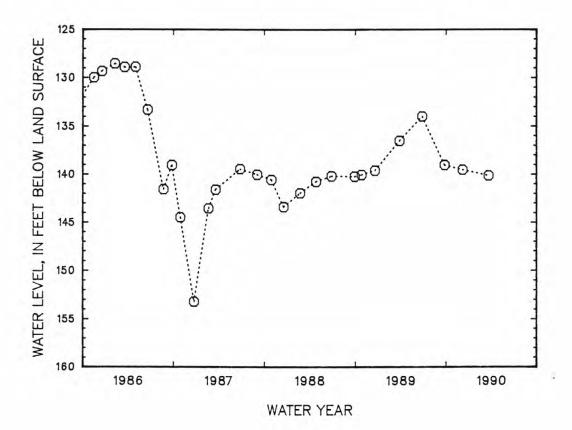
 WATER DATE
 WATER LEVEL
 DATE
 LEVEL LEVEL

 DEC 06 139.53
 MAR 20 140.14

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 139.53 DEC 06, 1989

LOWEST 140.14 MAR 20, 1990



#### CITY OF SUFFOLK

364318076365501. Local number, 58B268 SOW 169A.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quarternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 20 ft, screened 12 to 20 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

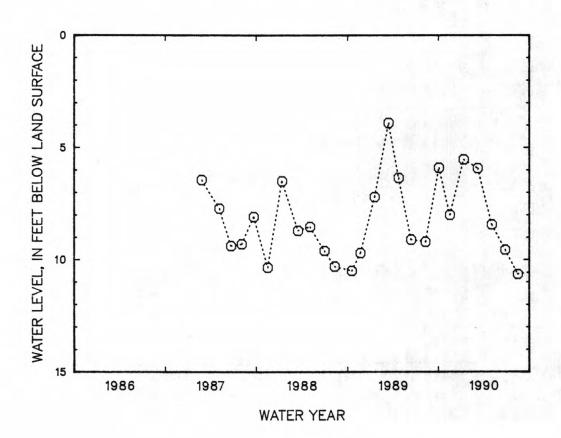
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.90 ft below land-surface datum, Mar. 15, 1989; lowest measured, 10.65 ft below land-surface datum, Aug. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	5.90 8.00	JAN 10	5.53	MAR 07	5.92	MAY 02	8.43	JUN 25	9.56	AUG 15	10.65
WATER Y	EAR 1990	HIGHEST	5.53	JAN 10. 1990	LOW	EST 10.65	AUG 15.	1990			



## CITY OF SUFFOLK

364318076365502. Local number, 58B269 SOW 169B.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080202, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER . -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 360 ft, screened 350 to 360 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

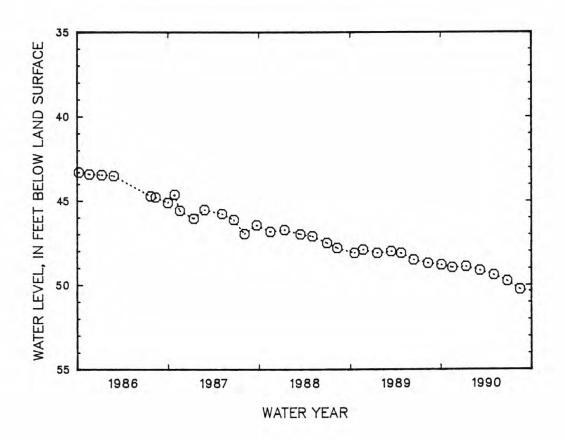
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.06 ft below land-surface datum, July 8, 1985; lowest measured, 50.25 ft below land-surface datum, Aug. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	48.80 48.96	JAN 10	48.90	MAR 07	49.13	MAY 02	49.40	JUN 25	49.76	AUG 15	50.25
WATER Y	FAR 1990	HIGHES	08 84 7	OCT 03 10	80	TOWERT 50 25	AIIG 15	1990			



364318076365503. Local number, 58B270 SOW 169C.

LOCATION.--Lat 36°43'18", long 76°36'55", Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 500 ft, screened 490 to 500 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

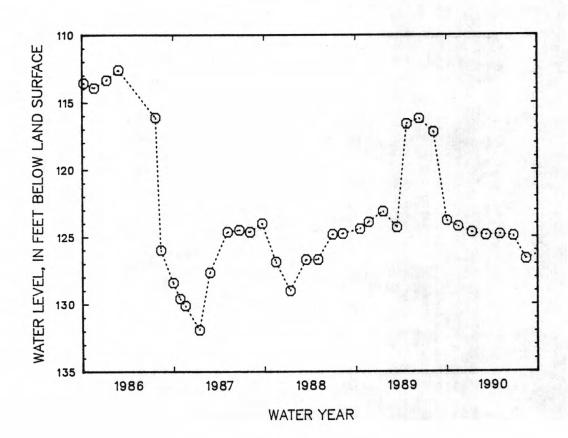
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.59 ft below land-surface datum, Feb. 25, 1986; lowest measured, 131.90 ft below land-surface datum, Jan. 12, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL	DATE LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 123.80 NOV 16 124.23	JAN 10 124.66	MAR 07 124.88	MAY 02 124.82	JUN 25	124.93	AUG 15	126.65
WATER YEAR 1990	HIGHEST 123.80	OCT 02, 1989	LOWEST 126.65 AUG	G 15, 1990			



#### CITY OF SUFFOLK

364317076363501. Local number, 58B271 SOW 169D.

LOCATION.--Lat 36°43'17", long 76°36'35", Hydrologic Unit 02080208, 200 ft south of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac and Upper Potomac aquifers Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 710 ft, screened 501 to 506 ft, 632 to 637 ft, 700 to 710 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Nov. 5, 1986, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 29 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

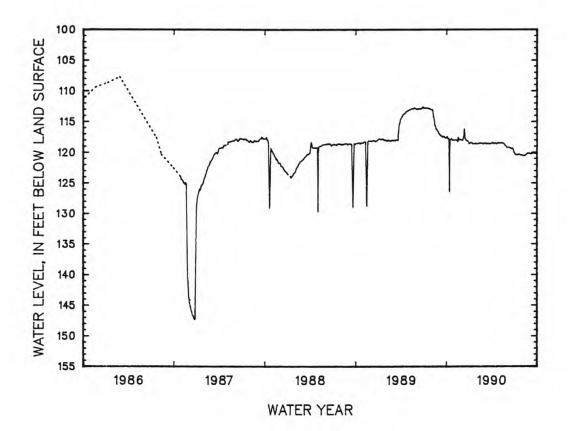
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 107.70 ft below land-surface datum, Feb. 25, 1986; lowest recorded, 147.30 ft below land-surface datum, Dec. 23, 24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAD	ADD	MAY	JUN	JUL	AUG	SEP
DAI	001	1404	DEC	JAM	LED	MAR	APR	PIAI	3014	301	AUG	SEL
5	117.70	118.00	117.98	118.45	118.60	118.55	118.42	118.46	119.21	120.30	120.55	120.22
10	117.81	118.00	117.19	118.48	118.49	118.59	118.58	118.49	119.22	120.44	120.51	120.23
15	117.90	118.24	117.75	118.62	118.53	118.60	118.44	118.49	119.29	120.39	120.47	120.00
20	117.78	117.91	118.06	118.63	118.49	118.56	118.62	118.60	119.43	120.33	120.26	120.17
25	118.00	117.93	118.18	118.57	118.65	118.62	118.45	118.90	119.38	120.44	120.13	120.14
EOM	117.96	118.00	118.58	118.61	118.56	118.53	118.52	119.16	119.98	120.45	120.18	120.19
WATER	YEAR 19	оо н	IGHEST 1	16.22 DEC	11. 1989	100	VEST 126	42 OCT	13. 1989			
MAILEN	ILAK 19	ы п.	IGHEST 1.	10.22 DEC	11, 1908	LU	MEST 170	.42 001	13, 1909			



### CITY OF SUFFOLK

364319076365501. Local number, 58B272 SOW 169E.

LOCATION.--Lat 36°43'19", long 76°36'55", Hydrologic Unit 02080208, 400 ft south of Norfolk and Western Railroad near Lake Kilby, 0.6 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 733 ft, screened 498 to 508 ft, 550 to 555 ft, 702 to 712 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 41 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

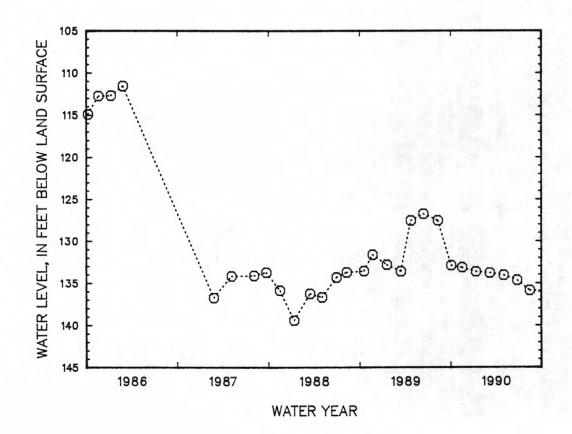
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.54 ft below land-surface datum, Feb. 25, 1986; lowest measured, 139.40 ft below land-surface datum, Jan. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE WATER LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 132.90 NOV 16 133.15	JAN 10 133.65	MAR 07 133.80	MAY 02 134.07	JUN 25	134.66	AUG 15	135.88
WATER YEAR 1990	HIGHEST 132.90	OCT 03, 1989	LOWEST 135.88 AUG	15, 1990			



## CITY OF SUFFOLK

364348076363201. Local number, 58B273 SOW 169F.

LOCATION.--Lat 36°43'48", long 76°36'32", Hydrologic Unit 02080208, 100 ft south of U.S. Highway 58 near Lake Kilby, 0.2 mi west of Suffolk. Owner: Virginia Water Control Board.

AQUIFER .-- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 661 ft, screened 541 to 546 ft, 567 to 572 ft, 635 to 640 ft.

INSTRUMENTATION. --Continuous strip-chart recorder. Prior to Nov. 5, 1986, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 26 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

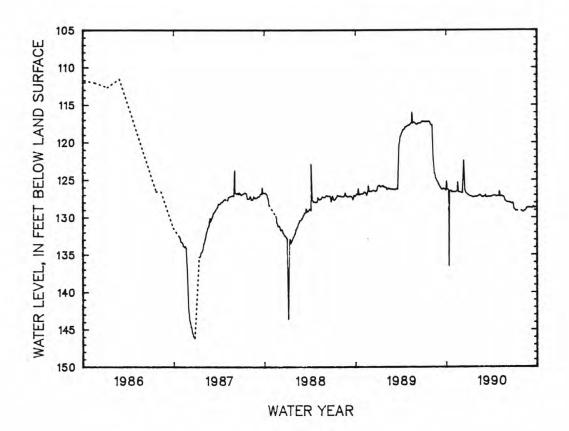
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.54 ft below land-surface datum, Feb. 25, 1986; lowest recorded, 146.11 ft below land-surface datum, Dec. 24, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	126.24	126.60	126.70	127.15	127.17	127.17	127.10	127.18	127.95	129.05	129.26	128.70
10	126.30	126.56	122.37	127.18	127.02	127.26	127.07	127.12	127.99	129.10	129.14	128.75
15	126.45	126.38	126.38	127.29	127.05	127.27	127.06	127.17	128.03		129.04	128.55
20	126.40	126.60	126.73	127.28	127.20	127.21	127.19	127.30	128.15		128.76	128.69
25	126.58	126.61	126.90	127.22	127.29	127.24	127.11	127.74	128.07		128.66	128.65
EOM	126.54	126.67	127.05	127.23	127.19	127.19	127.11	127.95	128.82	129.12	128.70	128.69
WATER	YEAR 19	90 H	IGHEST 1	18.85 DEC	10. 1989	9 1.00	WEST 136	.51 OCT	12 1989			



#### CITY OF SUFFOLK

365055076355301. Local number, 58C 2.

LOCATION.--Lat 36°50'55", long 76°35'53", Hydrologic Unit 02080208, 900 ft northwest of State Highway 603, 0.5 mi south of Oakland. Owner: Scott Saunders.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled withdrawal water well, diameter 4 in., depth 651 ft, screened 638 to 651 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 87 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

REMARKS. -- Water levels may be affected by local pumpage.

PERIOD OF RECORD.--August 1970, December 1971 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 117.40 ft below land-surface datum, Aug. 28, 1970; lowest measured, 173.32 ft below land-surface datum, Dec. 16, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	160.20	MAR 12	160.69

LOWEST

160.69 MAR 12, 1990

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 160.20 DEC 04, 1989

145 WATER LEVEL, IN FEET BELOW LAND SURFACE 150 155 .0.0.0.0. 160 165 170 Ö 175 180 1990 1986 1987 1988 1989 WATER YEAR

#### CITY OF SUFFOLK

365218076313001. Local number, 58C 8.

LOCATION.--Lat 36°52'18", long 76°31'30", Hydrologic Unit 02080208, 0.5 mi west of Wilkerson Landing, 3.2 mi northeast of Chuckatuck. Owner: G. A. Nimo.

AQUIFER .-- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 562 ft, screened 552 to 562 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--August to December 1970, November 1972 to December 1975, January 1978 to June 1990 (discontinued). Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 48.40 ft below land-surface datum, Aug. 28, 1970; lowest measured, 94.53 ft below land-surface datum, Dec. 16, 1986.

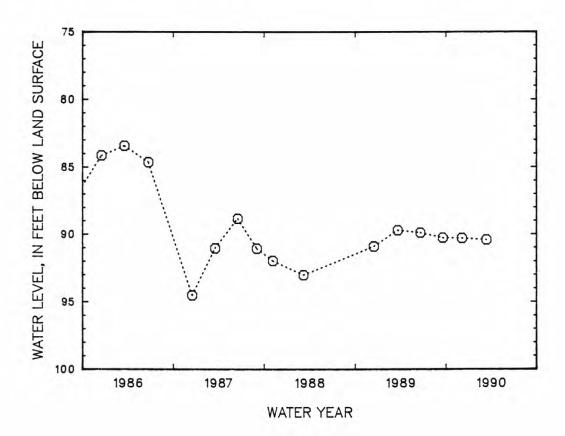
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	90.30	MAR 12	90.42

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 90.30 DEC 04, 1989

LOWEST 90.42 MAR 12, 1990



364512076343702. Local number, 58C 53 SOW 162B.

LOCATION.--Lat 36°45'12", long 76°34'37", Hydrologic Unit 02080208, 750 ft northeast of Virginia Department of Transportation fuel storage area, 2,000 ft east of U.S. Highway 460, and 0.8 mi southeast of Elephant Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 294 ft, diameter 2 in. from 294 to 896 ft, depth 896 ft, screened 881 to 896 ft.

INSTRUMENTATION. -- Digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.4 ft above land-surface datum.

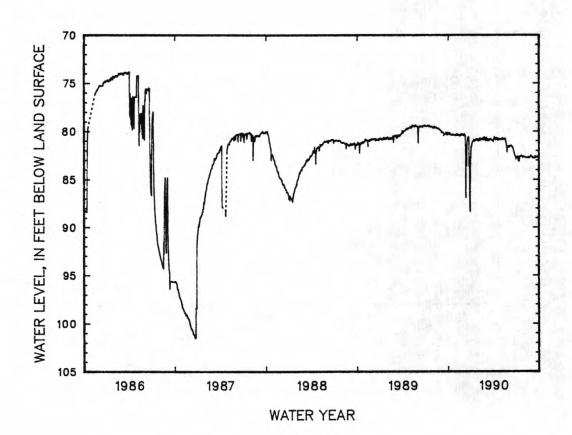
REMARKS. -- Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 69.41 ft below land-surface datum, Apr. 24, 1983; lowest recorded, 101.39 ft below land-surface datum, Dec. 20, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	80.30	80.38	80.30	81.15	80.93	80.79	80.68	80.76	81.54	82.70	82.68	82.75
10	80.30	80.40	86.46	80.93	80.73	80.82	80.80	80.77	81.51	82.75	82.71	82.75
15	80.39	80.38	81.40	80.99	80.78	80.86	80.69	80.78	81.59	82.64	82.71	82.56
20	80.33	80.32	80.63	80.86	80.84	80.79	80.88	81.10	82.00	82.55	82.67	82.65
25	80.39	80.38	82.67	80.82	80.83	80.93	80.83	82.16	82.47	82.60	82.66	82.64
EOM	80.34	80.40	82.09	80.93	80.98	80.91	80.79	81.65	82.72	82.59	82.55	82.65
WATER	YEAR 1990	HIG	HEST 79.	59 OCT :	19. NOV 23	1989	LOWEST	88.34	DEC 28,	1989		



## CITY OF SUFFOLK

364512076343705. Local number, 58C 56 SOW 162D.

LOCATION.--Lat 36°45'12", long 76°34'37", Hydrologic Unit 02080208, 750 ft northeast of Virginia Department of Transportation fuel storage area, 2,000 ft east of U.S. Highway 460, and 0.8 mi southeast of Elephant Fork. Owner: Virginia Water Control Board.

AQUIFER . -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 567 ft, screened 557 to 567 ft.

INSTRUMENTATION, -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 3.35 ft above land-surface datum.

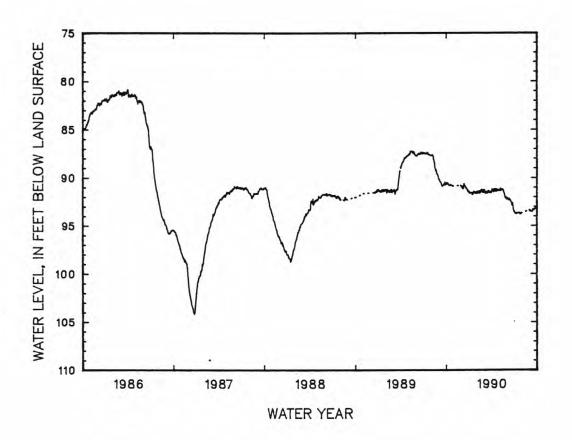
REMARKS . -- Levels may be affected by local pumpage.

PERIOD OF RECORD . -- February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 77.24 ft below land-surface datum, Oct. 1, 1984; lowest measured, 104.14 ft below land-surface datum, Dec. 23, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.55		90.96	91.56	91.58	91.40	91.27	91.31	92.13	93.70		93.49
10	90.68		90.88	91.56	91.38	91.46	91.34	91.19	92.33	93.76		93.50
15	90.78		90.84	91.69	91.36	91.50	91.18	91.21	92.32	93.65		93.24
20	90.75		91.06	91.59	91.41	91.48	91.35	91.50	92.60	93.66		93.25
25	90.80		91.30	91.53	91.45	91.55	91.33	92.01	92.77	93.77		93.13
EOM		90.88	91.40	91.57	91.44	91.47	91.22	92.21	93.51		93.34	93.17
WATER	VEAR 1990	HTG	HEST ON	16 OCT 1	0 1090	LOWES	T 03 78	TIIT 27	1000			



365133076351201. Local number, 58C 57 SOW 141A.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 122 ft, screened 112 to 122 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 52 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.0 ft thereafter.

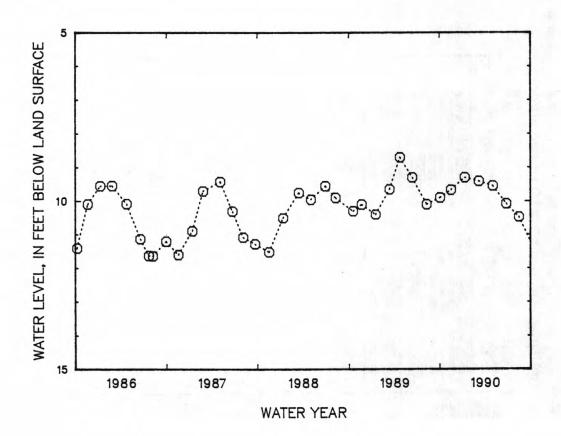
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 8.70 ft below land-surface datum, Apr. 25, 1989; lowest measured, 11.65 ft below land-surface datum, Nov. 26, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	9.90 9.67	JAN 10	9.30	MAR 07	9.41	MAY 02	9.55	JUN 25	10.08	AUG 15	10.48
WATER Y	EAR 1990	HIGHEST	9.30	JAN 10, 1990	LOWE	ST 10.48	AUG 15,	1990			



### CITY OF SUFFOLK

365133076351202. Local number, 58C 58 SOW 141B.

LOCATION.--Lat 36\*51'33", long 76\*35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 52 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.5 ft thereafter.

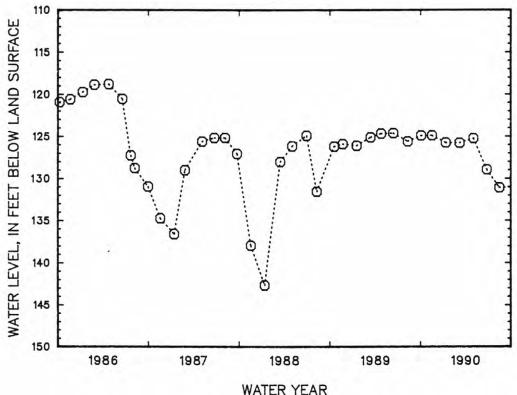
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 108.60 ft below land-surface datum, Apr. 24, 1980; lowest measured, 142.67 ft below land-surface datum, Jan. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	124.90 124.89	JAN 10	125.75	MAR 07	125.78	MAY 02	125.23	JUN 25	128.95	AUG 15	131.10
WATER Y	EAR 1990	HIGHEST	124.89	NOV 16. 1	989	LOWEST 131	.10 AUG 15.	1990			



WATER YEAR 1990

# GROUND-WATER LEVELS

### CITY OF SUFFOLK

365133076351203. Local number, 58C 59 SOW 141C.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

HIGHEST 126.02 DEC 11, 1989

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 447 ft, screened 437 to 447 ft.

INSTRUMENTATION. -- Continuous strip-chart recorder. Prior to May 5, 1981, occasional measurement with chalked tape by Virginia Water Control Board personnel.

DATUM. -- Elevation of land-surface datum is 52 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

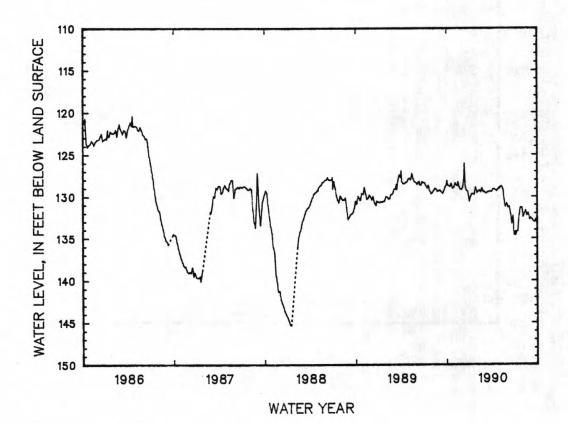
PERIOD OF RECORD. --April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 108.80 ft below land-surface datum, June 30, 1980; lowest recorded, 145.32 ft below land-surface datum, Jan. 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	128.63	128.42	128.91	130.03	129.39	129.54	129.15	128.83	131.27	134.20	132.45	132.58
10	128.71	128.68	127.77	129.70	129.25	129.60	129.10	128.78	131.20	134.20	131.98	132.74
15	128.80	128.70	128.83	129.70	129.46	129.49	129.21	129.12	132.03	134.11	131.68	132.98
20	128.47	128.81	129.26	129.76	129.01	129.41	129.32	130.28	133.23	132.20	132.23	133.03
25	129.03	129.12	129.40	128.92	129.44	129.39	129.12	131.20	132.34	131.31	131.96	132.75
EOM	128.90	129.16	130.57	129.53	129.40	129.42	128.94	130.84	134.59	131.32	132.73	132.63

LOWEST 134.62 JUL 06, 07, 1990



### CITY OF SUFFOLK

365133076351204. Local number, 58C 60 SOW 141D.

LOCATION.--Lat 36°51'33", long 76°35'12", Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION, --Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan 12, 1988; 1.0 ft thereafter.

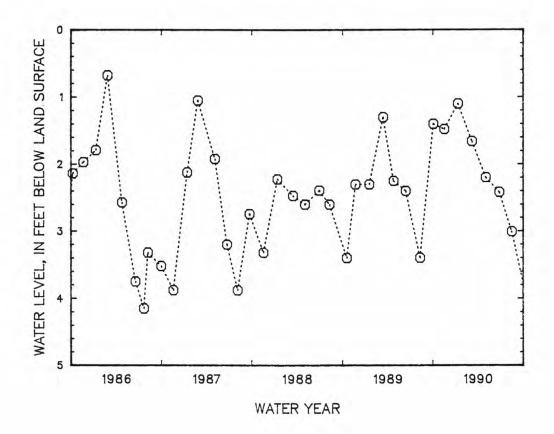
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.53 ft below land-surface datum, Feb. 18, 1980, Mar. 8, 1984; lowest measured, 4.18 ft below land-surface datum, Nov. 4, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	1.40 1.48	JAN 10	1.10	MAR 07	1.66	MAY 02	2.20	JUN 25	2.42	AUG 15	3.01
WATER Y	EAR 1990	HIGHEST	1.10	JAN 10. 1990	LOW	EST 3.01	AUG 15.	1990			



### CITY OF SUFFOLK

364731076355501. Local number, 58C 61 SOW 159A.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft, sounded to 17.50 ft on July 8, 1985, redrilled to 25 ft on May 15, 1990.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum prior to June 25, 1990; 1.55 ft thereafter.

REMARKS. -- Records provided by the Virginia Water Control Board. Well reported dry several days in 1985-1990.

PERIOD OF RECORD. -- June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

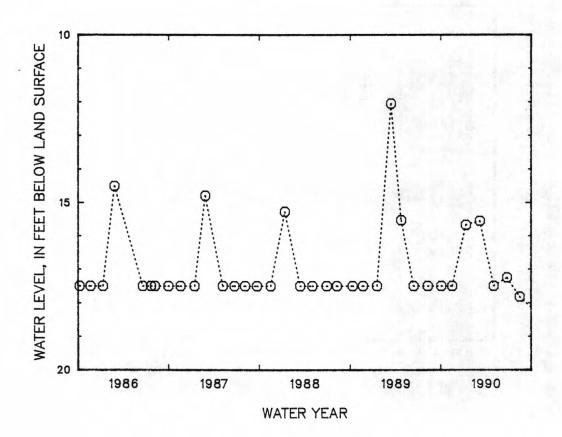
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.95 ft below land-surface datum, Apr. 19, 1984; lowest measured, 17.82 ft below land-surface datum, Aug. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL										
NOV 16	*DRY	JAN 10	15.67	MAR 07	15.55	MAY 02	*DRY	JUN 25	17.25	AUG 15	17.82

\*See WELL CHARACTERISTICS paragraph.

WATER YEAR 1990 HIGHEST 15.55 MAR 07, 1990 LOWEST 17.82 AUG 15, 1990



# CITY OF SUFFOLK

364731076355502. Local number, 58C 62 SOW 159B.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 575 ft, screened 555 to 575 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

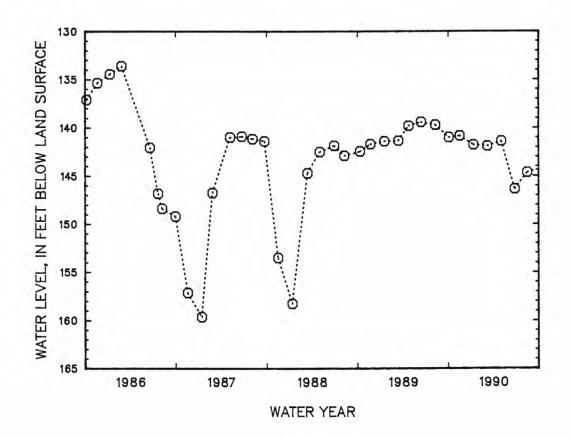
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD. -- June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 129.90 ft below land-surface datum, Aug. 28, 1984; lowest measured, 159.63 ft below land-surface datum, Jan. 13, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 16	141.00 140.84	JAN 10	141.78	MAR 07	141.91	MAY 02	141.40	JUN 25	146.37	AUG 15	144.65
WATER YE	EAR 1990	HIGHEST	140.84	NOV 16. 1	989	LOWEST 146	.37 JUN 25	1990			



# CITY OF SUFFOLK

364731076355503. Local number, 58C 63 SOW 159C.

LOCATION.--Lat 36°47'31", long 76°35'55", Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 2 in., depth 650 ft, screened 630 to 650 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

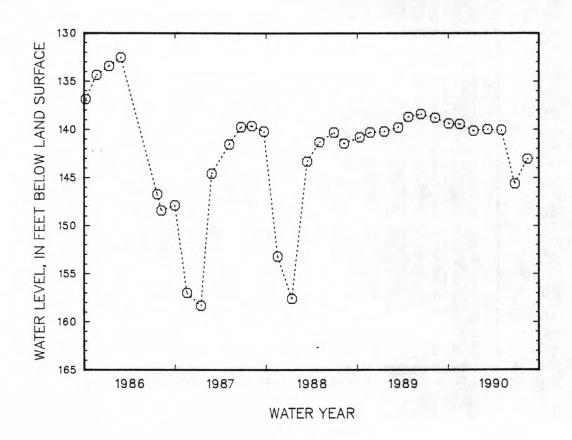
REMARKS. -- Records provided by the Virginia Water Control Board. Water levels may be affected by local pumpage.

PERIOD OF RECORD.--May 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 127.75 ft below land-surface datum, Dec. 23, 1981; lowest measured, 182.80 ft (revised) below land-surface datum, July 1, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE LEVEL	DATE WATER LEVEL	DATE WATER LEVEL	DATE LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 139.40 NOV 16 139.45	JAN 10 140.15	MAR 07 140.00	MAY 02 140.05	JUN 25	145.63	AUG 15	143.05
WATER YEAR 1990	HIGHEST 139.40	OCT 03. 1989	LOWEST 145.63 JUN 25.	1990			



#### SURRY COUNTY

370408076460101. Local number, 56E 1.

LOCATION.--Lat 37°04'08", long 76°40'01", Hydrologic Unit 03010202, off State Highway 617, 3.2 mi southwest of Bacons Castle. Owner: Buster E. Cox.

AQUIFER. -- Middle Potomac and Upper Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 18 in. to 360 ft, diameter 8 in. from 333.5 to 705 ft, depth 705 ft, screened 401 to 411 ft, 431 to 441 ft, 463 to 473 ft, 495 to 505 ft, 540 to 555 ft, 700 to 705 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

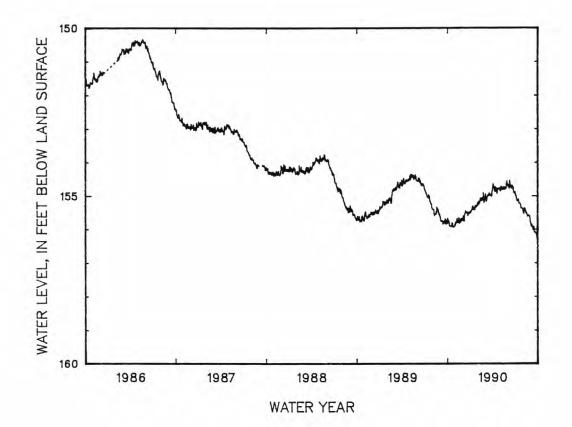
DATUM.--Elevation of land-surface datum is 93 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top edge of recorder shelf, 3.6 ft above land-surface datum.

PERIOD OF RECORD. -- March 1942, April 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.52 ft below land-surface datum, Mar. 10, 1942; lowest recorded, 156.29 ft below land-surface datum, Sept. 29, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	155.77	155.81	155.60	155.44	155.23	155.06	154.71	154.72	154.72	154.99	155.51	155.89
10	155.90	155.74	155.53	155.34	155.07	155.02	154.80	154.75	154.58	155.13	155.37	155.93
15	155.92	155.74	155.47	155.40	155.10	154.99	154.76	154.79	154.71	155.12	155.51	155.92
20	155.81	155.73	155.49	155.38	155.11	154.92	154.90	154.79	154.74	155.22	155.60	156.09
25	155.91	155.75	155.50	155.30	155.15	154.98	154.80	154.77	154.88	155.34	155.58	156.15
EOM	155.86	155.73	155.49	155.27	155.08	154.83	154.76	154.67	154.93	155.37	155.76	156.28
WATER	YEAR 1990	HI	GHEST 15	4.42 JUN	08, 1990	LOW	EST 156.	29 SEP 2	9. 1990			



#### SURRY COUNTY

370800076500701. Local number, 56F 2 SOW 039.

LOCATION.--Lat 37°08'00", long 76°50'07", Hydrologic Unit 02080206, off State Highway 10, at Surry County Administration building in Surry. Owner: Town of Surry.

AQUIFER. -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 367 ft, screened 350 to 362 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Jan. 10, 1976, to Oct. 7, 1985, occasional measurement with chalked tape. Mar. 15, 1971, to Jan. 10, 1976, continuous strip-chart recorder. Prior to Mar. 15, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 122 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

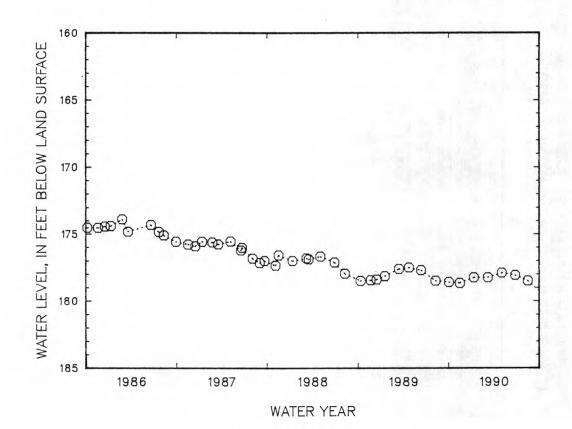
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 146.43 ft (revised) below land-surface datum, Mar. 25, 1971; lowest measured, 178.67 ft below land-surface datum, Nov. 15, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE WATER LEVEL	DATE LEVEL	DATE WATER LEVEL	DATE LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 178.60 NOV 15 178.67	JAN 10 178.25	MAR 07 178.25	MAY 02 177.90	JUN 25	178.08	AUG 15	178.50
WATER YEAR 1990	HIGHEST 177.90	MAY 02. 1990	LOWEST 178.67 NOV 15.	1989			



### SURRY COUNTY

370712076413201. Local number, 57E 11 SOW 094A.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

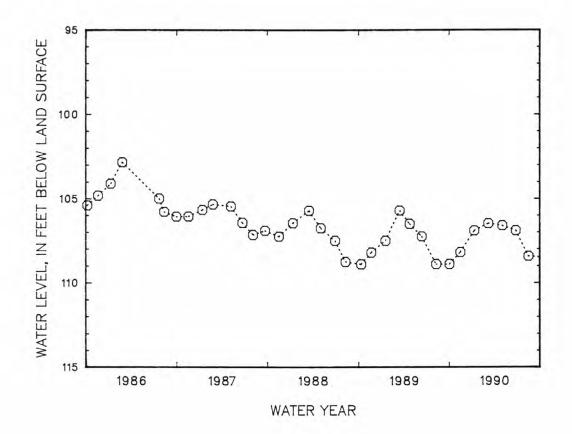
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.19 ft below land-surface datum, July 24, 1980; lowest measured, 108.90 ft below land-surface datum, Oct. 11, 1988, Aug. 9, Oct. 2, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	108.90 108.19	JAN 10	106.90	MAR 07	106.47	MAY 02	106.60	JUN 25	106.90	AUG 15	108.43
WATER Y	EAR 1990	HIGHEST	106.47	MAR 07. 1	990	LOWEST 10	8.90 OCT 02	. 1989			



#### SURRY COUNTY

370712076413202. Local number, 57E 12 SOW 094B.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Water Control Board.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 430 ft, diameter 3 in. from 430 to 440 ft, depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

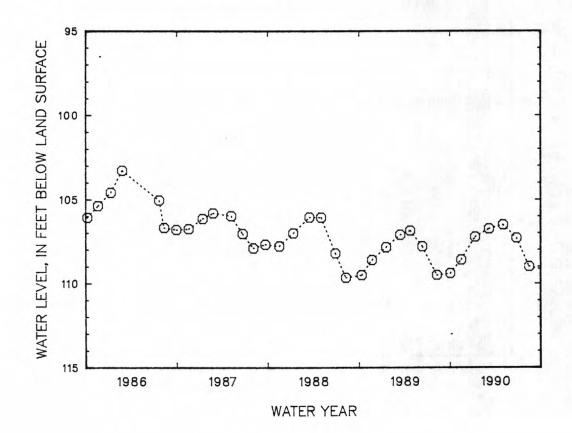
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.90 ft below land-surface datum, May 29, 1980; lowest measured, 109.65 ft below land-surface datum, Aug. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 1 NOV 15	109.40 108.59	JAN 10 :	107.23	MAR 07	106.74	MAY 02	106.50	JUN 25	107.30	AUG 15	109.00
WATER YEA	AR 1990	HIGHEST	106.50	MAY 02, 1	990	LOWEST 109.	40 OCT 02,	1989			



#### SURRY COUNTY

370712076413203. Local number, 57E 13 SOW 094C.

LOCATION.--Lat 37°07'12", long 76°41'32", Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 41 ft, diameter 3 in. from 41 to 46 ft, depth 46 ft, screened 41 to 46 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

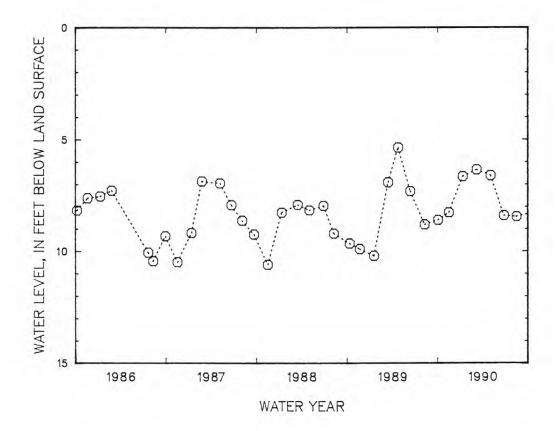
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 3.90 ft below land-surface datum, May 29, 1980; lowest measured, 11.17 ft below land-surface datum, Dec. 13, 1981.

WATER LEVEL. IN FEET BELOW LAND-SURFACE DATUM. WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	8.60 8.26	JAN 10	6.64	MAR 07	6.34	MAY 02	6.60	JUN 25	8.40	AUG 15	8.45
WATER Y	EAR 1990	HIGHEST	6.34	MAR 07, 1990	LOWES	ST 8.60	OCT 02.	1989			



### SURRY COUNTY

371132076405501. Local number, 57F 16 SOW 087A.

LOCATION.--Lat 37°11'32", long 76°40'55", Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia State Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,206 ft, screened 1,170 to 1,185 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

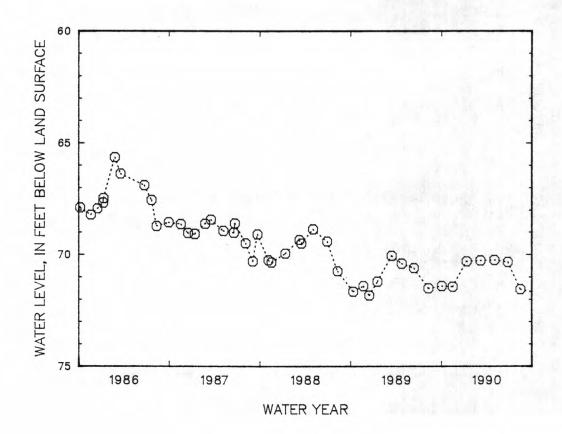
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.22 ft below land-surface datum, July 20, 1978; lowest measured, 71.82 ft below land-surface datum, Dec. 15, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	71.40 71.43	JAN 10	70.30	MAR 07	70.26	MAY 02	70.24	JUN 25	70.33	AUG 15	71.55
WATER Y	EAR 1990	HIGHEST	70.24	MAY 02. 199	0	LOWEST 71.55	AUG 15.	1990			



### SURRY COUNTY

371132076405502. Local number, 57F 24 SOW 087B.

LOCATION.--Lat 37°11'32", long 76°40'55", Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 520 ft, screened 510 to 520 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

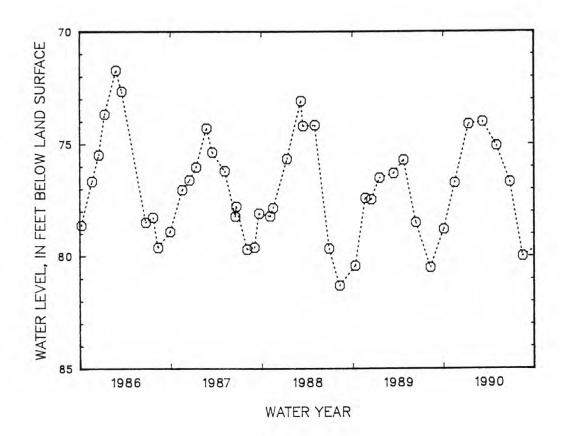
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.17 ft below land-surface datum, Aug. 17, 1982; lowest measured, 81.30 ft below land-surface datum, Aug. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02 NOV 15	78.80 76.72	JAN 10	74.11	MAR 07	74.00	MAY 02	75.07	JUN 25	76.68	AUG 15	80.00
WATER Y	EAR 1990	HIGHEST	74.00	MAR 07, 199	90	LOWEST 80.00	AUG 15	, 1990			



### SUSSEX COUNTY

365843077090201. Local number, 53D 3 SOW 048.

LOCATION.--Lat 36°58'43", long 77°09'02", Hydrologic Unit 03010201, off State Highway 40, 2.4 mi northeast of Homeville, and 5.5 mi south of Waverly. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac and Middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 554 ft, screened 279 to 284 ft, 358 to 363 ft, 439 to 444 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.6 ft above land-surface datum.

REMARKS. -- Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

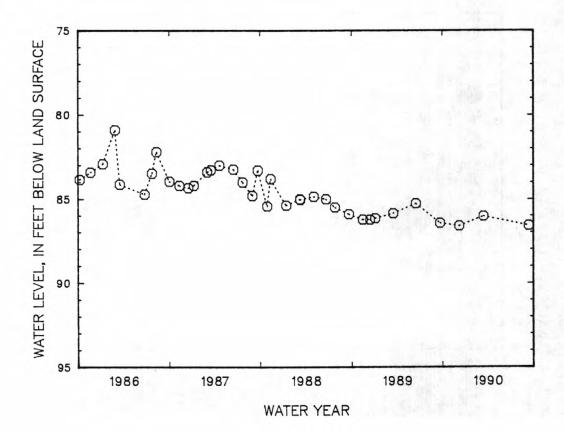
PERIOD OF RECORD. -- August 1971 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.39 ft below land-surface datum, May 15, 1972; lowest measured, 86.62 ft below land-surface datum, Dec. 7, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 07	86.62	MAR 14	86.03	SEP 11	86.60	

WATER YEAR 1990 HIGHEST 86.03 MAR 14, 1990 LOWEST 86.62 DEC 07, 1989



#### SUSSEX COUNTY

365530077104002. Local number, 53D 6 SOW 179A

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 470 ft, screened 460 to 470 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

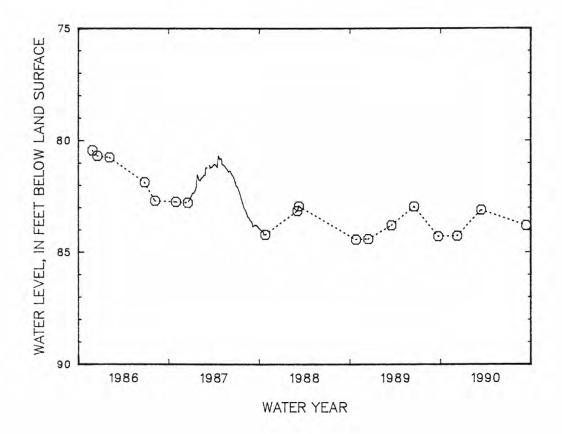
DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD . -- November 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.50 ft below land-surface datum, Feb. 12, 1988; lowest recorded, 84.44 ft below land-surface datum, Oct. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	84.28	MAR 14	83.10	SEP 11	83.81
WATER YEAR 1990	HIGHEST 83 10	MAR 14	1990	IOWEST 84	28 DEC 07	1989



#### SUSSEX COUNTY

365530077104003. Local number, 53D 7 SOW 179B.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER. -- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 398 ft, diameter 2 in. from 394 to 425 ft, depth 425 ft, screened 415 to 425 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Oct. 1, 1988, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 79.47 ft below land-surface datum, Dec. 17, 1985; lowest measured, 83.38 ft below land-surface datum, Oct. 25, 1988.

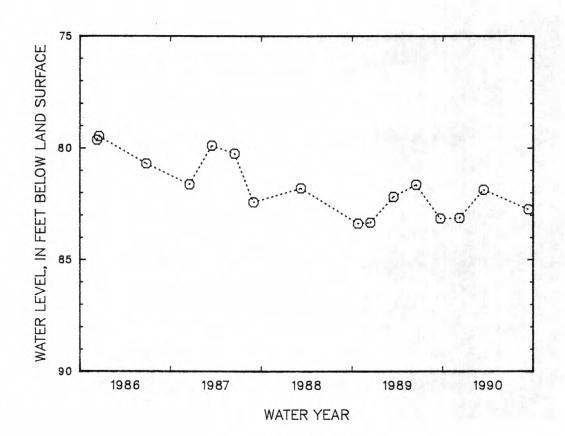
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 07	83.13	MAR 14	81.86	SEP 11	82.74	

WATER YEAR 1990

HIGHEST 81.86 MAR 14, 1990

LOWEST 83.13 DEC 07, 1989



#### SUSSEX COUNTY

365530077104004. Local number, 53D 8 SOW 179C.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER .-- Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 256 ft, diameter 2 in. from 249 to 280 ft, depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

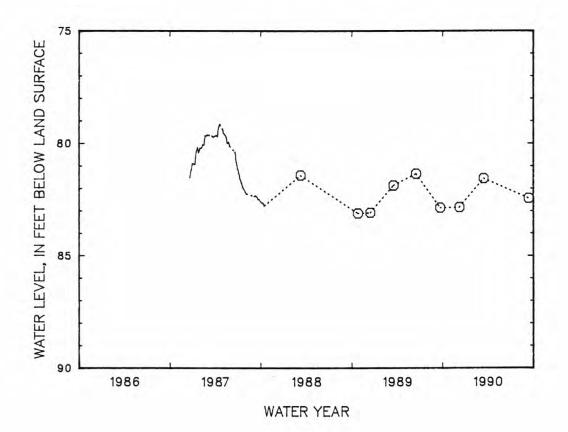
DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

PERIOD OF RECORD. -- December 1986 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 78.79 ft below land-surface datum, Apr. 18, 1987; lowest measured, 83.11 ft below land-surface datum, Oct. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

				DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
			I	EC 07	82.84	MAR 14	81.55	SEP 11	82.44
VATER	YEAR	1990	HIGHEST	81.55	MAR 14,	1990	LOWEST	82.84 DEC 07	, 1989



# SUSSEX COUNTY

365530077104005. Local number, 53D 9 SOW 179D.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 185 ft, diameter 2 in. from 178 to 209 ft, depth 209 ft, screened 199 to 209 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM. --Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

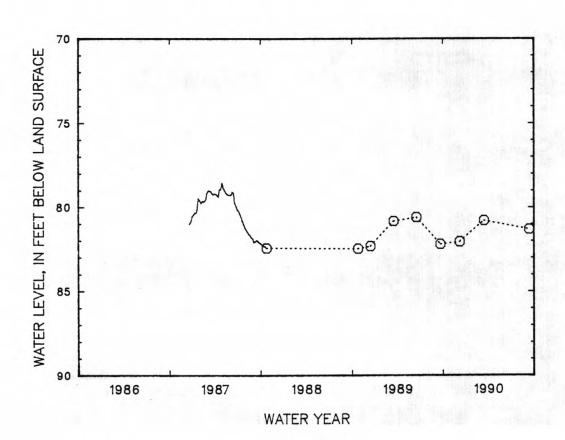
PERIOD OF RECORD. -- December 1986 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 76.51 ft below land-surface datum, Apr. 17, 1987; lowest recorded, 82.56 ft below land-surface datum, Nov. 25, 26, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 07	82.05	MAR 14	80.79	SEP 11	81.32	

WATER YEAR 1990 HIGHEST 80.79 MAR 14, 1990 LOWEST 82.05 DEC 07, 1989



#### SUSSEX COUNTY

365530077104006. Local number, 53D 10 SOW 179E.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER . -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 130 ft, diameter 4 in. from 140 to 145 ft, depth 145 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

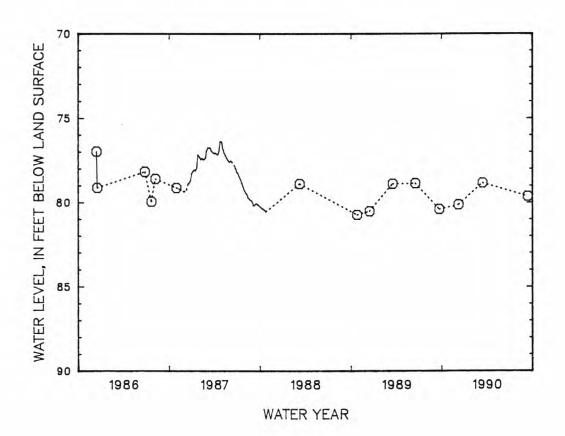
DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

PERIOD OF RECORD . -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 76.25 ft below land-surface datum, Apr. 24, 1987; lowest measured, 80.73 ft below land-surface datum, Oct. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	80.13	MAR 14	78.83	SEP 11	79.64
WATER YEAR 1990	HIGHEST 78.83	MAR 14,	1990	LOWEST	80.13 DEC 0	7, 1989



#### SUSSEX COUNTY

365530077104007. Local number, 53D 11 SOW 179F.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Water Control Board.

AQUIFER. -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 82 ft, diameter 4 in. from 92 to 97 ft, depth 97 ft, screened 82 to 92 ft.

INSTRUMENTATION. -- Semiannual measurements with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

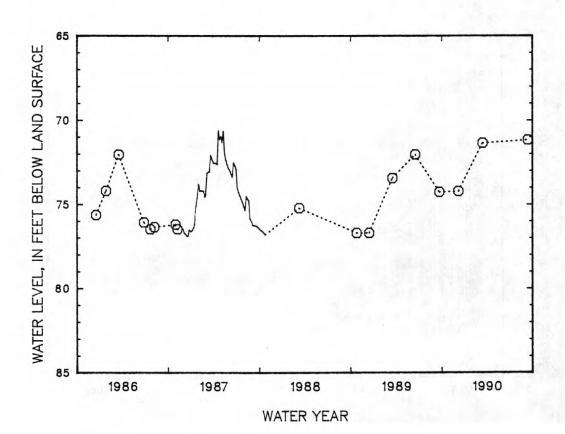
PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 70.60 ft below land-surface datum, Apr. 20, 1987; lowest recorded, 77.16 ft below land-surface datum, Nov. 28-30, Dec. 1, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 07	74.22	MAR 14	71.35	SEP 11	71.17

WATER YEAR 1990 HIGHEST 71.17 SEP 11, 1990 LOWEST 74.22 DEC 07, 1989



### SUSSEX COUNTY

365530077104008. Local number, 53D 12 SOW 179G.

LOCATION.--Lat 36°55'30", long 77°10'40", Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi south of Homeville. Owner: Virginia Water Control Board.

AQUIFER . -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 47 ft, diameter 4 in. from 57 to 67 ft, depth 67 ft, screened 47 to 57 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Oct. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Mar. 1 to Oct. 1, 1988, occasional measurement with chalked tape. Prior to Mar. 1, 1988, digital recorder--60-minute punch.

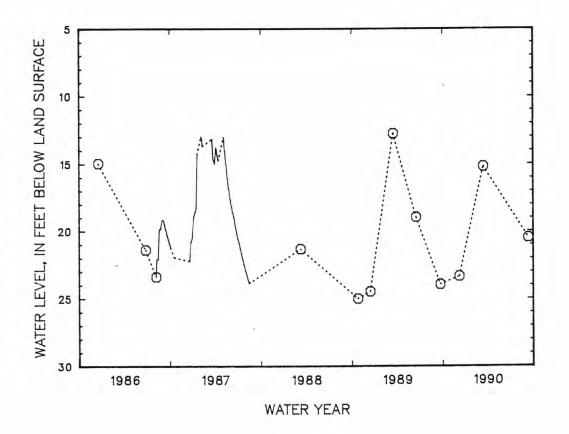
DATUM.--Elevation of land-surface datum is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level recorded, 11.46 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 27.09 ft below land-surface datum, Nov. 25-27, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	23.36	MAR 14	15.19	SEP 11	20.50
WATER YEAR 1990	HIGHEST 15.19	MAR 14,	1990	LOWEST	23.36 DEC 07	7, 1989



WATER YEAR 1990

#### SUSSEX COUNTY

365235077150501. Local number, 53E 5 SOW 045.

LOCATION.--Lat 37°02'37", long 77°11'30", Hydrologic Unit 03010201, 400 ft northeast of State Highway 625, 2.5 mi north of Newville. Owner: Butler Lumber Company.

AQUIFER . -- Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 4 in., depth 172 ft, screened 162 to 172 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Mar. 1, 1989, to June 1, 1990, quarterly measurement with chalked tape. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Water Control Board personnel.

DATUM.--Elevation of land-surface datum is 126.65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 8, 1988; 1.2 ft thereafter.

REMARKS.--Records provided by the Virginia Water Control Board prior to Mar. 1, 1989; U.S. Geological Survey thereafter.

PERIOD OF RECORD. -- September 1971, October 1974 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.90 ft below land-surface datum, Mar. 16, 1976; lowest measured, 91.85 ft below land-surface datum, Jan. 4, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	DEC 07	91.52	MAR 04	89.16	SEP 11	90.99
HIGHEST	89.16	MAR 04,	1990	LOWEST	91.52 DEC 07	, 1989

WATER YEAR

#### CITY OF VIRGINIA BEACH

364850076120701. Local number, 61C 23 SOW 129.

LOCATION.--Lat 36°48'50", long 76°12'07", Hydrologic Unit 02080208, at Woodstock Elementary School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 68 ft, diameter 6 in. from 68 to 78 ft, depth 78 ft, screened 68 to 73 ft.

INSTRUMENTATION. --Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.1 ft above land-surface datum.

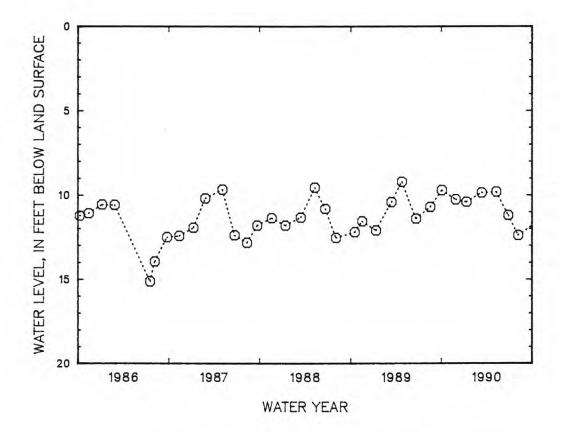
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.20 ft below land-surface datum, Apr. 25, 1989; lowest measured, 17.77 ft below land-surface datum, Aug. 26, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 28	9.70 10.25	JAN 10	10.40	MAR 12	9.85	MAY 10	9.80	JUN 27	11.20	AUG 06	12.40
WATER Y	EAR 1990	HIGHEST	9.70	OCT 03. 1989	LOW	EST 12.40	AUG 06.	1990			



# CITY OF VIRGINIA BEACH

364920076093601. Local number, 61C 25 SOW 130.

LOCATION.--Lat 36°49'20", long 76°09'36", Hydrologic Unit 02080208, at Kempsville Elementary School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 6 in., depth 71 ft, screened 61 to 66 ft.

INSTRUMENTATION. --Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.12 ft above land-surface datum.

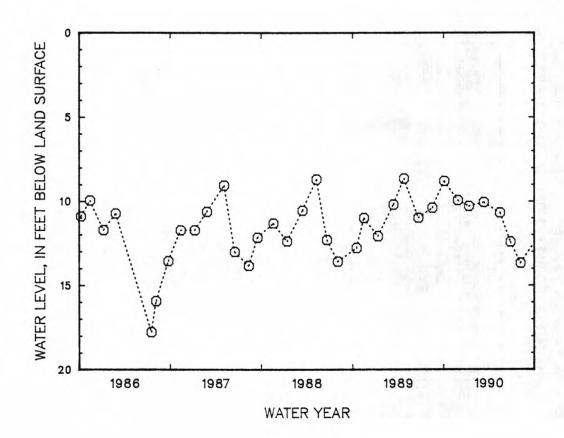
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.12 ft (revised) below land-surface datum, Feb. 20, 1980; lowest measured, 17.76 ft below land-surface datum, July 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	8.78 9.93	JAN 11	10.28	MAR 12	10.05	MAY 16	10.68	JUN 27	12.42	AUG 07	13.68
WATER Y	EAR 1990	HIGHES	T 8 78	OCT 04 1080	T OF	FCT 13 68	AUG 07	1000			



### CITY OF VIRGINIA BEACH

364920076093201. Local number, 61C 27 SOW 174A.

LOCATION.--Lat 36°49'20", long 76°09'32", Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 3 in., depth 175 ft, screened 160 to 170 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

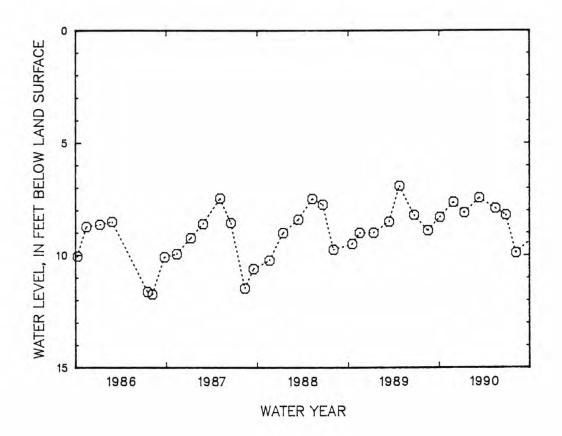
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.09 ft below land-surface datum, Apr. 25, 1984; lowest measured, 11.73 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	8.30 7.62	JAN 11	8.10	MAR 12	7.43	MAY 16	7.90	JUN 27	8.20	AUG 07	9.90
WATER Y	EAR 1990	HIGHEST	7 43	MAR 12 1990	T.OW	FST 9 90	AUG 07	1990			



### CITY OF VIRGINIA BEACH

364920076093202. Local number, 61C 28 SOW 174B.

LOCATION.--Lat 36°49'20", long 76°09'32", Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach.
Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 80 ft, screened 65 to 75 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

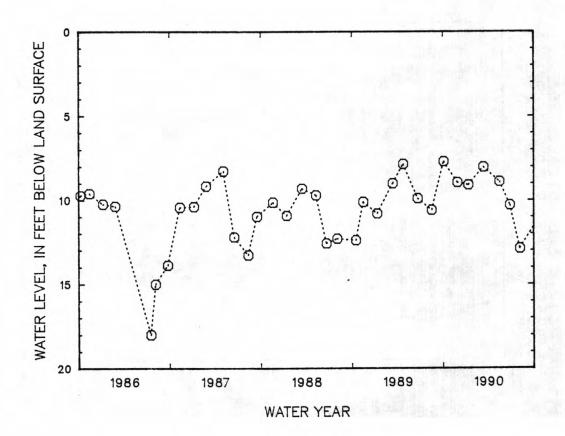
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.51 ft below land-surface datum, Apr. 25, 1984; lowest measured, 17.99 ft below land-surface datum, July 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	7.70 8.95	JAN 11	9.10	MAR 12	8.03	MAY 16	8.90	JUN 27	10.30	AUG 06	12.90
WATER Y	EAR 1990	HIGHEST	7.70	OCT 04, 1989	LOWES	ST 12.90	AUG 06,	1990			



### CITY OF VIRGINIA BEACH

364837076092001. Local number, 61C 29 SOW 175.

LOCATION.--Lat 36°48'37", long 76°09'20", Hydrologic Unit 02080208, at Providence Elementary School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 105 ft, screened 90 to 100 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

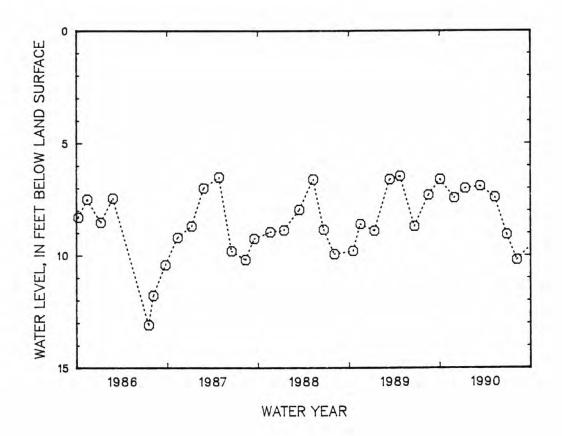
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.17 ft below land-surface datum, Apr. 25, 1984; lowest measured, 13.09 ft below land-surface datum, July 18, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 28	6.60 7.43	JAN 11	7.00	MAR 12	6.90	MAY 10	7.40	JUN 27	9.07	AUG 07	10.20
WATER Y	EAR 1990	HIGHEST	6 60	OCT 03 1989	TO	WEST 10 20	AUG 07	1990			



#### CITY OF VIRGINIA BEACH

365325076114001. Local number, 61D 4 SOW 154.

LOCATION.--Lat 36°53'25", long 76°11'40", Hydrologic Unit 02080108, 200 ft west of Barrs Road, 0.4 mi north of Burton Station Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 200 ft, diameter 4 in. from 200 to 1,130 ft, depth 1,130 ft, screened 1,000 to 1,010 ft, 1,020 to 1,070 ft, 1,080 to 1,120 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum.

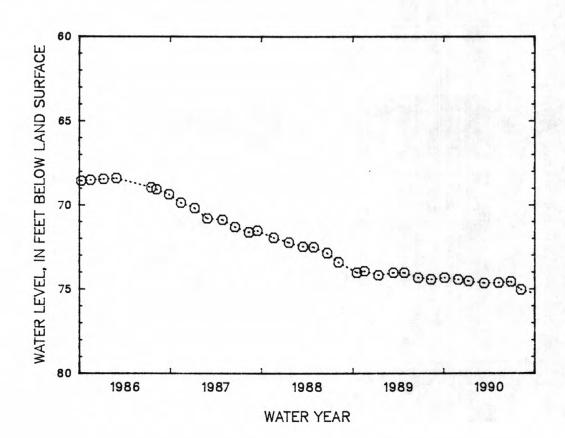
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- December 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 63.47 ft below land-surface datum, Mar. 20, 1981; lowest measured, 75.03 ft below land-surface datum, Aug. 6, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	74.33 74.44	JAN 09	74.53	MAR 12	74.65	MAY 09	74.63	JUN 27	74.56	AUG 06	75.03
WATER Y	EAR 1990	HIGHEST	74.33	OCT 04, 198	39 L	OWEST 75.03	AUG 06	1990			



### CITY OF VIRGINIA BEACH

365425076105001. Local number, 61D 5 SOW 155.

LOCATION.--Lat 36°54'25", long 76°10'50", Hydrologic Unit 02080108, 100 ft east of Ferry Road, 0.3 mi northwest of Diamond Springs Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 12 in. to 102 ft, diameter 6 in. from 102 to 150 ft, diameter 4 in. from 150 to 1,380 ft, depth 1,380 ft, screened 1,207 to 1,229 ft, 1,250 to 1,264 ft, 1,286 to 1,306 ft, 1,345 to 1,367 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

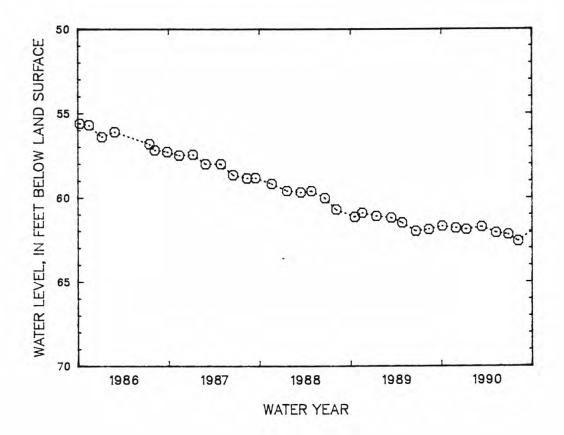
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --December 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.75 ft below land-surface datum, Dec. 17, 1980; lowest measured, 62.60 ft below land-surface datum, Aug. 6, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	61.70 61.82	JAN 09	61.90	MAR 12	61.74	MAY 09	62.10	JUN 27	62.20	AUG 06	62.60
WATER Y	EAR 1990	HIGHEST	61.70	OCT 04 19	89	LOWEST 62 60	AUG 06	1990			



#### CITY OF VIRGINIA BEACH

365327076080501. Local number, 61D 6 SOW 124.

LOCATION.--Lat 36°53'27", long 76°08'05", Hydrologic Unit 02080108, at Thoroughgood School in Virginia Beach.
Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in. to 25 ft, diameter 6 in. from 25 to 40 ft, depth 40 ft, screened 25 to 30 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

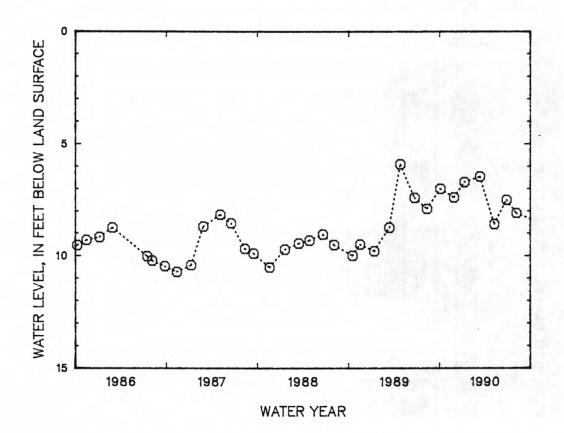
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.85 ft below land-surface datum, Apr. 27, 1984; lowest measured, 10.72 ft below land-surface datum, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	7.00 7.39	JAN 09	6.70	MAR 12	6.45	MAY 09	8.60	JUN 27	7.50	AUG 06	8.10
WATER Y	EAR 1990	HIGHEST	6.45	MAR 12, 1990	LOWEST	8.60	MAY 09,	1990			



### CITY OF VIRGINIA BEACH

363537076061001. Local number, 62A 2 SOW 097A.

LOCATION.--Lat 36°33'54", long 76°06'14", Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Crags Causeway in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 76 ft, screened 66 to 76 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Aug. 3, 1988; 0.00 ft Aug. 3, 1988, to Mar. 13, 1989; 0.65 ft thereafter.

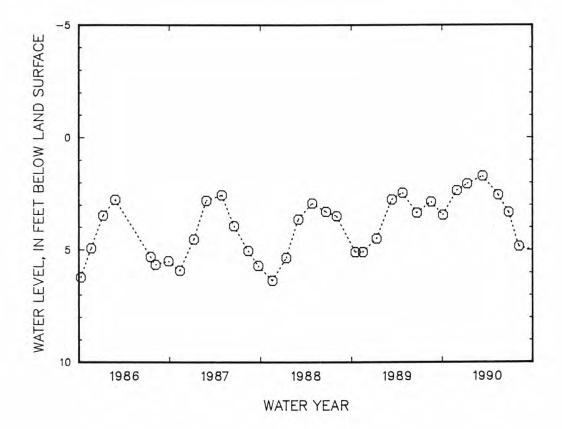
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 1.18 ft below land-surface datum, Apr. 30, 1980; lowest measured, 6.68 ft below land-surface datum, Nov. 28, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.45 2.35	JAN 10	2.05	MAR 13	1.70	MAY 15	2.55	JUN 26	3,33	AUG 07	4.85
WATER Y	EAR 1990	HIGHEST	1.70	MAR 13, 1990	LOWES	ST 4.85	AUG 07.	1990			



# CITY OF VIRGINIA BEACH

363537076061002. Local number, 62A 3 SOW 097B.

LOCATION.--Lat 36°33'54", long 76°06'14", Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Crags Causeway in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

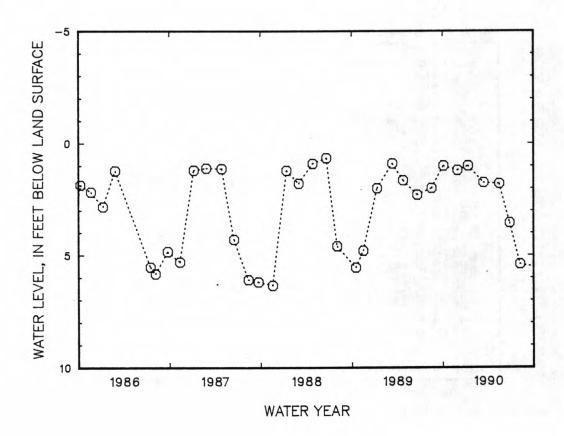
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.59 ft below land-surface datum, Feb. 16, 1983; lowest measured, 6.50 ft below land-surface datum, Oct. 17, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	1.00 1.20	JAN 10	1.00	MAR 13	1.75	MAY 15	1.80	JUN 26	3.56	AUG 07	5.40
WATER Y	EAR 1990	HIGHEST	1.00	OCT 04. 1989.	JAN 10.	1990	LOWEST	5.40 AUG 07	. 1990		



# CITY OF VIRGINIA BEACH

364126076003501. Local number, 62B 1 SOW 098A.

LOCATION.--Lat 36°41'26", long 76°00'35", Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Department of Transportation shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.05 ft thereafter.

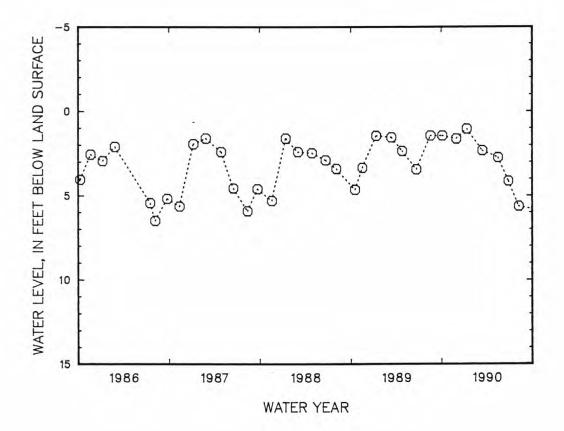
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.05 ft below land-surface datum, Jan. 10, 1990; lowest measured, 11.95 ft below land-surface datum, Sept. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	1.45 1.63	JAN 10	1.05	MAR 13	2.33	MAY 15	2.75	JUN 26	4.15	AUG 07	5.65
WATER Y	EAR 1990	HIGHEST	1.05	JAN 10. 1990	LOWE	ST 5.65	AUG 07	1990			



### CITY OF VIRGINIA BEACH

364126076003502. Local number, 62B 2 SOW 098B.

LOCATION.--Lat 36°41'26", long 76°00'35", Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Department of Transportation shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 98 ft, screened 88 to 98 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft thereafter.

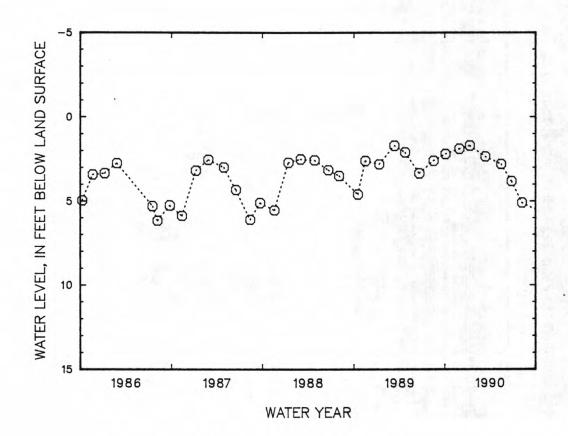
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land-surface datum, Mar. 13, 1989, Jan. 10, 1990; lowest measured, 11.76 ft below land-surface datum, Sept. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	2.20 1.89	JAN 10	1.70	MAR 13	2.35	MAY 15	2.80	JUN 26	3.82	AUG 07	5.10
WATER Y	EAR 1990	HIGHEST	1.70	JAN 10. 1990	LOWI	ST 5.10	AUG 07.	1990			



### CITY OF VIRGINIA BEACH

364713076030701. Local number, 62C 2 SOW 092A.

LOCATION.--Lat 36°47'15", long 76°03'08", Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 102 ft, screened 97 to 102 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.08 ft above land-surface datum prior to Mar. 2, 1988; 0.7 ft thereafter.

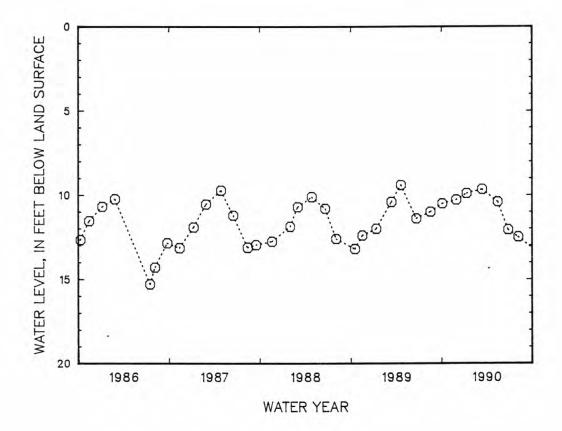
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- December 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 5.00 ft below land-surface datum, Dec. 1, 1977; lowest measured, 15.29 ft below land-surface datum, July 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	10.50 10.28	JAN 10	9.90	MAR 13	9,66	MAY 15	10.40	JUN 26	12.07	AUG 06	12.50
WATER Y	EAR 1990	HIGHEST	9.66	MAR 13. 1990	I.OV	VEST 12 50	AUG 06	1990			



### CITY OF VIRGINIA BEACH

364715076030801. Local number, 62C 3 SOW 092B.

LOCATION.--Lat 36°47'15", long 76°03'08", Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 58 ft, screened 53 to 58 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.05 ft above land-surface datum prior to Mar. 2, 1988; 0.9 ft thereafter.

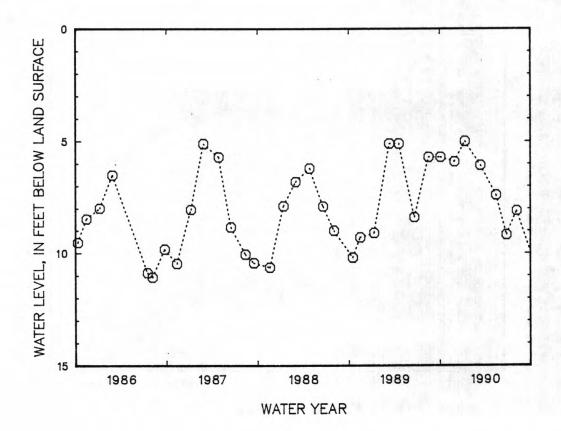
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.36 ft below land-surface datum, Feb. 16, 1983; lowest measured, 11.07 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	5.70 5.91	JAN 10	5.00	MAR 13	6.07	MAY 15	7.40	JUN 26	9.19	AUG 06	8.10
WATER Y	EAR 1990	HIGHEST	5.00	JAN 10, 1990	LOW	EST 9.19	JUN 26,	1990			- 1



#### CITY OF VIRGINIA BEACH

364711076060001. Local number, 62C 4 SOW 083.

LOCATION.--Lat 36°47'11", long 76°06'00", Hydrologic Unit 03010205, 0.3 mi northeast of State Highway 165, 3.5 mi northwest of Princess Anne, and in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 149 ft, screened 118 to 128 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 14, 1989; 0.90 ft thereafter.

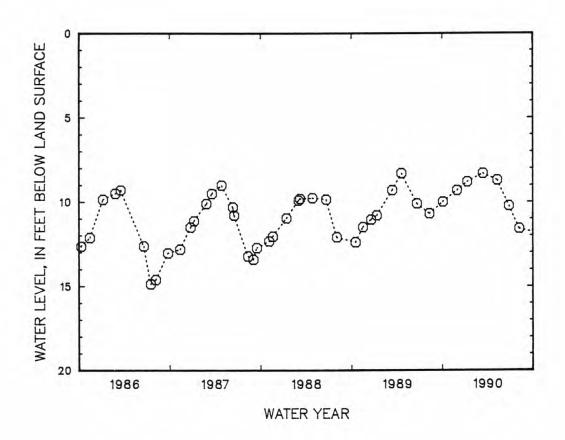
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.10 ft below land-surface datum, Feb. 20, 1980; lowest measured, 14.87 ft below land-surface datum, July 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	10.00 9.31	JAN 09	8,80	MAR 13	8.30	MAY 10	8.70	JUN 26	10.24	AUG 07	11.60
WATER Y	EAR 1990	HIGHEST	8.30	MAR 13 1990	I.OW	EST 11.60	AUG 07	1990			



#### CITY OF VIRGINIA BEACH

364504076031301. Local number, 62C 5 SOW 093.

LOCATION.--Lat 36°45'04", long 76°03'13", Hydrologic Unit 03010205, 200 ft southeast of intersection of State Highways 149 and 165 in Princess Anne, in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 4 in., depth 65 ft, screened 60 to 65 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.91 ft above land-surface datum prior to Mar. 2, 1988; 0.6 ft thereafter.

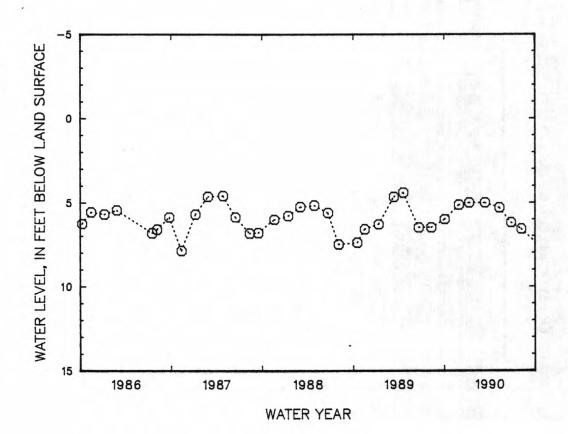
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 2.84 ft below land-surface datum, Feb. 8, 1978; lowest measured, 7.88 ft below land-surface datum, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	6.00 5.13	JAN 09	5.00	MAR 13	5.00	MAY 10	5.30	JUN 26	6.20	AUG 07	6.60
WATER Y	EAR 1990	HIGHEST	5.00	JAN 09, MAR	13. 1990	LOWEST	6.60	AUG 07, 1990			



#### CITY OF VIRGINIA BEACH

365158076030401. Local number, 62C 6 SOW 125.

LOCATION.--Lat 36°51'58", long 76°03'04", Hydrologic Unit 02080108, at Trantwood Elementary School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 4 in., depth 57 ft, screened 52 to 57 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.1 ft above land-surface datum.

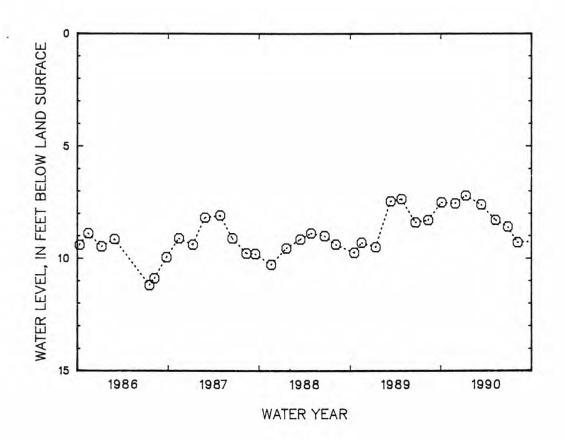
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.85 ft below land-surface datum, Feb. 28, 1979; lowest measured, 11.19 ft below land-surface datum, July 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 28	7.50 7.55	JAN 09	7.20	MAR 12	7.60	MAY 09	8.30	JUN 27	8.60	AUG 06	9.30
WATER Y	EAR 1990	HIGHEST	7.20	JAN 09 1990	I.OM	VEST 9.30	AUG 06.	1990			



#### CITY OF VIRGINIA BEACH

364906076043901. Local number, 62C 7 SOW 126.

LOCATION.--Lat 36°49'06", long 76°04'39", Hydrologic Unit 02080108, at Plaza Elementary School in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 6 in., depth 67 ft, screened 55 to 60 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.1 ft above land-surface datum.

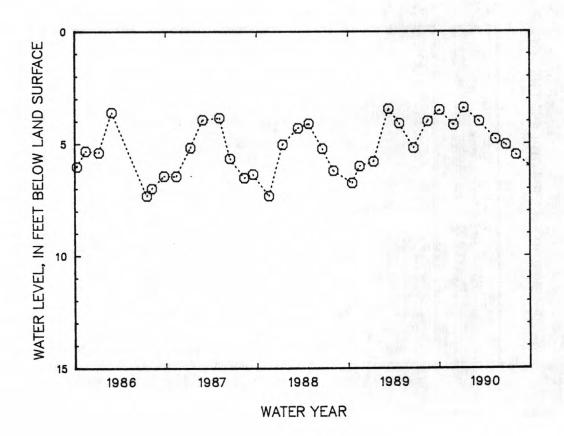
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.84 ft below land-surface datum, Feb. 16, 1983; lowest measured, 7.32 ft below land-surface datum, July 17, 1986, Nov. 19, 1987.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.50 4.18	JAN 09	3.40	MAR 12	4.00	MAY 16	4.80	JUN 27	5.05	AUG 07	5.50
WATER Y	EAR 1990	HIGHEST	3.40	JAN 09. 1990	LOW	EST 5.50	AUG 07. 1	990			



#### CITY OF VIRGINIA BEACH

364745076004301. Local number, 62C 9 SOW 172A.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 170 ft, screened 155 to 165 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

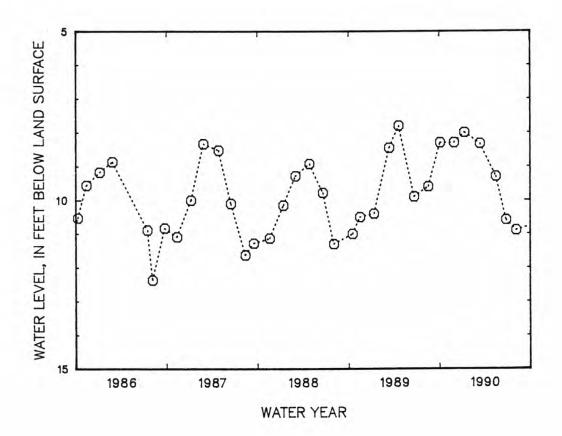
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD, --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.46 ft below land-surface datum, Apr. 25, 1984; lowest measured, 12.37 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	8.30 8.30	JAN 10	8.00	MAR 13	8.33	MAY 16	9.30	JUN 26	10.59	AUG 06	10.90
WATER Y	EAR 1990	HIGHEST	8.00	JAN 10. 1990	LOW	EST 10.90	AUG 06.	1990			



#### CITY OF VIRGINIA BEACH

364745076004302. Local number, 62C 10 SOW 172B.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. --Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 3 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

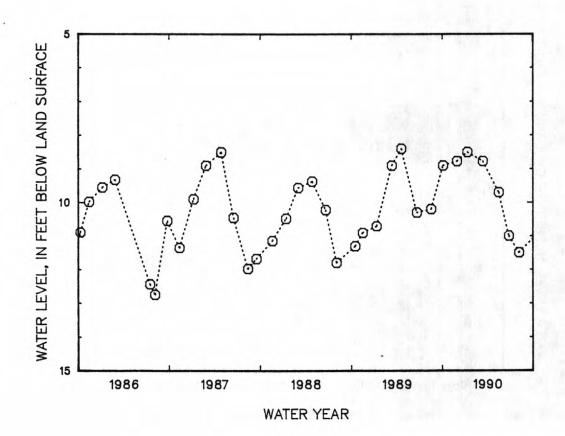
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.98 ft below land-surface datum, Apr. 25, 1984; lowest measured, 12.75 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	8.90 8.77	JAN 10	8,50	MAR 13	8.77	MAY 16	9.70	JUN 26	11.00	AUG 06	11.50
WATER Y	EAR 1990	HIGHEST	8.50	JAN 10 1990	T.OW	EST 11.50	AUG 06	1990			



#### CITY OF VIRGINIA BEACH

364745076004303. Local number, 62C 11 SOW 172C.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 3 in., depth 35 ft, screened 20 to 30 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

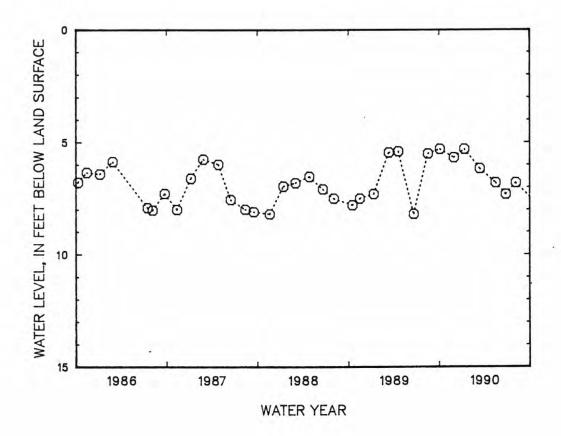
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- May 1984 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 4.89 ft (revised) below land-surface datum, Feb. 28, 1985; lowest measured, 8.20 ft below land-surface datum, Nov. 19, 1987, June 21, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	5.30 5.68	JAN 10	5.30	MAR 13	6.17	MAY 16	6.80	JUN 26	7.32	AUG 06	6.80
WATER Y	EAR 1990	HIGHEST	5 30	OCT 04 1989	TAN 10	1990	LOWEST	7 32 JUN 26	1990		



#### CITY OF VIRGINIA BEACH

364745076004304. Local number, 62C 12 SOW 172D.

LOCATION.--Lat 36°47'45", long 76°00'43", Hydrologic Unit 03010205, at the end of Fhantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 75 ft, screened 60 to 70 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

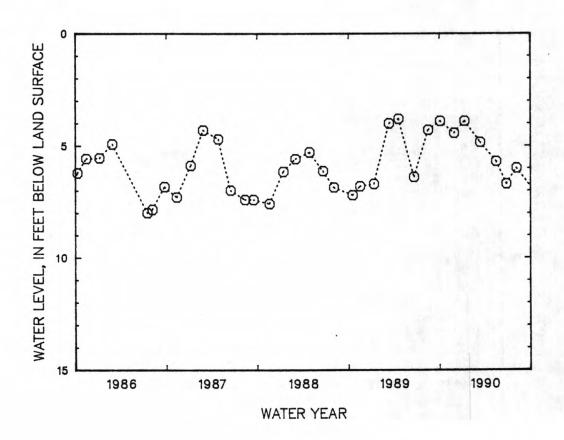
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.56 ft below land-surface datum, Apr. 25, 1984; lowest measured, 7.99 ft below land-surface datum, July 17, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL		WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04 NOV 29	3.90 4.44	JAN 10	3.90	MAR 13	4.85	MAY 16	5.70	JUN 26	6.70	AUG 06	6.00
WATER Y	EAR 1990	HIGHEST	3.90	OCT 04, 1989.	JAN 10.	1990	LOWEST	6.70 JUN 26,	1990		



#### CITY OF VIRGINIA BEACH

364613075583201. Local number, 63C 2 SOW 100B.

LOCATION.--Lat 36\*46'13", long 75°58'32", Hydrologic Unit 03010205, at Hampton Roads Sanitary District sludge disposal site off Old Dam Neck Road, 1.7 mi southeast of intersection of Oceana Boulevard and Old Dam Neck Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER . -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 1.25 in., depth 54 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.85 ft above land-surface datum.

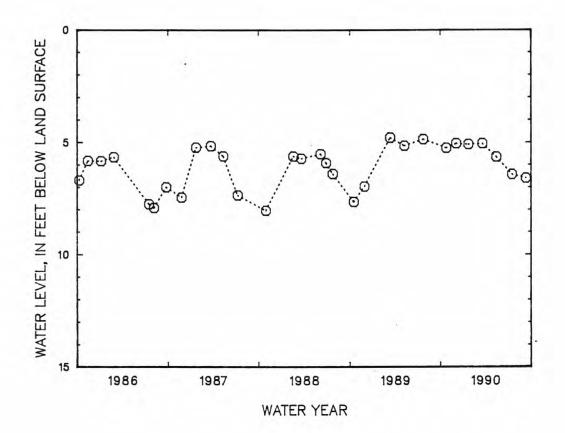
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- March 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.33 ft below land-surface datum, Mar. 26, 1983; lowest measured, 10.58 ft below land-surface datum, Mar. 20, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25 DEC 04	5.25 5.05	JAN 22	5.09	MAR 19	5.05	MAY 14	5.65	JUL 16	6.43	SEP 10	6.60
WATER Y	EAR 1990	HIGHEST	5.05	DEC 04. 1989.	MAR 19	1990	LOWEST	6.60 SEP 10	. 1990		



#### CITY OF VIRGINIA BEACH

364613075583202. Local number, 63C 3 SOW 100C.

LOCATION.--Lat 36°46'13", long 75°58'32", Hydrologic Unit 03010205, at Hampton Roads Sanitary District sludge disposal site off Old Dam Neck Road, 1.7 mi southeast of intersection of Oceana Boulevard and Old Dam Neck Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER . -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 1.25 in., depth 35 ft, screened 30 to 35 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.63 ft above land-surface datum.

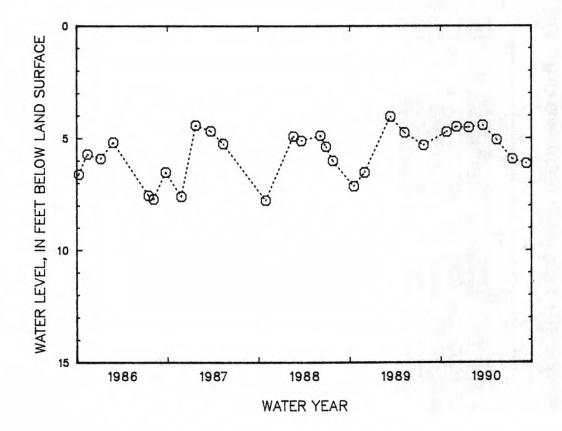
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.79 ft below land-surface datum, Feb. 16, Apr. 20, 1983; lowest measured, 12.35 ft below land-surface datum, Apr. 20, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25 DEC 04	4.72 4.49	JAN 22	4.52	MAR 19	4.42	MAY 14	5.07	JUL 16	5.93	SEP 10	6.13
WATER Y	EAR 1990	HIGHEST	4.42	MAR 19. 1990	LOW	EST 6.13	SEP 10.	1990			



#### CITY OF VIRGINIA BEACH

364722075591801. Local number, 63C 4 SOW 173A.

LOCATION.--Lat 36°47'22", long 75°59'18", Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER. -- Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 3 in., depth 291 ft, screened 281 to 291 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

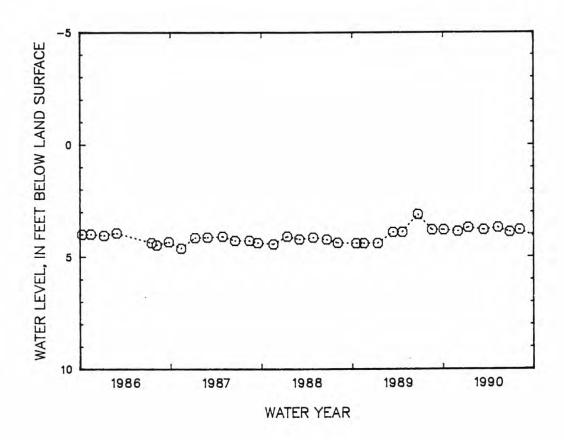
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.10 ft below land-surface datum, June 21, 1989; lowest measured, 4.63 ft below land-surface datum, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	3.80 3.87	JAN 10	3.70	MAR 13	3.80	MAY 10	3.70	JUN 26	3.90	AUG 06	3.80
WATER Y	EAR 1990	HIGHEST	3.70	JAN 10. MAY	10. 1990	LOWEST	3.90	JUN 26, 1990			



### CITY OF VIRGINIA BEACH

364722075591802. Local number, 63C 5 SOW 173B.

LOCATION.--Lat 36°47'22", long 75°59'18", Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: Virginia Water Control Board.

AQUIFER .-- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Drilled observation water well, diameter 3 in., depth 95 ft, screened 80 to 90 ft.

INSTRUMENTATION. -- Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

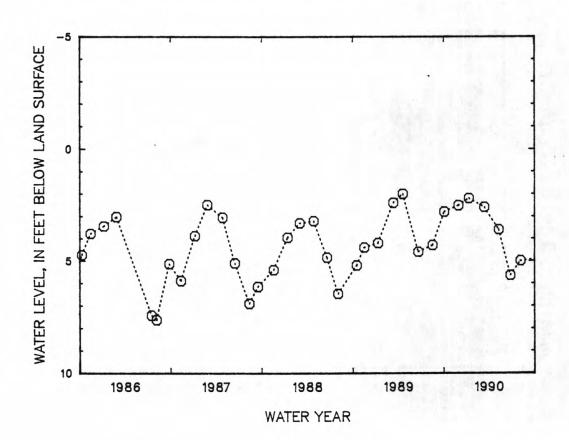
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, Apr. 20, 1989; lowest measured, 7.63 ft below land-surface datum, Aug. 6, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03 NOV 29	2.80 2.52	JAN 10	2.20	MAR 13	2.60	MAY 10	3.60	JUN 26	5.65	AUG 06	5.00
WATER Y	EAR 1990	HIGHEST	2.20	JAN 10. 1990	LOWES	T 5.65	JUN 26. 1	1990			



#### WESTMORELAND COUNTY

381110076550501. Local number, 55P 5.

LOCATION.--Lat 38°11'10", long 76°55'05", Hydrologic Unit 02070011, behind craft shop at George Washington Birthplace National Monument, 3.8 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER .-- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled observation water well, diameter 6 in., depth 471 ft, screened 451 to 466 ft.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

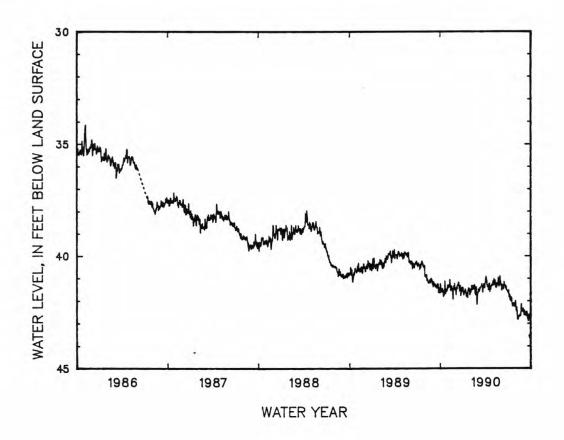
DATUM. -- Elevation of land-surface datum is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.0 ft above land-surface datum.

PERIOD OF RECORD. -- June 1974 to current year.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 25.05 ft below land-surface datum, June 24, 1974; lowest recorded, 42.89 ft below land-surface datum, Sept. 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.60	41.36	41.45	41.62	41.43	41.54	41.09	41.02	41.52	41.83	42.30	42.43
10	41.46	41.21	41.29	41.48	41.32	41.45	41.30	41.09	41.32	41.99	42.80	42.51
15	41.75	41.43	41.17	41.76	41.46	41.32	41.24	41.39	41.16	41.88	42.68	42.50
20	41.12	41.46	41.37	41.86	41.72	41.45	41.43	41.25	41.41	42.22	42.65	42.89
25	41.48	41.34	41.59	41.43	42.14	41.25	41.32	41.34	41.52	42.20	42.37	42.79
EOM	41.29	41.44	41.40	41.56	41.65	41.18	41.12	41.11	41.62	42.02	42.35	42.77
WATER	YEAR 1990	HIG	HEST 40.	23 MAY 2	9, 1990	LOWES	T 42.89	SEP 20,	1990			



#### WESTMORELAND COUNTY

381132076551001. Local number, 55P 9.

LOCATION.--Lat 38°11'32", long 76°55'10", Hydrologic Unit 02070011, at George Washington Birthplace National Monument, 500 ft east of park road, 0.6 mi north of the end of State Highway 204, and 3.4 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER. -- Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS .-- Dug unused water well, diameter 36 in., depth 22.6 ft.

INSTRUMENTATION .-- Monthly measurements with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of concrete lip on casing, 1.65 ft above land-surface datum.

PERIOD OF RECORD . -- July 1977 to current year.

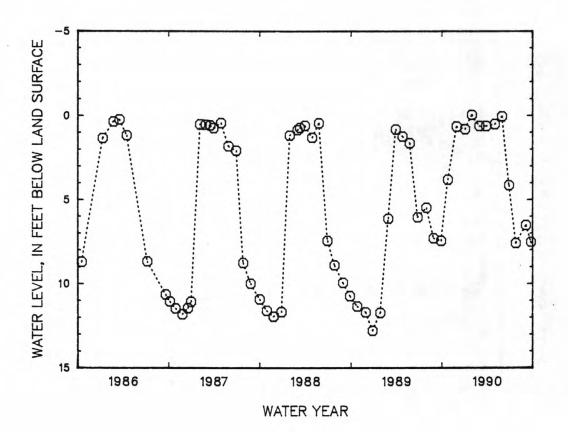
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft above land-surface datum, Jan. 29, 1990; lowest measured, 12.80 ft below land-surface datum, Dec. 27, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE -	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25 NOV 29	3.81	JAN 02	.81 *+.04	FEB 28 MAR 27	.62	MAY 01 30	.51	JUN 27 JUL 25	4.15	SEP 04	6.53

<sup>\*</sup> Flowing well; readings are above land-surface datum.

WATER YEAR 1990 HIGHEST \*+.04 JAN 29, 1990 LOWEST 7.60 JUL 25, 1990



#### WESTMORELAND COUNTY

381530076584401. Local number, 55Q 2.

LOCATION.--Lat 38°15'30", long 76°58'44", Hydrologic Unit 02070011, 200 ft southwest of State Highway 205 (McKinney Boulevard) at Colonial Beach and 0.3 mi northwest of the intersection of State Highways 205 (McKinney Boulevard) and 632. Owner: Darl Concrete and Contracting Company.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 890 ft, depth 890 ft, screened 844 to 874 ft.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Prior to June 1, 1990, annual measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of 0.75 in. nipple in top of casing, 2.8 ft above land-surface datum. Prior to Dec. 10, 1974, measuring point was top of casing, 2.2 ft above land-surface datum.

PERIOD OF RECORD. -- December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 16.37 ft below land-surface datum, Dec. 10, 1971; lowest measured, 76.28 ft below land-surface datum, Sept. 20, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1988 TO SEPTEMBER 1989

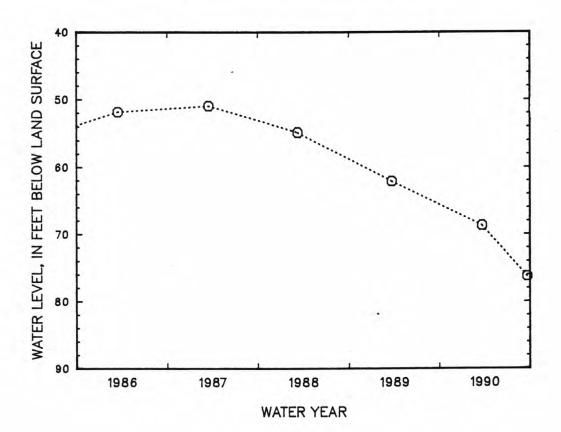
DATE LEVEL
MAR 23 62.10

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

MATER DATE LEVEL DATE LEVEL

MAR 22 68.72 SEP 20 76.28

WATER YEAR 1990 HIGHEST 68.72 MAR 22, 1990 LOWEST 76.28 SEP 20, 1990



#### WESTMORELAND COUNTY

380538076490801. Local number, 56N 1 SOW 016.

LOCATION.--Lat 38°05'38", long 76°49'08", Hydrologic Unit 02080104, at Washington and Lee School, 0.5 mi east of Montross. Owner: Westmoreland County Public Schools.

AQUIFER. -- Brightseat-Upper Potomac aquifer of Cretaceous-Tertiary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 189 ft, diameter 2 in. from 189 to 641 ft, depth 641 ft, screened 608 to 628 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Mar. 31, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 149 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

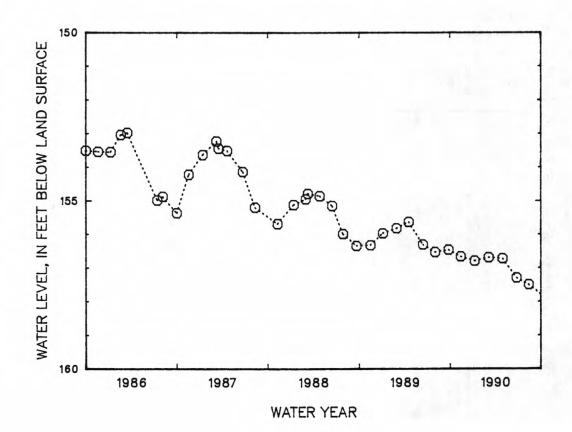
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD . -- August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level recorded, 133.47 ft below land-surface datum, Aug. 28, 1967; lowest measured, 157.50 ft below land-surface datum, Aug. 13, 1990.

#### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL		WATER LEVEL	DATE	WATER LEVEL	DATE		TER	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	156.67	JAN 08 1	56.80	MAR 05	156.70	APR 3	0 156	.73	JUN 25	157.30	AUG 13	157.50
WATER YE	AR 1990	HIGHEST	156.67	NOV 13. 1	989	LOWEST 1	57.50	AUG 13.	1990			



#### CITY OF WILLIAMSBURG

371610076423001. Local number, 57G 31.

LOCATION.--Lat 37°16'10", long 76°42'30", Hydrologic Unit 02080206, on the campus of the College of William and Mary in the old powerplant, 200 ft west of the intersection of Boundary Street and State Highways 5 and 31 (Francis Street), 500 ft south of intersection of State Highways 5 and 31 (Jamestown Road) and Boundary Street, and in the city of Williamsburg. Owner: College of William and Mary.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 261 ft, diameter 8 in. from 158 to 442 ft, depth 442 ft, screened 395 to 432 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, occasional measurements with chalked tape.

DATUM. -- Elevation of land-surface datum is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.47 ft above land-surface datum.

PERIOD OF RECORD. -- July 1924, September 1978, September 1983 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 60.00 ft below land-surface datum, July 1924; lowest measured, 149.00 ft below land-surface datum, July 17, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

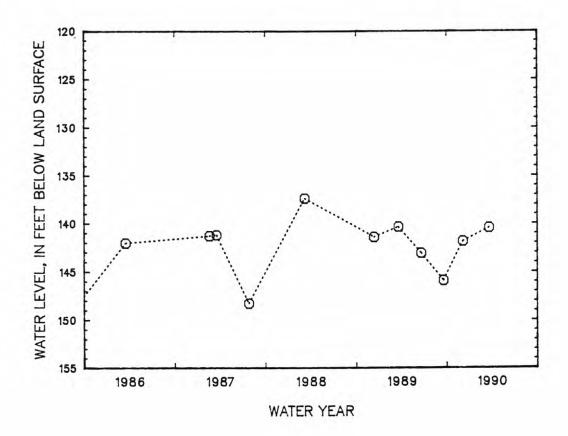
DATE LEVEL DATE LEVEL

DEC 05 141.87 MAR 20 140.46

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 140.46 MAR 20, 1990

LOWEST 141.87 DEC 05, 1989



#### YORK COUNTY

371916076375901. Local number, 57G 2.

LOCATION.--Lat 37°19'16", long 76°37'59", Hydrologic Unit 02080107, at Building 3101 on Camp Peary Naval Reservation, 3.3 mi northeast of Williamsburg. Owner: U.S. Department of the Navy.

AQUIFER. -- Sand and gravel of undifferentiated Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 352 ft, diameter 8 in. from 352 to 387 ft, depth 387 ft, screen depth unknown.

INSTRUMENTATION. -- Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

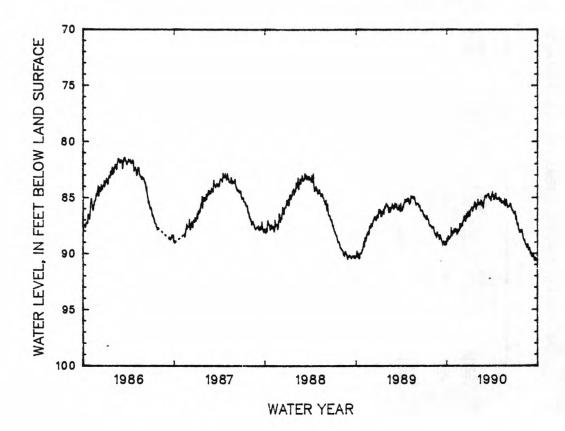
PERIOD OF RECORD. -- January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 43.09 ft below land-surface datum, Mar. 7, 1968; lowest recorded, 90.62 ft below land-surface datum, Sept. 25, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990 LOWEST VALUES

DAY	OCT	NOA	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	88.84	88.04	87.16	86.16	85.45	84.82	84.84	85.21	85.76	86.92	88.63	89.91
10	88.52	88.04	86.86	85.85	85.47	84.90	85.19	85.30	85.78	87.33	88.81	90.14
15	88.58	88.09	86.85	86.09	85.48	84.68	84.69	85.42	85.55	87.58	89.26	90.16
20	87.92	87.92	86.52	85.78	85.73	84.90	85.06	85.61	86.10	88.12	89.49	90.61
25	88.02	87.54	86.31	85.53	85.94	84.98	85.09	85.71	86.28	88.12	89.51	90.62
EOM	87.84	87.58	86.17	85.78	85.29	84.84	84.98	85.59	86.44	88.03	89.58	90.60

WATER YEAR 1990 HIGHEST 83.61 APR 03, 1990 LOWEST 90.62 SEP 25, 1990



#### YORK COUNTY

371654076401601. Local number, 57G 17 SOW 068.

LOCATION.--Lat 37°16'54", long 76°40'16", Hydrologic Unit 02080107, 0.05 mi east of State Highway 716 at Parkway Estates, 0.5 mi east of Williamsburg. Owner: Sydnor Hydrodynamics.

AQUIFER. -- Upper Potomac aquifer of Cretaceous age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 452.3 ft, screened 411 to 426 ft, 442.2 to 452.3 ft.

INSTRUMENTATION. --Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Apr. 30, 1978, to Sept. 30, 1985, occasional measurement with chalked tape. Jan. 15, 1974, to Apr. 30, 1978, continuous strip-chart recorder. Prior to Jan. 15, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

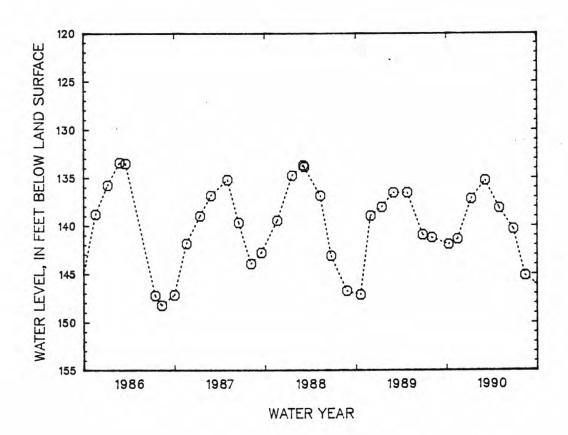
REMARKS . -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1972 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.09 ft below land-surface datum, Nov. 22, 1972; lowest measured, 148.26 ft below land-surface datum, Aug. 11, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 15	141.95 141.40	JAN 09 1	137.20	MAR 06	135.27	MAY 01	138.15	JUN 27	140.35	AUG 14	145.18
WATER Y	EAR 1990	HIGHEST	135.27	MAR 06, 19	90	LOWEST 145	.18 AUG 14,	1990			



#### YORK COUNTY

371735076391501. Local number, 57G 19 SOW 069.

LOCATION.--Lat 37°17'35", long 76°39'15", Hydrologic Unit 02080107, 250 ft east of State Highway 716 at Queens Lake Subdivision, 1.6 mi east of Williamsburg. Owner: Sydnor Hydrodynamics.

AQUIFER. --Middle Potomac and Upper Potomac aquifers of Cretaceous age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 515 ft, screened 420 to 430 ft, 445 to 460 ft, 505 to 515 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Apr. 30, 1979, to Sept. 30, 1985, occasional measurement with chalked tape. July 31, 1974, to Apr. 30, 1979, continuous stripchart recorder. Prior to July 31, 1974, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 64 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum prior to Aug. 14, 1990; 2.05 ft thereafter.

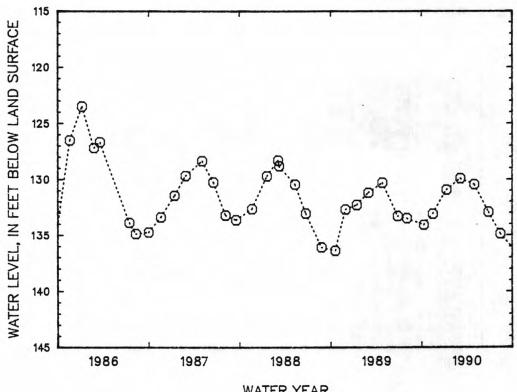
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. -- November 1972 to current year. Unpublished records available prior to October 1985 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 109.95 ft below land-surface datum, Nov. 29, 1972; lowest measured, 136.40 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

	ATER EVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
	34.10 33.11	JAN 09	130.95	MAR 06	129.93	MAY 01	130.47	JUN 27	132.95	AUG 14	134.90
WATER YEAR	1990	HIGHEST	129.93	MAR 06. 1	990	LOWEST 134	.90 AUG 14.	1990			



WATER YEAR

#### YORK COUNTY

371853076421501. Local number, 57G 59.

LOCATION.--Lat 37°18'53", long 76°42'00", Hydrologic Unit 02080206, 0.25 mi southeast of State Highway 645 in Waller Mill Park, 2.6 mi northeast of the intersection of U.S. Highway 60 (Richmond Road) and State Highway 645 (Airport Road), and 3.1 mi north of the city of Williamsburg. Owner: City of Williamsburg.

AQUIFER. -- Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS. -- Drilled withdrawal water well, diameter 4 in., depth 470 ft, screened 450 to 470 ft.

INSTRUMENTATION. -- Quarterly measurement with chalked tape by USGS personnel. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM. -- Elevation of land-surface datum is 74 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD. -- December 1971, November 1984 to June 1990 (discontinued). Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 101.87 ft below land-surface datum, Mar. 16, 1986; lowest measured, 120.00 ft below land-surface datum, Dec. 7, 1971.

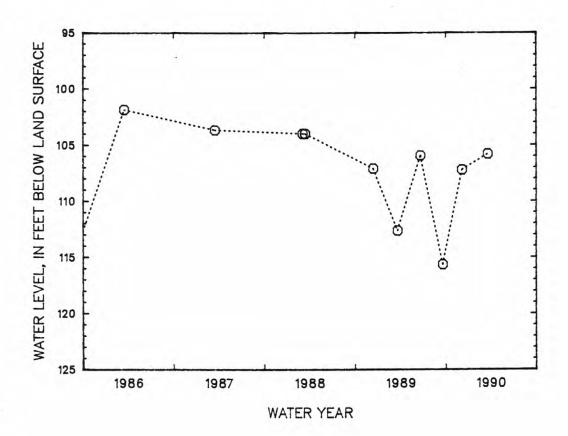
WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, OCTOBER 1989 TO JUNE 1990

	WATER		WATER
DATE	LEVEL	DATE	LEVEL
DEC 05	107.21	MAR 19	105.81

PERIOD OCTOBER 1989 TO JUNE 1990

HIGHEST 105.81 MAR 19, 1990

LOWEST 107.21 DEC 05, 1989



#### YORK COUNTY

371601076343501. Local number, 58G 2.

LOCATION. --Lat 37°16'01", long 76°34'35", Hydrologic Unit 02080107, 3.2 mi northwest of the intersection of State Highway 238 and Main Road at Gate 1 on the Yorktown Naval Weapons Station in Lackey. Owner: U.S. Department of

AQUIFER. -- Sand of late Cretaceous age.

WELL CHARACTERISTICS .-- Drilled unused water well, diameter 18 in., depth 445 ft, screen depth unknown.

INSTRUMENTATION. -- Semiannual measurement with chalked tape by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with chalked tape. Prior to Dec. 1, 1988, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

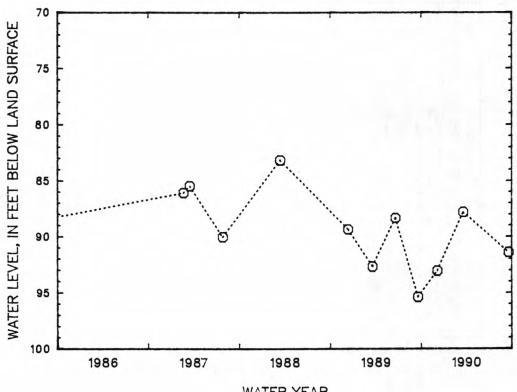
PERIOD OF RECORD.--August 1918, December 1971, December 1983 to July 1985, February 1987 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD. -- Highest water level measured, 61.41 ft below land-surface datum, Dec. 7, 1971; highest reported, 2 ft above land-surface datum, Aug. 1, 1918; lowest measured, 95.40 ft below land-surface datum, Sept. 18, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
DEC 05	93.07	MAR 19	87.82	SEP 18	91.45	

WATER YEAR 1990 HIGHEST 87.82 MAR 19, 1990 LOWEST 93.07 DEC 05, 1989



WATER YEAR

371

#### YORK COUNTY

371535076373501. Local number, 59F 1 SOW 027.

LOCATION.--Lat 37°13'04", long 76°29'19", Hydrologic Unit 02080107, at U.S. Naval Supply Center, 1.6 mi southeast of Yorktown. Owner: U.S. Naval Supply Center.

AQUIFER. -- Chickahominy-Piney Point aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS. -- Drilled unused water well, diameter 10 in., depth 446 ft, screened 421 to 446 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape by Virginia Water Control Board personnel. Sept. 10, 1971, to Oct. 10, 1985, occasional measurement with chalked tape. Apr. 10, 1970, to Sept. 10, 1971, continuous strip-chart recorder. Prior to Apr. 10, 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

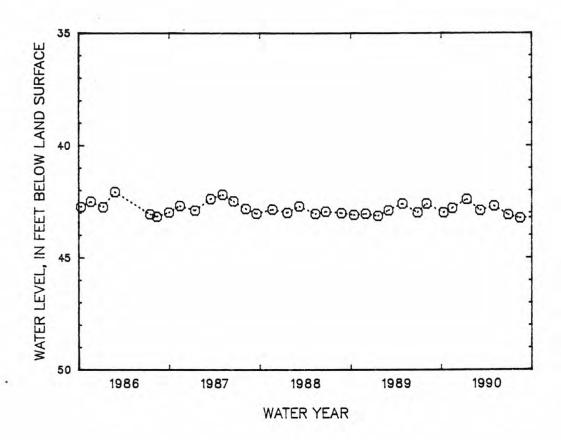
REMARKS. -- Records provided by the Virginia Water Control Board.

PERIOD OF RECORD. --October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Water Control Board.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Oct. 27, 1969; lowest measured, 44.69 ft below land-surface datum, July 9, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10 NOV 14	43.00 42.80	JAN 11	42.40	MAR 06	42.90	MAY 01	42.70	JUN 27	43.10	AUG 14	43.25
WATER Y	EAR 1990	HIGHEST	42 40	TAN 11 190	20	IOWEST 43 25	AUG 14	1990			



THIS IS A BLANK PAGE

## GROUND-WATER-QUALITY RECORDS

REMARKS CODES.--The following remark codes may appear with the water-quality data in this section:

REMARK
Estimated value
Actual value is known to be greater than the value shown.
Actual value is known to be less than the the value shown
Results based on colony count outside the acceptance range (non-ideal colony count)
Biological organism count less than 0.5 percent (organism may be observed rather than counted)
Biological organism count equal to or greater than 15 percent (dominant)
Biological organism estimated as dominant

WATER QUALITY DATA, WATER YEAR OCTOBER 1989 TO SEPTEMBER 1990

LOCAL IDENT- I- FIER	STATION NUMBER	GEO- LOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)
		NORTH	AMPTON COU	NTY					
63F 52 SOW 182B 63F 53 SOW 182C 63F 54 SOW 182D 63F 55	370807075570803 370807075570804 370807075570805 370807075570806	121CSPKU 121CSPKU	11-29-89 11-16-89 11-16-89 11-16-89	1332.00 220.00 60.00 20.00	8.0 8.0 8.0 8.0	670 300 205	5400 642 296 201	6.9 8.3 7.9 5.8	6.5 8.4 7.6 5.9
		PRINCE	WILLIAM C	COUNTY					
51T175	383754077250501	000IRSV	07-25-90	415.00	340	300	317	6.9	7.1
51T174	383812077263301	000IRSV	07-25-90		405	135	132	6.6	6.9
51T140	383824077264301	000IRSV	07-17-90	196.00	415	80	83	6.3	6.5
51T134	383836077233601	000IRSV	07-18-90	145.00	330	135	124	6.6	6.8
51T166	383923077260201	000IRSV	07-25-90	302.00	420	95	92	6.1	6.4
52T 52	383940077180601	000IRSV	07-19-90	370.00	270	385	373	7.1	7.3
51T147	383941077282601	000IRSV	07-18-90	125.00	325	110	106	6.3	6.4
51T122	383947077262001	000IRSV	07-25-90	247.00	400	135	135	5.6	5.8
50T 68	383957077304901	230TRSC	07-12-90	205.00	230	365	353	7.2	8.3
51T171	384005077261701	000IRSV	07-26-90	400.00	375	105	109	5.9	6.2
50T 66	384020077331901	231BLBF	07-12-90	210.00	193	610	613	7.1	7.9
51T120	384035077252901	000IRSV	07-26-90	320.00	325	180	178	7.2	7.6
51T118	384040077251902	000IRSV	07-26-90	325.00	350	260	275	6.8	7.1
51T173	384050077255601	000IRSV	07-26-90	365.00	250	240	244	7.4	7.5
51T151	384055077264001	000IRSV	07-18-90	167.00	340	380	354	5.8	6.0
51T 29E 51T167 50T 69 52T 44 51T168	384111077253501 384207077272801 384217077360501 384224077212201 384332077231901	000IRSV 000IRSV 000IRSV 000IRSV	07-25-90 07-23-90 07-12-90 07-19-90 08-01-90	250.00 120.00 125.00 400.00 400.00	330 265 280 295 135	100 95 475 135 360	102 96 450 134 380	6.2 6.1 7.3 6.2 7.1	6.4 6.3 8.1 6.8 7.3
51T159	384419077232701	000IRSV	07-19-90	185.00	175	110	113	6.0	6.3
51U 97H	384632077273401	231MNSS	07-24-90	1000.00	250	770	785	7.6	7.6
50U126	384640077361101	000MMPS	08-01-90		325	390	397	7.7	7.8
51U 16	384644077271101	231MNSS	07-27-90	790.00	270	400	401		7.2
51U104G	384652077280401	231BLBF	07-24-90	945.00	230	1180	1160	7.3	7.4
50U122	384657077301901	231BLBF	07-31-90	350.00	245	900	874	7.5	7.5
51U103G	384702077283401	231BLBF	07-24-90	925.00	210	1110	1120	7.4	7.4
51U 99G	384702077284201	231BLBF	07-30-90	900.00	200	700	631	7.5	7.5
51U 10	384705077265401	231MNSS	07-26-90	400.00	190	525	517	7.5	7.6
51U101G	384707077293701	231BLBF	07-31-90	300.00	195	675	661	7.3	7.4
51U100G	384712077290201		07-31-90	397.00	180	550	548	7.4	7.5
51U 98G	384721077281801		07-30-90	305.00	195	600	589	7.4	7.4
50U125	384724077370301		08-01-90	300.00	350	480	504	7.5	7.6
51U 11	384728077270601		07-27-90	343.00	228	480	470		7.3
49U 62	384739077391301		08-01-90	305.00	380	260	275	7.6	7.6
51U102D	384740077292101	231BLBF	07-31-90	650.00	170	925	889	7.4	7.5
51U106D	384741077284401	231BLBF	07-31-90	515.00	165	800	765	7.4	7.5
49U 72	384844077375801	220JRSC	08-01-90	330.00	362	475	499	7.5	7.6
50U 97	385019077330501	000IRSV	07-16-90	452.00	330	380	378	8.9	8.9
50U 86	385111077353101	231BLRN	07-16-90	200.00	355	350	359	7.6	8.3
49U 51	385147077404701	231BLRN	07-10-90	525.00	570	300	305	7.6	8.1
49U 68	385159077402501	220JRSC	07-10-90	170.00	570	65	65	6.0	7.2
50U130	385205077352401	220JRSC	07-17-90	300.00	315	390	367	7.6	7.7
49U 69	385210077400701	220JRSC	07-11-90	140.00	540	80	70	5.6	6.5
50U106	385219077370401	231BLRN	07-17-90	250.00	460	175	193	8.1	7.9
49V 46	385247077403401	231BLRN	07-11-90	325.00	570	200	208	9.5	9.2
49V 43	385256077375101	231BLRN	07-11-90	100.00	350	400	430	7.6	8.1
49V 58	385337077402101	377HMPN	08-02-90	310.00	700	20	25	5.2	5.7
49V 56	385408077402801	377HMPN	08-02-90	975.00	1220	10	15	5.4	5.7
49V 55	385505077392201	231BLRN	08-02-90	400.00	605	20	30	5.2	5.8

0001RSV INTRUSIVE ROCKS
000MNPS METAMORPHOSED SEDIMENTARY ROCKS
110QRNR COLUMBIA AQUIFER
111SDMN SEDIMENTS, UNDIFFERENTIATED
121CSPKU YORKTOWN-EASTOVER AQUIFER

122YRKN YORKTOWN FORMATION 211CRCSU UPPER POTOMAC AQUIFER 220JRSC JURASSIC SYSTEM 230TRSC TRIASSIC SYSTEM

231BLBF 231BLRN 231MNSS 377HMPN

BALLS BLUFF FORMATION BULL RUN FORMATION MANASSAS FORMATION HAMPTON SHALE OR FORMATION

LOCAL IDENT- I- FIER	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)
			NORTHAMPT	ON COUNTY	rContinu	ued				
63F 52 SOW 182B 63F 53 SOW 182C 63F 54 SOW 182D 63F 55	16.0 16.0 16.0 18.5	1	5 8 0 2	5900 2: 100 49	5 4.6 37	770 3.4 2.0 4.5	11000 120 18 16	280 13 1.2 1.5	=======================================	292 241 91 23
		P	RINCE WILI	LIAM COUNT	TYContin	nued				
51T175 51T174 51T140 51T134 51T166	16.0 15.0 15.0 14.0 15.0	=======================================	2.9 3.6 4.7 0 5.8	7 2:	8.9 6.7 5 11	4.1 5.8 1.9 4.3 3.4	8.9 8.9 6.6 5.9 7.8	2.2 0.80 0.90 3.5 1.1		63 1 39 1 54
52T 52 51T147 51T122 50T 68 51T171	18.0 14.0 14.5 15.5 14.0	=======================================	4.9 3.8 6.8 5.9 7.7	3 39 3 34 9 170	8.8 11 55	12 4.1 1.5 7.9 1.4	11 6.8 11 10 8.2	3.2 1.1 1.2 0.50 1.5	170 54 30 176 37	52 27 3 172
50T 66 51T120 51T118 51T173 51T151	18.0 14.5 15.0 14.0 15.0	=======================================	0.3 7.4 8.7 3.6	130	12 0 40 0 32	24 10 7.9 6.2 <0.02	33 7.2 7.7 8.9 2 71	0.90 1.1 0.60 1.9	97 155 112	85 140 2 102
51T 29E 51T167 50T 69 52T 44 51T168	15.0 15.0 16.5 15.0 14.0	=======================================	7.1 5.7 1.8 3.6 5.4	32 3 220 5 34	10 56 11	5.3 1.8 19 1.5 4.5	5.4 7.7 14 8.3 12	0.70 0.20 0.70 1.9	47	43 225 5 51
51T159 51U 97H 50U126 51U 16 51U104G	14.0 18.5 14.5 16.0 20.0	=======================================	6.3 1.7 4.1 4.9 0.4	390 1 180 1 190	76 38 55	1.9 49 21 12 36	6.4 18 12 12 32	1.1 1.2 1.2 0.70 1.6	37 202 177 ) 193	145 168 153
50U122 51U103G 51U 99G 51U 10 51U101G	16.0 18.0 18.0 15.5 15.0	=======================================	1.0 1.1 2.4 3.9 5.5	490 260 240	140 67 77	24 32 22 11 30	62 66 41 15 25	0.70 1.2 0.80 0.80	197 234 161	181 219 149
51U100G 51U 98G 50U125 51U 11 49U 62	15.5 16.0 15.0 15.0	=======================================	3.4 1.0 1.2 2.1 5.1	290 2 220 2 220	76 53 68	25 23 22 13 7.0	20 19 19 12 10	0.80 0.80 0.60 1.1 1.0	245	229 209 181
51U102D 51U106D 49U 72 50U 97 50U 86	16.0 16.5 14.5 15.5	=	1.2 1.3 2.6 0.5 0.1	360 3220 3 19	82 56 7.6	35 37 19 0.05		0.90 0.80 0.80 0.20 <0.10	219 233 71	201 220 66
49U 51 49U 68 50U130 49U 69 50U106	17.5 14.0 15.0 16.0 17.0	=======================================	0.1 6.4 2.4 5.1 6.0	180 22	6.6 49 5.5	12 2.0 13 2.0 3.3	11 3.0 13 3.9 6.4	0.90 0.60 0.80 0.70	31 189 16	29 167 15
49V 46 49V 43 49V 58 49V 56 49V 55	15.5 20.0 14.5 13.5 14.0	=======================================	0.1 0.2 5.9 7.6 6.8	170	53 0.93 0.69		23 1.4 1.1	0.10 0.60 0.80 0.80	208	192 10 4.7

LOCAL IDENT- I- FIER	ALKA- LINITY WAT DIS SI TOT IT I FIELD S MG/L AS CACO3 AS	ULFATE DIS- SOLVED (MG/L S SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180	CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
			NORTHAMPT	ON COUNTY	Continu	ued				
63F 52 SOW 182B 63F 53 SOW 182C 63F 54 SOW 182D 63F 55	257 97 23	<1.0 2.0 <1.0 24	<24000 59 32 24	<0.10 1.1 0.10 <0.10	12	38400 355 191 106	361 1		<0.100	0.800
		PR	INCE WILL	IAM COUNT	YConti	nued				
51T175 51T174 51T140 51T134 51T166	=======================================	100 3.8 <1.0 5.8 <1.0	2.1 2.2 2.2 0.70 4.4	0.20 <0.10 <0.10 <0.10	37 40 37	=======================================	236 106 83 108 88	0.14 0.11 0.15	<0.100 <0.100 <0.100	0.020 0.030 0.030
52T 52 51T147 51T122 50T 68 51T171	=	22 <1.0 16 1.1 7.4	3.8 3.1 6.4 10 2.1	0.30 <0.10 <0.10 <0.10	35 29 29	=======================================	247 91 97 228 93	0.12	2 <0.100 0.800 1.80	0.030
50T 66 51T120 51T118 51T173 51T151	=	69 7.2 6.5 17	12 2.4 3.6 7.4 54	<0.10 <0.10 0.50 0.40 <0.10	40 31 23	=======================================	399 140 193 165 199	0.19 0.26 0.22	0.300 0.400 0.200	0.020
51T 29E 51T167 50T 69 52T 44 51T168	=======================================	<1.0 2.8 8.1 3.9 2.1	4.1 2.5 11 2.3 9.2	<0.10 0.30 <0.10 <0.10	31 29 36	- :	74 85 281 104 234	0.11	<0.100 1.00 <0.100	0.020 0.020 0.020
51T159 51U 97H 50U126 51U 16 51U104G		<1.0 240 17 58 470	2.2 7.2 12 8.5	<0.10 0.10 <0.10 0.60 <0.10	29 25 34	=======================================	71 546 241 275 865	0.74 0.33 0.37	0.700 2.00 0.500	0.010
50U122 51U103G 51U 99G 51U 10 51U101G	=======================================	250 420 110 96 61	22 20 15 16 24	0.30 <0.10 0.30 0.40	27 28 35		615 830 431 354 423	1.13	0.400 1.20 1.30	
51U100G 51U 98G 50U125 51U 11 49U 62	=======================================	32 71 6.0 44 5.4	17 19 34 19 5.5	0.20 0.20 <0.10 0.20 <0.10	30 29 22	=======================================	335 389 294 293 184	0.53	0.600 1.20 1.00	<0.010 0.030
51U102D 51U106D 49U 72 50U 97 50U 86	=======================================	260 190 25 100 6.2	18 26 19 8.9	0.30 0.20 0.30 <0.10	30 25 60	=======================================	631 533 310 292 229	0.73	0.800 0.300 <0.100	<0.010 0.020 <0.010
49U 51 49U 68 50U130 49U 69 50U106	=======================================	4.0 <1.0 11 <1.0 <1.0	1.4 1.7 12 4.4	<0.10 0.20 0.40 0.20 <0.10	27 23 22	=======================================	186 60 239 51 115	0.08 0.32 0.07	0.300 0.700 2.80	<0.010
49V 46 49V 43 49V 58 49V 56 49V 55	=======================================	3.0 18 <1.0 <1.0 <1.0	2.4 16 1.8 1.2 1.8	0.10 0.40 <0.10 <0.10	23 9.2 7.3	=======================================	158 270 24 15 26		<0.100 0.100 2 <0.100	0.040 0.020 <0.010

LOCAL IDENT- I- FIER	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
		NORTH	AMPTON CO	OUNTYCon	tinued				
63F 52 SOW 182B	44		0.010	-:	<70			7200	
63F 53 SOW 182C 63F 54 SOW 182D 63F 55	1.3 0.30 <0.20	=======================================	0.080 0.100 <0.010	Ξ	<10 <10 10	==	Ξ	630 70 30	=======================================
		PRINCE	WILLIAM (	COUNTYCo	ntinued				
51 <b>T</b> 175		<0.20		0.010	<10	52	<0.5		<1.0
51T174		0.20		<0.010	<10	5	<0.5 <0.5		<1.0 2.0
51T140 51T134	- 11	<0.20		0.020 <0.010	10 <10	44	<0.5	:	1.0
51T166		0.30		0.030	<10	14	<0.5		<1.0
52T 52		0.30		<0.010	<10	210	<0.5		<1.0
51T147		<0.20		0.030	<10	9	<0.5		<1.0
51T122 50T 68		0.40		<0.010	<10 <10	29 1000	<0.8		<1.0 <1.0
511171		0.30		<0.010	<10	13	<0.5		<1.0
50T 66		1.7		<0.010	<10	77	<0.5		1.0
51T120		<0.20		0.050	<10	<2	.<0.5		<1.0
51T118 51T173		<0.20	==	0.050	<10	13	<0.5		<1.0 <1.0
5111/3		<0.20 0.70		<0.010 <0.010	<10 <10	42 <2	<0.5		2.0
51T 29E		0.50		0.040	<10	<2	<0.5		<1.0
51T167		<0.20		0.020	<10	<2	<0.5		<1.0
50T 69 52T 44	11	<0.20		0.020	<10	420 8	<0.5 <0.5		<1.0 <1.0
517168		<0.20 0.30		0.030	<10 10	7	<0.5		<1.0
51T159		0.30	24	0.030	<10	7	0.6		<1.0
51U 97H		<0.20		0.030	<10	87	<0.5		<1.0
50U126 51U 16		0.40		0.010	<10	<2	<0.5 <0.5		<1.0 <1.0
51U104G		<0.20 <0.20		0.050 <0.010	<10 <10	280 36	<0.5		1.0
50U122		<0.20		<0.010	<10	100	<0.5		1.0
51U103G		0.30		<0.010	<10	69	<0.5		<1.0
51U 99G 51U 10		<0.20		<0.010	10	300	0.9		<1.0
51U101G		<0.40		0.060 <0.010	<10 <10	200 130	<0.5 <0.5		1.0
51U100G		<0.20		<0.010	<10	160	<0.5		<1.0
51U 98G		<0.20		<0.010	<10	110	0.8		1.0
50U125		0.40		0.020	10	350	<0.5		<1.0
51U 11 49U 62		<0.20		0.010	<10 10	200 200	<0.5 <0.5		<1.0 <1.0
51U102D		0.30		<0.010	20	97	<0.5		2.0
51U106D		<0.20		<0.010	10	160	<0.5		1.0
490 72		<0.20		0.030	20	460	<0.5		<1.0
50U 97 50U 86	- 11	1.1	11	<0.010	<10 <10	<2 <2	<0.5 <0.5		1.0
49U 51		0.30		<0.010	<10	360	<0.5		<1.0
49U 51 49U 68		0.30		0.010	<10	14	<0.5		<1.0
500130	44	<0.20		0.010	<10	190	<0.5		<1.0
49U 69 50U106		<0.20 0.30		0.020	<10 10	31 61	<0.5 <0.5		<1.0 <1.0
49V 46	22					<2	<0.5		<1.0
49V 48		0.20		<0.010 <0.010	<10 <10	350	<0.5		<1.0
49V 58		0.20		<0.010	<10	9	<0.5		1.0
49V 56 49V 55		<0.20	==	0.030	<10 10	5 29	<0.5		<1.0 <1.0
		0.20		-0.010	10	20	-0.5		-2.0

LOCAL IDENT- I- FIER	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
		NORTH	AMPTON CO	UNTYCon	tinued				
63F 52 SOW 182B 63F 53 SOW 182C 63F 54 SOW 182D 63F 55	==	=======================================	=======================================	68000 3700 260 260	62000 19 180 210	=	=======================================	930 30 100 70	960 5 84 47
		PRINCE	WILLIAM C	OUNTYCo	ntinued				
51T175 51T174 51T140 51T134 51T166	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 <10 10	=======================================	8 160 37 2400 10	<10 <10 <10 <10 <10	8 <4 4 10 <4	= 1	27 120 25 120 4
52T 52 51T147 51T122 50T 68 51T171	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	10 <10 <10 <10 <10	=======================================	7 50 4 4 76	<10 <10 <10 <10 <10	15 <4 <4 15 <4	=======================================	6 5 12 <1 78
50T 66 51T120 51T118 51T173 51T151	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	10 <10 <10 <10 <10	=======================================	13 <3 4 <3 5	<10 <10 <10 <10 <10	39 <4 <4 <4	=	1 <1 <1 1 <1
51T 29E 51T167 50T 69 52T 44 51T168	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 20 <10 <10 <10	=======================================	<3 120 5 8 28	<10 <10 <10 <10 <10	<4 <4 18 6 9	=======================================	<1 6 <1 28 300
51T159 51U 97H 50U126 51U 16 51U104G	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 <10 <10	=======================================	8 9 7 7 36	<10 <10 <10 <10 <10	5 19 12 15 40	=======================================	1 1 <1 <1 25
50U122 51U103G 51U 99G 51U 10 51U101G	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 <10 <10	=======================================	7 11 4 3 6	<10 <10 <10 <10 <10	42 58 34 17 26	=======================================	23 34 3 <1 <1
51U100G 51U 98G 50U125 51U 11 49U 62	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 <10 <10	=======================================	<3 4 6 4 10	<10 <10 <10 <10 <10	25 24 20 25 17	=	<1 <1 <1 1 6
51U102D 51U106D 49U 72 50U 97 50U 86	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 <10 <10	=======================================	47 8 11 7 4	<10 <10 <10 <10 <10	40 31 23 11 <4	=	1 <1 15 <1 <1
49U 51 49U 68 50U130 49U 69 50U106	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 <10 250 <10	=======================================	19 6 3 15 39	<10 <10 <10 <10 <10	5 <4 14 <4 <4	=	40 2 <1 3 <1
49V 46 49V 43 49V 58 49V 56 49V 55	<5 <5 <5 <5 <5	<3 <3 <3 <3 <3	<10 <10 10 <10 <10	=======================================	200 32 10 11 4	<10 <10 <10 <10 <10	<4 35 <4 <4		95 1 9 2

	WATER QUALITY	Y DATA, W	ATER YEAR	OCTOBER	1989 TO S	EPTEMBER	1990		
LOCAL IDENT- I- FIER	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	TOTAL (PC/L)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
		NORTH	AMPTON CO	UNTYCon	tinued				
63F 52 SOW 182B 63F 53 SOW 182C 63F 54 SOW 182D 63F 55	Ξ	=======================================	=======================================	=	=======================================	4900 <3 6 930	=======================================	2.8 1.9 1.1 1.1	=======================================
		PRINCE	WILLIAM C	OUNTYCo	ntinued				
51T175 51T174 51T140 51T134 51T166	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 1.0 <1.0 <1.0 <1.0	260 46 24 42 37	14 14 40 <3 19	1400 3100 2700 2400 2500	=	0.3 0.3 0.2 0.2
52T 52 51T147 51T122 50T 68 51T171	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 <1.0	170 37 51 160 36	8 4 5 4 15	2200 3300 3600 2000 2300	=======================================	0.4 0.2 0.4 0.2 0.3
50T 66 51T120 51T118 51T173 51T151	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 1.0 <1.0 <1.0 <1.0	3300 47 60 66 1	6 10 39 71 <3	1100 360 1400 1200 5400	=======================================	0.6 0.3 0.3 0.5 1.4
51T 29E 51T167 50T 69 52T 44 51T168	<0.1 0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 2.0	41 45 140 43 140	7 4 4 <3 9	2500 3400 1600 5100 2400	=======================================	0.4 1.0 0.5 0.4 0.8
51T159 51U 97H 50U126 51U 16 51U104G	0.1 <0.1 0.1 0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 <1.0	45 620 98 91 2300	<3 <3 18 4 <3	6200 1000 960 830 800	=======================================	0.6 0.5 0.6 0.3 0.5
50U122 51U103G 51U 99G 51U 10 51U101G	<0.1 <0.1 <0.1 <0.1 <0.1	10 10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 1.0	6200 4000 1300 92 660	<3 4 4 11 9	1300 2100 2600 890 1400	=======================================	0.7 0.5 0.6 0.5 0.7
51U100G 51U 98G 50U125 51U 11 49U 62	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 2.0	970 570 260 180 100		2500 1600 1200 1400 1600	=======================================	0.8 0.8 0.6 0.5
51U102D 51U106D 49U 72 50U 97 50U 86	<0.1 <0.1 <0.1 <0.1 <0.1	10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 1.0 2.0 <1.0 <1.0	2200 1700 1300 33 <1	<3 <3 72 4 <3	2500 2300 2900 120 1200	=======================================	0.7 1.0 0.7 0.6 0.8
49U 51 49U 68 50U130 49U 69 50U106	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 1.0	1200 29 300 29 85	3 4 <3 10 26	<80 460 1000 660 1000	=======================================	1.2 0.7 0.3 0.3 0.3
49V 46 49V 43 49V 58 49V 56 49V 55	<0.1 <0.1 <0.1 <0.1 <0.1	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<1.0 <1.0 <1.0 <1.0 1.0	22 760 4 5	<3 44 2300 10 8	<80 450 1300 640 1200	:: :: ::	0.3 0.6 0.5 0.4 0.5

QUALITY OF GROUND WATER

LOCAL IDENT- I- FIER	STATION NUMBER	GEO- LOGIC R UNIT	DATE	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)
		YORK	COUNTY					
59F 72 SOW 184A 59F 73 SOW 184B 59F 74 SOW 184C 59F 91 59F100	370841076275202 370841076275203 370841076275204 370857076251001 370857076251002	110QRNR 121CSPKU	07-10-90 07-10-90	9.31 9.08	131.00 60.00 20.00 110.00 25.00	42.0 42.0 42.0 5.0 5.0	322 463 165 579 483	322 475 169 600 503
59F 92 59F 14 59F 76 SOW 185A 59F 78 SOW 185C 59F 79 SOW 185D	370918076264001 370930076253901 370934076251402 370934076251404 370934076251405	121CSPKU 122YRKN	07-27-90 07-17-90 07-03-90 09-04-90 07-03-90	=	126.00 120.00 120.00 50.00 15.00	20.0 10.0 10.0 10.0 10.0	403 950 625 397 480	414 1000 614 368 476
59F 66 59F 67 59F 53 59F 54 59F 81 SOW 186A	370939076245301 370944076252801 370958076275501 370958076275502 370958076291502	111SDMN 111SDMN 111SDMN	06-19-90 06-22-90 06-19-90 06-26-90 09-04-90	4.15 2.43 7.89 8.76	12.00 9.00 15.00 45.00 132.00	6.0 10.0 55.0 55.0 47.0	390 250 100 323 348	447 300 127 344 341
59F 9 59F 68 59F 56 59F 90 59F 69	370959076255401 371004076255601 371007076274301 371013076252201 371014076262201	111SDMN 111SDMN 121CSPKU	07-17-90 06-22-90 06-26-90 07-18-90 06-22-90	3.13 3.95  3.92	120.00 9.00 13.00 110.00 9.00	10.0 10.0 45.0 7.0 10.0	860 670 450 1000 475	908 673 441 1050 548
59F 70 59F 62 59F 61 59F 26 59F 22	371021076263401 371025076270101 371029076265301 371030076270901 371037076253701	111SDMN 111SDMN	06-22-90 06-19-90 06-26-90 07-18-90 07-18-90	2.05 5.18 6.11	9.00 15.00 12.00 115.00 120.00	10.0 10.0 5.0 15.0 10.0	930 200 140 352 920	938 280 106 362 983
58F 62 SOW 187A 58F 63 SOW 187B 59F 89 SOW 189A 59F 96 SOW 189B 59F 52	371045076310702 371045076310703 371053076252202 371053076252203 371056076242901	121CSPKU	09-05-90 09-06-90 09-06-90	=======================================	140.00 28.00 97.00 15.00 95.00	55.0 55.0 5.0 5.0 5.0	595 402 990 1280 387	571 402 949 1230 370
59F 59 59F 60 59F 63 59F 64 59F 95	371102076255102 371108076260701 371125076262901 371125076262902 371127076263501	111SDMN 111SDMN	06-26-90 06-26-90 06-20-90 06-26-90 07-27-90	5.89 5.17 5.60 4.56	45.00 15.00 15.00 45.00 90.00	7.0 5.0 10.0 10.0 6.0	238 400 690 600	235 273 779 607 1090
59F 21 59F 94 59F 86 SOW 188A 59F 87 SOW 188B 59F 5	371154076281501 371157076234401 371207076265502 371207076265503 371221076262601	121CSPKU 121CSPKU 110QRNR		=======================================	130.00 120.00 99.00 30.00 85.00	20.0 1.0 5.0 5.0 8.0	365 845 1480 980 399	371 832 1440 942 418
58F 58 59F 93 59F 98 SOW 190A 59F 99 SOW 190B	371223076324201 371235076254801 371314076252202 371314076252203	121CSPKU 121CSPKU	06-20-90 07-27-90 09-06-90 09-06-90	4.74  	30.00 97.00 100.00 15.00	65.0 4.0 5.0 5.0	580 1100 775 6820	602 1100 723 7270

LOCAL IDENT- I- FIER	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	TEMPER- ATURE WATER (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
		YC	RK COUNTY	Continu	ied				
59F 72 SOW 184A 59F 73 SOW 184B 59F 74 SOW 184C 59F 91 59F100	7.0 7.3 5.9 7.6 5.8	8.1 7.9 7.8 7.6 5.9	23.0 22.0 22.0 20.5 26.0	11 2 <1 	=======================================	 :: ::	160 200 54 260 110	60 77 19 77 34	1.9 1.7 1.5 17 7.3
59F 92 59F 14 59F 76 SOW 185A 59F 78 SOW 185C 59F 79 SOW 185D	7.8 7.9 7.7 7.6 6.6	7.8 8.0 8.0 7.6 7.9	21.0 22.5 17.5 20.0 19.0	  10  6	=======================================	=======================================	170 160 270 170 150	54 34 93 61 51	7.7 18 9.0 3.2 5.5
59F 66 59F 67 59F 53 59F 54 59F 81 SOW 186A	6.2 6.8 5.1 7.5 7.4	6.7 7.1 5.4 7.5 7.5	19.5 22.5 20.5 19.5 17.5	=======================================	180  380 	3  K0 	50 130 16 180 170	17 47 3.9 67 66	1.9 4.2 1.5 2.4 1.1
59F 9 59F 68 59F 56 59F 90 59F 69	7.6 7.0 7.1 7.3 6.9	7.8 7.2 7.4 7.4 7.3	21.0 20.5 20.0 20.5 21.0	=======================================	=======================================	=	1 320 210  270	0.16 120 80 	0.07 4.5 2.8 22 4.6
59F 70 59F 62 59F 61 59F 26 59F 22	6.7 6.4 6.2 7.9 7.4	6.9 7.2 6.6 7.9 7.5	19.5 20.5 18.0 23.5 23.0	=======================================	K250	 K0  	450 78 37 140 340	160 27 12 44 79	12 2.6 1.6 6.9 35
58F 62 SOW 187A 58F 63 SOW 187B 59F 89 SOW 189A 59F 96 SOW 189B 59F 52	7.4 7.3 7.3 6.4 7.5	7.5 7.5 7.4 6.5 7.7	22.5 17.0 17.5 23.0 18.5	=======================================	==	=======================================	190 210 370 260 150	50 80 99 86 58	15 1.4 31 12 1.5
59F 59 59F 60 59F 63 59F 64 59F 95	7.5 6.4 6.8 7.3	7.8 6.2 7.3 7.6 7.5	18.0 19.0 18.0 20.5	=======================================	 K1000	 K0 	100 150 380 280 340	37 55 140 100 92	2.2 3.7 6.8 8.5 26
59F 21 59F 94 59F 86 SOW 188A 59F 87 SOW 188B 59F 5	7.7 7.4 6.9 7.0 8.0	7.8 7.6 7.1 7.2 7.9	21.5 31.0 18.0 24.5 28.0	=======================================	=======================================	=======================================	160 2 630 350 2	49 0.71 220 130 0.73	8.1 0.11 19 7.2 0.06
58F 58 59F 93 59F 98 SOW 190A 59F 99 SOW 190B	6.6 7.0 7.1 4.4	7.3 7.1 7.2 4.1	17.0 18.0 18.5 24.0	=======================================	K120  	  	240 510 300 960	88 190 110 230	6.0 7.6 6.1 94

QUALITY OF GROUND WATER

LOCAL IDENT- I- FIER	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
		YC	ORK COUNT	YContinu	ed				
59F 72 SOW 184A 59F 73 SOW 184B 59F 74 SOW 184C 59F 91 59F100	6.7 26 9.0 18 47	0.20 0.60 2.5 9.9 2.4	244 52 262 34	155 233 51 257 33	4.5 3.4 5.8 4.5 56	3.0 18 18 44 64	<0.10 <0.10 0.20 0.50 <0.10	20 13 9.1	193 271 91 350 332
59F 92 59F 14 59F 76 SOW 185A 59F 78 SOW 185C 59F 79 SOW 185D	21 140 23 12 18	6.0 13 7.1 1.3 1.2	207 252 253 185 82	200 247 245 179 100	<1.0 11 21 6.1 52	14 170 35 11 31	0.40 0.30 <0.10 <0.10 0.20	28  15	238 538 361 209 277
59F 66 59F 67 59F 53 59F 54 59F 81 SOW 186A	58 15 15 4.0 4.9	0.60 <0.10 0.80 0.70 0.80	56 114 9 133 178	89 111 7.3 150 164	66 26 6.0 11 3.3	31 14 28 10 7.0	<0.10 0.50 <0.10 0.20 <0.10	=======================================	215 206 68 200 194
59F 9 59F 68 59F 56 59F 90 59F 69	200 22 9.1 49 14	2.4 0.50 1.2 12 0.10	252 265 186 362 261	244 275 186 349 262	13 49 13 130 20	140 30 14 74 15	0.30 0.30 0.20 0.20 0.60	=======================================	529 413 259 650 342
59F 70 59F 62 59F 61 59F 26 59F 22	31 13 2.9 21 66	1.4 0.70 0.90 5.1	253 121 20 177 316	247 68 23 168 309	220 17 19 7.3 94	34 11 4.9 13 90	0.40 0.30 0.20 0.20 0.30	=======================================	660 135 62 207 573
58F 62 SOW 187A 58F 63 SOW 187B 59F 89 SOW 189A 59F 96 SOW 189B 59F 52	48 5.4 51 140 12	10 0.90 15 0.90 1.5	303 208 283 101 131	300 204 280 95 127	9.3 8.4 130 130 <1.0	10 8.2 · 72 250 38	<0.10 <0.10 <0.10 <0.10 0.30		302 238 601 718 237
59F 59 59F 60 59F 63 59F 64 59F 95	7.9 21 19 17 90	0.80 0.50 1.3 5.1	72 128 254 277	80 69 231 266 298	18 49 170 21 79	10 16 23 25 140	0.40 0.30 0.20 0.20 0.20	=======================================	152 235 471 366 640
59F 21 59F 94 59F 86 SOW 188A 59F 87 SOW 188B 59F 5	17 190 64 58 99	6.2 0.30 8.3 8.8 0.20	187 310 379 271 186	183 298 372 295 181	1.8 6.4 310 120 11	9.8 84 110 85 12	0.20 0.20 0.10 0.10 0.20	=	203 494 956 567 255
58F 58 59F 93 59F 98 SOW 190A 59F 99 SOW 190B	24 39 33 910	1.3 2.9 2.6 11	209 421 262	209 401 251 <1.0	60 130 21 140	39 72 74 2500	0.10 0.20 <0.10 <0.10	=======================================	726 426 4670

LOCAL IDENT- I- FIER	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
		YORK CO	UNTYCon	tinued				
59F 72 SOW 184A 59F 73 SOW 184B 59F 74 SOW 184C 59F 91 59F100	189 286 98 329 302	0.26 0.37 0.12 0.48 0.45	  <0.010 0.070	<0.100 <0.100 <0.100 <0.100 16.0	0.030 0.060 <0.010 0.120 0.030	0.30 0.50 0.20 0.50 0.80	0.30 1.0	0.020 <0.010 <0.010 0.020 0.020
59F 92 59F 14 59F 76 SOW 185A 59F 78 SOW 185C 59F 79 SOW 185D	538 368 206 225	0.73 0.49 0.28 0.38	<0.010 <0.010  <0.010	<0.100 <0.100 <0.100 <0.100 0.100	0.150 0.240 0.140 0.050 0.020	0.40 0.40 0.20 0.60 <0.20	<0.20 0.50  0.20	0.010 0.020 0.010 0.050 <0.010
59F 66 59F 67 59F 53 59F 54 59F 81 SOW 186A	212  62 175 190	0.29  0.09 0.27 0.26	<0.010 <0.010 <0.010 <0.010 <0.010	0.900 <0.100 <0.100 <0.100 <0.100	0.020 0.110 0.030 <0.010 0.070	0.40 0.60 1.3 0.30 0.90	0.80  <0.20 0.40	0.070 0.030 <0.010 0.010 0.010
59F 9 59F 68 59F 56 59F 90 59F 69	507 385 243  311	0.72 0.56 0.35 	<0.010 <0.010 <0.010 <0.010 <0.010	<0.100 <0.100 2.50 <0.100 <0.100	0.140 0.020 <0.010 0.270 0.150	0.30 0.60 0.90 0.60 0.90	0.30 0.20 <0.20 0.20 0.50	0.010 <0.010 0.030 0.040 0.010
59F 70 59F 62 59F 61 59F 26 59F 22	611 144 53 204 571	0.90 0.18 0.08 0.28 0.78	<0.010 <0.010 <0.010 <0.010 <0.010	<0.100 <0.100 <0.100 <0.100 <0.100	0.020 0.010 <0.010 0.180 0.400	0.80 0.30 0.40 0.60 0.60	0.30  <0.20 <0.20 0.40	<0.010 0.050 0.030 <0.010 0.030
58F 62 SOW 187A 58F 63 SOW 187B 59F 89 SOW 189A 59F 96 SOW 189B 59F 52	325 230 568 680	0.41 0.32 0.82 0.98	<0.010 <0.010 <0.010 <0.010 <0.010	<0.100 <0.100 <0.100 <0.100 <0.100	0.400 0.040 0.310 0.030 0.100	0.70 <0.20 0.60 0.30 0.30	0.80 0.20 0.40 0.40 <0.20	<0.010 <0.010 <0.010 <0.010 0.120
59F 59 59F 60 59F 63 59F 64 59F 95	120 223 514 343 622	0.21 0.32 0.64 0.50 0.87	<0.010 <0.010 <0.010 <0.010 <0.010	<0.100 <0.100 <0.100 <0.100 <0.100	0.040 0.030 0.100 0.160 0.300	0.40 0.80 0.80 0.70 0.60	0.60 0.50  0.50 0.50	0.130 0.060 0.070 0.040 0.010
59F 21 59F 94 59F 86 SOW 188A 59F 87 SOW 188B 59F 5	204 468   235	0.28 0.67  0.35	<0.010 <0.010 <0.010 <0.010 <0.010	<0.100 <0.100 <0.100 <0.100 <0.100	0.150 0.040 0.310 0.150 0.010	0.30 <0.20 0.50 0.40 <0.20	<0.20 <0.20 0.70 0.60 <0.20	<0.010 0.280 <0.010 <0.010 0.210
58F 58 59F 93 59F 98 SOW 190A 59F 99 SOW 190B	347 700 410	0.47 0.99 0.58	0.010 <0.010 <0.010 <0.010	<0.100 <0.100 <0.100 <0.100	0.020 0.150 0.430 0.750	0.60 0.30 0.50 0.80	<0.20 0.50 1.0	0.030 0.010 <0.010 <0.010

LOCAL IDENT- I- FIER	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
		YORK CO	UNTYCon	tinued				
59F 72 SOW 184A 59F 73 SOW 184B 59F 74 SOW 184C 59F 91 59F100	<10 10 20 	20 10 20	80 3700 560 1900 190	30 280 440 140 180	<10 120 120 10 30	10 94 100 10 26	48 42 390	1.2 3.0 1.4
59F 92 59F 14 59F 76 SOW 185A 59F 78 SOW 185C 59F 79 SOW 185D	  <10  <10	 60  30	250 230 900 1100 2500	15 39 170 240 1300	<10 <10 20 70 260	3 20 65 180	 -5  27	2.8  5.6
59F 66 59F 67 59F 53 59F 54 59F 81 SOW 186A	=======================================	=======================================	4800 17000 1800 510 1200	21 1000 1400 120 520	100 130 20 40 30	28 130 22 46 23	=	=======================================
59F 9 59F 68 59F 56 59F 90 59F 69	  	=======================================	30 3000 13000 1800 4900	<3 210 9 1500 260	<10 90 260 20 170	<1 97 2 24 140	=======================================	
59F 70 59F 62 59F 61 59F 26 59F 22	=======================================	=======================================	1700 220 10000 130 450	250 130 38 22 360	670 140 50 <10 <10	630 140 9 <1 7	=======================================	=======================================
58F 62 SOW 187A 58F 63 SOW 187B 59F 89 SOW 189A 59F 96 SOW 189B 59F 52	=======================================	=======================================	230 1500 490 580 2000	160 830 410 380 1300	30 20 20 690 60	27 24 22 680 63	=======================================	=======================================
59F 59 59F 60 59F 63 59F 64 59F 95	=======================================	=======================================	590 14000 5700 1200 1100	15 490 520 220 450	20 230 270 50 30	12 260 280 45 25	=======================================	=======================================
59F 21 59F 94 59F 86 SOW 188A 59F 87 SOW 188B 59F 5	=======================================	=======================================	220 40 5700 8000 550	62 32 3600 890 58	<10 <10 170 350 <10	6 1 130 300 <1	=======================================	=======================================
58F 58 59F 93 59F 98 SOW 190A 59F 99 SOW 190B	=	=======================================	6300 5700 6200 130000	3500 5400 5500 140000	190 40 190 670	180 71 200 720	=	=======================================

INDEX 385

	Page		Page
Access to WATSTORE data	6	CAROLINE COUNTYContinued	
ACCOMACK COUNTY:		Well 52N 6	76
Well 64H 5 SOW 102C	24 .	Well 52P 10	77
Well 64H 6 SOW 102A	25	CHARLES CITY COUNTY:	70
Well 64H 7 SOW 102B	26	Well 53G 7	78
Well 64K 7 SOW 106C	27	Well 53G 14	79
Well 64K 8 SOW 106B	28	Well 54G 11 SOW 066	80 81
	29		7
Well 64K 10 SOW 108A	30	Chemical oxygen demand (COD), definition of	,
Well 64K 11 SOW 108B	31 32	CHESAPEAKE (INDEPENDENT CITY): Well 59C 29 SOW 163A	82
Well 65k 2 SOW 058	33	Well 59C 30 SOW 163B	83
Well 65K 23 SOW 109C	34	Well 59C 31 SOW 163C	84
Well 65K 24 SOW 109A	35	Well 59C 36	85
Well 65K 25 SOW 109B	36	Well 60B 3 SOW 090A	86
Well 65K 26 SOW 109S	37	Well 60B 4 SOW 090B	87
Well 65K 27 SOW 114A	38	Well 60C 41 SOW 164	88
Well 65K 28 SOW 114B	39	Well 61A 3 SOW 132	89
Well 65K 29 SOW 114C	40	Well 61B 2 SOW 091A	90
Well 65K 30 SOW 114S	41	Well 61B 5 SOW 091B	91
Well 66K 2 SOW 101C	42	Well 61B 6 SOW 091C	92
Well 66K 3 SOW 101B	43	Well 61B 7 SOW 091D	93
Well 66K 4 SOW 101A	44	Well 61B 8 SOW 134	94
Well 66L 1 SOW 107C	45	Well 61B 12 SOW 091E	95
Well 66L 2 SOW 107A	46	Well 61B 13 SOW 091F	96
Well 66L 3 SOW 107B	47	Well 61B 14 SOW 091G	97
Well 66M 16 SOW 110A	48	Well 61B 15 SOW 091H	98
Well 66M 17 SOW 110B	49	Well 61B 16 SOW 091J	99
Well 66M 18 SOW 110C	50	Well 61B 17 SOW 091K	100
Well 66M 19 SOW 110S	51	Well 61B 18 SOW 091L	101
Well 66M 23 SOW 181A	52	Well 61B 19 SOW 091M	102
Well 66M 24 SOW 181B	53	CHESTERFIELD COUNTY:	1222
Well 66M 25 SOW 181C	54	Well 51H 92	103
Well 66M 26 SOW 181D	55	Well 51H 93	104
Well 66M 27 SOW 181E	56	Well 51H 94	105
Well 67M 2	57	Well 51H 95	106
Well 67M 10 SOW 115A	58	Well 51H130	107
Well 67M 11 SOW 115B	59	Chlorophyll, definition of	7
Well 67M 12 SOW 115C	60	CLARKE COUNTY: Well 46W175	100
Well 67M 13 SOW 115D	61	Well 40W1/3	108
Well 67M 14 SOW 115E	62	Coliform bacteria, fecal	7
Adenosine triphosphate (ATP), definition of	7	total	,
ALBEMARLE COUNTY: Well 43N 1 SOW 028	63	Collection and computation of,	4-5
Algae, definition of	7	ground-water levelsground-water quality	5-6
Algal growth potential (AGP), definition of	7	COLONIAL HEIGHTS (INDEPENDENT CITY):	5 0
AMELIA COUNTY:	,	Well 51G 1	109
Well 47H 1 SOW 166	64	Color unit, definition of	8
APPOMATTOX COUNTY:	•	Contents	5
Well 40G 1 SOW 012	65		cover
Well 41H 2	66	Cooperation, explanation of	1
Aquifer, definition of	7		
explanation of	5		
ARLINGTON COUNTY:		Data, collection and computation of	
Well 53V 1	67	ground-water levels	4-5
Well 54V 3	68	collection and computation of	
Artesian, definition of	7	ground-water quality	5-6
Ash mass, definition of	7	presentation, ground-water levels	5
AUGUSTA COUNTY:		presentation, ground-water quality	6
Well 38P 1 SOW 070	69	Datum of ground-water levels, explanation of	5
		Definition of terms	6-11
		Diatoms, definition of	9
Bacteria, definition of	7	Dissolved, definition of	8
fecal coliform, definition of	7	Dissolved-solids concentration, definition of	8
fecal streptococcal, definition of	7	Dry mass, definition of	7
total coliform, definition of	7		
Biochemical oxygen demand (BOD),	1.72	TOOM! COUNTY	
definition of	7	ESSEX COUNTY:	
Biomass, definition of	7	Well 55L 1	110
Blue-green algae, definition of	9	Explanation of ground-water level records	2-6
BUCHANAN COUNTY:		Extremes for period of record, explanation of	5
Well 14E 40	70		
BUCKINGHAM COUNTY:	122		
Well 41H 1	71	Factors for converting inch-pound units to	
Well 41H 3	72	International System	
Well 41H 4	73	of Units (SI)inside back	cover
Colle/volume definition of	-	FAIRFAX COUNTY:	111
Cells/volume, definition of	7	Well 52U 4	111 112
Well 52N 1	74	Well 52V 2  Fecal coliform bacteria, definition of	7
Well 52N 5	75	streptococcal bacteria, definition of	7
	15	soreprocedura passeria, derimitation of	,

	rage		1 486
Figure 1. Monthly ground-water levels at		JAMES CITY COUNTYContinued	
key observation wells	3	Well 56F 1 SOW 018	154
<ol><li>System for numbering wells</li></ol>	4	Well 56G 8	155
<ol><li>Map of Virginia showing location of</li></ol>		Well 56G 38	156
ground-water observation wells	16-17	Well 56G 57	157
4. Map of southeastern Virginia		Well 56H 22 SOW 135A	158
showing location of ground-water		Well 56H 25 SOW 177A	159
observation wells	18-19	Well 56H 26 SOW 177B	160
<ol><li>Map of York-James peninsula and</li></ol>		Well 56H 27 SOW 177C	161
vicinity in Virginia showing		Well 56H 28 SOW 177D	162
location of ground-water	22 25	Well 56H 29 SOW 177E	163
observation wells	20-21	Well 56H 30 SOW 177F	164
6. Map of Delmarva peninsula in		Well 56H 31 SOW 135B	165
Virginia showing location of	14	Well 57H 14 SOW 095	166
ground-water observation wells	22		
Footnotes, ground-water quality records	6	WING AND AUTOM CONTROL	
FRANKLIN (INDEPENDENT CITY):		KING AND QUEEN COUNTY:	107
Well 55B 66 SOW 145C Well 55B 67 SOW 145D	113	Well 54K 6 SOW 064	167 168
Well 33B 67 SOW 143D	114	Well 54L 5	-
		Well 56J 11 SOW 073	169 170
GLOUCESTER COUNTY:		Well 57J 3 SOW 074KING GEORGE COUNTY:	1/0
Well 58F 14	115	Well 54R 2	171
Well 58H 6 SOW 168A	116	KING WILLIAM COUNTY:	1,1
Well 58H 7 SOW 168B	117	Well 53K 9	172
Well 58H 8 SOW 168C	118	Well 56J 2	173
Green algae, definition of	9	Well 56J 10	174
Ground-water level records	24	Well 56J 18	175
Ground-water level records, explanation of	2-4		
Ground-water levels at key observation wells	3		
Ground-water quality records		LANCASTER COUNTY:	
explanation of	5-6	Well 59K 1 SOW 015	176
		Well 59K 9	177
		Well 59L 3	178
HALIFAX COUNTY:		Land-surface datum, definition of	8
Well 39C 1 SOW 011	119	Latitude-longitude system, explanation of	2
HANOVER COUNTY:		Location, explanation of	5
Well 51M 11	120	LOUDOUN COUNTY:	
Well 52J 10	121	Well 49Y 1 SOW 022	179
Well 52K 3	122	Well 50W 4C	180
Well 53K 16	123	LOUISA COUNTY:	
Well 53K 19 SOW 080	124	Well 45N 1	181
Hardness of water, definition of	8	Well 45N 4	182
HENRICO COUNTY:		Well 46N 1 SOW 056	183
Well 50J 1 SOW 023	125		
Well 51H132 SOW 081	126		
Well 51J 13	127	Map of Delmarva peninsula in Virginia	
Well 51K 4 SOW 137	128	showing location of ground-water	
Well 52H 3 SOW 136	129	observation wells	22
Well 52J 1	130	Map of southeastern Virginia showing location	10-10
Well 52J 34	131	of ground-water observation wells	18-19
Well 52J 35 Well 53H 2	132	Map of Virginia showing location of ground-water observation wells	16-17
Well 53H 4 SOW 072	133 134	Map of York-James peninsula and vicinity	10-17
HOPEWELL (INDEPENDENT CITY):	134	in Virginia showing location of ground-	
Well 52G 1	135	water observation wells	20-21
Well 52G 15 SOW 142A	136	MATHEWS COUNTY:	20 21
Well 52G 16 SOW 142B	137	Well 59H 1	184
Hydrologic bench-mark network, definition of	8	Measuring point, definition of	8
Hydrologic conditions, summary of	2	Metamorphic stage, definition of	8
Hydrologic unit, definition of	8	Methylene blue active substance (MBAS),	
		definition of	8
		Micrograms per gram, definition of	8
Illustrations, list of	5	Micrograms per liter, definition of	8
Instrumentation, explanation of	5	MIDDLESEX COUNTY:	
Introduction	1	Well 58K 1 SOW 031	185
ISLE OF WIGHT COUNTY:		Well 58K 7	186
Well 55B 16	138	Well 59J 3	187
Well 55B 36	139	Milligrams of carbon per area or volume per	
Well 55B 43	140	unit of time for periphyton, macrophytes,	
Well 55B 62 SOW 096B	141	and phytoplankton, definition of	9
Well 56B 5	142	Milligrams of oxygen per area or volume per	
Well 56C 1	143	unit of time for periphyton, macrophytes,	676
Well 57C 25 SOW 149A	144	and phytoplankton, definition of	10
Well 57C 26 SOW 149B	145	Milligrams per liter, definition of	8
Well 57C 28 SOW 149D	146	MONTGOMERY COUNTY:	
Well 57D 21 SOW 143A	147	Well 27F 2 SOW 019	188
Well 57D 22 SOW 143B	148	Monthly ground-water levels at	_
Well 57D 23 SOW 143C	149	key observation wells	3
Well 57E 10 SOW 144B	150		
Well 57E 14 SOW 144A	151	Wattanal Carteta Wantial No.	
Well 57E 15 SOW 144C	152	National Geodetic Vertical Datum	
		of 1929 (NGVD), definition of	8
JAMES CITY COUNTY:		National Technical Information Center	1
Well 55H 20	152	NELSON COUNTY: Well 39K 1 SOW 006	189
JJU 20	153	HELL JOB I DOM JUU	103

INDEX 387

	Page		Page
NEW KENT COUNTY:		Primary productivity, definition of	9
Well 53J 6	190	PRINCE GEORGE COUNTY:	
Well 54H 15	191	Well 52F 1 SOW 038	245
Well 54J 3	192	PRINCE WILLIAM COUNTY:	1.5
Well 55H 1 SOW 017	193	Well 49U 1	246
Well 55H 3 Well 55J 6	194	Well 49V 1	248
Well 55J 6	195	Well 51S 7	249
Well 58E 3	196	Well 52S 5	250
Well 58F 1 SOW 002	197	Well 53T 2 SOW 029	25
Well 58F 50 SOW 171A	198	Prince William County,	
Well 58F 51 SOW 171B	199	quality of ground water3	74-379
Well 58F 52 SOW 171C	200	Publications on techniques of water-resources	
Well 58F 53 SOW 171D	201	investigations	11-13
Well 58F 54 SOW 171E	202	PULASKI COUNTY:	252
Well 58F 55 SOW 171F	203	Well 25E 1 SOW 009	253
Well 61C 1	204	HELL ZJE Z BON 033	250
Well 61C 2	205		
Well 61C 3	206	Quality of ground water3	74-384
NORTHAMPTON COUNTY:			
Well 62G 15 SOW 121	207		
Well 63F 15 SOW 105A	208	Radiochemical program, definition of	10
Well 63F 16 SOW 105C	209	Records collected by the State of Virginia Records of ground-water levels	4-
Well 63F 25	211	Records of ground-water-quality levels	5-6
Well 63F 29	212	Remark codes	- 6
Well 63F 30	213	Remarks, explanation of	
Well 63F 31	214	Reports, selected U.S. Geological Survey,	
Well 63F 32	215	on water resources in Virginia	13-14
Well 63F 33	216	Return period, definition of	10
Well 63F 34	217	RICHMOND COUNTY: Well 56M 7	254
Well 63F 49	218	ROANOKE (INDEPENDENT CITY):	23-
Well 63G 15 SOW 104C	220	Well 31G 1 SOW 008	255
Well 63G 16 SOW 104B	221	ROCKBRIDGE COUNTY:	
Well 63G 17 SOW 104A	222	Well 35K 1 SOW 063	256
Well 63G 20 SOW 075	223	ROCKINGHAM COUNTY:	
Well 63G 21 SOW 104S	224	Well 41Q 1	257
Well 63G 22 SOW 111A	225		
Well 63G 23 SOW 111B	226 227	Salasted HSGS reports on water resources	
Well 63G 25 SOW 111S	228	Selected USGS reports on water resources in Virginia	13-14
Well 63G 26 SOW 160	229	Sodium-adsorption-ratio, definition of	10
Well 63G 27 SOW 161	230	Solute, definition of	10
Well 63H 4 SOW 103C	231	SOUTHAMPTON COUNTY:	
Well 63H 5 SOW 103B	232	Well 51B 3	258
Well 63H 6 SOW 103A	233	Well 52A 1	259
Well 63J 1 SOW 113A	234	Well 52B 8 SOW 178A	260
Well 63J 2 SOW 113B	235	Well 52B 9 SOW 178B	261 262
Well 64J 9 SOW 112A	236 237	Well 52B 11 SOW 178D	263
Well 64J 10 SOW 112B	238	Well 52B 12 SOW 178E	264
Well 64J 11 SOW 112C	239	Well 52B 13 SOW 178F	265
Well 64J 13 SOW 120	240	Well 54A 1	266
Northampton County, quality of ground water374		Well 54B 12	267
Numbering system for wells	2,4	Well 54B 24 SOW 034	268
Numbers, station identification	2	Well 54C 1	269
		Well 55A 3 SOW 086	270
ORANGE COUNTY:		Well 55C 3	272
Well 45P 1 SOW 030	241	Well 55C 10	273
Organic mass, definition of	7	Well 55D 5	274
Organism, definition of	8	Specific conductance, definition of	10
Organism count/area, definition of	8	Station identification number, explanation of	2
Organism count/volume, definition of	8	Streptococcal bacteria, fecal	7
Organism total count, definition of	8	SUFFOLK (INDEPENDENT CITY):	275
		Well 56A 1 SOW 047	276
Parameter code, definition of	8	Well 56A 10 SOW 088A	277
Partial-record station, definition of	9	Well 56A 11 SOW 089	278
Particle-size classification, definition of	9	Well 56A 12 SOW 088B	279
Particle size, definition of	9	Well 56A 13 SOW 076B	280
PATRICK COUNTY:	242	Well 56A 14 SOW 076C	281
Well 30C 1 SOW 010	242	Well 57A 6 SOW 085	282
Percent composition, definition of Period of record, explanation of	9 5	Well 57B 1	283
Periphyton, definition of	9	Well 57C 21 SOW 099A	285
Pesticides, definition of	9	Well 57C 22 SOW 099B	286
Phytoplankton, definition of	9	Well 57C 23 SOW 099C	287
Picocurie, definition of	9	Well 57C 24 SOW 099D	288
Plankton, definition of	9	Well 58A 1 SOW 036	289
PORTSMOUTH (INDEPENDENT CITY):	010	Well 58A 2 SOW 042	290
Well 60C 27 Well 60D 2	243	Well 58A 75 SOW 170	291
Preface	244 iii	Well 58A 77 SOW 180A	292
	111	HELL JOA 70 DON 100D	290

	Page		Page
SUFFOLK (INDEPENDENT CITY) Continued		VIRGINIA BEACH (INDEPENDENT CITY) Continued	
Well 58A 79 SOW 180C	294	Well 62C 11 SOW 172C	355
Well 58A 80 SOW 180D	295	Well 62C 12 SOW 172D	356
Well 58A 81 SOW 180E	296	Well 63C 2 SOW 100B	357
Well 58A 82 SOW 180F	297	Well 63C 3 SOW 100C	358
Well 58A 83 SOW 180G	298	Well 63C 4 SOW 173A	359
Well 58A 84 SOW 180H	299	Well 63C 5 SOW 173B	360
Well 58B 13	300		
Well 58B235	301		
Well 58B268 SOW 169A	302	Water-level records, explanation of	2-6
Well 58B269 SOW 169B	303	Water-resources data for Virginia, 1990,	
Well 58B270 SOW 169C	304	explanation of	1-11
Well 58B271 SOW 169D	305	Water-resources investigations, publications	11 11
Well 58B272 SOW 169E	306	on techniques of	11-13
Well 58B273 SOW 169F	307	Water resources reports, selected,	12-14
Well 58C 8	308 309	in Virginia Water year, definition of	13-14
Well 58C 53 SOW 162B	310	WATSTORE data, access to	6
Well 58C 56 SOW 162D	311	Well characteristics, explanation of	5
Well 58C 57 SOW 141A	312	Well descriptions and ground-water levels:	
Well 58C 58 SOW 141B	313	Accomack County	24-62
Well 58C 59 SOW 141C	314	Albemarle County	63
Well 58C 60 SOW 141D	315	Amelia County	64
Well 58C 61 SOW 159A	316	Appomattox County	65-66
Well 58C 62 SOW 159B	317	Arlington County	67-68
Well 58C 63 SOW 159C	318	Augusta County	69
Summary of hydrologic conditions	2	Buchanan County	70
SURRY COUNTY:		Buckingham County	71-73
Well 56E 1	319	Caroline County	74-77
Well 56F 2 SOW 039	320	Charles City County	78-81
Well 57E 11 SOW 094A	321	Chesapeake (independent city)	
Well 57E 12 SOW 094B	322 323	Chesterfield County	108
Well 57F 16 SOW 087A	324	Colonial Heights (independent city)	109
Well 57F 24 SOW 087B	325	Essex County	110
Suspended, definition of	10	Fairfax County1	
Suspended recoverable, definition of	10	Franklin (independent city)	
Suspended, total, definition of	10	Gloucester County1	
SUSSEX COUNTY:		Halifax County	119
Well 53D 3 SOW 048	326	Hanover County12	20-124
Well 53D 6 SOW 179A	327	Henrico County12	25-134
Well 53D 7 SOW 179B	328	Hopewell (independent city)	
Well 53D 8 SOW 179C	329	Isle of Wight County13	
Well 53D 9 SOW 179D	330	James City County1	
Well 53D 10 SOW 179E	331	King and Queen County16	57-170
Well 53D 11 SOW 179F	332	King George County	
Well 53D 12 SOW 179G	333	King William County	
Well 53E 5 SOW 045	334	Lancaster County	
System for numbering wells	4	Louisa County	81-183
		Mathews County	184
Tables:		Middlesex County1	
Publications on techniques of water-		Montgomery County	188
resources investigations	11-13	Nelson County	189
Selected U.S. Geological Survey reports on		New Kent County1	90-195
water-resources in Virginia	13-14	Newport News (independent city)	96-203
Taxonomy, definition of	10	Norfolk (independent city)20	
Techniques of water-resources investigations,		Northampton County20	
publications on	11-13	Orange County	241
Thermograph, definition of	10	Patrick County	242
Time-weighted average, definition of	10	Portsmouth (independent city)24 Prince George County	245
Total, definition of	11 8	Prince William County24	
Total, recoverable, definition of	11	Pulaski County	52-253
Total, recoverable, delinition of		Richmond County	254
VIRGINIA BEACH (INDEPENDENT CITY):		Roanoke (independent city)	255
Well 61C 23 SOW 129	335	Rockbridge County	256
Well 61C 25 SOW 130	336	Rockingham County	257
Well 61C 27 SOW 174A	337	Southampton County2	58-274
Well 61C 28 SOW 174B	338	Suffolk (independent city)	75-318
Well 61C 29 SOW 175	339	Surry County3	
Well 61D 4 SOW 154	340	Sussex County3	
Well 61D 5 SOW 155	341	Virginia Beach (independent city)	
Well 61D 6 SOW 124	342	Westmoreland County30	
Well 62A 2 SOW 097A	343	Williamsburg (independent city)	365 66-371
Well 62A 3 SOW 097B	344	York County	2,4
Well 62B 1 SOW 098A	345 346	Wells, numbering system for, explanation of WESTMORELAND COUNTY:	2,4
Well 62C 2 SOW 092A	346	Well 55P 5	361
Well 62C 3 SOW 092B	348	Well 55P 9	362
Well 62C 4 SOW 083	349	Well 550 2	363
Well 62C 5 SOW 093	350	Well 56N 1 SOW 016	364
Well 62C 6 SOW 125	351	Wet mass, definition of	7
Well 62C 7 SOW 126	352	WILLIAMSBURG (INDEPENDENT CITY):	
Well 62C 9 SOW 172A	353	Well 57G 31	365
Well 62C 10 SOW 172B	354	WSP (Water-Supply Paper), definition of	11

	Page	Pag	ge
YORK COUNTY:		YORK COUNTYContinued	
Well 57G 2 Well 57G 17 SOW 068	367	Well 59F 1 SOW 027	
Well 57G 19 SOW 069	368 369		
Well 58G 2	370	Zooplankton, definition of	9

# FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	Ву	To obtain SI units
	Length	
inches (in)	2.54x101	millimeters (mm)
	2.54x10 <sup>-2</sup>	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	1.609x10°	kilometers (km)
	Area	
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	4.047x10 <sup>-1</sup>	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	2.590x10°	square kilometers (km²)
	Volume	
gallons (gal)	3.785x10°	liters (L)
	3.785x10°	cubic decimeters (dm <sup>3</sup> )
	3.785x10 <sup>-3</sup>	cubic meters (m <sup>3</sup> )
million gallons	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	2.832x101	cubic decimeters (dm <sup>3</sup> )
	2.832x10 <sup>-2</sup>	cubic meters (m <sup>3</sup> )
cfs-days	$2.447 \times 10^{3}$	cubic meters (m <sup>3</sup> )
	2.447x10 <sup>-3</sup>	cubic hectometers (hm³)
acre-feet (acre-ft)	$1.233 \times 10^{3}$	cubic meters (m <sup>3</sup> )
	1.233x10 <sup>-3</sup>	cubic hectometers (hm <sup>3</sup> )
	1.233x10 <sup>-6</sup>	cubic kilometers (km³)
	Flow	
cubic feet per second (ft <sup>3</sup> /s)	2.832x101	liters per second (L/s)
(10 /0)	2.832x10 <sup>1</sup>	cubic decimeters per second (dm <sup>3</sup> /s)
	2.832x10 <sup>-2</sup>	cubic meters per second (m³/s)
gallons per minute (gal/min)	6.309x10 <sup>-2</sup>	liters per second (L/s)
Barrette For married (8m/ mar)	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	6.309x10 <sup>-5</sup>	cubic meters per second (m³/s)
million gallons per day	4.381x10 <sup>1</sup>	cubic decimeters per second (dm <sup>3</sup> /s)
g	4.381x10 <sup>-2</sup>	cubic meters per second (m³/s)
	Mass	
tons (short)	9.072x10 <sup>-1</sup>	megagrams (Mg) or metric tons

USGS LIBRARY - RESTON IOR

3 1818 00456008 0

U.S.MAIL

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
3600 W. Broad Street, Room 606
Richmond, VA 23230

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
SPECIAL 4TH CLASS BOOK RATE