

Water Resources Data Maryland and Delaware Water Year 1992

Volume 2. Ground-Water Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-92-2
Prepared in cooperation with the States of Maryland and Delaware
and with other agencies

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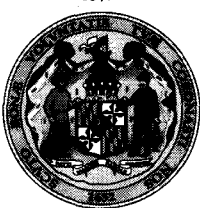
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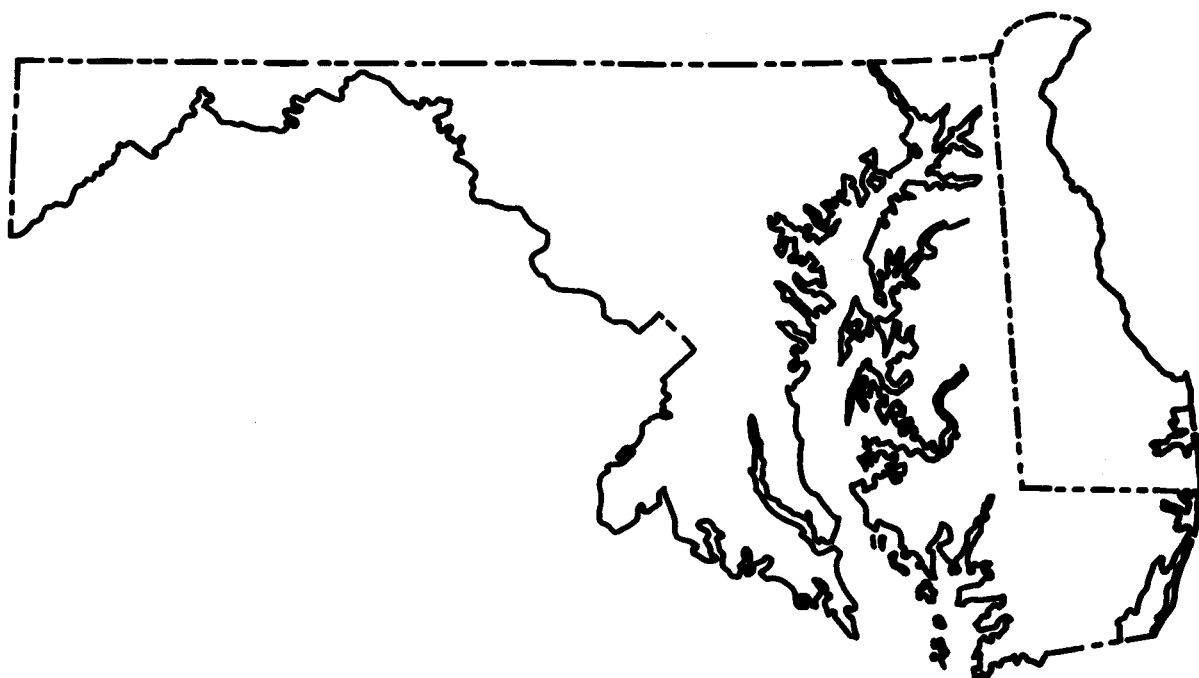
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Volume 2. Ground-Water Data

by R.W. James and M.J. Smigaj



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MD-DE-92-2
Prepared in cooperation with the States of Maryland and Delaware
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

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Towson, Maryland 21286

PREFACE

This volume of the annual hydrologic data report of Maryland and Delaware 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 quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Maryland, Delaware, and the District of Columbia are contained in two volumes:

Volume 1. Surface Water Data

Volume 2. Ground Water Data

This report (Volume 2) is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey, Maryland Geological Survey, and Delaware Geological Survey, 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 individuals contributed significantly to the collection, processing, and tabulation of the data:

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S. E. Curtin		

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This report was prepared under the general supervision of J. G. Peters, District Chief, MD-DE-DC District, H. J. Freiburger, Area Hydrologist, Mid-Atlantic Programs, and S. P. Sauer, Regional Hydrologist, Northeastern Region, and in cooperation with the States of Maryland and Delaware and with other agencies.

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GROUND-WATER SPRING DISCHARGE

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MARYLAND:**CECIL COUNTY**

Spring 393459076045001 Local number CE Cc 40..... 34

FREDRICK COUNTY

Spring 393218077271001 Local number FR Cd 38..... 35

Spring 391846077370501 Local number FR Fb 12..... 36

HARFORD COUNTY

Spring 394153076325701 Local number HA Aa 9..... 37

WASHINGTON COUNTY

Spring 392836077442701 Local number WA Di 103..... 38

GROUND-WATER LEVELS

DELAWARE:**KENT COUNTY**

Well 391039075325501 Local number Id53-05.....39-40

Well 391026075304901 Local number Id55-01.....41-42

Well 390607075331501 Local number Jd42-03..... 43

Well 385041075395601 Local number Mc51-01..... 44

Well 385310075331301 Local number Md22-01..... 45

NEWCASTLE COUNTY

Well 393917075401601 Local number Db15-05..... 46

Well 393856075415602 Local number Db24-17..... 47

Well 393734075371103 Local number Db33-17..... 48

Well 393734075371102 Local number Db33-18..... 49

Well 393734075371101 Local number Db33-19..... 50

Well 393755075364801 Local number Dc34-05..... 51

Well 393755075364802 Local number Dc34-06..... 52

Well 393316075421601 Local number Eb23-22..... 53

Well 393316075421602 Local number Eb23-23..... 54

Well 393316075421603 Local number Eb23-24..... 55

Well 393316075421604 Local number Eb23-25..... 56

Well 391949075410701 Local number Hb14-01..... 57

SUSSEX COUNTY

Well 384930075370201 Local number Nc13-03.....58-59

Well 384639075353101 Local number Nc45-01..... 60

Well 384704075212900 Local number Nf44-01..... 61

Well 384955075192801 Local number Ng11-01..... 62

Well 384558075083501 Local number Ni52-11..... 63

Well 384558075083502 Local number Ni52-12..... 64

Well 384038075110001 Local number Oh54-01..... 65

Well 384038075110002 Local number Oh54-02..... 66

Well 384258075063101 Local number Oi24-06..... 67

Well 383730075213501 Local number Pf24-02..... 68

Well 383730075213502 Local number Pf24-03..... 69

Well 383138075260201 Local number Qe44-01..... 70

Well 383050075105201 Local number Qh54-04..... 71

Well 383050075105202 Local number Qh54-05..... 72

Well 383050075105203 Local number Qh54-06..... 73

Well 383050075105204 Local number Qh54-07..... 74

Well 382808075030501 Local number Rj22-05..... 75

Well 382808075030502 Local number Rj22-06..... 76

Well 382808075030503 Local number Rj22-07..... 77

Well 382808075030504 Local number Rj22-08..... 78

MARYLAND:**ALLEGANY COUNTY**

Well 394024078273401 Local number AL Ah 1..... 79

Well 393930078460901 Local number AL Bd 2..... 80

Well 393009079025201 Local number AL Ca 19..... 81

Well 393148079010601 Local number AL Ca 20..... 82

ANNE ARUNDEL COUNTY

Well 391101076404001 Local number AA Ac 11..... 83

Well 391015076373501 Local number AA Ad 29..... 84

Well 391032076385902 Local number AA Ad 90..... 85

Well 391032076385904 Local number AA Ad 102..... 86

Well 391032076385905 Local number AA Ad 104..... 87

Well 391032076385906 Local number AA Ad 108..... 88

Well 391006076380101 Local number AA Ad 109.....89-90

Well 390950076391101 Local number AA Bd 91..... 91

Well 390821076365401 Local number AA Bd 152.....92-93

Well 390938076383701 Local number AA Bd 155..... 94

Well 390922076371001 Local number AA Bd 156..... 95

Well 390737076374401 Local number AA Bd 157.....96-97

Well 390744076390001 Local number AA Bd 158..... 98

Well 390737076374402 Local number AA Bd 159..... 99

Well 390908076394402 Local number AA Bd 160.....100-101

Well 390945076285601 Local number AA Bf 3..... 102

Well 390303076463201 Local number AA Cb 1..... 103

Well 390423076432001 Local number AA Cc 40..... 104

Well 390450076343402 Local number AA Ce 117.....105-106

Well 390150076283003 Local number AA Cf 98..... 107

Well 390150076283002 Local number AA Cf 99..... 108

Well 390123076241602 Local number AA Cg 23.....109-110

Well 390127076240301 Local number AA Cg 25..... 111

Well 385808076373502 Local number AA Dd 42..... 112

Well 385915076340401 Local number AA De 1.....113-114

GROUND-WATER LEVELS-Continued

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MARYLAND-Continued:**ANNE ARUNDEL COUNTY--Continued**

Well 385920076322401	Local number AA De	140	115
Well 385920076322402	Local number AA De	144	116
Well 385852076333201	Local number AA De	177	117-118
Well 385921076270701	Local number AA Df	19	119-120
Well 385916076270702	Local number AA Df	20	121-122
Well 385905076293601	Local number AA Df	79	123-124
Well 385623076274401	Local number AA Df	103	125
Well 385406076383901	Local number AA Ed	45	126
Well 384646076352401	Local number AA Fd	43	127

BALTIMORE CITY

Well 391617076322001	Local number 2S5E-	1	128
Well 391600076353301	Local number 3S2E-	5	129
Well 391556076315301	Local number 3S5E-	46	130
Well 391349076354501	Local number 5S2E-	24	131
Well 391213076324401	Local number 7S4E-	1	132

BALTIMORE COUNTY

Well 393129076384201	Local number BA Cd	26	133
Well 393102076341801	Local number BA Ce	21	134
Well 392931076410301	Local number BA Dc	444	135
Well 392045076512501	Local number BA Ea	18	136
Well 392305076432001	Local number BA Ec	43	137
Well 391607076312901	Local number BA Fe	19	138
Well 391356076293501	Local number BA Gf	11	139
Well 391257076282501	Local number BA Gf	168	140
Well 391226076253401	Local number BA Gf	178	141

CALVERT COUNTY

Well 384331076395201	Local number CA Bb	27	142
Well 384334076394501	Local number CA Bb	28	143
Well 383930076314301	Local number CA Cc	18	144
Well 383934076320202	Local number CA Cc	39	145-146
Well 383605076344601	Local number CA Cc	57	147
Well 383239076354201	Local number CA Db	47	148
Well 383216076351401	Local number CA Db	65	149
Well 383216076351402	Local number CA Db	66	150
Well 383216076351403	Local number CA Db	67	151
Well 383050076305501	Local number CA Dc	35	152
Well 382549076260101	Local number CA Ed	47	153-154
Well 382343076302901	Local number CA Fc	13	155-156
Well 382340076303001	Local number CA Fc	15	157
Well 382340076303002	Local number CA Fc	16	158-159
Well 382343076303801	Local number CA Fc	17	160
Well 382340076303801	Local number CA Fc	18	161-162
Well 382337076303702	Local number CA Fc	20	163
Well 382339076304201	Local number CA Fc	33	164-165
Well 382339076304202	Local number CA Fc	34	166-167
Well 382408076260401	Local number CA Fd	51	168
Well 382407076260301	Local number CA Fd	54	169
Well 382318076242401	Local number CA Fe	22	170
Well 381952076270901	Local number CA Gd	6	171

CAROLINE COUNTY

Well 390333075504501	Local number CO Bc	1	172
Well 390227075470201	Local number CO Bd	53	173
Well 385310075503601	Local number CO Dc	129	174
Well 385217075490601	Local number CO Dd	47	175

CARROLL COUNTY

Well 394008077005601	Local number CL Ad	47	176
Well 393638076510001	Local number CL Bf	1	177
Well 393754076512401	Local number CL Bf	184	178
Well 392259077052401	Local number CL Ec	75	179

CECIL COUNTY

Well 393637075535001	Local number CE Be	73	180
Well 393637075535002	Local number CE Be	74	181
Well 393615075475901	Local number CE Bf	81	182
Well 393537075492001	Local number CE Bf	82	183
Well 393432075593601	Local number CE Cd	51	184
Well 393432075593602	Local number CE Cd	52	185
Well 393216075564201	Local number CE Cd	53	186
Well 393433075544901	Local number CE Ce	54	187
Well 393241075500201	Local number CE Ce	55	188
Well 393026075523101	Local number CE Ce	56	189
Well 392536075593201	Local number CE Dd	81	190
Well 392403075521801	Local number CE Ee	29	191

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MARYLAND-Continued:**CHARLES COUNTY**

Well 383524077111802	Local number CH Bb	17	192-193
Well 383524077094401	Local number CH Bc	5	194-195
Well 383633077083001	Local number CH Bc	24	196-197
Well 383819076555501	Local number CH Be	43	198-199
Well 383706076575601	Local number CH Be	57	200
Well 383706076575604	Local number CH Be	60	201
Well 383853076532601	Local number CH Bf	101	202-203
Well 383640076545901	Local number CH Bf	133	204
Well 383728076531701	Local number CH Bf	134	205
Well 383508076540701	Local number CH Bf	146	206
Well 383508076540703	Local number CH Bf	151	207-208
Well 383637076545803	Local number CH Bf	157	209
Well 383637076531902	Local number CH Bf	158	210
Well 383746076482901	Local number CH Bg	12	211
Well 383652076495701	Local number CH Bg	13	212
Well 383422077114601	Local number CH Cb	7	213-214
Well 383236076563901	Local number CH Ce	37	215-216
Well 383340076511601	Local number CH Cf	33	217
Well 382607077002601	Local number CH Dd	33	218
Well 382927076552301	Local number CH De	45	219
Well 382103076560201	Local number CH Ee	16	220
Well 382154076574801	Local number CH Ee	70	221
Well 382456076562201	Local number CH Ee	90	222

DORCHESTER COUNTY

Well 383708075503801	Local number DO Bg	59	223
Well 383151076080801	Local number DO Cd	1	224
Well 383340076041601	Local number DO Ce	5	225
Well 383408076042402	Local number DO Ce	15	226
Well 383346076030301	Local number DO Ce	21	227
Well 383243076042301	Local number DO Ce	78	228
Well 383401076032001	Local number DO Ce	88	229
Well 382800076180701	Local number DO Db	17	230
Well 382807076175801	Local number DO Db	18	231
Well 382847076190901	Local number DO Db	19	232
Well 382916075491702	Local number DO Dh	27	233

FREDRICK COUNTY

Well 394200077190701	Local number FR Af	27	234
Well 393733077274801	Local number FR Bd	96	235
Well 393156077135701	Local number FR Cg	1	236
Well 392517077190401	Local number FR Df	35	237
Well 392257077095601	Local number FR Eh	11	238

GARRETT COUNTY

Well 394017078581701	Local number GA Ag	1	239
Well 393749079190301	Local number GA Bc	1	240
Well 393121079200401	Local number GA Cb	79	241
Well 392439079231801	Local number GA Eb	78	242
Well 391512079270901	Local number GA Fa	28	243
Well 391512079270902	Local number GA Fa	29	244
Well 391539079254601	Local number GA Fa	31	245
Well 391539079254602	Local number GA Fa	32	246
Well 391539079254603	Local number GA Fa	33	247
Well 391539079254604	Local number GA Fa	34	248
Well 391501079260001	Local number GA Fa	38	249
Well 391530079244401	Local number GA Fb	22	250
Well 391530079244403	Local number GA Fb	24	251
Well 391530079244404	Local number GA Fb	25	252
Well 391513079243602	Local number GA Fb	27	253
Well 391513079243605	Local number GA Fb	30	254
Well 391602079240301	Local number GA Fb	31	255
Well 391602079240304	Local number GA Fb	34	256
Well 391715079223105	Local number GA Fb	39	257
Well 391420079264901	Local number GA Ga	16	258

HARFORD COUNTY

Well 393902076160001	Local number HA Bd	31	259
Well 393158076302601	Local number HA Ca	23	260
Well 392529076180901	Local number HA Dd	89	261
Well 392721076150301	Local number HA Dd	91	262
Well 392721076150302	Local number HA Dd	92	263
Well 392557076161601	Local number HA Dd	106	264
Well 392921076100401	Local number HA De	66	265
Well 392628076133101	Local number HA De	151	266
Well 392606076145801	Local number HA De	181	267
Well 392606076145802	Local number HA De	182	268
Well 392606076145803	Local number HA De	183	269
Well 392914076110301	Local number HA De	195	270
Well 392819076130901	Local number HA De	197	271
Well 392819076130902	Local number HA De	198	272-273

GROUND-WATER LEVELS-Continued

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MARYLAND-Continued:**HARFORD COUNTY--Continued**

Well 392435076203301	Local number	HA Ec	11	274
Well 392408076210101	Local number	HA Ec	46	275
Well 392343076161901	Local number	HA Ed	24	276
Well 392455076192101	Local number	HA Ed	47	277
Well 392455076192102	Local number	HA Ed	48	278
Well 392455076192103	Local number	HA Ed	49	279
Well 392405076183701	Local number	HA Ed	52	280-281
Well 392035076172203	Local number	HA Ed	59	282-283
Well 392035076172204	Local number	HA Ed	60	284-285
Well 392334076171303	Local number	HA Ed	80	286-287
Well 392437076183101	Local number	HA Ed	201	288-289
Well 392024076173001	Local number	HA Ed	223	290-291
Well 392024076173002	Local number	HA Ed	224	292-293
Well 391817076173701	Local number	HA Fd	6	294-295
Well 391816076173801	Local number	HA Fd	8	296-297
Well 391814076173801	Local number	HA Fd	21	298-299
Well 391814076173802	Local number	HA Fd	22	300-301
Well 391814076173803	Local number	HA Fd	23	302-303
Well 391825076172601	Local number	HA Fd	26	304-305
Well 391825076172602	Local number	HA Fd	27	306-307
Well 391825076172603	Local number	HA Fd	28	308-309
Well 391812076173101	Local number	HA Fd	29	310-311
Well 391812076173102	Local number	HA Fd	30	312-313
Well 391812076173103	Local number	HA Fd	31	314-315
Well 391809076174301	Local number	HA Fd	32	316-317
Well 391809076174302	Local number	HA Fd	33	318-319
Well 391809076174303	Local number	HA Fd	34	320-321
Well 391809076174601	Local number	HA Fd	35	322-323
Well 391809076174602	Local number	HA Fd	36	324-325
Well 391809076174603	Local number	HA Fd	37	326-327
Well 391826076173101	Local number	HA Fd	38	328-329
Well 391826076173102	Local number	HA Fd	39	330-331
Well 391826076173103	Local number	HA Fd	40	332-333
Well 391810076172801	Local number	HA Fd	44	334-335
Well 391810076172802	Local number	HA Fd	45	336-337
Well 391810076172803	Local number	HA Fd	46	338-339

HOWARD COUNTY

Well 391910076565701	Local number	HO Bd	1	340
Well 391440076555401	Local number	HO Cd	20	341
Well 391442076555301	Local number	HO Cd	21	342
Well 3914440765554701	Local number	HO Cd	25	343
Well 3914420765554701	Local number	HO Cd	26	344
Well 3914470765554702	Local number	HO Cd	28	345-346
Well 3914420765554702	Local number	HO Cd	29	347-348
Well 391440076555402	Local number	HO Cd	78	349-350
Well 391445076555101	Local number	HO Cd	79	351
Well 391438076555001	Local number	HO Cd	342	352-353
Well 391001076540001	Local number	HO Ce	38	354

KENT COUNTY

Well 392007076075501	Local number	KE Ac	20	355
Well 391751076061101	Local number	KE Bc	50	356-357
Well 391659976050402	Local number	KE Bc	185	358-359
Well 391650076050403	Local number	KE Bc	186	360-361
Well 391823075594701	Local number	KE Be	43	362
Well 391846075561701	Local number	KE Be	55	363
Well 391752075523901	Local number	KE Bf	93	364-365
Well 391755075532701	Local number	KE Bf	154	366
Well 391815075472101	Local number	KE Bg	33	367
Well 391815075472102	Local number	KE Bg	34	368
Well 391400076101401	Local number	KE Cb	36	369
Well 391124076101001	Local number	KE Cb	97	370-371
Well 391124076101002	Local number	KE Cb	98	372-373
Well 391124076101003	Local number	KE Cb	99	374-375
Well 391124076101004	Local number	KE Cb	100	376-377
Well 391251076142201	Local number	KE Cb	101	378-379
Well 391124076101005	Local number	KE Cb	103	380-381
Well 391432076015501	Local number	KE Cd	44	382
Well 390837076140401	Local number	KE Db	40	383
Well 390626076083301	Local number	KE Dc	89	384-385
Well 390626076083302	Local number	KE Dc	91	386-387

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MARYLAND-Continued:**MONTGOMERY COUNTY**

Well 391142077280601	Local number MO Cb	26.....	388
Well 391314077224201	Local number MO Cc	14.....	389
Well 390802077283801	Local number MO Db	68.....	390
Well 390917077244401	Local number MO Dc	59.....	391
Well 390451077245901	Local number MO Ec	10.....	392
Well 390434076573002	Local number MO Eh	20.....	393

PRINCE GEORGES COUNTY

Well 390151076561501	Local number PG Bc	16.....	394
Well 385130076465501	Local number PG De	21.....	395
Well 385152076431301	Local number PG Df	2.....	396
Well 384423077004501	Local number PG Fb	36.....	397
Well 384230076555501	Local number PG Fc	17.....	398
Well 384131076533301	Local number PG Fd	41.....	399
Well 383228076410601	Local number PG Hf	35.....	400-401
Well 383348076411301	Local number PG Hf	40.....	402-403
Well 383348076411302	Local number PG Hf	41.....	404-405
Well 383348076411303	Local number PG Hf	42.....	406-407

QUEEN ANNES COUNTY

Well 391203076024301	Local number QA Be	15.....	408
Well 391203076024302	Local number QA Be	16.....	409
Well 391203076024303	Local number QA Be	17.....	410
Well 390841075515201	Local number QA Cg	1.....	411
Well 390201076182701	Local number QA Db	30.....	412
Well 390201076182703	Local number QA Db	32.....	413
Well 390023076174301	Local number QA Db	34.....	414
Well 390119076191001	Local number QA Db	35.....	415
Well 390023076174302	Local number QA Db	37.....	416
Well 385718076211501	Local number QA Ea	77.....	417
Well 385718076211502	Local number QA Ea	78.....	418
Well 385757076200101	Local number QA Ea	79.....	419
Well 385757076200102	Local number QA Ea	80.....	420
Well 385718076211503	Local number QA Ea	81.....	421
Well 385751076171603	Local number QA Eb	110.....	422
Well 385751076171601	Local number QA Eb	111.....	423
Well 385751076171602	Local number QA Eb	112.....	424
Well 385748076172001	Local number QA Eb	113.....	425-426
Well 385843076155302	Local number QA Eb	155.....	427
Well 385852076195201	Local number QA Eb	156.....	428
Well 385852076195202	Local number QA Eb	157.....	429
Well 385756076105301	Local number QA Ec	1.....	430
Well 385534075573601	Local number QA Ef	29.....	431
Well 385429076120201	Local number QA Fc	7.....	432

ST. MARYS COUNTY

Well 382838076470101	Local number SM Bb	15.....	433
Well 382838076470102	Local number SM Bb	22.....	434
Well 381616076364701	Local number SM Dd	46.....	435
Well 381616076364702	Local number SM Dd	49.....	436
Well 381807076380001	Local number SM Dd	50.....	437
Well 381616076364703	Local number SM Dd	62.....	438
Well 381615076364701	Local number SM Dd	63.....	439
Well 381841076284401	Local number SM Df	66.....	440
Well 381527076283101	Local number SM Df	71.....	441
Well 381548076272102	Local number SM Df	84.....	442
Well 381052076253001	Local number SM Ef	80.....	443
Well 381213076222801	Local number SM Eg	27.....	444
Well 380834076303401	Local number SM Fe	30.....	445-446
Well 380834076303402	Local number SM Fe	31.....	447
Well 380711076222201	Local number SM Fg	45.....	448
Well 380347076200101	Local number SM Gh	11.....	449

SOMERSET COUNTY

Well 381156075412501	Local number SO Be	42.....	450
Well 380927075423701	Local number SO Ce	42.....	451-452
Well 380616075380701	Local number SO Cf	2.....	453

TALBOT COUNTY

Well 385242075593101	Local number TA Bf	73.....	454
Well 385242075593102	Local number TA Bf	74.....	455
Well 384923076100601	Local number TA Cc	35.....	456
Well 384514076103701	Local number TA Cc	36.....	457
Well 384643076043801	Local number TA Ce	7.....	458

WASHINGTON COUNTY

Well 394154078103501	Local number WA Ac	1.....	459
Well 393638078001301	Local number WA Be	2.....	460
Well 393851077343001	Local number WA Bk	25.....	461-462
Well 393414077461801	Local number WA Ch	106.....	463-464
Well 393402077434201	Local number WA Ci	82.....	465
Well 392904077371501	Local number WA Dj	2.....	466

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MARYLAND-Continued:**WICOMICO COUNTY**

Well 382150075352101	Local number WI Ce	13	467
Well 382404075355401	Local number WI Ce	204	468
Well 382037075310801	Local number WI Cf	3	469
Well 382429075344501	Local number WI Cf	147	470
Well 382329075263701	Local number WI Cg	20	471

WORCHESTER COUNTY

Well 382621075174201	Local number WO Ae	23	472
Well 382621075174202	Local number WO Ae	24	473
Well 382621075174203	Local number WO Ae	25	474
Well 382632075031801	Local number WO Ah	6	475-476
Well 382635075030601	Local number WO Ah	35	477
Well 382635075030602	Local number WO Ah	36	478
Well 382635075030603	Local number WO Ah	37	479
Well 382022075072401	Local number WO Bg	1	480
Well 382359075094501	Local number WO Bg	15	481
Well 382358075094501	Local number WO Bg	45	482
Well 382358075094502	Local number WO Bg	46	483
Well 382325075063301	Local number WO Bg	47	484-485
Well 382325075063302	Local number WO Bg	48	486-487
Well 382038075065901	Local number WO Bg	49	488-489
Well 382215075041801	Local number WO Bh	31	490-491
Well 382443075033501	Local number WO Bh	34	492-493
Well 382215075041901	Local number WO Bh	84	494
Well 382215075041902	Local number WO Bh	85	495
Well 382215075041903	Local number WO Bh	89	496-497
Well 382127075043802	Local number WO Bh	98	498-499
Well 381939075052101	Local number WO Cg	72	500
Well 381037075234301	Local number WO Dd	7	501
Well 381457075174101	Local number WO De	36	502
Well 381427075081102	Local number WO Dg	21	503
Well 380408075335701	Local number WO Fb	2	504

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DELAWARE:**NEWCASTLE COUNTY**

Well 394706075420601	Local number Bb33-13	506-514
Well 394709075421601	Local number Bb33-15	506-514
Well 394732075420202	Local number Bb33-26	506-514
Well 394714075414501	Local number Bb34-34	506-514
Well 394656075415801	Local number Bb44-13	506-514
Well 393134075460101	Local number Ea44-11	506-514
Well 393132075460201	Local number Ea44-12	506-514
Well 393211075433401	Local number Eb32-22	506-514
Well 393143075440101	Local number Eb42-03	506-514
Well 393059075421301	Local number Eb43-05	506-514
Well 393025075441501	Local number Eb51-11	506-514
Well 392800075454401	Local number Fa25-11	506-514
Well 392120075434402	Local number Gb42-05	506-514
Well 392118075434701	Local number Gb42-06	506-514
Well 392120075434301	Local number Gb42-07	506-514
Well 392120075434403	Local number Gb42-08	506-514
Well 392120075434501	Local number Gb42-10A	506-514
Well 392120075434303	Local number Gb42-11	506-514

MARYLAND:**ALLEGANY COUNTY**

Well 394143078421301	Local number AL Ae 36	515-517
Well 394311078245501	Local number AL Ai 26	515-517
Well 393342078570901	Local number AL Cb 8	515-517
Well 393438078420601	Local number AL Ce 4	515-517

ANNE ARUNDEL COUNTY

Well 391032076385905	Local number AA Ad 104	518-520
Well 390903076413601	Local number AA Bc 216	518-520
Well 390938076383701	Local number AA Bd 155	518-520
Well 390922076371001	Local number AA Bd 156	518-520
Well 390737076374401	Local number AA Bd 157	518-520
Well 390744076390001	Local number AA Bd 158	518-520
Well 390737076374402	Local number AA Bd 159	518-520
Well 390127076240301	Local number AA Cg 25	518-520
Well 385623076274401	Local number AA Df 103	518-520
Well 385003076310501	Local number AA Ee 84	518-520

BALTIMORE COUNTY

Well 392831076410301	Local number BA Dc 444	521
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CALVERT COUNTY

Well 382343076302901	Local number CA Fc 13	522-526
Well 382343076302902	Local number CA Fc 14	522-526
Well 382340076303001	Local number CA Fc 15	522-526
Well 382340076303002	Local number CA Fc 16	522-526
Well 382343076303801	Local number CA Fc 17	522-526
Well 382340076303801	Local number CA Fc 18	522-526
Well 382337076303702	Local number CA Fc 20	522-526
Well 382340076303401	Local number CA Fc 28	522-526
Well 382340076303402	Local number CA Fc 29	522-526
Well 382340076303403	Local number CA Fc 30	522-526
Well 382340076303802	Local number CA Fc 31	522-526
Well 382340076303803	Local number CA Fc 32	522-526
Well 382339076304201	Local number CA Fc 33	522-526
Well 382339076304202	Local number CA Fc 34	522-526

CAROLINE COUNTY

Well 385302075540101	Local number CO Dc 146	527
Well 385009075445002	Local number CO De 16	527

CARROLL COUNTY

Well 394200076551201	Local number Cl Ae 1	528-529
Well 393754076512401	Local number CL Bf 184	528-529

CECIL COUNTY

Well 393459076045001	Local number CE Cc 40	530-531
Well 392544075574803	Local number CE Dd 102	530-531

CHARLES COUNTY

Well 383422077114601	Local number CH Cb 7	532-533
Well 382103076560201	Local number CH Ee 16	532-533
Well 382456076562201	Local number CH Ee 90	532-533

DORCHESTER COUNTY

Well 383218075522802	Local number DO Cg 46	534
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FREDERICK COUNTY

Well 394200077190701	Local number FR Af 27	535-536
Well 393733077274801	Local number FR Bd 96	535-536
Well 393218077271001	Local number FR Cd 38	535-536
Well 392552077262201	Local number FR Dd 178	535-536
Well 392517077190401	Local number FR Df 35	535-536
Well 391846077370501	Local number FR Fb 12	535-536

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MARYLAND:**GARRETT COUNTY**

Well 393930079264301	Local number	GA Ba	1	537-538
Well 392959079252402	Local number	GA Da	17	537-538
Well 392420079221701	Local number	GA Eb	72	537-538

HARFORD COUNTY

Well 394153076325701	Local number	HA Aa	9	539-540
Well 393800076240101	Local number	HA Bc	31	539-540
Well 393158076302601	Local number	HA Ca	23	539-540
Well 392721076150302	Local number	HA Dd	92	539-540
Well 392455076192103	Local number	HA Ed	49	539-540

HOWARD COUNTY

Well 391440076555401	Local number	HO Cd	20	541-545
Well 391447076554702	Local number	HO Cd	28	541-545
Well 391442076554702	Local number	HO Cd	29	541-545
Well 391440076555402	Local number	HO Cd	78	541-545
Well 391445076555101	Local number	HO Cd	79	541-545
Well 391439076555601	Local number	HO Cd	80	541-545
Well 391439076555602	Local number	HO Cd	81	541-545
Well 391447076554703	Local number	HO Cd	253	541-545
Well 391447076554704	Local number	HO Cd	290	541-545
Well 391447076554706	Local number	HO Cd	292	541-545
Well 391489076555001	Local number	HO Cd	342	541-545
Well 391441076555301	Local number	HO Cd	390	541-545
Well 391441076555302	Local number	HO Cd	391	541-545

KENT COUNTY

Well 392212076035501	Local number	KE Ad	20	546-553
Well 392158076034302	Local number	KE Ad	43	546-553
Well 392002075523901	Local number	KE Af	56	546-553
Well 391621076120701	Local number	KE Bb	12	546-553
Well 391631076100301	Local number	KE Bb	38	546-553
Well 391929076084001	Local number	KE Bc	70	546-553
Well 391650076050402	Local number	KE Bc	185	546-553
Well 391650076050403	Local number	KE Bc	186	546-553
Well 391648076005401	Local number	KE Bd	147	546-553
Well 391832075560802	Local number	KE Be	47	546-553
Well 391923075564301	Local number	KE Be	49	546-553
Well 391851075561801	Local number	KE Be	50	546-553
Well 391810075555801	Local number	KE Be	52	546-553
Well 391811075564901	Local number	KE Be	60	546-553
Well 391742075554801	Local number	KE Be	62	546-553
Well 391911075583502	Local number	KE Be	113	546-553
Well 391814075575501	Local number	KE Be	158	546-553
Well 391720075554601	Local number	KE Be	159	546-553
Well 391720075554602	Local number	KE Be	160	546-553
Well 391720075554603	Local number	KE Be	161	546-553
Well 391742075554802	Local number	KE Be	162	546-553
Well 391838075560901	Local number	KE Be	165	546-553
Well 391838075560903	Local number	KE Be	167	546-553
Well 391643075550901	Local number	KE Be	171	546-553
Well 391820075580401	Local number	KE Be	172	546-553
Well 391820075580402	Local number	KE Be	173	554-560
Well 391719075554702	Local number	KE Be	174	554-560
Well 391719075554703	Local number	KE Be	175	554-560
Well 391745075551601	Local number	KE Be	176	554-560
Well 391629075562001	Local number	KE Be	177	554-560
Well 391839075574801	Local number	KE Be	178	554-560
Well 391849075573901	Local number	KE Be	179	554-560
Well 391839075574802	Local number	KE Be	180	554-560
Well 391847075563401	Local number	KE Be	181	554-560
Well 391653075560601	Local number	KE Be	182	554-560
Well 391611075511101	Local number	KE Bf	9	554-560
Well 391850075502701	Local number	KE Bf	58	554-560
Well 391536075501601	Local number	KE Bf	138	554-560
Well 391531075501401	Local number	KE Bf	183	554-560
Well 391224076144801	Local number	KE Cb	64	554-560
Well 391247076143002	Local number	KE Cb	71	554-560
Well 391318076142001	Local number	KE Cb	79	554-560
Well 391435076133701	Local number	KE Cb	88	554-560
Well 391124076101001	Local number	KE Cb	97	554-560
Well 391124076101002	Local number	KE Cb	98	554-560
Well 391124076101003	Local number	KE Cb	99	554-560
Well 391124076101004	Local number	KE Cb	100	554-560
Well 391251076142201	Local number	KE Cb	101	554-560
Well 391124076101005	Local number	KE Cb	103	554-560
Well 391033076061301	Local number	KE Cc	61	554-560
Well 391246076035001	Local number	KE Cd	2	554-560
Well 391246076034702	Local number	KE Cd	104	554-560
Well 390915076163501	Local number	KE Da	11	554-560

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MARYLAND:**KENT COUNTY--Continued**

Well 390944076112901	Local number KE Db	79	554-560
Well 390804076101301	Local number KE Db	96	554-560
Well 390702076103101	Local number KE Db	120	554-560
Well 390749076055401	Local number KE Dc	55	554-560
Well 390719076090903	Local number KE Dc	73	554-560
Well 390704076095001	Local number KE Dc	77	554-560
Well 390626076083301	Local number KE Dc	89	554-560
Well 390626076083302	Local number KE Dc	91	554-560
Well 390948076032401	Local number KE Dd	5	554-560
Well 390321076132301	Local number KE Eb	12	554-560

MONTGOMERY COUNTY

Well 391927077120801	Local number MO Be	62	561
Well 390802077283801	Local number MO Db	68	561

QUEEN ANNES COUNTY

Well 390841075515201	Local number QA Cg	1	562-566
Well 390055076184501	Local number QA Db	14	562-566
Well 390022076191801	Local number QA Db	15	562-566
Well 390059076191801	Local number QA Db	17	562-566
Well 390033076184501	Local number QA Db	23	562-566
Well 390117076191301	Local number QA Db	27	562-566
Well 390201076182701	Local number QA Db	30	562-566
Well 390201076182703	Local number QA Db	32	562-566
Well 390023076174301	Local number QA Db	34	562-566
Well 390119076191001	Local number QA Db	35	562-566
Well 390023076174302	Local number QA Db	37	562-566
Well 385825076202901	Local number QA Ea	39	562-566
Well 385820076202501	Local number QA Ea	42	562-566
Well 385554076213801	Local number QA Ea	45	562-566
Well 385825076201201	Local number QA Ea	48	562-566
Well 385505076215001	Local number QA Ea	59	562-566
Well 385701076212501	Local number QA Ea	60	562-566
Well 385812076202801	Local number QA Ea	61	562-566
Well 385742076205801	Local number QA Ea	71	562-566
Well 385718076211501	Local number QA Ea	77	562-566
Well 385718076211502	Local number QA Ea	78	562-566
Well 385757076200101	Local number QA Ea	79	562-566
Well 385757076200102	Local number QA Ea	80	562-566
Well 385718076211503	Local number QA Ea	81	562-566
Well 385705076212002	Local number QA Ea	82	562-566
Well 385705076212001	Local number QA Ea	83	567-568
Well 385843076155302	Local number QA Eb	155	567-568
Well 385852076195201	Local number QA Eb	156	567-568
Well 385852076195202	Local number QA Eb	157	567-568
Well 385354076212701	Local number QA Fa	49	567-568
Well 385024076222501	Local number QA Fa	54	567-568
Well 385133076201201	Local number QA Fa	58	567-568
Well 385254076201901	Local number QA Fa	60	567-568
Well 385434076215601	Local number QA Fa	63	567-568
Well 385454076214901	Local number QA Fa	64	567-568
Well 385236076215201	Local number QA Fa	66	567-568
Well 385023076222201	Local number QA Fa	67	567-568
Well 385254076201301	Local number QA Fa	72	567-568
Well 385227076215401	Local number QA Fa	74	567-568
Well 385155076200401	Local number QA Fa	75	567-568

ST. MARYS COUNTY

Well 381052076253001	Local number SM Ef	80	569
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TALBOT COUNTY

Well 384643076043801	Local number TA Ce	7	570
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WASHINGTON COUNTY

Well 394223078182101	Local number WA Ab	3	571-573
Well 394149078052801	Local number WA Ad	101	571-573
Well 394115077461501	Local number WA Ah	63	571-573
Well 394219077335301	Local number WA Ak	99	571-573
Well 392836077442701	Local number WA Di	103	571-573

WICOMICO COUNTY

Well 382511075203601	Local number WI Bh	2	574-578
Well 382543075212201	Local number WI Bh	4	574-578
Well 382609075210502	Local number WI Bh	9	574-578
Well 382549075204101	Local number WI Bh	12	574-578
Well 382329075412002	Local number WI Cd	71	574-578
Well 382150075352101	Local number WI Ce	13	574-578
Well 382452075202902	Local number WI Ch	57	574-578

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MARYLAND:**WORCESTER COUNTY**

Well 382632075031901	Local number WO Ah	34.....	579-583
Well 382635075030602	Local number WO Ah	36.....	579-583
Well 382332075141802	Local number WO Bf	87.....	579-583
Well 382359075094501	Local number WO Bg	15.....	579-583
Well 382358075094501	Local number WO Bg	45.....	579-583
Well 382358075094502	Local number WO Bg	46.....	579-583
Well 382214075041901	local number WO Bh	28.....	579-583
Well 382443075033501	local number WO Bh	34.....	579-583
Well 382215075041901	local number WO Bh	84.....	579-583
Well 382215075041902	local number WO Bh	85.....	579-583
Well 382215075041903	local number WO Bh	89.....	579-583
Well 382235075040901	local number WO Bh	91.....	579-583
Well 382304075040601	local number WO Bh	93.....	579-583
Well 382447075033702	local number WO Bh	94.....	579-583
Well 382304075040602	local number WO Bh	95.....	579-583
Well 382235075041902	local number WO Bh	96.....	579-583
Well 382127075043803	Local number WO Bh	97.....	579-583
Well 382127075043802	Local number WO Bh	98.....	579-583
Well 381543075273802	Local number WO Cc	3.....	579-583
Well 381941075052201	Local number WO Cg	32.....	579-583
Well 381939075052102	Local number WO Cg	75.....	579-583

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WATER RESOURCES DATA - MARYLAND AND DELAWARE, 1992

VOLUME 2. GROUND-WATER DATA

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 Maryland and Delaware 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 - Maryland and Delaware."

This series of annual reports for Maryland and Delaware 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. In the 1989 water year, the report format was changed to two volumes. Both volumes contained data on quantities of surface water, quality of surface and ground water, and ground-water levels. Volume 1 contained data on the Atlantic Slope Basins (Delaware River thru Patuxent River) and Volume 2 contained data on the Monongahela and Potomac River basins. Beginning with the 1991 water year, Volume 1 contains all information on quantities of surface water and surface-water-quality data and Volume 2 contains ground-water levels and ground-water-quality data.

This report is Volume 2 in our 1992 series and includes records of water levels and water quality of ground-water wells and springs. It contains records for water levels at 373 observation wells, discharge data for 5 springs, and water quality at 276 wells. Location of ground-water level wells are shown on figures 3 and 4. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Maryland and Delaware.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Maryland and Delaware 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." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Books and Open-File Reports Section, 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 MD-DE-92-2." 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. Beginning with the 1991 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (410) 828-1535. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

COOPERATION

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

Maryland Geological Survey, E. T. Cleaves, Director.

Delaware Geological Survey, R. R. Jordan, State Geologist.

Maryland Department of Environment; Chesapeake Bay and
Special Projects Program, R. M. Summers, Division Chief.

U.S. Army, Aberdeen Proving Ground, Support Activity, Environmental Management Division.

U.S. Navy, Naval Ordnance Station, Indian Head.

The following organizations aided in collecting records:

Delaware: State Department of Natural Resources and Environmental Control,
Water Resources Agency for New Castle County.

Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Ground-Water Levels

Ground-water levels in water-table and artesian observation wells fluctuate with response to precipitation and ground-water withdrawal. Water-table levels in Maryland and Delaware were below average for the majority of the water year (fig. 1). These are attributed to below normal (1951-80) precipitation during the first nine months of the water year. No new record high or low levels were recorded at any of the water-table observation wells in either State during the water year. Water levels in the confined aquifer systems of Maryland and Delaware, which are the main municipal source for water supply, either sustained their water levels or declined to record lows except in those areas where use by industry has declined. Water-level conditions are summarized below for each of the physiographic provinces in the bi-state area.

Appalachian Plateau.-- Water-table levels were average to slightly above average at the beginning of the 1992 water year, reaching highest levels in February and March. These levels fluctuated above and below the average throughout the water year. Water levels at the end of the water year were slightly below average due to late summer rains.

Valley and Ridge.-- Water-table levels were average throughout the water year, reaching their highest levels in May. During the summer, these levels rose above average following above normal precipitation. Levels at the end of the water year were above average.

Blue Ridge.-- Water-table levels were below average at the beginning of the water year but sharply rose in December, following above normal precipitation. These water-levels remained average to above throughout the rest of the 1992 water year.

Piedmont.-- Water-table levels were below average at the beginning of the water year and remained below normal throughout the water year. Record low water levels were measured in February, at observation, artesian wells in the Newark Triassic Basin, (New Oxford Formation) in Montgomery County, Maryland. These record lows are due to increased ground-water withdrawal, in the Poolesville area.

Coastal Plain.-- Water-table levels were below average at the start of the water year. The water table rose to average levels in May and declined through July. The water-table levels rose to above average levels by the end of the water year. There were no water-table records for Maryland and Delaware in the 1992 water year. Artesian aquifers (identified in parenthesis) however, continued to decline in the following areas of Maryland and Delaware due to increased ground-water withdrawals: Chestertown (Patapsco), Dover (Piney Point), Elkton (Potomac), Glen Burnie (Patapsco), Leonardtown (Aquia), Lexington Park (Aquia), Potomac Heights (Patapsco), Prince Frederick (Aquia), Princess Anne (Manokin), St. Charles (Patapsco), Solomons Island (Aquia), and Waldorf (Magothy).



EXPLANATION OF THE RECORDS

The ground-water and quality-of-ground-water records published in this report are for the 1992 water year that began October 1, 1991, and ended September 30, 1992. 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 and 4. 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.

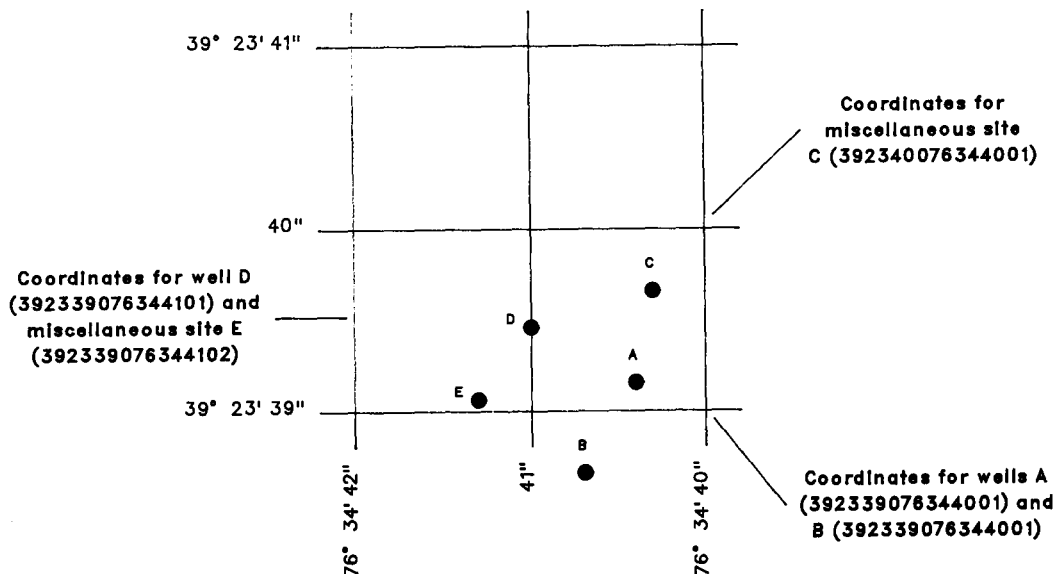


Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude)

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 systems used by the U.S. Geological Survey to assign identification numbers for ground-water well sites is 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. (See figure 2 above.)

Well Numbering System

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

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

Records of Ground-water Levels

Water-level data from the Maryland and Delaware Observation-Well Networks and observation wells from 10 ground-water projects are reported. These data are intended to provide historical water-level information for ground-water management and identify ground-water conditions in project areas. The observation well networks were established to observe ground-water level fluctuations through time and to identify areas of man-induced stress on the ground-water flow system. The locations of these observation wells in Maryland and Delaware are shown in figure 3. The locations of project wells are shown in figure 4.

Data Collection and Computation

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

The water-level data tables and hydrographs are presented in alphabetical order by counties. The primary identification number is the state well number that appears in the upper left hand corner (see Latitude-Longitude System section on page 5). The secondary identification number is the 15-digit number.

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

Data Presentation

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

WELL NUMBER.--(See Latitude -Longitude System section on page 4.)

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

PERMIT NUMBER.--The permit number is the state permit number required for drilling wells in Maryland and Delaware. Upon completion of the well, the driller must submit a completion report which documents specific data on the construction of the well.

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

AQUIFER.--The aquifer is the geologic formation from which the well receives its water supply. Each aquifer is identified by its geologic age and its U. S. Geological Survey data base system code.

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

INSTRUMENTATION.--This provides information on the frequency of measurement of water levels and the equipment used.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--The extremes for period identify the date or dates of highest and lowest water-level measurements.

Spring Discharge Tables

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

Water-Level Tables

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

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

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

Hydrographs

The hydrographs are a graphic display of water level fluctuations over a period of time. In this report a 5-year hydrograph is shown starting October 1, 1986 through September 30, 1991. Those hydrographs which display hand measured values are referenced to land surface datum. Each measurement is indicated by a circle and connected with a dashed line to indicate the trend from one measurement to the next. The trend line should be interpreted as a general direction of water level movement. Actual water levels may deviate from this line. The trend line is not drawn if the measurements are greater than 60 days apart. Recorder data are graphed as a continuous line using the lowest water level recorded for each day. Missing data are indicated by a blank space. Missing data result from recorder malfunctions, battery or clock failures, and mechanical problems related to the response of water level movement in a well.

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 or chloride concentrations. 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 or spring number (**Well Number**). The prime identification number for wells or springs sampled is the 15-digit (**site ID**) number derived from the latitude-longitude locations. The site ID includes a two digit sequence number for use at locations having multiple sites. 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 water-quality data in this report:

PRINTED OUTPUT**REMARK**

E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National **Water Data Storage and Retrieval System (WATSTORE)** was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using **WATSTORE**. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * **Station Header File** - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- * **Daily Values File** - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperature, specific conductance, sediment concentrations, sediment discharges, and ground-water levels.
- * **Peak Flow File** - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- * **Water Quality File** - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, radio-chemical characteristics of both surface and ground water.
- * **Ground-Water Site Inventory Data Base** - Contains inventory data for more than 900,000 well, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened **WATSTORE** to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to **WATSTORE**. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to **WATSTORE**, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on **CD-ROM** discs. Beginning with the 1991 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (**CD-ROM**). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single **CD-ROM** disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of **CD-ROM** discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

Terms related to water-quality and other hydrologic data, as used in this report, are defined below. See 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.

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.

Aquifer 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.

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

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 plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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 plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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 plus or minus 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 micro-organisms, 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°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square mile (g/m^2).

Dry mass 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).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with 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.

Color unit 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.

Dissolved refers to that material in a representative water sample which passes through a 0.45 μ 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.

Dissolved-solids concentration 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.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

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.

Measuring point (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.

Micrograms per gram ($\mu\text{g/g}$) 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 ($\mu\text{g/L}$, $\mu\text{g/L}$) 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.

Milligrams per liter (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.

National 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.

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

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (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.

Parameter Code 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.

Partial-record station is a particular site where limited water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size 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).

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

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

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

Percent composition 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.

Periphyton 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.

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

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

Plankton 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.

Diatoms 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.

Primary productivity 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 [$\text{mg C}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3 \cdot \text{time})$] 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 [$\text{mg O}_2/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg O}_2/(\text{m}^3 \cdot \text{time})$] 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.

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 μm 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 constituent.

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 μm 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."

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.

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

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

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.

Total 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.

Water year in Geological Survey reports dealing with surface-water supply 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, 1985, is called the "1985 water year."

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

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

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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. 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 measurements, 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-E2. **Borehole geophysics applied to ground-water investigations**, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 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. F. 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**, 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 F. A. Kilpatrick, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. **Discharge ratings at gaging stations**, 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. **Fluorimetric 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. 53 pages.
- 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 A15. 1984. 48 pages.
- 3-A16. **Measurement of discharge using tracers**, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 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. Rathbun, N. Yotsukura, G. W. Parker, and L. L. Delong: USGS--TWRI Book 3, Chapter 18A. 1989. 52 pages.
- 3-A19. **Levels of streamflow gaging stations**, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-B1. **Aquifer-test design, observation, and data analysis**, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pgs.
- 3-B2. **Introduction to ground-water hydraulics, a programmed text 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-B7. **Analytical solutions for one-, two-, and three dimensional solute transport in ground-water systems with uniform flow**, by Eliezer J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 90 pages.
- 3-C1. **Fluvial sediment concepts**, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. **Field methods of 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. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 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 determination of organic substances in water and fluvial sediments**, by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. **Methods for collection and analysis of aquatic biological and microbiological samples**, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 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.
- 6-A2. **Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model**, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 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. Schaffranek, 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 manometers**, 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 GROUND-WATER RESOURCES IN DELAWARE

Listed below is a selection of reports on ground-water resources in Delaware which are available through the U.S. Geological Survey, Book and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

Professional Papers

Structural and stratigraphic frameworks and spatial distribution of the permeability of the Atlantic Coastal Plain, New York to North Carolina, by P.M. Brown, J.A. Miller, and F.M. Swain: U.S. Geological Survey Professional Paper No. 796. 1972.

Water resources of the Delmarva Peninsula, by E.M. Cushing, I.H. Kantrowitz, and K.R. Taylor: U.S. Geological Survey Professional Paper No. 822. 1972. 58 pages.

Hydrogeologic framework of the Coastal Plain sediments in Maryland, Delaware, and the District of Columbia, as developed for the Northern Atlantic Regional Aquifer Systems Analysis (NARASA), by D.A. Vroblesky, and W.B. Fleck: U.S. Geological Survey Professional Paper No. 1404-E. 1989. 45 pages.

Simulation of the ground-water flow system of the Coastal Plain sediments, Maryland, Delaware, and the District of Columbia, by W.B. Fleck, and D.A. Vroblesky: U.S. Geological Survey Professional Paper No. 1404-J. 1992.

Water-Supply Papers

Beach-area water supplies between Ocean City, Maryland, and Rehoboth Beach, Delaware, by T.H. Slaughter: U.S. Geological Survey Water-Supply Paper No. 1619-T. 1962.

Ground-water resources of southern New Castle County, Delaware, by D.R. Rima, O.J. Coskery, and P.W. Anderson: U.S. Geological Survey Water-Supply Paper No. 1756. 1964.

Ground-water-quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Analysis of available water-quality data through 1987, by P.A. Hamilton, and R.J. Shedlock: U.S. Geological Survey Water-Supply Paper No. 2355-B. 1989. 186 pages.

Hydrologic Investigation Atlases

Water-table, surface-drainage, and engineering soils map of the St. Georges area, Delaware, by J.K. Adams, and D.H. Boggess: U.S. Geological Survey Hydrologic Investigation Atlas No. 60. 1963. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Newark area, Delaware, by D.H. Boggess, and J.K. Adams: U.S. Geological Survey Hydrologic Investigation Atlas No. 64. 1963. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Wilmington area, Delaware, by J.K. Adams, and D.H. Boggess: U.S. Geological Survey Hydrologic Investigation Atlas No. 79. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Taylors Bridge area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 80. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Smyrna area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 81. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Middletown area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 82. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Clayton area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 83. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Sharptown area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 84. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Greenwood quadrangle, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 99. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Hickman area, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 100. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Ellendale quadrangle, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 101. 1964. 1 map. scale 1:24,000.

Water-table, surface-drainage and engineering soils map of the Milton quadrangle, Delaware, by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 102. 1964. 1 map. scale 1:24,000.

- Water-table, surface-drainage and engineering soils map of the Lewes area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 103. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Seaford West area, Delaware,**
by D.H. Boggess, J.K. Adams, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 105. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Seaford East area, Delaware,**
by D.H. Boggess, J.K. Adams, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 106. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Georgetown quadrangle, Delaware,**
by D.H. Boggess, J.K. Adams, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 107. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Harbeson quadrangle, Delaware,**
by D.H. Boggess, J.K. Adams, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 108. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Rehoboth Beach area, Delaware,**
by D.H. Boggess, J.K. Adams, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 109. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Frankford area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 119. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Trap Pond area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 120. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Millsboro area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 121. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Bethany Beach area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 122. 1964.
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- Water-table, surface-drainage and engineering soils map of the Laurel area, Delaware,**
by J.K. Adams, D.H. Boggess, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 123. 1964.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Marydel area, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 132. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Milford quadrangle, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 133. 1964-65.
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- Water-table, surface-drainage and engineering soils map of the Little Creek quadrangle, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 134. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Burrsville area, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 135. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Harrington quadrangle, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 136. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Mispillion River, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 137. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Kenton area, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 138. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Dover quadrangle, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 139. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Frederica area, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 140. 1964-65.
1 map. scale 1:24,000.
- Water-table, surface-drainage and engineering soils map of the Wyoming quadrangle, Delaware,**
by D.H. Boggess, C.F. Davis, and others: U.S. Geological Survey Hydrologic Investigation Atlas No. 141. 1964-65.
1 map. scale 1:24,000.

Water-Resources Investigations Report

Ground-water temperature of the Wyoming quadrangle in central Delaware, with application to ground-water-source heat pumps, by A.L. Hodges, Jr.: U.S. Geological Survey Water-Resources Investigations Report No. 82-53. 1983. 29 pages.

Simulated ground-water flow in the Potomac aquifers, New Castle County, Delaware, by M.M. Martin: U.S. Geological Survey Water-Resources Investigations Report No. 84-4007.

Hydrogeology, degradation of groundwater quality, and simulation of infiltration from the Delaware River into the Potomac aquifers, northern Delaware, by S.W. Phillips: U.S. Geological Survey Water-Resources Investigations Report No. 87-4185. 1988. 86 pages.

Water levels, chloride concentrations, and pumpage in the Coastal aquifers of Delaware and Maryland, by D.J. Phelan: U.S. Geological Survey Water-Resources Investigations Report No. 87-4229. 1988. 106 pages.

Open-File Reports

Availability of ground water on the Delmarva Peninsula, by A.J. Hodges, Jr.: U.S. Geological Survey Open-File Report No. 77-759. 1978. 6 pages.

Hydrologic data for the Potomac Formation in New Castle County, Delaware, by M.M. Martin: U.S. Geological Survey Open-File Report No. 81-916. 1982. 148 pages.

Ground-water-quality data for the Atlantic Coastal Plain, Delaware, Maryland, Virginia, and North Carolina, by L.L. Knobel: U.S. Geological Survey Open-File Report No. 85-154. 1986. 84 pages.

Ground-water quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia, project description, by L.J. Bachman, R.J. Shedlock, and P.J. Phillips: U.S. Geological Survey Open-File Report No. 87-112. 1988. 18 pages.

Groundwater assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Analysis of available water-quality data through 1987, by P.A. Hamilton, R.J. Shedlock, and P.J. Phillips: U.S. Geological Survey Open-File Report No. 89-34. 1990. 71 pages.

Distribution of dissolved atrazine and two metabolites in the confined aquifer, southeastern Delaware, by J.M. Denver, and M.W. Sandstrom: U.S. Geological Survey Open-File Report No. 91-88. 1992. 48 pages.

Unnumbered Reports

A summary of geologic and hydrologic data from an exploratory well drilled near Greenwood, Delaware: U.S. Geological Survey. 1971. 18 pages.

SELECTED DELAWARE GEOLOGICAL SURVEY REPORTS ON GROUND-WATER RESOURCES IN DELAWARE

Listed below is a selection of reports on ground-water resources in Delaware which are available through the Delaware Geological Survey, by writing: Publications, Delaware Geological Survey, University of Delaware, Newark, DE 19716-7501.

Report of Investigations

High-capacity test well developed at the Dover Air Force Base, by W.C. Rasmussen, J.J. Groot, and A.J. Depman: Delaware Geological Survey Report of Investigation No. 2. 1958. 36 pages.

Wells for the observation of chloride and water levels in aquifers that cross the Chesapeake and Delaware Canal, by W.C. Rasmussen, J.J. Groot, and N.H. Beamer: Delaware Geological Survey Report of Investigation No. 3. 1958. 22 pages.

Ground-water levels in Delaware, January 1962-June 1966, by K.D. Woodruff: Delaware Geological Survey Report of Investigation No. 9. 1967. 28 pages.

The Occurrence of saline ground-water in Delaware aquifers, by K.D. Woodruff: Delaware Geological Survey Report of Investigation No. 13. 1969. 45 pages.

General ground-water quality in fresh-aquifers of Delaware, by K.D. Woodruff: Delaware Geological Survey Report of Investigation No. 15. 1970. 32 pages.

Ground-water geology of the Delaware Atlantic seashore, by J.C. Miller: Delaware Geological Survey Report of Investigation No. 17. 1971. 33 pages.

Geology and ground water, University of Delaware, Newark, Delaware, by K.D. Woodruff, J.C. Miller, R.R. Jordan, N. Spoljaric and T.E. Pickett: Delaware Geological Survey Report of Investigation No. 18. 1972. 40 pages.

Configuration on the base and thickness of the unconfined aquifer in southeastern Sussex County, Delaware, by J.M. Denver: Delaware Geological Survey Report of Investigation No. 20. 1983. 12 pages.

Hydrogeology of selected sites in the greater Newark area, Delaware, by J.H. Talley: Delaware Geological Survey Report of Investigation No. 22. 1974. 61 pages.

Relation of ground water to surface water in four small basins of the Delaware Coastal Plain, by R.H. Johnston: Delaware Geological Survey Report of Investigation No. 24. 1976. 56 pages.

Hydraulic characteristics of the Piney Point aquifer and overlying confining bed near Dover, Delaware, by P.P. Leahy: Delaware Geological Survey Report of Investigation No. 26. 1976. 24 pages.

Ground-water investigations in the Delaware Piedmont for the City of Newark, 1976, by W.F. Hahn: Delaware Geological Survey Report of Investigation No. 27. 1977. 26 pages.

Well and aquifer tests, Laird Tract well field, Newark, Delaware, by J.H. Talley, and W.F. Hahn: Delaware Geological Survey Report of Investigation No. 28. 1978. 26 pages.

Digital model of the Piney Point aquifer in Kent County, Delaware, by P.P. Leahy: Delaware Geological Survey Report of Investigation No. 29. 1979. 81 pages.

Ground-water levels in Delaware, July, 1966-December, 1977, by J.H. Talley: Delaware Geological Survey Report of Investigation No. 30. 1979. 50 pages.

Hydrology of the Manokin, Ocean City, and Pokomoke aquifers of southeastern Delaware, by A.L. Hodges: Delaware Geological Survey Report of Investigation No. 38. 1983. 60 pages.

Sodium concentrations in water from the Piney Point Formation, Dover area, Delaware, by N. Spoljaric: Delaware Geological Survey Report of Investigation No. 40. 1986. 14 pages.

Hydrogeology and geochemistry of the unconfined aquifer, west-central and southwestern Delaware, by J.M. Denver: Delaware Geological Survey Report of Investigation No. 41. 1986. 100 pages.

Estimate of direct discharge of fresh ground water to Rehoboth and Indian River Bays, by A.S. Andres: Delaware Geological Survey Report of Investigation No. 43. 1987. 37 pages.

Ground-water levels in Delaware, January 1978-December 1987, by J.H. Talley: Delaware Geological Survey Report of Investigation No. 44. 1988. 58 pages.

Effects of agricultural practices and septic-system effluent on the quality of water in the unconfined aquifer in parts of eastern Sussex County, Delaware, by J.M. Denver: Delaware Geological Survey Report of Investigation No. 45. 1989. 66 pages.

Results of the coastal Sussex County, Delaware, ground-water quality survey, by A.S. Andres: Delaware Geological Survey Report of Investigation No. 49. 1991. 28 pages.

Bulletin

Ground-water problems in highway construction and maintenance, by W.C. Rasmussen, and L.B. Haigler: Delaware Geological Survey Bulletin No. 1. 1953. 24 pages.

Geology and ground-water resources of the Newark area, Delaware, by J.J. Groot, and W.C. Rasmussen: Delaware Geological Survey Bulletin No. 2. 1954. 133 pages.

Preliminary report on the geology and ground-water resources of Delaware, by I.W. Marine, and W.C. Rasmussen: Delaware Geological Survey Bulletin No. 4. 1955. 336 pages.

Ground-water resources of southern New Castle County, Delaware, by D.R. Rima, O.J. Coskery, and P.W. Anderson: Delaware Geological Survey Bulletin No. 11. 1964. 54 pages.

Geology, hydrology and geophysics of Columbia sediments in the Middletown-Odessa area, Delaware, by N. Spoljaric, and K.D. Woodruff: Delaware Geological Survey Bulletin No. 14. 1973. 78 pages.

Hydrology of the Columbia (Pleistocene) deposits of Delaware, by R.H. Johnston: Delaware Geological Survey Bulletin No. 14. 1973. 7 pages.

Open File Reports

A preliminary report on nitrate contamination of shallow ground waters in Delaware, by J.C. Miller: Delaware Geological Survey Open File Report No. 1. 1971. 7 pages.

Geologic and Hydrologic aspects of landfills, by N. Spoljaric, and J.H. Talley: Delaware Geological Survey Open File Report No. 16. 1982. 22 pages.

Ground-water availability in southern New Castle County, Delaware, by J.J. Groot, P.M. Demicco, and P.J. Cherry: Delaware Geological Survey Open File Report No. 23. 1983. 20 pages.

Saturated thickness of the water-table aquifer in southern New Castle County, Delaware, by J.J. Groot, P.M. Demicco, and P.J. Cherry: Delaware Geological Survey Open File Report No. 24. 1983. 1 map.

Saturated thickness of the Columbia Formation in southern New Castle County, Delaware, by J.J. Groot, P.M. Demicco, and P.J. Cherry: Delaware Geological Survey Open File Report No. 25. 1983. 1 map.

Salinity distribution and ground-water circulation beneath the Coastal Plain of Delaware and the adjacent Continental Shelf, by J.J. Groot: Delaware Geological Survey Open File Report No. 26. 1983. 24 pages.

Potential for ground-water recharge in the Coastal Plain of New Castle County, Delaware, sheet 1, Northern New Castle County (1983); 2 sheets, Chesapeake and Delaware Canal area (1985), by S. Petty, W.D. Miller, and B.A. Lanan; K.D. Woodruff, editor: Delaware Geological Survey Open File Report No. 28. maps with discussion. scale 1:24,000.

Source of ground-water contamination, by J.H. Talley: Delaware Geological Survey Open File Report No. 29. 1985. 20 pages.

Ground-water level and chemistry data from coastal Sussex County, Delaware, Ground-water quality survey, by A.S. Andres: Delaware Geological Survey Open File Report No. 33. 1991. 31 pages.

Methodology for mapping ground-water recharge area in Delaware's Coastal Plain, by A.S. Andres: Delaware Geological Survey Open File Report No. 34. 1991. 18 pages. (reprinted 1992).

Estimate of nitrate flux to Rehoboth and Indian River Bays, Delaware through direct discharge of ground-water, by A.S. Andres: Delaware Geological Survey Open File Report No. 35. 1992. 36 pages.

Water Level Reports

Water levels and aretsian pressures in Delaware-1952, by I.W. Marine: Delaware Geological Survey Water Level Report No. 1. 1954. 11 pages.

Water levels and aretsian pressures in Delaware-1953, by D.H. Boggess, and O.J. Coskery: Delaware Geological Survey Water Level Report No. 2. 1954. 10 pages.

Water levels and aretsian pressures in Delaware-1954, by D.H. Boggess, and O.J. Coskery: Delaware Geological Survey Water Level Report No. 3. 1955. 10 pages.

Water levels and aretsian pressures in Delaware-1955, by O.J. Coskery: Delaware Geological Survey Water Level Report No. 4. 1956. 10 pages.

Water levels in Delaware-1956, by O.J. Coskery Delaware Geological Survey Water Level Report No. 5. 1958. 21 pages.

Water levels in Delaware-1957, by O.J. Coskery Delaware Geological Survey Water Level Report No. 6. 1961. 22 pages.

Water levels in Delaware-1958, by O.J. Coskery Delaware Geological Survey Water Level Report No. 7. 1961. 17 pages.

SELECTED U.S.GEOLOGICAL SURVEY REPORTS ON GROUND-WATER RESOURCES IN MARYLAND

Listed below is a selection of reports on ground-water resources in Maryland which are available through the U.S. Geological Survey, Book and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

Professional Papers

Hydrochemical facies and ground-water flow patterns in northern part of Atlantic Coastal Plain, by William Back: U.S. Geological Survey Professional Paper No. 498-A. 1966.

Relationships of fresh and salty ground water in the northern Atlantic Coastal Plain of the United States, in Geological Survey Research, by J.E. Upson: U.S. Geological Survey Professional Paper No. 550-C. 1966. p. C235-C243.

Structural and stratigraphic frameworks and spatial distribution of the permeability of the Atlantic Coastal Plain, New York to North Carolina, by P.M. Brown, J.A. Miller, and F.M. Swain: U.S. Geological Survey Professional Paper No. 796. 1972.

Summary appraisals of the Nation's ground-water resources Mid-Atlantic Region, by Allen Sinnott, and E.M. Cushing: U.S. Geological Survey Professional Paper No. 813-I. 1976.

Water Desources of the Delmarva Peninsula, by E.M. Cushing, I.H. Kantrowitz, and K.R. Taylor: U.S. Geological Survey Professional Paper No. 822. 1973. 58 pages.

Hydrogeologic framework of the Coastal Plain sediments in Maryland, Delaware and the District of Columbia, as developed for the Northern Atlantic Region Aquifer Systems Analysis (RASA), U.S. Geological Survey, by D.A. Vroblesky, and W.B. Fleck: U.S. Geological Survey Professional Paper No. 1404-E. 1989. 45 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: U.S. Geological Survey Professional Paper No. 1404-F. 1990. 100 pages.

Simulation of the ground-water flow system in the Coastal Plain sediments, Maryland, Delaware, and the District of Columbia, by W.B. Fleck, and D.A. Vroblesky: U.S. Geological Survey Professional Paper No. 1404-J. 1992.

Water-Supply Papers

Water resources of the Baltimore area, Maryland, by E.G. Otton, R.O.R. Martin and W.H. Durum: U. S. Geological Survey Water-Supply Paper No. 1499-F. 1964.

Beach-area water supplies between Ocean City, Maryland, and Rehoboth Beach, Delaware, by T.H. Slaughter: U. S. Geological Survey Water-Supply Paper No. 1619-T. 1962.

Ground-Water-Quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Analysis of available water-quality data through 1987, by P.A. Hamilton, and R.J. Shedlock: U. S. Geological Survey Water-Supply Paper No. 2355-B. 1989. 186 pages.

Hydrologic Investigation Atlas

Water resources of southern Maryland, by J.M. Weigle, W.E. Webb, and R.A. Gardner: U.S. Geological Survey Hydrologic Investigation Atlas No. 365. 1970.

Water-Resources Investigations Report

Ground Water in the Piedmont Upland of Central Maryland, by C. A. Richardson: U. S. Geological Survey Water-Resources Investigations No. 80-18. 1980. 42 pages.

The difference between the potentiometric surface of the Magothy aquifer of September 1982 in southern Maryland, F.K. Mack, J.C. Wheeler, S.E. Curtin and D.C. Andreasen: U. S. Geological Survey Water-Resources Investigations Report No. 83-4282. 1983. 1 sheet.

The difference between the potentiometric surfaces of the Magothy aquifer of September 1975 and September 1982 in southern Maryland, F.K. Mack, J.C. Wheeler, S.E. Curtin and D.C. Andreasen: U. S. Geological Survey Water-Resources Investigations Report No. 83-4283. 1983. 1 sheet.

Nitrate in the Columbia Aquifer, Central Delmarva Peninsula, Maryland, by L. J. Bachman: U. S. Geological Survey Water-Resources Investigations Report No. 84-4322. 51 pages.

The potentiometric surface of the Magothy aquifer in southern Maryland, September 1983, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U. S. Geological Survey Water-Resources Investigations Report No. 85-4000. 1985. 1 sheet.

The potentiometric surface of the Magothy aquifer in southern Maryland, September 1984, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U. S. Geological Survey Water-Resources Investigations Report No. 85-4003. 1985. 1 sheet.

Hydrogeology and water quality of the Catoctin Mountain National Park area, Frederick County, Maryland, by T.J. Trombley: U. S. Geological Survey Water-Resources Investigations Report No. 85-4241. 1985. 41 pages.

The difference between the potentiometric surfaces of the Magothy aquifer of September 1982 and September 1984 in southern Maryland, by F.K. Mack, J.C. Wheeler, S.E. Curtin and D.C. Andreasen: U. S. Geological Survey Water-Resources Investigations Report No. 85-4337. 1985. 1 sheet.

Preliminary map showing the potentiometric surface of the Aquia aquifer in southern Maryland, September 1984, by F.K. Mack, J.C. Wheeler, S.E. Curtin and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 85-4338. 1985. 1 sheet.

Preliminary map showing the difference between the potentiometric surfaces of the Aquia aquifer of September 1982 and September 1984 in southern Maryland, by F.K. Mack, J.C. Wheeler, S.E. Curtin and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 85-4339. 1985. 1 sheet.

Reconnaissance of the groundwater, surface-water system in the Zekiah swamp Run Basin, Charles and Prince Georges Counties, Maryland, by H.T. Hopkins, G.T. Fisher, and L.J. McGreevy: U.S. Geological Survey Water-Resources Investigations Report No. 86-4097. 1986. 49 pages.

The Potentiometric surfaces of the Magothy aquifer in southern Maryland, during the fall of 1986, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4025. 1987. 1 sheet.

The Potentiometric surface of the Magothy aquifer in southern Maryland, September 1985, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4029. 1987. 1 sheet.

The Potentiometric surfaces of the Aquia aquifer in southern Maryland, during the fall of 1986, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4214. 1987. 1 sheet.

Difference between the potentiometric surfaces of the Aquia aquifer in spring of 1979 and fall of 1986 in southern Maryland, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4215. 1987. 1 sheet.

Potentiometric surfaces of the Magothy aquifer in southern Maryland, during the fall of 1986, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4016. 1987. 1 sheet.

Difference between the potentiometric surfaces of the Magothy aquifer in the fall of 1975 and fall of 1986 in southern Maryland, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 87-4217. 1987. 1 sheet.

Water Levels, chloride concentrations, and pumpage in the coastal aquifers of Maryland and Delaware, by D. J. Phelan: U.S. Geological Survey Water-Resources Investigations Report No. 87-4229. 1987. 106 pages.

Potentiometric surface of the Aquia aquifer in southern Maryland during the fall of 1987, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 89-4012. 1989. 1 sheet.

Potentiometric surface of the Magothy aquifer in southern Maryland, during the fall of 1987, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 89-4013. 1989. 1 sheet.

Hydrogeology of the Canal Creek area of Aberdeen Proving Ground Maryland, by J.P. Oliveros, and D.A. Vroblesky: U.S. Geological Survey Water-Resources Investigations Report No. 89-4013. 1989. 50 pages.

Inorganic and organic groundwater chemistry in the Canal Creek area of Aberdeen Proving Ground, Maryland, by M.M. Lora, and D.A. Vroblesky: U.S. Geological Survey Water-Resources Investigations Report No. 89-4022. 1989. 97 pages.

Change in potentiometric surfaces of the Magothy aquifer in southern Maryland, from the fall of 1986 to the fall of 1988, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 90-4037. 1990. 1 sheet.

Change in potentiometric surfaces of the Magothy aquifer in southern Maryland, from the fall of 1986 to the fall of 1988, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 90-4038. 1990. 1 sheet.

The difference between the potentiometric surface of the Magothy aquifer of September 1986 and September 1988 in southern Maryland, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 90-4039. 1990. 1 sheet.

Potentiometric surface of the Magothy aquifer in southern Maryland, during September 1988, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 90-4040. 1990. 1 sheet.

Preliminary assessment of the geologic framework, hydrogeology, and groundwater quality of the Potomac Group aquifer system, northwestern Charles County, Maryland, by S.N. Hiortdahl: U.S. Geological Survey Water-Resources Investigations Report No. 91-4059. (in press).

Potentiometric surface of the Magothy aquifer in southern Maryland, during September 1989, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 91-4093. 1991. 1 sheet.

Potentiometric surface of the Aquia aquifer in southern Maryland, September 1989, by F.K. Mack, J.C. Wheeler, C.E. Curtin, and D.C. Andreasen: U.S. Geological Survey Water-Resources Investigations Report No. 91-4094. 1991. 1 sheet.

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Environmental geohydrology folio no. 1, White Marsh 7-1/2 minute quadrangle, Maryland, by E.G. Otton: U.S. Geological Survey Open-File Report No. 74-737. 1974. 4 pages.

Areas of shallow water table, Prince Georges County, Maryland, by C.A. Richardson: U.S. Geological Survey Open-File Report No. 76-194. 1976. 2 pages. 1 plate.

Availability of ground water in Prince Georges County, Maryland, by C.A. Richardson: U.S. Geological Survey Open-File Report No. 76-197. 1976. 6 pages. 4 plates.

Preliminary analysis of geohydrologic data from test wells drilled near Chalk Point, Prince Georges County, Maryland, by F.K. Mack: U.S. Geological Survey Open-File Report No. 76-322. 1976. 31 pages.

Approximate depth to water table, Montgomery County, Maryland, by C.A. Richardson: U.S. Geological Survey Open-File Report No. 76-881. 1976. 2 pages. 1 plate.

Availability of ground water in Montgomery County, Maryland, by C.A. Richardson: U.S. Geological Survey Open-File Report No. 76-882. 1976. 6 pages. 1 plate.

Westminster quadrangle: Hydrogeologic atlas, by E.G. Otton: U.S. Geological Survey Open-File Report No. 77-793.

New Windsor quadrangle: Hydrogeologic atlas, by E. G. Otton: U.S. Geological Survey Open-File Report No. 78-769. 1978.

Map showing the potentiometric surface of the Magothy aquifer in southern Maryland, September 1977, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 78-999. 1978. 1 sheet.

Finksburg quadrangle, Maryland, by J.F. Williams III: U.S. Geological Survey Open-File Report No. 79-1536. 1979. 50 pages.

Hampstead quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-561. 1980. 50 pages.

Map showing the potentiometric surface of the Magothy aquifer in southern Maryland, September 1979, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 80-959. 1980. 1 sheet.

Hereford quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-962. 1980. 50 pages.

Reisterstown quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-1009. 1980. 55 pages.

Lineboro quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-1010. 1980. 50 pages.

Ellicott City quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-1011. 1980. 56 pages.

New Freedom quadrangle, Maryland: Hydrogeology, by M.T. Duigon: U.S. Geological Survey Open-File Report No. 80-1012. 1980. 54 pages.

Hydrogeologic Atlas, Union Bridge and Woodsboro quadrangles, Carroll County, Maryland, by J.M. Weigle: U.S. Geological Survey Open-File Report No. 80-1013. 1981. 10 pages.

Hydrogeologic Atlas, Taneytown and Emmitsburg quadrangles, Carroll County, Maryland, by J.M. Weigle: U.S. Geological Survey Open-File Report No. 80-1014. 1981. 40 pages.

Hydrogeologic Atlas, Littlestown quadrangle, Carroll County, Maryland, by J.M. Weigle: U.S. Geological Survey Open-File Report No. 80-1015. 1981. 44 pages.

Phoenix quadrangle, Baltimore and Harford counties, Maryland: Hydrogeology, by E.G. Otton: U.S. Geological Survey Open-File Report No. 81-65. 1982. 46 pages.

Map showing the potentiometric surface of the Magothy aquifer in southern Maryland, September 1979, by F.J. Chapelle, D.D. Drummond, and Tracey Curley: U.S. Geological Survey Open-File Report No. 81-416. 1982. 1 sheet.

Map showing how the potentiometric surface of the Magothy aquifer of August 1980 differed from the potentiometric surface of September 1977, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 81-631. 1982. 1 sheet.

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Map showing the potentiometric surface of the Magothy aquifer, in southern Maryland, August 1980, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 81-633. 1982. 1 sheet.

Map showing the potentiometric surface of the Magothy aquifer, in southern Maryland, September 1981, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 82-257. 1983. 1 sheet.

The difference between the potentiometric surface of the Magothy aquifer of September 1975, and September 1981 in southern Maryland, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 82-339. 1983. 1 sheet.

Preliminary analysis of geohydrologic data from the test wells drilled near Chester, on Kent Island, Queen Annes County, Maryland, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 82-854. 1983. 33 pages.

Water level declines in the Magothy aquifer in southern Maryland related to increase in pumpage, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 82-919. 1983. 29 pages.

The difference between the potentiometric surface of the Aquia aquifer of September 1975 and September 1981 in southern Maryland, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 83-339. 1984. 1 sheet.

Map showing the potentiometric surface of the Aquia aquifer in southern Maryland, September 1982, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 83-929. 1984. 1 sheet.

Preliminary map showing the difference between the potentiometric surfaces of the Aquia aquifer of April 1979 and September 1982 in southern Maryland, by F.K. Mack, J.C. Wheeler, and S.E. Curtin: U.S. Geological Survey Open-File Report No. 83-930. 1984. 1 sheet.

Hydrologic data: South branch Casselman River, Garrett County, and Marsh Run, Washington County, Maryland, by J.T. Hilleary: U.S. Geological Survey Open-File Report No. 84-426. 1985. 63 pages.

Ground-water-quality data for the Atlantic Coastal Plain, Delaware, Maryland, Virginia, and North Carolina, by L.L. Knobel: U.S. Geological Survey Open-File Report No. 85-154. 1986. pp. 42-55.

Ground-water quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia, by L.J. Bachman, R.J. Shedlock, and P.J. Phillips: U.S. Geological Survey Open-File Report No. 87-112. 1988. 18 pages.

Groundwater use in the Coastal Plain of Maryland, 1900-1980, by J.C. Wheeler, and F.W. Wilde: U.S. Geological Survey Open-File Report No. 87-540. 1988. 173 pages.

Maryland and the District of Columbia ground-water quality, by J.C. Wheeler: U.S. Geological Survey Open-File Report No. 87-0730. 1988. 10 pages.

Ground-water quality assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia, project description, by L.J. Bachman, R.J. Shedlock, and P.J. Phillips: U.S. Geological Survey Open-File Report No. 87-112. 18 pages.

Water withdrawal and use in Maryland, by J.C. Wheeler: U.S. Geological Survey Open-File Report No. 88-714. 1989. 30 pages.

Groundwater assessment of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Analysis of available water-quality data through 1987, by P.A. Hamilton, R.J. Shedlock, and P.J. Phillips: U.S. Geological Survey Open-File Report No. 89-34. 1990. 71 pages.

Hydrogeologic and chemical data for the O-Field area, Aberdeen Proving Ground, Maryland, by D.A. Vroblesky, and P.R. Nemoff: U.S. Geological Survey Open-File Report No. 89-238. 1990. 70 pages.

Hydrogeologic data for Canal Creek area of Aberdeen Proving Ground, Maryland, by J.P. Oliveros, and Patrice Gernhardt: U.S. Geological Survey Open-File Report No. 89-387. 1990. 71 pages.

Hydrogeologic data for Carroll Island, Aberdeen Proving Ground, Maryland, by L.K. Ham, L.N. Sears, S.W. Phillips, and F.T. Tenbus: U.S. Geological Survey Open-File Report No. 89-388. 1990. 105 pages.

Groundwater, surface-water, and bottom-sediments effects of selected remedial actions in the O-Field area of Aberdeen Proving Ground, Maryland, by D.A. Vroblesky, M.M. Lorah, and J.P. Oliveros: U.S. Geological Survey Open-File Report No. 89-399. 1990. 162 pages.

Study approach for the hydrogeologic assessment of Carroll Island and Graces Quarters, Aberdeen Proving Ground, Maryland, by F.J. Tenbus, and S.W. Phillips: U.S. Geological Survey Open-File Report No. 90-181. 1991. 68 pages.

Unnumbered Reports

Geophysical cross-section of the Cretaceous sediments of southern Maryland: U.S. Geological Survey. 1968. 46 pages.

Preliminary results of an exploratory water well at Ocean City, Maryland: U.S. Geological Survey. 1969. 18 pages.

Geologic and hydrologic data from a test well drilled near Chestertown, Maryland: U.S. Geological Survey. 1971. 20 pages.

Environmental geohydrology, Cockeysville quadrangle 6, by E.G. Otton: U.S. Geological Survey. 1975. 4 pages.

Miscellaneous Maps

Water resources of Southern Maryland, by J.M. Weigle, W.E. Webb, and R.A. Gardner: U.S. Geological Survey Miscellaneous Maps No. HA-365. 1970. 3 sheets.

SELECTED MARYLAND GEOLOGICAL SURVEY REPORTS ON GROUND-WATER RESOURCES IN MARYLAND

Listed below is a selection of reports on ground-water resources in Maryland which are available through the Maryland Geological Survey, 2300 St. Paul Street, Baltimore, Maryland 21218.

Basic Data Reports

Records of wells and springs in Baltimore County, Maryland, by C.P. Laughlin: Maryland Geological Survey Basic Data Report No. 1. 1966. 406 pages.

Records of wells and springs, chemical analysis, and selected well logs in Charles County, Maryland, by T.H. Slaughter and C.P. Laughlin: Maryland Geological Survey Basic Data Report No. 2. 1966. 93 pages.

Hydrogeologic data from the James Island State Park test well (1,514 Feet), Somerset County, Maryland, by H.J. Hansen: Maryland Geological Survey Basic Data Report No. 3. 1967. 24 pages.

Southern Maryland - Records of selected wells, water levels, and chemical analysis of water, by J.M. Weigle and W.F. Webb: Maryland Geological Survey Basic Data Report No. 4. 1970. 48 pages.

Deep wells of Maryland, by Jonathan Edwards, Jr.: Maryland Geological Survey Basic Data Report No. 5. 1970. 160 pages.

Worcester County ground-water information: Well records, chemical quality data, and pumpage, by R.C. Lucas: Maryland Geological Survey Basic Data Report No. 6. 1972. 90 pages.

Harford County ground-water information: Selected well records, chemical quality data, and pumpage, by L.J. Nutter and M.J. Smigaj: Maryland Geological Survey Basic Data Report No. 7. 1975. 89 pages.

Anne Arundel County ground-water information: Selected well records, chemical-quality data, pumpage, appropriation data, and selected well logs, by R.C. Lucas: Maryland Geological Survey Basic Data Report No. 8. 1976. 149 pages.

Maryland ground-water information: chemical quality data, by R.S. Woll: Maryland Geological Survey Basic Data Report No. 10. 1978. 125 pages.

Garrett County water-well records, chemical-quality data, ground-water use, coal test-hole, and surface-water data, by L.J. Nutter, L.L. Knobel, and M.J. Smigaj, **with a section on gas-well records compiled** by K.A. Schwarz, and Jonathan Edwards, Jr.: Maryland Geological Survey Basic Data Report No. 11. 1980. 102 pages.

Carroll County ground-water information: Well records, chemical-quality data, by J.T. Hilleary, and J.M. Weigle: Maryland Geological Survey Basic Data Report No. 12. 1981. 252 pages.

Prince George's County ground-water information: Well records, chemical-quality data, pumpage, appropriation data, observation well records, and well logs, by M.D. Tompkins: Maryland Geological Survey Basic Data Report No. 13. 1983. 160 pages.

Records of selected wells, Calvert and St. Mary's Counties, Maryland, by D.D. Drummond: Maryland Geological Survey Basic Data Report No. 14. 1984. 117 pages.

Ground-water and surface-water data Frederick County, Maryland, by J.R. Dine, M.D. Tompkins, and M.T. Duigon: Maryland Geological Survey Basic Data Report No. 15. 1985. 240 pages.

Hydrologic data for Cecil County, Maryland, by R. E. Willey, R. A. McGregor, J. de Grouchy, and M.D. Tompkins: Maryland Geological Survey Basic Data Report No. 16. 1987. 150 pages.

Ground-water levels from the Maryland observation-well network, 1943-86, by M.J. Smigaj, and R.G. Davis, Jr: Maryland Geological Survey Basic Data Report No. 17. 1987. 234 pages.

Ground-water and surface-water data for Washington County, Maryland, by M.T. Duigon, J.R. Dine, and M.D. Tompkins: Maryland Geological Survey Basic Data Report No. 18. 1989. 273 pages.

Bulletins

Geology and ground-water resources of the Baltimore Area, by R.R. Bennett, and R.R. Meyer: Department of Geology, Mines and Water Resources Bulletin No. 4. 1952. 573 pages.

Water resources of Anne Arundel County, by V.R. Bennion and J.W. Brookhart: Department of Geology, Mines and Water Resources Bulletin No. 5. 1949. 149 pages.

Water resources of Calvert County, by V.R. Bennion, D.F. Dougherty, and R.M. Overbeck: Department of Geology, Mines and Water Resources Bulletin No. 8. 1951. 100 pages.

Geology and water resources of Prince George's County, by C.W. Cooke, R.O.R. Martin, and Gerald Meyer: Department of Geology, Mines and Water Resources Bulletin No. 10. 1952. 270 pages.

Water resources of St. Mary's County, by R.O.R. Martin, and H.F. Ferguson: Department of Geology, Mines and Water Resources Bulletin No. 11. 1953. 195 pages.

Geology and water resources of Garrett County, by T.W. Amsden, R.M. Overbeck, and R.O.R. Martin: Department of Geology, Mines and Water Resources Bulletin No. 13. 1954. 349 pages.

Water resources of Howard and Montgomery Counties, by R.J. Dingman, Gerald Meyer, and R.O.R. Martin: Department of Geology, Mines and Water Resources Bulletin No. 14. 1954. 260 pages.

Ground-water resources of the southern Maryland Coastal Plain, by E.G. Otton: Department of Geology, Mines and Water Resources Bulletin No. 15. 1955. 347 pages.

Water resources of Somerset, Wicomico, and Worcester Counties, by W.C. Rasmussen, T.H. Slaughter, and A.E. Hulme, **with a section on the Salisbury area,** by R.R. Meyer and R.R. Bennett: Department of Geology, Mines and Water Resources Bulletin No. 16. 1955. 535 pages.

Water resources of Baltimore and Harford Counties, by R.J. Dingman, H.F. Ferguson, and R.O.R. Martin: Department of Geology, Mines and Water Resources Bulletin No. 17. 1956. 465 pages.

Water resources of Caroline, Dorchester, and Talbot Counties, by W.C. Rasmussen, T.C. Slaughter, A.E. Hulme, and J.J. Murphy: Department of Geology, Mines and Water Resources Bulletin No. 18. 1957. 465 pages.

Water resources of Cecil, Kent, and Queen Anne's Counties, by R.M. Overbeck, T.C. Slaughter, and A.E. Hulme: Department of Geology, Mines and Water Resources Bulletin No. 21. 1958. 478 pages.

Water resources of Carroll and Frederick Counties, by Gerald Meyer and R.M. Beall: Department of Geology, Mines and Water Resources Bulletin No. 22. 1958. 355 pages.

Water resources of Allegany and Washington Counties, by T.H. Slaughter, and J.M. Darling: Department of Geology, Mines and Water Resources Bulletin No. 24. 1962. 408 pages.

Ground-water supplies for industrial and urban development in Anne Arundel County, by F.K. Mack, and C.A. Richardson: Department of Geology, Mines and Water Resources Bulletin No. 26. 1962. 90 pages.

Ground water in Prince George's County, by F.K. Mack: Maryland Geological Survey Bulletin No. 29. 1966 101 pages.

Availability of ground water in Charles County, by T.H. Slaughter, E.G. Otton, and C.P. Laughlin: Maryland Geological Survey Bulletin No. 30. 1968. 101 pages.

Geohydrology of channel-fill deposits near Salisbury, Maryland, by F.K. Mack, W.O. Thomas, and J.M. Weigle: Maryland Geological Survey Bulletin No. 31. 1972. 124 pages.

Ground-water resources in Harford County, by L.J. Nutter: Maryland Geological Survey Bulletin No. 33. 1977. 44 pages.

Water resources of Frederick County, Maryland, by M.T. Duigon, and J.R. Dine: Maryland Geological Survey Bulletin No. 33. 1987. 102 pages.

Water resources and estimated effects of ground-water development, Cecil County, Maryland, by E.G. Otton, R.E. Willey, R.A. McGregor, Grufron Achmad, S.N. Hiortdahl, and J.M. Gerhart: Maryland Geological Survey Bulletin No. 34. 1988. 133 pages.

Hydrogeology and ground-water of Somerset County, Maryland, by W.H. Werkheiser: Maryland Geological Survey Bulletin No. 35. 1990. 156 pages.

Water resources of Washington County, by M.T. Duigon, and J.R. Dine: Maryland Geological Survey Bulletin No. 36. 1991. 126 pages.

Report of Investigations

Water resources of the Salisbury area, Maryland, by D.H. Boggess, and S.G. Heidel: Maryland Geological Survey Report of Investigations No. 3. 1968. 69 pages.

Ground-water occurrence in the Maryland Piedmont, by L.J. Nutter, and E.G. Otton: Maryland Geological Survey Report of Investigations No. 10. 1969. 56 pages.

Water resources of Dorchester and Talbot Counties, Maryland with special emphasis on the ground-water potential of the Cambridge and Easton areas, by F.K. Mack, W.E. Webb, and R.A. Gardner: Maryland Geological Survey Report of Investigations No. 17. 1971. 107 pages.

Solid-waste disposal in the geohydrologic environment of Maryland, by E.G. Otton: Maryland Geological Survey Report of Investigations No. 18. 1972. 59 pages.

Hydrogeology of the carbonate rocks, Frederick and Hagerstown valleys, Maryland, by L.J. Nutter: Maryland Geological Survey Report of Investigations No. 19. 1973. 70 pages.

Hydrogeology of the formation and neutralization of acid water draining from underground coal mines of western Maryland, by E.F. Holiday, and S.W. McKenzie: Maryland Geological Survey Report of Investigations No. 20. 1973. 50 pages.

An evaluation of the Magothy Aquifer in the Annapolis Area, Maryland, by F.K. Mack: Maryland Geological Survey Report of Investigations No. 22. 1974. 75 pages.

Availability of fresh ground water in northern Worcester County, Maryland, with Special Emphasis on the Ocean City area, by J.M. Weigle: Maryland Geological Survey Report of Investigations No. 24. 1974. 64 pages.

Hydrogeology of the Triassic Rocks of Maryland, by L.J. Nutter: Maryland Geological Survey Report of Investigations No. 26. 1975. 37 pages.

Digital simulation and prediction of water levels in the Magothy aquifer in southern Maryland, by F.K. Mack, and R.J. Mandle: Maryland Geological Survey Report of Investigations No. 28. 1977. 42 pages.

Simulated changes in water level in the Piney Point aquifer in Maryland, by J.F. Williams: Maryland Geological Survey Report of Investigations No. 31. 1979. 50 pages.

A quasi three-dimensional finite-difference ground-water flow model with a field application, by Grufron Achmad, and J.M. Weigle: Maryland Geological Survey Report of Investigations No. 33. 1979. 58 pages.

The Availability in ground water in western Montgomery County, Maryland, by E.G. Otton: Maryland Geological Survey Report of Investigations No. 34. 1981. 76 pages.

Geohydrology of the fresh aquifer system in the vicinity of Ocean City, Maryland with a section on simulated Water-Level Changes, by J.M. Weigle, and Grufron Achmad: Maryland Geological Survey Report of Investigations No. 37. 1982. 55 pages.

Hydrogeology, digital simulation, and geochemistry of the Aquia and Piney Point-Wanjemoy aquifer system in Southern Maryland, by F.H. Chapelle, and D.D. Drummond: Maryland Geological Survey Report of Investigations No. 38. 1983. 100 pages.

Hydrogeology of the upper Chesapeake Bay area Maryland, with emphasis on aquifers of the Potomac Group, by E.G. Otton, and R.J. Mandle: Maryland Geological Survey Report of Investigations No. 39. 1984. 62 pages.

The Columbia aquifer of the Eastern Shore of Maryland. Part 1: Hydrogeology, by L.J. Bachman, 1984. 34 pages. **Part 2: Selected water-well records, chemical analysis, water-level measurements, lithologic logs, and geophysical logs**, by J.M. Wilson, 1984. 110 pages: Maryland Geological Survey Report of Investigations No. 40.

First report on the hydrologic effects of underground coal mining in southern Garrett County, Maryland, by M.T. Duigon, and M.J. Smigaj: Maryland Geological Survey Report of Investigations No. 41. 1985. 99 pages.

Hydrologic and mining data from an area of underground coal mining in Garrett County, Maryland, by S. N. Hiortdahl: Maryland Geological Survey Report of Investigations No. 41-A. 1988. 81 pages.

Maryland springs - Their physical, thermal, and chemical characteristics, by E. G. Otton, and J. T. Hilleary: Maryland Geological Survey Report of Investigations No. 44. 1985. 151 pages.

Hydrogeology, digital solute-transport simulation, and geochemistry of the Lower Cretaceous aquifer system near Baltimore, Maryland, by F.H. Chapelle: Maryland Geological Survey Report of Investigations No. 43. 1985. 120 pages.

Simulation of ground-water flow and base flow in weathered crystalline rock, Upper Cattail Creek, Howard County, Maryland, by R.E. Willey, and Grufron Achmad: Maryland Geological Survey Report of Investigations No. 45. 1986. 68 pages.

Evaluation of the water-supply potential of aquifers in the Potomac Group of Anne Arundel County, Maryland, by F.K. Mack, and Grufron Achmad: Maryland Geological Survey Report of Investigations No. 46. 1986. 111 pages.

Hydrogeology, brackish-water occurrence, and simulation of flow and brackish-water movement in the Aquia aquifer in the Kent Island area, Maryland, by D.D. Drummond: Maryland Geological Survey Report of Investigations No. 51. 1988. 131 pages.

Geology and hydrologic assessment of Coastal Plain aquifers in the Waldorf area, Charles County, Maryland, by J.M. Wilson, and W.B. Fleck: Maryland Geological Survey Report of Investigations No. 53. 1990. 138 pages.

Simulated hydrologic effects of the development of the Patapsco aquifer system in Glen Burnie, Anne Arundel County, Maryland, by Grufron Achmad: Maryland Geological Survey Report of Investigations No. 54. 1991. 96 pages.

Open-File Reports

Hydrogeology

Availability of ground water for urban and industrial development in upper Montgomery County, Maryland, by P.M. Johnston, and E.G. Otton: Maryland Geological Survey Open-File Report No. 63-02-1. 1963. 47 pages.

Ground-water aquifers and mineral commodities of Maryland, Prepared in cooperation with the Maryland Department of State Planning: Maryland Geological Survey Open-File Report No. 69-06-1. 1969. 36 pages.

A User's guide for the Artesian aquifers of the Maryland Coastal Plain. Part One: Introductory definitions and examples. 86 pages. Part Two: Aquifer characteristics, by H.J. Hansen: Maryland Geological Survey Open-File Report No. 72-02-01. 1972. 123 pages.

Geologic and hydrologic data from two core holes drilled through the Aquia Formation (Eocene-Paleocene) in Prince George's and Queen Anne's Counties, Maryland, by H.J. Hansen: Maryland Geological Survey Open-File Report No. 77-02-1. 1977. 77 pages.

Waste Gate Formation. Part One: Hydrogeologic framework and potential utilization of the brine aquifers of the Waste Gate Formation, a new unit of the Potomac Group underlying the Delmarva Peninsula, by H.J. Hansen, 1982. 50 pages. **Part Two: Palynology of the continental Cretaceous sediments, Crisfield geothermal test well, eastern Maryland**, by J.A. Doyle: Maryland Geological Survey Open-File Report No. 82-02-1. 1982. 37 pages.

Summary of hydrogeologic data from a deep (2,678 Ft.) well at Lexington Park, St. Mary's County, Maryland, by H.J. Hansen, and J.M. Wilson: Maryland Geological Survey Open-File Report No. 84-02-1. 1984. 61 pages.

Stratigraphy, hydrogeology, and water chemistry of the Cretaceous aquifers of the Waldorf/La Plata Area, Charles County, Maryland, by J.M. Wilson: Maryland Geological Survey Open-File Report No. 86-02-2. 1986. 66 pages.

Summary of hydrogeologic data from a test well (1,725 Ft.) drilled in Tuckahoe State Park, Queen Anne's County, Maryland, by D.C. Andreasen, and H.J. Hansen: Maryland Geological Survey Open-File Report No. 87-02-3. 1987. 47 pages.

Selected geohydrologic characteristics of the Patapsco aquifers at Chalk Point, Prince George's County, by F.K. Mack: Maryland Geological Survey Open-File Report No. 88-02-4. 1988. 36 pages.

Hydrogeology and stratigraphy of a 1,515-Foot test Well drilled near Princess Anne, Somerset County, Maryland, by H.J. Hansen, and J.M. Wilson: Maryland Geological Survey Open-File Report No. 91-02-5. 1990. 59 pages.

Geohydrologic data for the Coastal Plain sediments underlying Broadneck peninsula, Anne Arundel County, Maryland, by F.K. Mack, and D.C. Andreasen: Maryland Geological Survey Open-File Report No. 92-02-6. 1991. 76 pages.

Information Circulars

The Electric Log: Geophysic's contribution to ground-water prospecting and evaluation, by H.J. Hansen: Maryland Geological Survey Information Circular No. 4. 1967. 11 pages.

Well yields in the bedrock aquifers of Maryland, by L.J. Nutter: Maryland Geological Survey Information Circular No. 16. 1974. 24 pages.

A digital simulation model of the Aquia aquifer in southern Maryland, by G.W. Kapple, and H.J. Hansen: Maryland Geological Survey Information Circular No. 20. 1976. 34 pages.

Hydrogeologic characteristics of the Waste Gate Formation, A new subsurface unit of the Potomac Group underlying the eastern Delmarva Peninsula, by H.J. Hansen: Maryland Geological Survey Information Circular No. 39. 1984. 24 pages.

Maps

Quadrangle Atlases

Cockeysville Quadrangle: Geology, hydrology, and mineral resources, by E.G. Otton, E.T. Cleaves, W.P. Crowley, K.R. Kuff, and Jurgen Reinhardt: Maryland Geological Survey Quadrangle Atlas No. 3. 1975. 8 maps.

White Marsh Quadrangle: Geology, hydrology, and mineral resources, by E.T. Cleaves, K.R. Kuff, W.P. Crowley, and Jurgen Reinhardt: Maryland Geological Survey Quadrangle Atlas No. 4. 1979. 3 maps. Five other maps for this atlas are available for inspection at MGS: by E.T. Cleaves, and E.G. Otton.

Jarrettsville Quadrangle hydrogeology, by L.J. Nutter: Maryland Geological Survey Quadrangle Atlas No. 5. 1977. 4 maps.

Bel Air Quadrangle hydrogeology, by L.J. Nutter: Maryland Geological Survey Quadrangle Atlas No. 6. 1977. 4 maps.

Hydrogeologic Atlas, Reisterstown Quadrangle, Baltimore County, Maryland, by M.T. Duigon, and W.P. Crowley: Maryland Geological Survey Quadrangle Atlas No. 7. 1983. 6 maps.

Hydrogeologic Atlas Westminster Quadrangle, Carroll County, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 9. 1979. 5 maps.

Hydrogeologic Atlas Winfield Quadrangle, Carroll County, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 10. 1980. 5 maps.

Hydrogeologic Atlas New Windsor Quadrangle, Carroll County, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 11. 1980. 5 maps.

Hydrogeologic Atlas Hampstead Quadrangle, Carroll County, Maryland, by M.T. Duigon: Maryland Geological Survey Quadrangle Atlas No. 12. 1981. 5 maps.

Hydrogeologic Atlas Lineboro Quadrangle, Carroll County, Maryland, by M.T. Duigon, E.G. Otton, and J.T. Hilleary: Maryland Geological Survey Quadrangle Atlas No. 13. 1981. 5 maps.

Hydrogeologic Atlas Littlestown Quadrangle, Carroll County, Maryland, by J.M. Weigle, and J.T. Hilleary: Maryland Geological Survey Quadrangle Atlas No. 14. 1981. 5 maps.

Hydrogeologic Atlas Manchester Quadrangle, Carroll County, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 15. 1981. 5 maps.

Hydrogeologic Atlas Taneytown-Emmitsburg Quadrangles, Carroll County, Maryland, by J.M. Weigle: Maryland Geological Survey Quadrangle Atlas No. 16. 1981. 5 maps.

Hydrogeologic Atlas Union Bridge-Woodsboro Quadrangles, Carroll County, Maryland, by J.M. Weigle: Maryland Geological Survey Quadrangle Atlas No. 17. 1981. 5 maps.

Hydrogeologic Atlas Hereford Quadrangle, Baltimore County, Maryland, by M.T. Duigon, and J.T. Hilleary: Maryland Geological Survey Quadrangle Atlas No. 18. 1981. 5 maps.

Hydrogeologic Atlas Finksburg Quadrangle, Carroll County, Maryland, by J.F. Williams: Maryland Geological Survey Quadrangle Atlas No. 19. 1981. 5 maps.

Hydrogeologic Atlas New Freedom Quadrangle, Baltimore County, Maryland, by M.T. Duigon: Maryland Geological Survey Quadrangle Atlas No. 20. 1983. 5 maps.

Hydrogeologic Atlas Ellicott City Quadrangle, Baltimore and Howard Counties, Maryland, by M.T. Duigon: Maryland Geological Survey Quadrangle Atlas No. 21. 1983. 5 maps.

Hydrogeologic Atlas Phoenix Quadrangle, Baltimore and Harford Counties, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 22. 1983. 5 maps.

Hydrogeologic Atlas Norrisville Quadrangle, Baltimore and Harford Counties, Maryland, by E.G. Otton: Maryland Geological Survey Quadrangle Atlas No. 23. 1983. 5 maps.

SELECTED U.S.GEOLOGICAL SURVEY REPORTS ON GROUND-WATER RESOURCES IN WASHINGTON D.C.

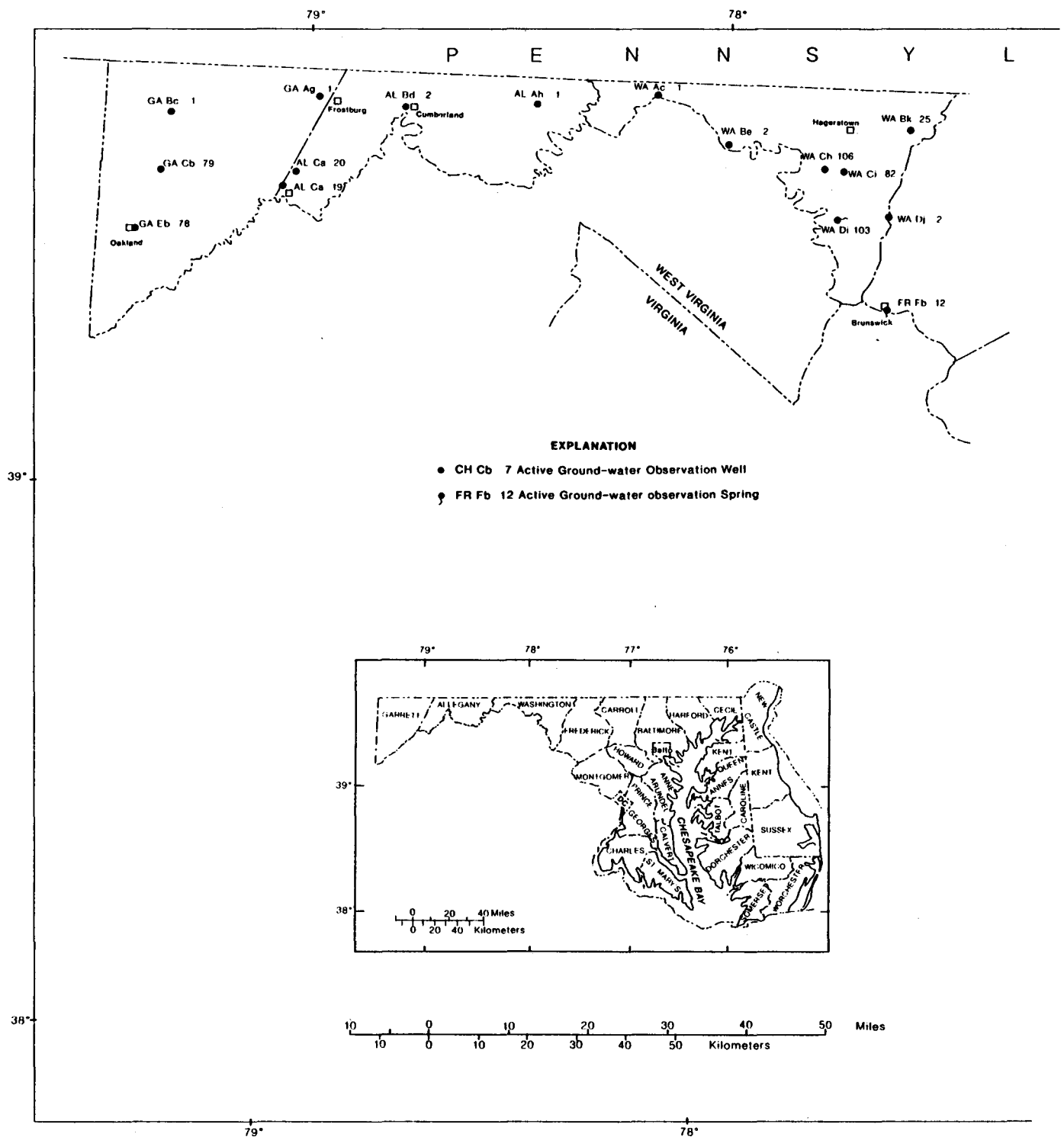
Listed below is a selection of reports on ground-water resources in Washington, D. C. which are available through the U.S. Geological Survey, Book and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

Water-Supply Paper

Geology and ground-water resources of Washington, D.C., and vicinity, by P. M. Johnston, with a section on Chemical quality of the water, by D. E. Weaver and Leonard Siu: U.S. Geological Survey Water-Supply Paper 1776. 1964. 133 pages.

Open-File Report

Maryland and the District of Columbia ground-water quality, by J.C. Wheeler: U.S. Geological Survey Open-File Report No. 87-0730. 1988. 10 pages.

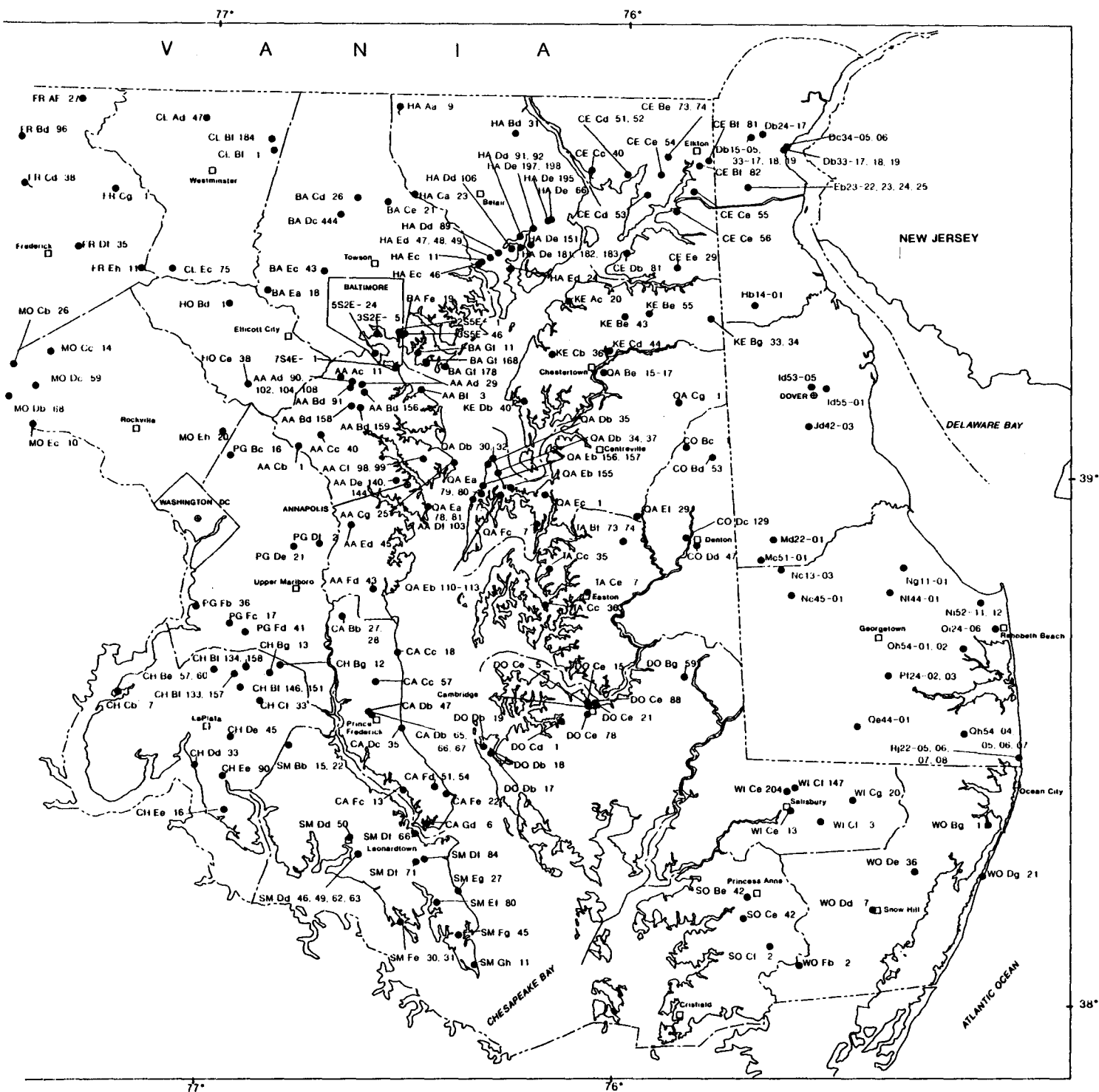


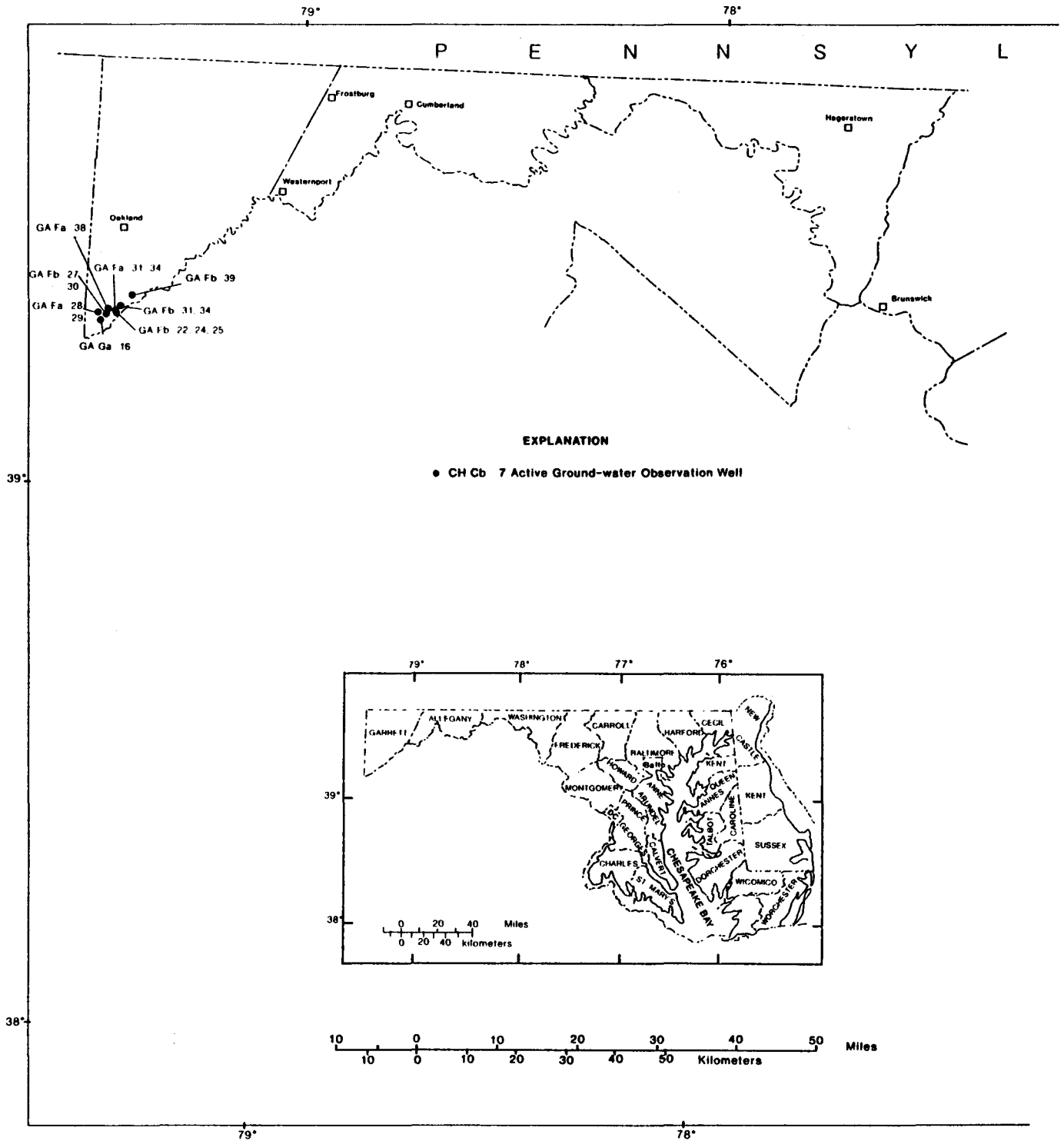
Base map modified from U.S. Geological Survey 1:500,000

Figure 3. Location of Maryland and Delaware ground-water network observation wells and springs.

WATER RESOURCES DATA - MARYLAND AND DELAWARE, 1992

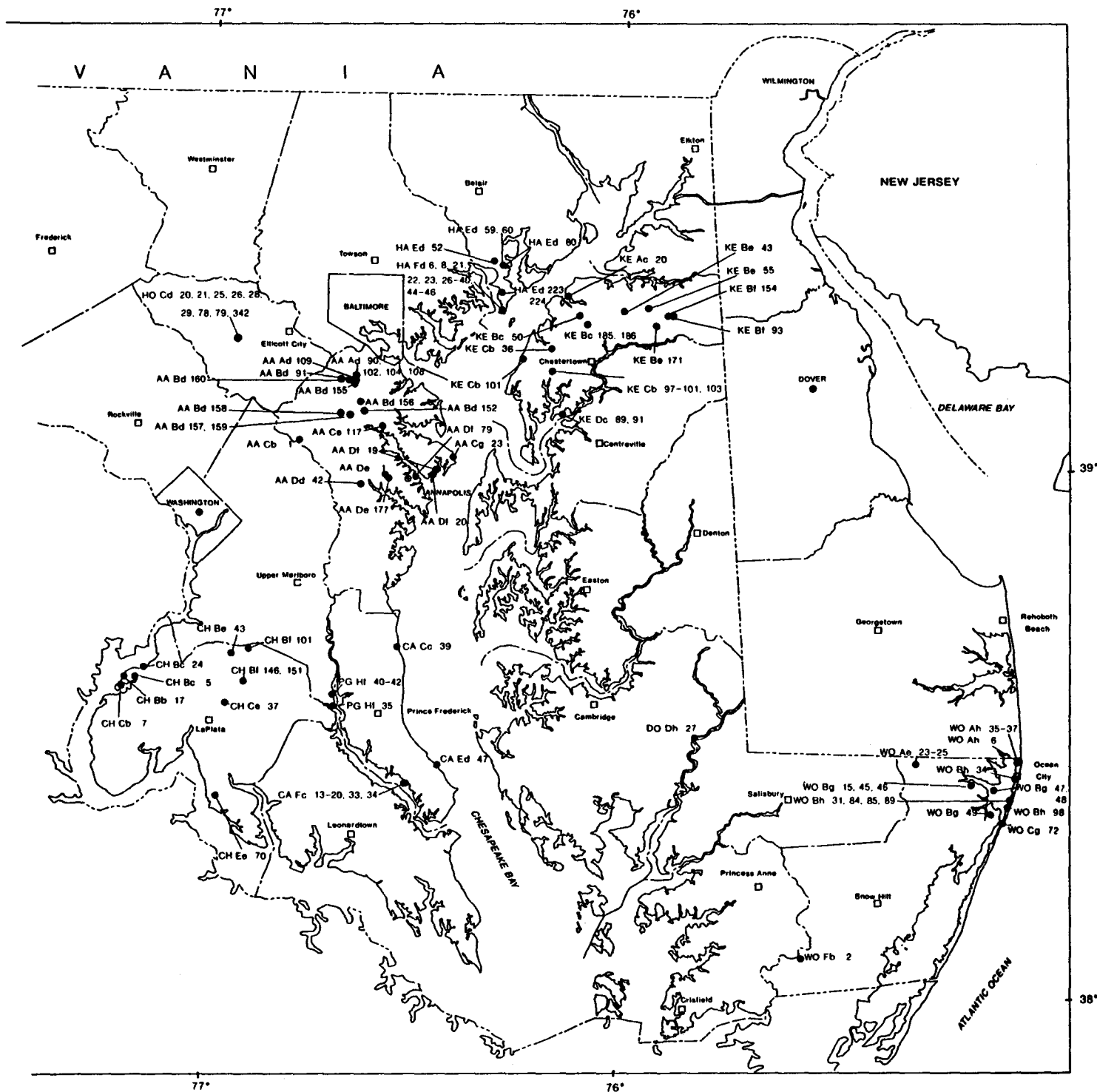
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Base map modified from U.S. Geological Survey 1:500,000

Figure 4. Location of Maryland project ground-water observation wells.



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER SPRING DISCHARGE

MARYLAND--Continued

FREDERICK COUNTY

SPRING NUMBER.--FR Cd 38. SITE ID.--393218077271001.

LOCATION.--Lat 39°32'18", long 77°27'10", Hydrologic Unit 02070009, at Fish Hatchery, near Lewestown.

Owner: Maryland Department of Natural Resources.

AQUIFER.--Weaverton Formation of Lower Cambrian age. Aquifer code: 377WVRN.

SPRING IMPROVEMENTS.--Concrete block shed with pipeline.

INSTRUMENTATION.--Monthly volumetric measurements by USGS personnel.

DATUM.--Elevation of land surface is 820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

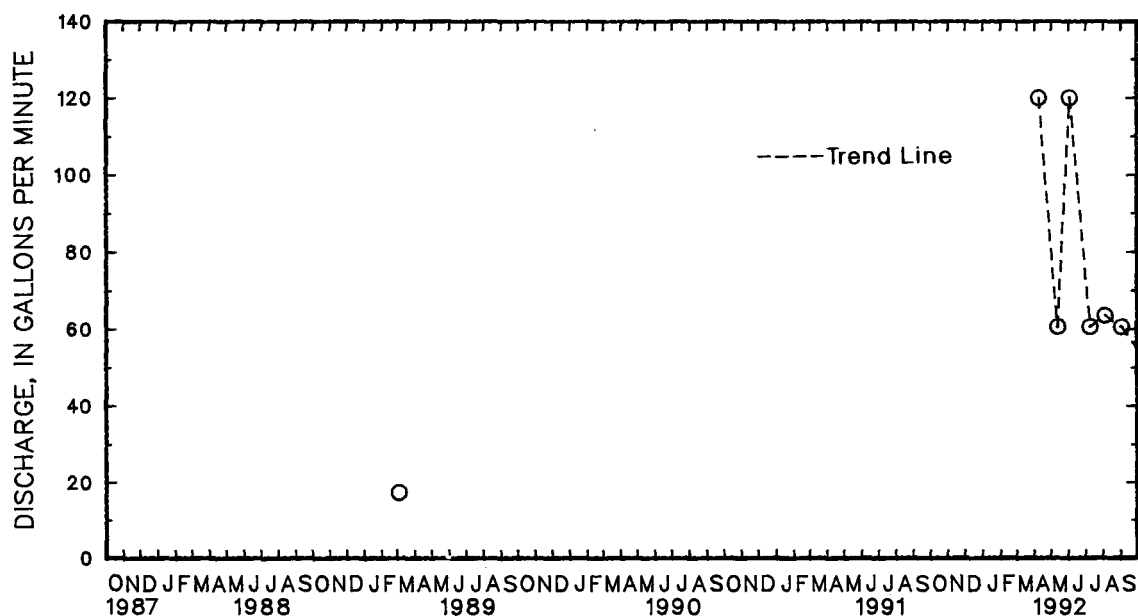
REMARKS.--Maryland Water-Level and Water Quality Network observation spring. Temperatures are available.

PERIOD OF RECORD.--Nov. 1980, March 1989 and April 1991, to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 120 gal/min, April 9, 1992 and June 3, 1992;
minimum discharge measured, 17 gal/min, March 3, 1989.

DISCHARGE, IN GALLONS PER MINUTE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
APR 9	120.0	JUN 3	120.0	JUL 9	60.0	AUG 4	63.0	SEP 3	60.0
MAY 12	60.0								
WATER YEAR 1992	MAXIMUM	120.0	APR 9, 1992,	JUN 3, 1992,	MINIMUM	60.0	MAY 12, 1992,	JUN 3, 1992,	SEP 3, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER SPRING DISCHARGE

MARYLAND--Continued

FREDERICK COUNTY--Continued

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

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

Owner: Town of Brunswick.

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

SPRING IMPROVEMENTS.--2 in. outflow pipe.

INSTRUMENTATION.--Monthly volumetric measurements by USGS personnel.

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

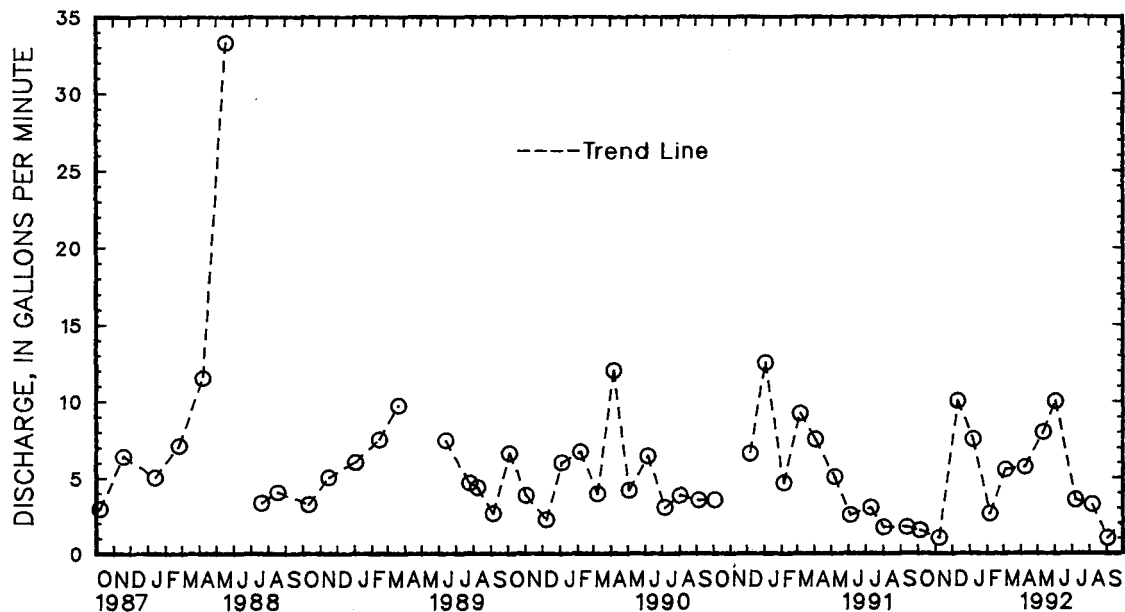
REMARKS.--Maryland Water-Level and Water Quality Network observation spring. Temperatures are available.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 36.0 gal/min, April 30, 1964;
minimum discharge measured, 0.8 gal/min, Oct. 1, 1986.

DISCHARGE, IN GALLONS PER MINUTE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 4	1.5	JAN 7	7.5	APR 8	5.7	JUN 2	10.0	AUG 6	3.2
NOV 7	1.0	FEB 6	2.6	MAY 11	8.0	JUL 7	3.5	SEP 2	1.0
DEC 11	10.0	MAR 4	5.5						
WATER YEAR 1992		MAXIMUM	10.0	DEC 11, 1991,	JUN 2, 1992	MINIMUM	1.0	NOV 7, 1991,	SEP 2, 1992

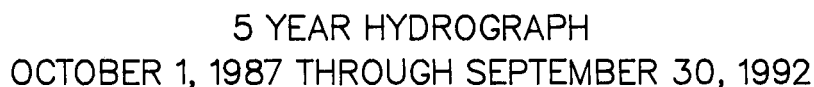


5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

HARFORD COUNTY

minimum discharge measured, 5.5 gal/min, Sept. 2, 1992.

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
OCT 11	6.0	JAN 2	7.5	APR 6	8.6	JUN 1	8.6	AUG 7	6.0
NOV 12	6.0	FEB 5	8.0	MAY 13	10.0	JUN 29	7.5	SEP 2	5.5
DEC 13	10.0	MAR 3	8.6						
WATER YEAR 1992	MAXIMUM	10.0	DEC 13, 1991,	MAY 13, 1992	MINIMUM	5.5	SEP 2, 1992		



GROUND-WATER LEVELS

DELAWARE--Continued

KENT COUNTY

WELL NUMBER.--Id53-05. SITE ID.--391039075325501.

LOCATION.--Lat 39°10'39", long 75°32'55", Hydrologic Unit 02040207, 700 ft southwest of State College Rd. and Penn Central Railroad.

Owner: City of Dover.

AQUIFER.--Fredrica aquifer of Miocene age. Aquifer code: 122FRDC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 47 ft; casing diameter 6 in., to 44 ft; screen diameter 4 in. from 44 to 47 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from March 21, 1973 to current year.

DATUM.--Elevation of land surface is 36 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 3.7 ft above land surface.

REMARKS.--Water levels affected by nearby pumping. Minor variations in water levels are caused by trains passing on nearby tracks. Well has been discontinued as of April 30, 1992.

PERIOD OF RECORD.--March 21, 1973 to April 30, 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.25 ft below land surface, March 29, 1978; lowest measured, 12.23 ft below land surface, Dec. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.43	7.31	7.63	7.60	7.96	7.88	7.09	7.06	7.03	6.96	6.63	6.58
2	7.31	7.29	7.66	7.62	7.90	7.76	---	---	7.06	7.02	---	---
3	7.32	7.30	7.68	7.65	7.75	7.58	7.01	6.97	7.07	7.04	6.58	6.56
4	7.35	7.31	7.70	7.67	7.57	7.54	6.96	6.92	7.05	7.01	6.59	6.55
5	7.35	7.33	7.74	7.68	7.53	7.46	6.94	6.93	7.07	7.02	6.57	6.53
6	7.36	7.34	7.71	7.68	7.45	7.43	6.93	6.91	7.07	7.05	6.54	6.50
7	7.51	7.35	7.72	7.67	7.44	7.40	6.94	6.92	7.05	7.03	6.49	6.40
8	7.55	7.51	7.74	7.71	7.42	7.38	6.96	6.91	7.09	7.04	6.44	6.38
9	7.57	7.54	7.75	7.71	7.38	7.29	6.91	6.87	7.17	7.09	6.43	6.37
10	7.56	7.52	7.72	7.66	7.28	7.22	6.88	6.86	7.20	7.17	6.37	6.26
11	7.54	7.51	7.74	7.66	7.21	7.16	6.93	6.89	7.16	7.13	6.24	6.19
12	7.60	7.54	7.77	7.74	7.17	7.11	6.95	6.90	7.19	7.13	6.21	6.17
13	7.64	7.59	7.77	7.76	7.11	7.08	6.90	6.86	7.18	7.10	6.21	6.16
14	7.66	7.63	7.79	7.76	7.09	7.05	6.90	6.82	7.17	7.10	6.19	6.15
15	7.64	7.58	7.81	7.78	7.10	7.07	6.95	6.90	7.17	7.05	6.18	6.14
16	7.64	7.59	7.82	7.77	7.10	7.06	6.96	6.89	7.07	7.03	6.23	6.15
17	7.63	7.47	7.85	7.82	7.08	7.03	6.96	6.93	7.10	7.06	6.14	6.11
18	7.49	7.44	7.86	7.84	7.10	7.04	6.98	6.94	7.06	6.97	6.17	6.08
19	7.45	7.42	7.86	7.84	7.14	7.10	7.01	6.98	6.96	6.93	6.06	5.99
20	7.48	7.44	7.87	7.85	7.14	7.07	6.98	6.94	6.94	6.92	5.98	5.96
21	7.49	7.46	7.87	7.85	7.06	7.02	6.99	6.94	6.93	6.91	5.99	5.96
22	7.50	7.46	7.88	7.83	7.07	7.03	7.02	6.99	6.93	6.88	5.96	5.87
23	7.52	7.48	7.87	7.83	7.04	7.01	6.99	6.86	6.88	6.86	5.90	5.87
24	7.55	7.51	7.88	7.83	7.09	7.03	6.97	6.87	6.88	6.85	5.93	5.89
25	7.55	7.52	7.92	7.89	7.14	7.08	7.02	6.97	6.87	6.79	5.91	5.88
26	7.56	7.52	7.95	7.92	7.16	7.13	7.05	6.97	6.76	6.68	5.87	5.62
27	7.55	7.53	7.97	7.94	7.16	7.13	7.05	7.01	6.68	6.63	5.62	5.48
28	7.60	7.54	7.95	7.92	7.18	7.11	7.02	6.98	6.62	6.55	5.47	5.39
29	7.64	7.60	7.96	7.94	7.10	7.00	7.02	7.00	6.64	6.55	5.38	5.33
30	7.61	7.57	7.96	7.95	7.09	7.00	7.00	6.96	---	---	5.33	5.25
31	7.61	7.56	---	---	7.11	7.09	6.97	6.95	---	---	5.27	5.22
MONTH	7.66	7.29	7.97	7.60	7.96	7.00	7.09	6.82	7.20	6.55	6.63	5.22

GROUND-WATER LEVELS

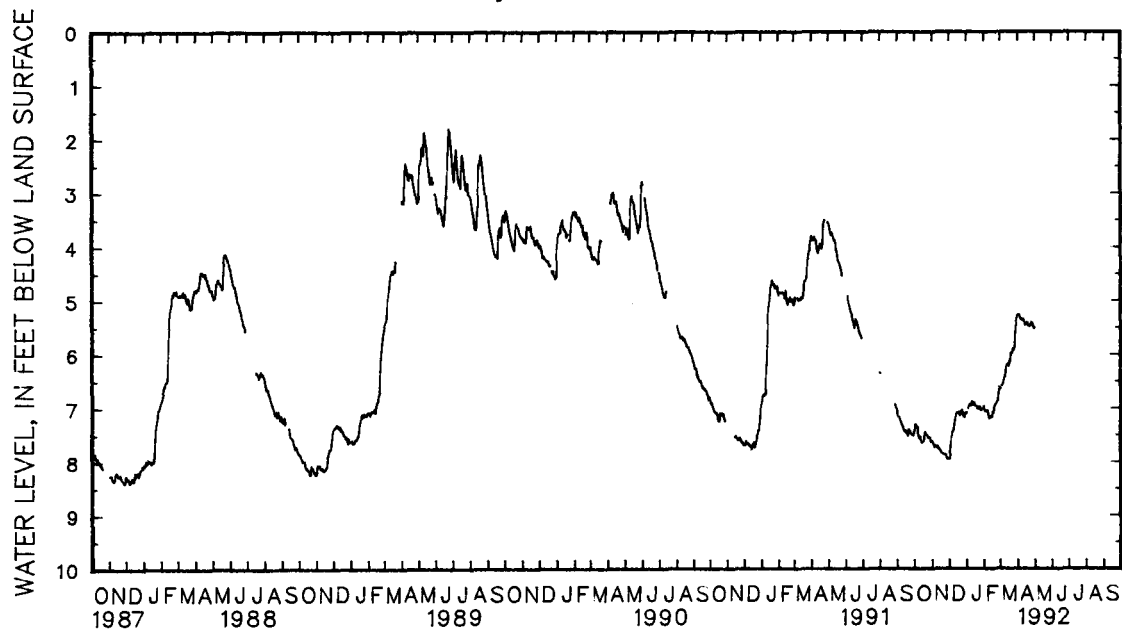
DELAWARE--Continued

KENT COUNTY

Id53-05--continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.27	5.21	---	---	---	---	---	---	---	---	---	---
2	5.27	5.20	---	---	---	---	---	---	---	---	---	---
3	5.26	5.22	---	---	---	---	---	---	---	---	---	---
4	5.27	5.25	---	---	---	---	---	---	---	---	---	---
5	5.32	5.26	---	---	---	---	---	---	---	---	---	---
6	5.35	5.32	---	---	---	---	---	---	---	---	---	---
7	5.34	5.29	---	---	---	---	---	---	---	---	---	---
8	5.34	5.29	---	---	---	---	---	---	---	---	---	---
9	5.36	5.33	---	---	---	---	---	---	---	---	---	---
10	5.37	5.33	---	---	---	---	---	---	---	---	---	---
11	5.35	5.33	---	---	---	---	---	---	---	---	---	---
12	5.40	5.33	---	---	---	---	---	---	---	---	---	---
13	5.46	5.40	---	---	---	---	---	---	---	---	---	---
14	5.43	5.40	---	---	---	---	---	---	---	---	---	---
15	5.43	5.40	---	---	---	---	---	---	---	---	---	---
16	5.44	5.38	---	---	---	---	---	---	---	---	---	---
17	5.41	5.37	---	---	---	---	---	---	---	---	---	---
18	5.46	5.40	---	---	---	---	---	---	---	---	---	---
19	5.47	5.43	---	---	---	---	---	---	---	---	---	---
20	5.48	5.45	---	---	---	---	---	---	---	---	---	---
21	5.46	5.43	---	---	---	---	---	---	---	---	---	---
22	5.45	5.43	---	---	---	---	---	---	---	---	---	---
23	5.47	5.43	---	---	---	---	---	---	---	---	---	---
24	5.45	5.38	---	---	---	---	---	---	---	---	---	---
25	5.41	5.38	---	---	---	---	---	---	---	---	---	---
26	5.44	5.41	---	---	---	---	---	---	---	---	---	---
27	5.46	5.43	---	---	---	---	---	---	---	---	---	---
28	5.50	5.45	---	---	---	---	---	---	---	---	---	---
29	5.52	5.48	---	---	---	---	---	---	---	---	---	---
30	5.51	5.49	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	5.52	5.20	---	---	---	---	---	---	---	---	---	---

Daily Low Water Levels



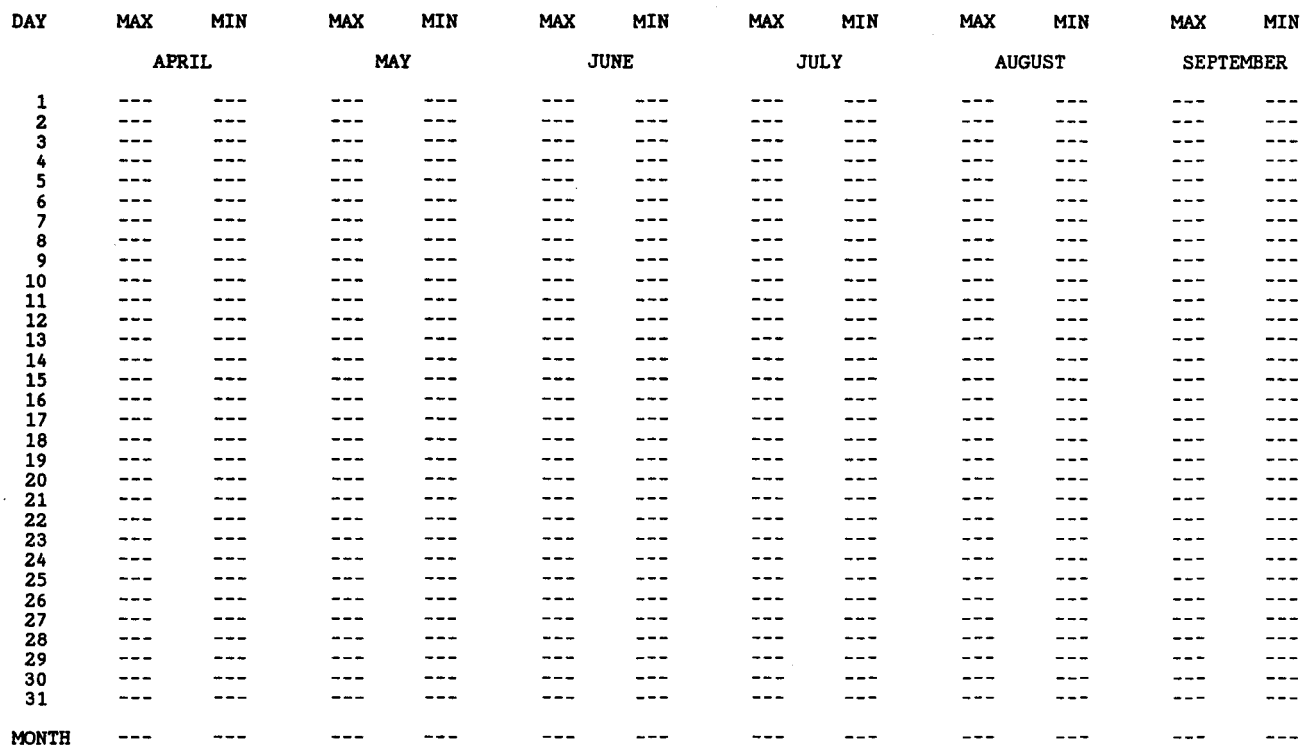
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE
KENT COUNTY--Continued

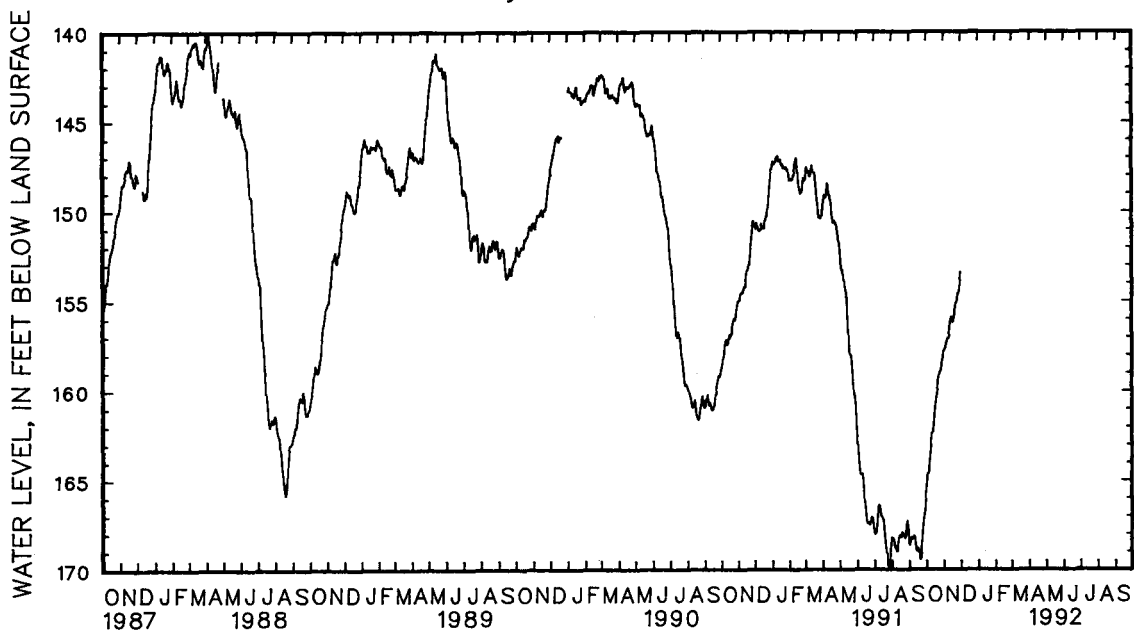
WELL NUMBER.--Id55-01. SITE ID.--391026075304901.
LOCATION.--Lat 39°10'26", long 75°30'49", Hydrologic Unit 02040207, White Oak Rd. at Dover.
Owner: City of Dover.
AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 349 ft; casing diameter 2.5 in., to 329 ft; screened from 329 to 349 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from Oct. 1, 1984 to current year.
DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 1.0 ft above land surface.
REMARKS.--Water level affected by pumping in the Dover area. No record from Dec. 22, 1989 to Jan. 2, 1990, due to recorder malfunction. Well has been discontinued as of Dec. 1, 1991.
PERIOD OF RECORD.--August 1969 to Dec. 1, 1991.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.40 ft below land surface, May 5, 1970; lowest measured, 169.91 ft below land surface, July 26, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	165.46	165.07	157.76	157.72	153.41	153.07	---	---	---	---	---	---
2	165.05	164.66	157.72	157.64	---	---	---	---	---	---	---	---
3	164.64	164.55	157.66	157.52	---	---	---	---	---	---	---	---
4	164.64	164.58	157.50	157.31	---	---	---	---	---	---	---	---
5	164.61	164.21	157.29	157.24	---	---	---	---	---	---	---	---
6	164.18	163.77	157.27	157.10	---	---	---	---	---	---	---	---
7	163.75	163.35	157.11	156.93	---	---	---	---	---	---	---	---
8	163.34	163.10	157.07	156.96	---	---	---	---	---	---	---	---
9	163.09	162.72	157.07	156.97	---	---	---	---	---	---	---	---
10	162.70	162.39	156.97	156.53	---	---	---	---	---	---	---	---
11	162.38	162.28	156.53	156.27	---	---	---	---	---	---	---	---
12	162.33	162.26	156.27	156.08	---	---	---	---	---	---	---	---
13	162.26	161.95	156.08	155.87	---	---	---	---	---	---	---	---
14	161.94	161.47	155.92	155.86	---	---	---	---	---	---	---	---
15	161.46	161.01	155.97	155.92	---	---	---	---	---	---	---	---
16	161.01	160.75	156.10	155.96	---	---	---	---	---	---	---	---
17	160.73	160.44	156.18	156.10	---	---	---	---	---	---	---	---
18	160.44	160.28	156.13	155.95	---	---	---	---	---	---	---	---
19	160.26	160.02	155.95	155.78	---	---	---	---	---	---	---	---
20	160.01	159.70	155.77	155.39	---	---	---	---	---	---	---	---
21	159.68	159.31	155.38	155.15	---	---	---	---	---	---	---	---
22	159.30	159.15	155.16	155.05	---	---	---	---	---	---	---	---
23	159.17	159.05	155.13	155.05	---	---	---	---	---	---	---	---
24	159.06	158.94	155.04	154.78	---	---	---	---	---	---	---	---
25	158.95	158.88	154.79	154.58	---	---	---	---	---	---	---	---
26	158.90	158.78	154.58	154.55	---	---	---	---	---	---	---	---
27	158.78	158.44	154.57	154.40	---	---	---	---	---	---	---	---
28	158.43	158.27	154.39	154.17	---	---	---	---	---	---	---	---
29	158.28	158.21	154.15	153.85	---	---	---	---	---	---	---	---
30	158.20	157.85	153.83	153.43	---	---	---	---	---	---	---	---
31	157.85	157.75	---	---	---	---	---	---	---	---	---	---
MONTH	165.46	157.75	157.76	153.43	153.41	153.07	---	---	---	---	---	---



Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

KENT COUNTY--Continued

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

LOCATION.--Lat 39°06'07", long 75°33'15", Hydrologic Unit 02040207, 1 mi south of Camden.

Owner: Delaware Department of Transportation.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11 ft; casing diameter 1.25 in., to 8.5 ft; well point from 8.5 to 11 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape or electric sensing device by USGS or Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 44 ft above National Geodetic Vertical Datum of 1929, from topographic map.

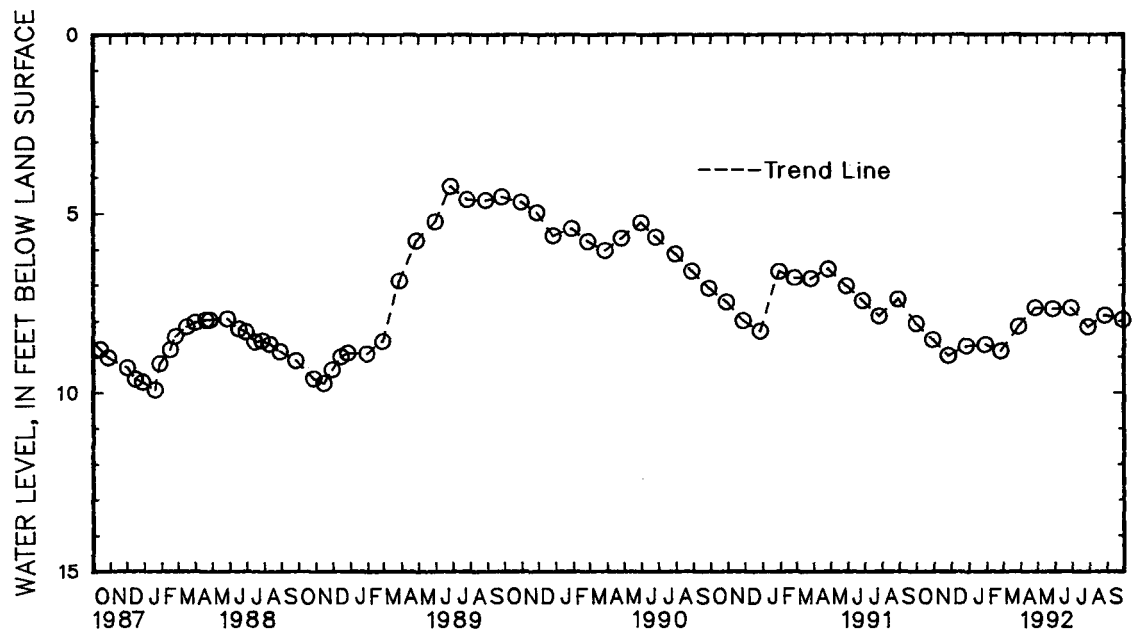
Measuring point: Top of casing at land surface.

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

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

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.53	DEC 27	8.71	FEB 26	8.85	APR 27	7.64	JUN 29	7.65	AUG 28	7.85
NOV 26	8.98	JAN 29	8.67	MAR 28	8.16	MAY 28	7.67	JUL 29	8.17		
WATER YEAR 1992		HIGHEST	7.64	APR 27, 1992		LOWEST	8.98	NOV 26, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

KENT COUNTY--Continued

WELL NUMBER.--Mc51-01. SITE ID.--385041075395601.

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

Owner: Delaware Department of Transportation.

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

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

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map.

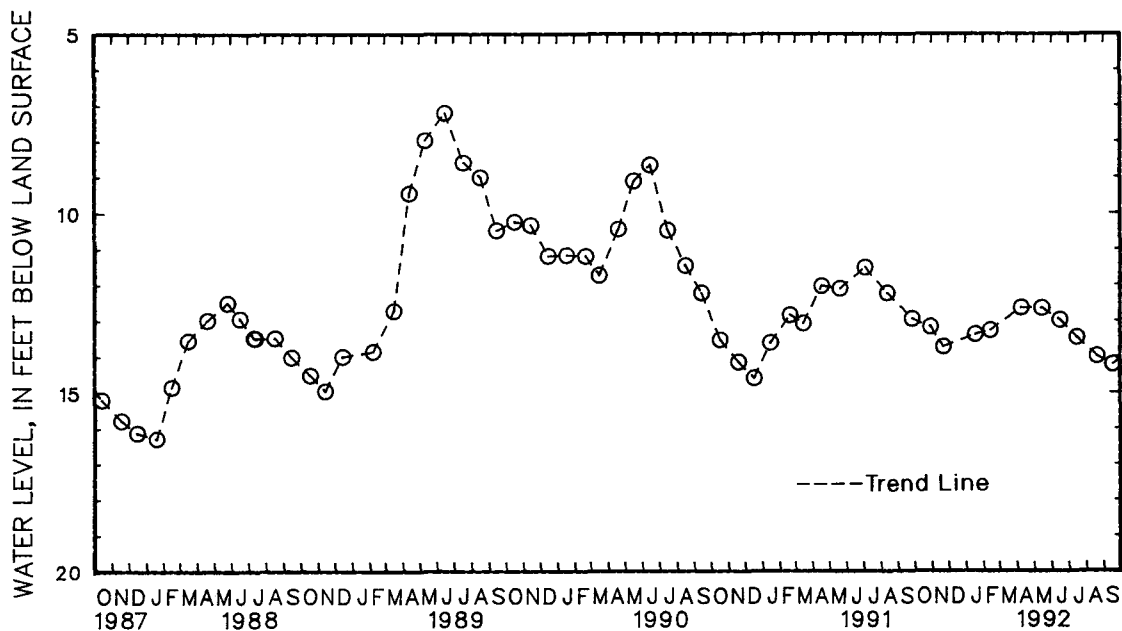
Measuring point: Top of casing at land surface.

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

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

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	13.18	JAN 17	13.39	APR 8	12.65	JUN 15	12.99	AUG 20	14.00
NOV 21	13.74	FEB 13	13.28	MAY 14	12.66	JUL 15	13.47	SEP 17	14.23
WATER YEAR 1992		HIGHEST	12.65	APR 8, 1992	LOWEST	14.23	SEP 17, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

KENT COUNTY--Continued

WELL NUMBER.--Md22-01. SITE ID.--385310075331301. PERMIT NUMBER.--10221.

LOCATION.--Lat 38°53'10", long 75°33'13", Hydrologic Unit 02040207, 2.4 mi west of Williamsville.

Owner: Delaware Department of Transportation.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 17 ft; casing diameter 1 in., to 14 ft; well point from 14 to 17 ft.

INSTRUMENTATION.--Bimonthly measurements with chalked steel tape by USGS and Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 58 ft above National Geodetic Vertical Datum of 1929, from topographic map.

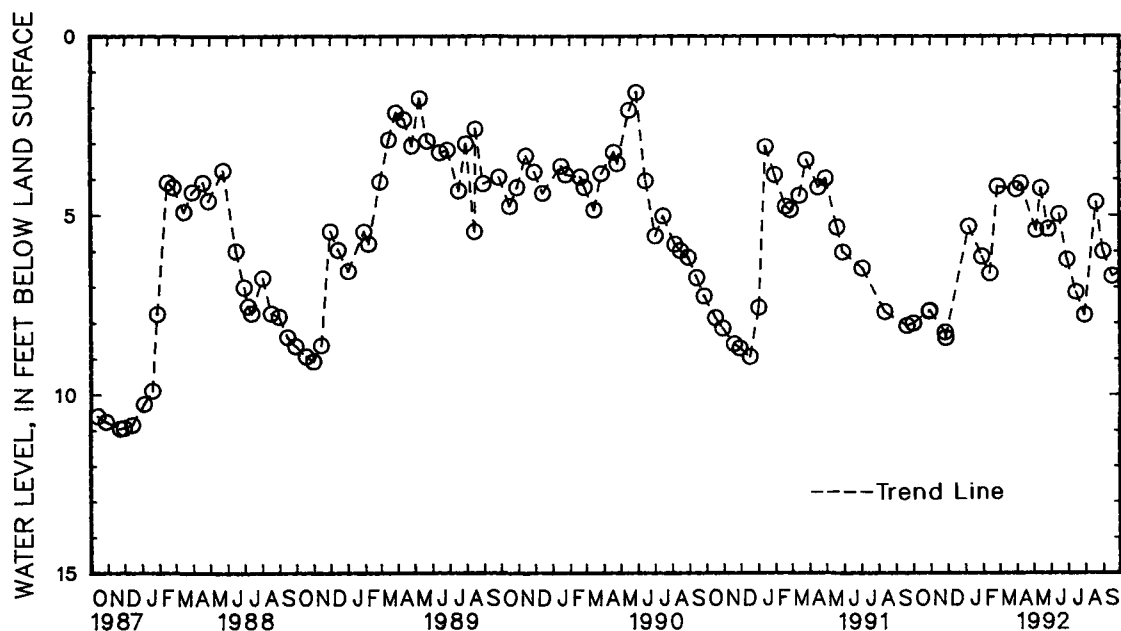
Measuring point: Top of casing at land surface.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.07 ft below land surface, July 14, 1975; lowest measured, 11.14 ft below land surface, Jan. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	8.02	NOV 27	8.43	FEB 27	4.20	MAY 14	4.25	JUL 15	7.15	SEP 17	6.70
29	7.69	JAN 7	5.31	MAR 31	4.28	27	5.38	30	7.79		
30	7.67	30	6.15	APR 8	4.11	JUN 15	4.97	AUG 20	4.64		
NOV 26	8.27	FEB 13	6.62	MAY 5	5.41	29	6.24	SEP 1	6.01		
WATER YEAR 1992		HIGHEST	4.11	APR 8, 1992	LOWEST	8.43	NOV 27, 1991				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

NEW CASTLE COUNTY

WELL NUMBER.--Db15-05. SITE ID.--393917075401601.

LOCATION.--Lat 39°39'17", long 75°40'16", Hydrologic Unit 02040205, Smalley's Dam,
at the Wilmington Suburban Water Co. plant.

Owner: Wilmington Suburban Water Co.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 306 ft; casing diameter 12 in., to 215.5 ft,
and 238.5 to 273.5 ft, screened from 215.5 to 238.5 ft and 273.5 to 306 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.

Equipped with graphic water-level recorder from March 1979 to November 1981.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

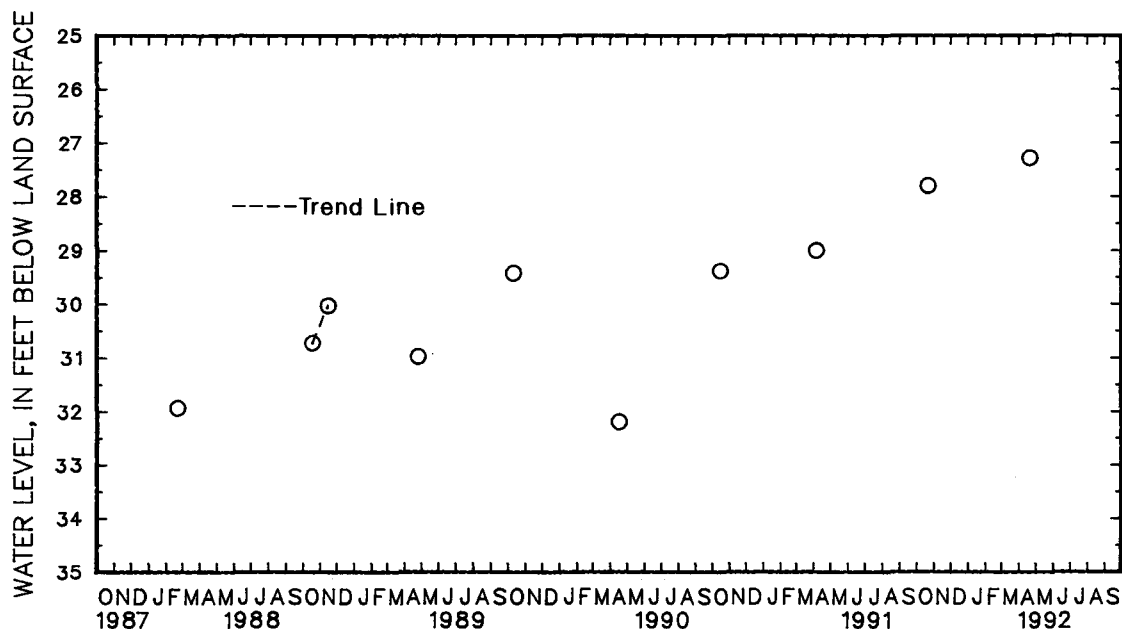
Measuring Point: Top of 12 in. casing, 1.5 ft above land surface.

PERIOD OF RECORD.--March 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.60 ft below land surface, Oct. 10, 1984;
lowest measured, 39.31 ft below land surface, Sept. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

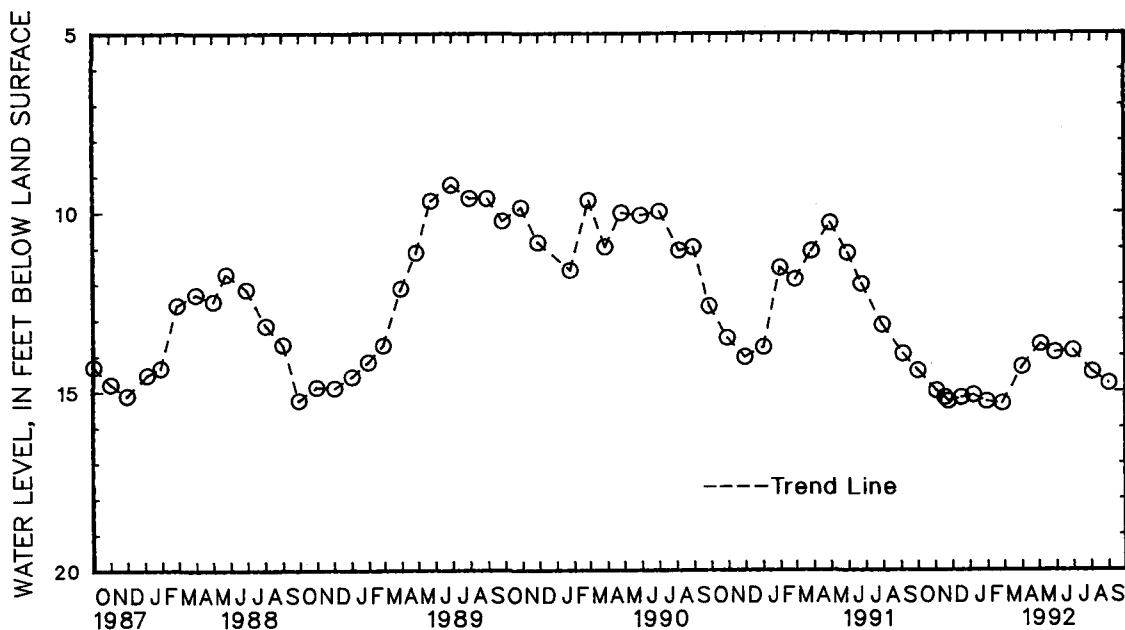
DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	27.80	APR 20	27.28
WATER YEAR 1992	HIGHEST	27.28	APR 20, 1992
	LOWEST	27.80	OCT 21, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT	4	14.43	NOV	25	15.28	JAN	31	15.29	MAY	4	13.69
NOV	1	14.99	DEC	18	15.18	FEB	27	15.34		29	13.92
	19	15.18	JAN	8	15.11	APR	1	14.32		JUN	30
WATER YEAR 1992		HIGHEST	13.69	MAY 4, 1992		LOWEST	15.34	FEB 27, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

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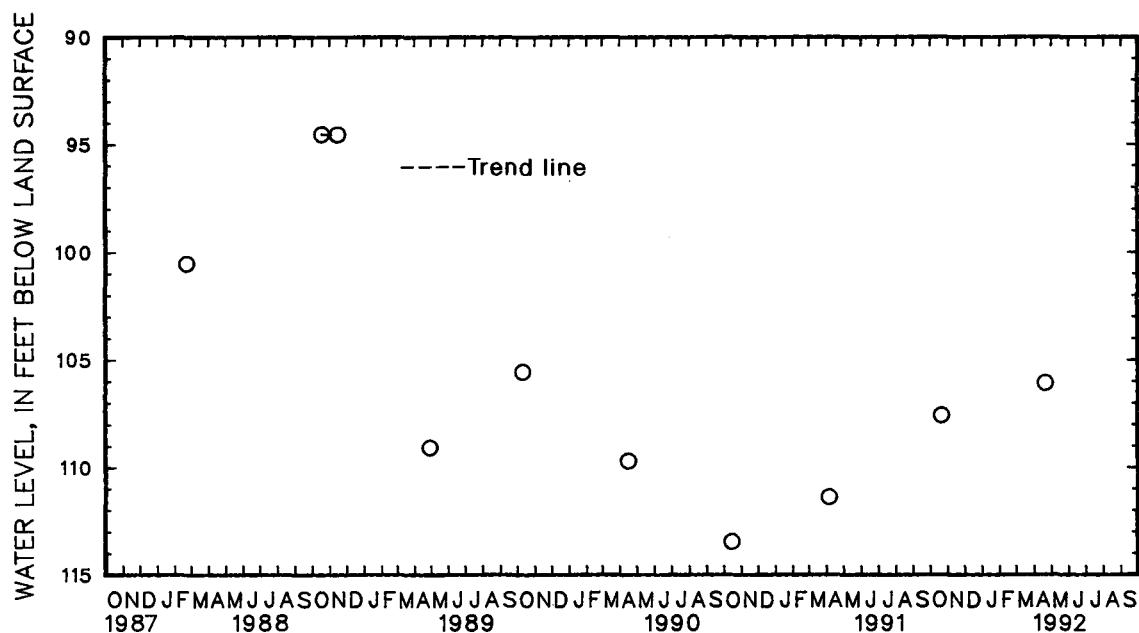
DELAWARE--Continued

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db33-18. SITE ID.--393734075371102. PERMIT NUMBER--44612.
 LOCATION.--Lat 39°37'34", long 75°37'11", Hydrologic Unit 02040205, off Salem Church Rd., near Beck's Pond.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 143 ft; casing diameter 2 in., to 139 ft; screened from 139 to 143 ft. Installed in a 8 in. borehole with Db33-17, and Db33-19.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from October 1980 to November 1981.
 DATUM.--Elevation of land surface is 48 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of coupling, 1.75 ft above land surface.
 PERIOD OF RECORD.--October 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 94.53 ft below land surface, Oct. 18, 1988;
 lowest measured, 113.44 ft below land surface, Oct. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	107.56	APR 20	106.06
WATER YEAR 1992 HIGHEST 106.06 APR 20, 1992 LOWEST 107.56 OCT 21, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

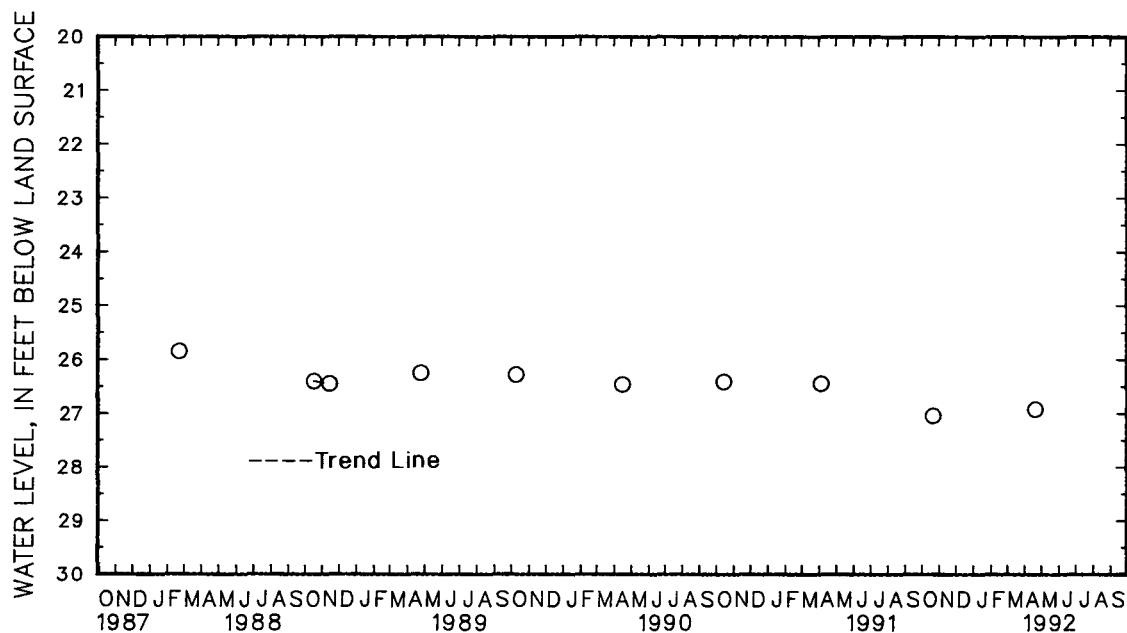
DELAWARE--Continued

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Db33-19. SITE ID.--393734075371101. PERMIT NUMBER--44612.
 LOCATION.--Lat 39°37'34", long 75°37'11", Hydrologic Unit 02040205, off Salem Church Rd., nr Beck's Pond.
 Owner: U.S. Geological Survey.
 AQUIFER.--Columbia Group of Pleistocene age. Aquifer code: 112CLMB.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 39 ft; casing diameter 2 in; to 35 ft; screened from 35 to 39 ft. Installed in a 8 in. borehole with Db33-17, and Db33-18.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel. Measured monthly from October 1980 to November 1981.
 DATUM.--Elevation of land surface is 48 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of coupling, 1.75 ft above land surface.
 PERIOD OF RECORD.--October 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.35 ft below land surface, July 14, 1981; lowest measured 28.23 ft below land surface, April 3, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	27.05	APR 20	26.93
WATER YEAR 1992 HIGHEST 26.93 APR 20, 1992 LOWEST 27.05 OCT 21, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

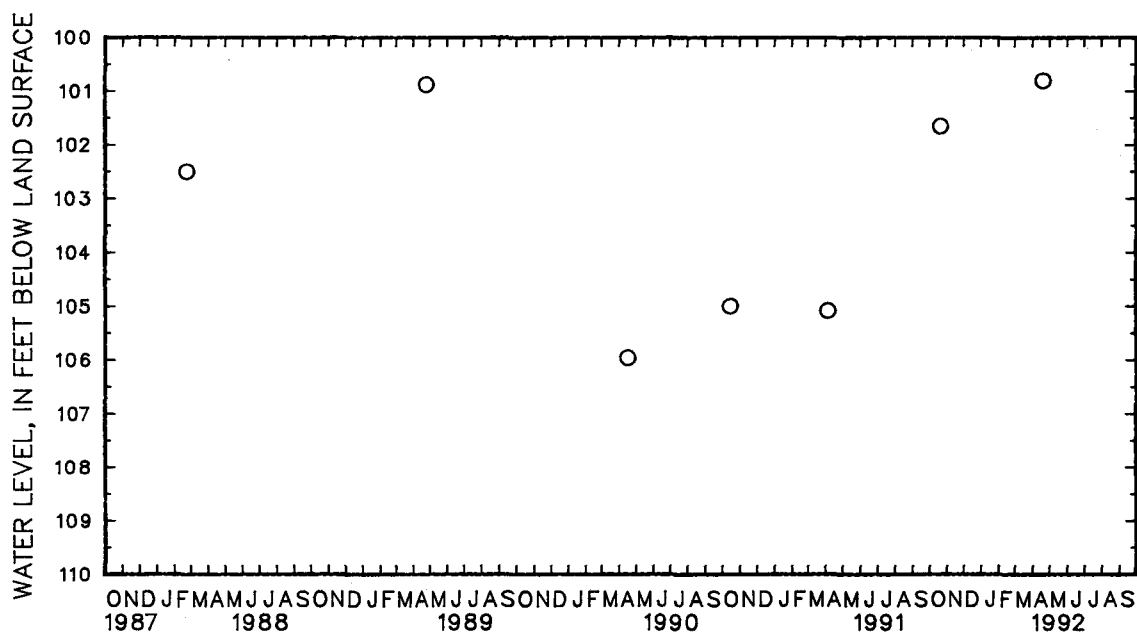
DELAWARE--Continued

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Dc34-05. SITE ID.--393755075364801.
 LOCATION.--Lat 39°37'55", long 75°36'48", Hydrologic Unit 02040205, east side of Rt. 9,
 at National Guard Rifle Range.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 2 in., to 574 ft;
 screened from 574 to 579 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from
 November 1975 to November 1981.
 DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of coupling, 2.1 ft above land surface.
 PERIOD OF RECORD.--November 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.38 ft below land surface, Oct. 10, 1984;
 lowest measured, 130.62 ft below land surface, May 5, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	101.65	APR 20	100.80
WATER YEAR 1992 HIGHEST 100.80 APR 20, 1992 LOWEST 101.65 OCT 21, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

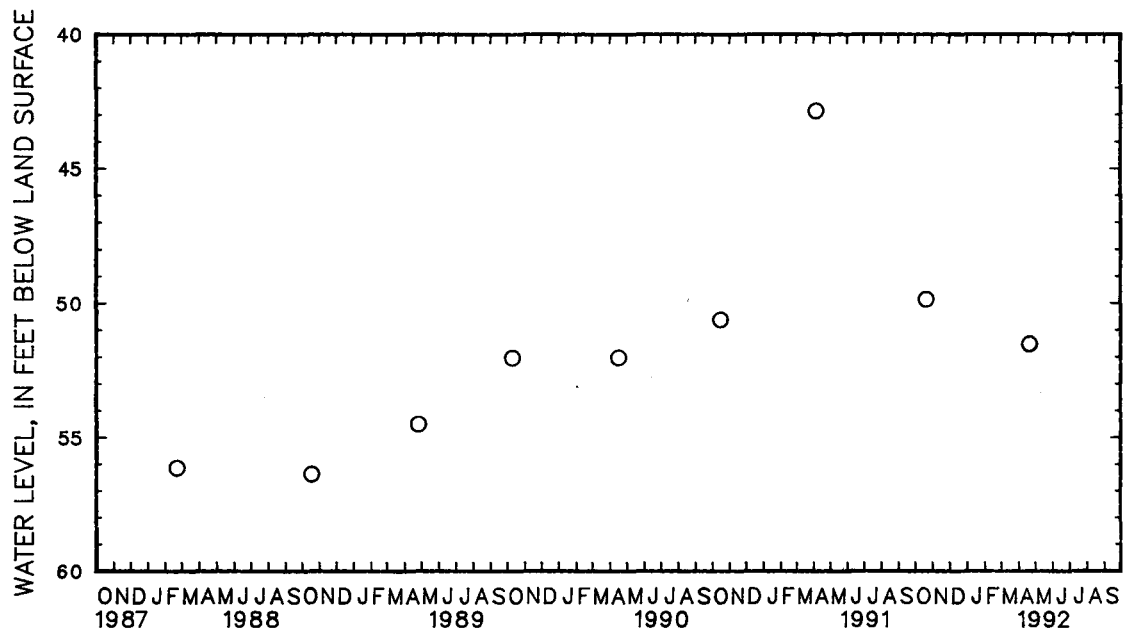
DELAWARE--Continued

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Dc34-06. SITE ID.--393755075364802.
 LOCATION.--Lat 39°37'55", long 75°36'48", Hydrologic Unit 02040205, east side of Rt. 9,
 at National Guard Rifle Range.
 Owner: U.S. Geological Survey
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 188 ft; casing diameter 2 in., to 183 ft;
 screened from 183 to 188 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from November 1975 to October 1982. Beginning March 1982, water-level measured semi-
 annually.
 DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of 6 in casing, 2.0 ft above land surface.
 PERIOD OF RECORD.--November 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.94 ft below land surface, Feb. 15, 1976;
 lowest measured, 62.37 ft below land surface, Oct. 15, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	49.87	APR 20	51.54
WATER YEAR 1992 HIGHEST 49.87 OCT 21, 1991 LOWEST 51.54 APR 20, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-22. SITE ID.--393316075421601.

LOCATION.--Lat 39°33'16", Long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 732 ft; casing diameter 2 in., to 101 ft, screened from 101 to 105 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.

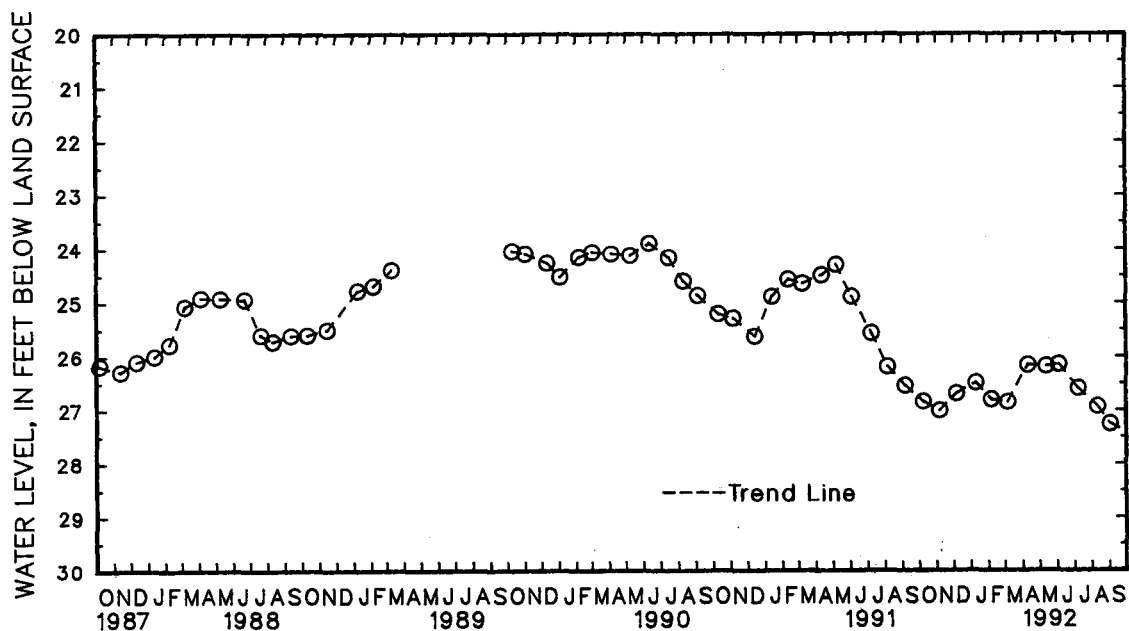
Measuring Point: Top of casing, 2.50 ft above land surface.

PERIOD OF RECORD.--November 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.84 ft below land surface, April 20, 1982;
lowest measured, 27.27 ft below land surface, SEPT. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	26.85	DEC 6	26.70	FEB 6	26.81	APR 10	26.17	JUN 3	26.16	AUG 11	26.94
NOV 6	27.02	JAN 10	26.50	MAR 6	26.86	MAY 12	26.19	JUL 8	26.60	SEP 2	27.27
WATER YEAR 1992		HIGHEST	26.16	JUN 3, 1992	LOWEST	27.27	SEP 2, 1992				



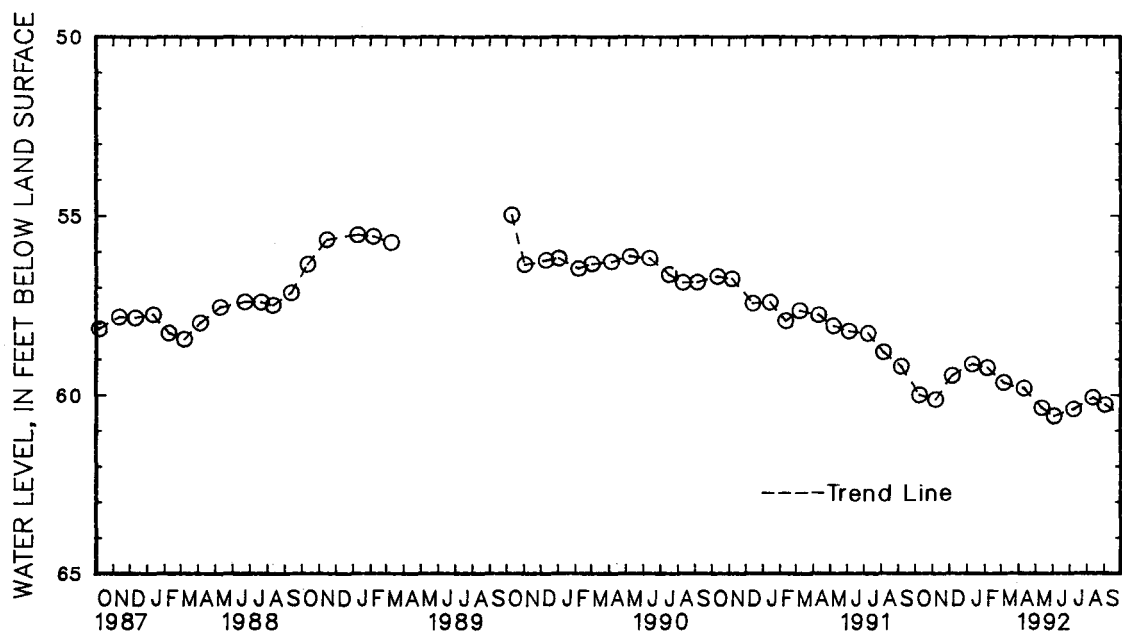
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-23 . SITE ID.--393316075421602.
LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 292 ft; casing diameter 2 in., to 288 ft, screened from 288 to 292 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 2.5 ft above land surface.
PERIOD OF RECORD.--November 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.38 ft below land surface, Oct. 12, 1982; lowest measured, 60.60 ft below land surface, June 3, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	60.00	DEC 6	59.46	FEB 6	59.24	APR 10	59.82	JUN 3	60.60	AUG 11	60.08
NOV 6	60.13	JAN 10	59.14	MAR 6	59.65	MAY 12	60.37	JUL 8	60.40	SEP 2	60.28
WATER YEAR 1992		HIGHEST	59.14	JAN 10, 1992		LOWEST	60.60	JUN 3, 1992			



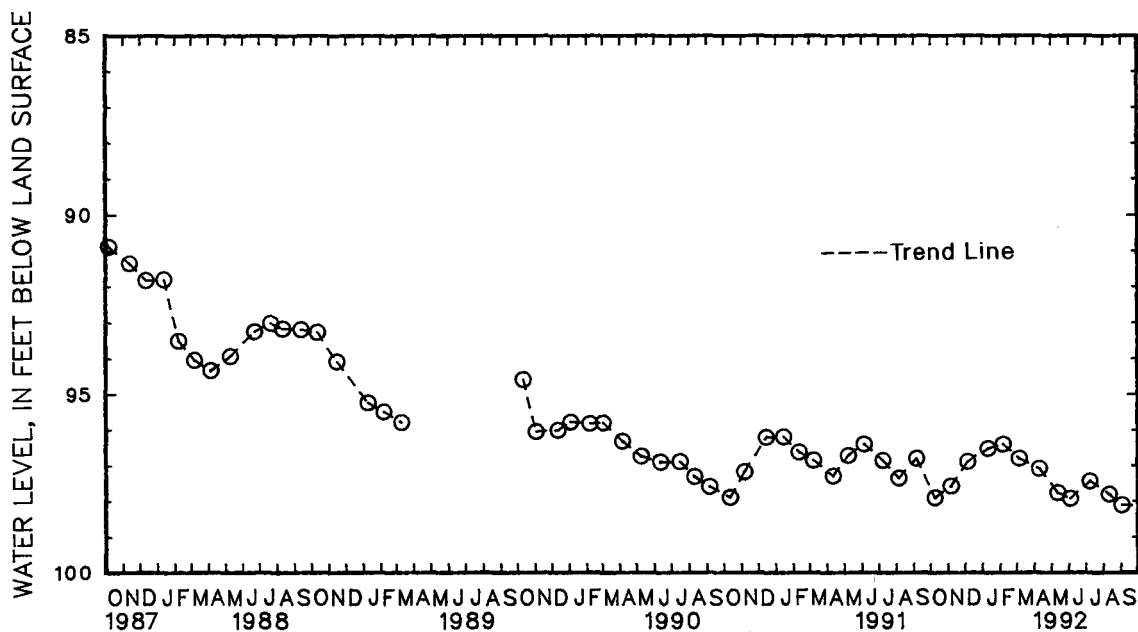
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-24 . SITE ID.--393316075421603.
LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 436 ft; casing diameter 2 in., to 432 ft, screened from 432 to 436 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 2.5 ft above land surface.
PERIOD OF RECORD.--November 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.17 ft below land surface, Nov. 13, 1980; lowest measured, 98.11 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	97.91	DEC 6	96.90	FEB 6	96.41	APR 10	97.08	JUN 3	97.93	AUG 11	97.81
NOV 6	97.58	JAN 10	96.53	MAR 6	96.81	MAY 12	97.77	JUL 8	97.45	SEP 2	98.11
WATER YEAR 1992		HIGHEST	96.41	FEB 6, 1992	LOWEST	98.11	SEP 2, 1992				



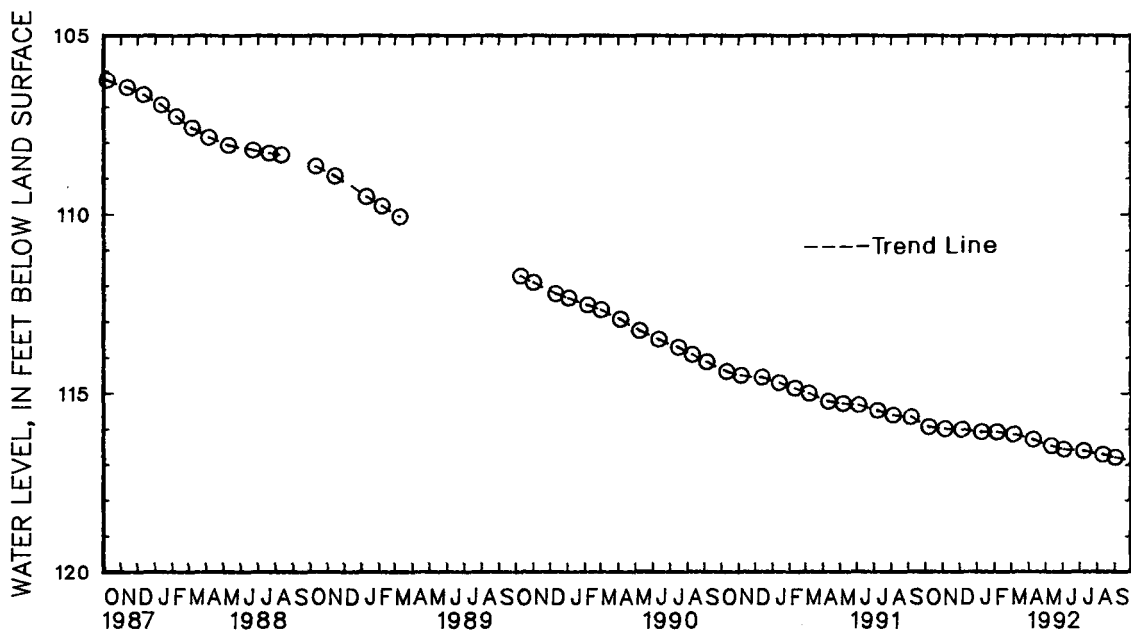
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
NEW CASTLE COUNTY--Continued

WELL NUMBER.--Eb23-25. SITE ID.--393316075421604.
LOCATION.--Lat 39°33'16", long 75°42'16", Hydrologic Unit 02040205, at Lums Pond State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 604 ft; screen diameter 2 in., to 600 ft, screened from 600 to 604 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 2.5 ft above land surface.
PERIOD OF RECORD.--November 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.07 ft below land surface, April 20, 1982; lowest measured, 116.80 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	115.95	DEC 6	116.02	FEB 6	116.09	APR 10	116.30	JUN 3	116.57	AUG 11	116.72
NOV 6	116.00	JAN 10	116.09	MAR 6	116.15	MAY 12	116.48	JUL 8	116.62	SEP 2	116.80
WATER YEAR 1992		HIGHEST 115.95 OCT 8, 1991		LOWEST 116.80 SEP 2, 1992							



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

NEW CASTLE COUNTY--Continued

WELL NUMBER.--Hb14-01. SITE ID.--391949075410701.

LOCATION.--Lat 39°19'49", long 75°41'07", Hydrologic Unit 02040205, at Prices Corners.

Owner: Delaware Department of Transportation.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 1 in., to 16 ft; well point from 16 to 19 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape or electric sensing device by USGS and Delaware Geological Survey personnel.

DATUM.--Elevation of land surface is 72 ft above National Geodetic Vertical Datum of 1929, from topographic map.

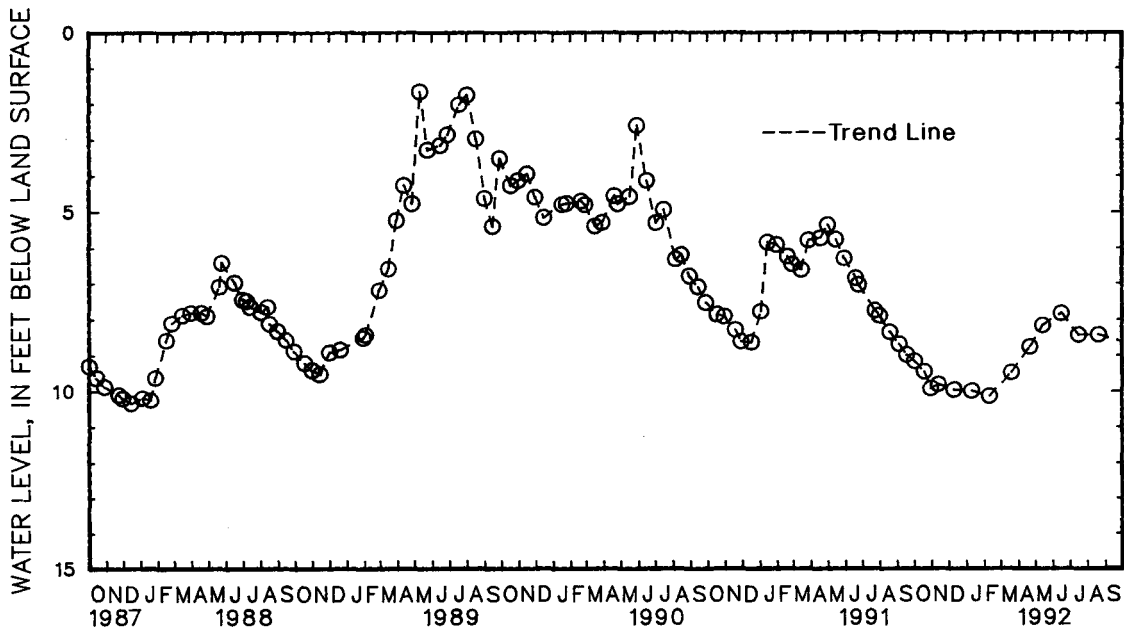
Measuring point: Top of casing at land surface.

PERIOD OF RECORD.--October 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.49 ft below land surface, April 7, 1958; lowest measured, 11.95 ft below land surface, Aug. 31, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	9.23	NOV 12	9.87	FEB 10	10.20	MAY 14	8.19	AUG 20	8.46
18	9.52	DEC 10	10.02	MAR 19	9.51	JUN 15	7.85		
30	9.99	JAN 10	10.05	APR 21	8.79	JUL 16	8.46		
WATER YEAR 1992		HIGHEST	7.85	JUN 15, 1992	LOWEST	10.20	FEB 10, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY

WELL NUMBER.--Nc13-03. SITE ID.--384930075370201. PERMIT NUMBER.--10233.
 LOCATION.--Lat 38°49'30", long 75°37'02", Hydrologic Unit 02060008, 2.0 mi northwest of Greenwood.
 Owner: University of Delaware.
 AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, casing diameter 6 in., to 630 ft,
 screened diameter 3 in. from 620 to 630 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--60-minute recorder interval from Oct. 1, 1983 to May 13, 1992.
 DATUM.--Elevation of land surface is 62.5 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.0 ft above land surface.
 REMARKS.--Well has been discontinued as of May 13, 1992.
 PERIOD OF RECORD.--December 1970 to May 13, 1992.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.70 ft below land surface, Jan. 1, 1971;
 lowest measured, 87.07 ft below land surface, April 13, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	86.34	86.24	86.40	86.37	86.68	86.59	86.84	86.79	86.72	86.59	86.82	86.69
2	86.28	86.22	86.45	86.35	86.62	86.55	86.80	86.68	86.77	86.69	86.81	86.76
3	86.22	86.16	86.50	86.45	86.54	86.25	86.68	86.51	86.78	86.71	86.86	86.75
4	86.28	86.21	86.52	86.50	86.62	86.30	86.49	86.26	86.78	86.52	86.89	86.84
5	86.27	86.19	86.54	86.52	86.70	86.58	86.50	86.43	86.77	86.64	86.89	86.81
6	86.27	86.17	86.54	86.52	86.63	86.51	86.53	86.47	86.77	86.65	86.88	86.82
7	86.32	86.26	86.53	86.48	86.61	86.48	86.66	86.54	86.64	86.56	86.81	86.59
8	86.42	86.32	86.60	86.52	86.58	86.52	86.70	86.66	86.72	86.60	86.69	86.59
9	86.43	86.38	86.60	86.54	86.52	86.42	86.67	86.48	87.01	86.75	86.75	86.70
10	86.39	86.24	86.54	86.34	86.64	86.47	86.49	86.43	87.06	86.96	86.72	86.41
11	86.24	86.12	86.46	86.32	86.65	86.61	86.65	86.49	86.95	86.82	86.57	86.30
12	86.24	86.18	86.52	86.47	86.66	86.55	86.69	86.60	87.02	86.86	86.63	86.57
13	86.34	86.25	86.52	86.50	86.55	86.47	86.58	86.44	86.98	86.73	86.71	86.63
14	86.41	86.35	86.57	86.51	86.51	86.33	86.49	86.17	86.89	86.71	86.71	86.64
15	86.35	86.18	86.57	86.51	86.59	86.51	86.63	86.50	86.88	86.56	86.79	86.68
16	86.28	86.20	86.60	86.50	86.68	86.56	86.70	86.46	86.81	86.53	86.86	86.78
17	86.27	86.12	86.69	86.60	86.67	86.48	86.70	86.50	86.90	86.82	86.82	86.65
18	86.35	86.25	86.69	86.65	86.77	86.55	86.80	86.64	86.86	86.67	86.85	86.67
19	86.35	86.22	86.66	86.61	86.93	86.78	86.83	86.77	86.70	86.60	86.65	86.51
20	86.40	86.35	86.65	86.56	86.91	86.76	86.79	86.60	86.83	86.68	86.69	86.65
21	86.43	86.38	86.59	86.53	86.74	86.57	86.73	86.65	86.89	86.79	86.78	86.68
22	86.44	86.38	86.59	86.43	86.65	86.54	86.81	86.76	86.90	86.79	86.78	86.52
23	86.50	86.42	86.55	86.51	86.54	86.36	86.73	86.33	86.79	86.75	86.77	86.55
24	86.50	86.46	86.54	86.42	86.60	86.43	86.70	86.37	86.80	86.74	86.89	86.78
25	86.50	86.45	86.64	86.55	86.77	86.60	86.81	86.70	86.80	86.58	86.90	86.82
26	86.48	86.42	86.78	86.64	86.79	86.73	86.93	86.68	86.55	86.46	86.81	86.38
27	86.45	86.37	86.82	86.78	86.82	86.73	86.93	86.85	86.61	86.55	86.65	86.46
28	86.51	86.38	86.79	86.70	86.82	86.62	86.85	86.81	86.60	86.41	86.71	86.64
29	86.60	86.52	86.70	86.67	86.61	86.38	86.83	86.77	86.82	86.38	86.77	86.71
30	86.57	86.40	86.70	86.65	86.79	86.42	86.77	86.60	---	---	86.76	86.61
31	86.40	86.36	---	---	86.86	86.79	86.59	86.52	---	---	86.67	86.55
MONTH	86.60	86.12	86.82	86.32	86.93	86.25	86.93	86.17	87.06	86.38	86.90	86.30

GROUND-WATER LEVELS

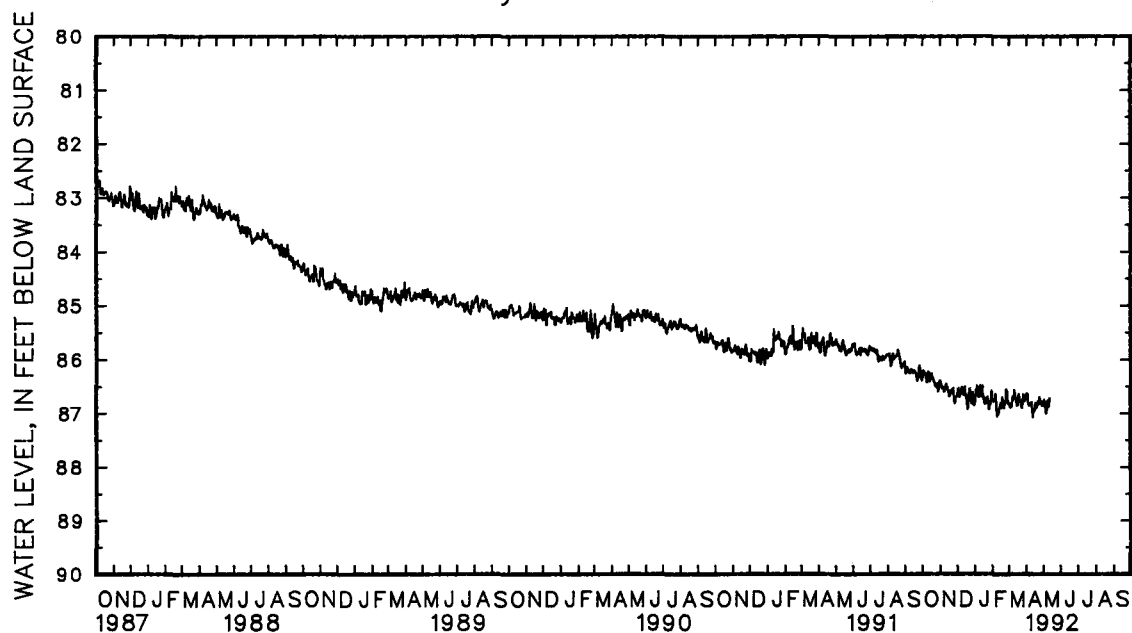
DELAWARE--Continued

SUSSEX COUNTY

Nc13-03-Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	86.67	86.55	86.86	86.79	---	---	---	---	---	---	---	---
2	86.63	86.57	86.81	86.64	---	---	---	---	---	---	---	---
3	86.67	86.61	86.76	86.65	---	---	---	---	---	---	---	---
4	86.65	86.61	86.79	86.71	---	---	---	---	---	---	---	---
5	86.82	86.65	86.90	86.78	---	---	---	---	---	---	---	---
6	86.86	86.81	87.00	86.90	---	---	---	---	---	---	---	---
7	86.82	86.70	87.00	86.91	---	---	---	---	---	---	---	---
8	86.82	86.69	86.90	86.71	---	---	---	---	---	---	---	---
9	86.84	86.80	86.77	86.71	---	---	---	---	---	---	---	---
10	86.83	86.78	86.81	86.73	---	---	---	---	---	---	---	---
11	86.80	86.77	86.88	86.81	---	---	---	---	---	---	---	---
12	86.96	86.77	86.85	86.75	---	---	---	---	---	---	---	---
13	87.07	86.96	86.73	86.66	---	---	---	---	---	---	---	---
14	86.98	86.87	---	---	---	---	---	---	---	---	---	---
15	86.97	86.89	---	---	---	---	---	---	---	---	---	---
16	86.94	86.80	---	---	---	---	---	---	---	---	---	---
17	86.82	86.73	---	---	---	---	---	---	---	---	---	---
18	86.91	86.82	---	---	---	---	---	---	---	---	---	---
19	86.90	86.85	---	---	---	---	---	---	---	---	---	---
20	86.87	86.80	---	---	---	---	---	---	---	---	---	---
21	86.80	86.74	---	---	---	---	---	---	---	---	---	---
22	86.78	86.73	---	---	---	---	---	---	---	---	---	---
23	86.83	86.78	---	---	---	---	---	---	---	---	---	---
24	86.79	86.61	---	---	---	---	---	---	---	---	---	---
25	86.70	86.61	---	---	---	---	---	---	---	---	---	---
26	86.75	86.68	---	---	---	---	---	---	---	---	---	---
27	86.79	86.72	---	---	---	---	---	---	---	---	---	---
28	86.83	86.75	---	---	---	---	---	---	---	---	---	---
29	86.86	86.79	---	---	---	---	---	---	---	---	---	---
30	86.80	86.73	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	87.07	86.55	87.00	86.64	---	---	---	---	---	---	---	---

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

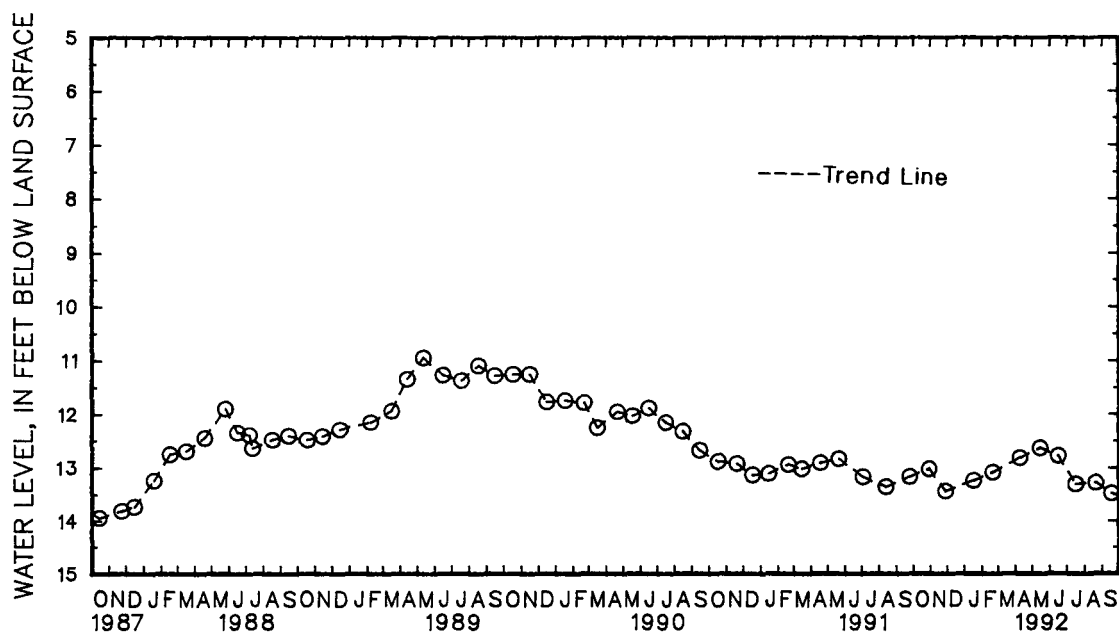
DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Nc45-01. SITE ID.--384639075353101. PERMIT NUMBER.--10226.
 LOCATION.--Lat 38°46'39", long 75°35'31", Hydrologic Unit 02060008, 2.0 mi south of Greenwood.
 Owner: P. H. Cannon.
 AQUIFER.--Columbia Group of Pleistocene age. Aquifer code: 112CLMB.
 WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 15 ft; casing diameter 1 in., to 14 ft; screened from 14 to 15 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 43 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring point: Top of casing, 1.0 ft above land surface.
 PERIOD OF RECORD.--October 1950 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.82 ft below land surface, April 9, 1958; lowest measured, 14.66 ft below land surface, Dec. 11, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	13.04	JAN 17	13.26	APR 8	12.83	JUN 15	12.79	AUG 20	13.30
NOV 27	13.46	FEB 20	13.10	MAY 14	12.65	JUL 15	13.33	SEP 17	13.50
WATER YEAR 1992		HIGHEST	12.65	MAY 14, 1992		LOWEST	13.50	SEP 17, 1992	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

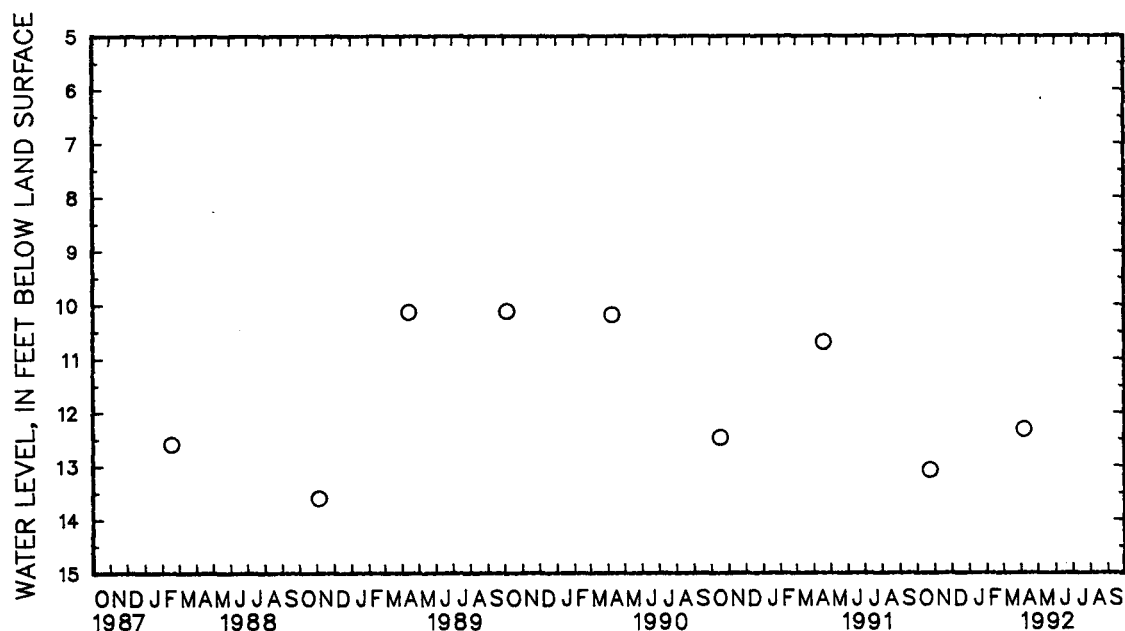
DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Nf44-01. SITE ID.--384704075212900. PERMIT NUMBER.--39703.
 LOCATION.--Lat 38°47'04", long 75°21'29", Hydrologic Unit 02040207, at intersection of DE Rt 16 and DE Rt 30,
 next to railroad tracks.
 Owner: Unknown.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, Artisian well, depth 121 ft; casing diameter 2 in., to 20 ft;
 screened from 116 to 121 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from
 October 1977 to December 1979. Measurements twice yearly from March 1980 to current year.
 DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.30 ft above land surface.
 REMARKS.--Delaware Water-Level Network observation well.
 PERIOD OF RECORD.--Oct. 1977 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.52 ft below land surface, March 2, 1977;
 lowest measured, 13.79 ft below land surface, Nov. 2, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	13.08	APR 6	12.32
WATER YEAR 1992 HIGHEST 12.32 APR 6, 1992 LOWEST 13.08 OCT 24, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--N152-11 . . . SITE ID.--384558075083501. . . PERMIT NUMBER.--057363.

LOCATION.--Lat 38°45'58", long 75°08'35", Hydrologic Unit 02040207, in Lewes Library Park, nr railroad tracks.

Owner: Town of Lewes.

AQUIFER.--Pocomoke aquifer of Miocene age. . . Aquifer code: 122FCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 155 ft; casing diameter 4 in., to 145 ft; screened from 145 to 155 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by Delaware Geological Survey personnel.

Intermittent measurements from May 1985 to July 1987. Twice yearly measurements February 1988 to January 1992.

Equipped with digital water-level recorder--60-minute recorder interval from 1985 to current year.

DATUM.--Elevation of land surface is 16 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 0.5 ft above land surface.

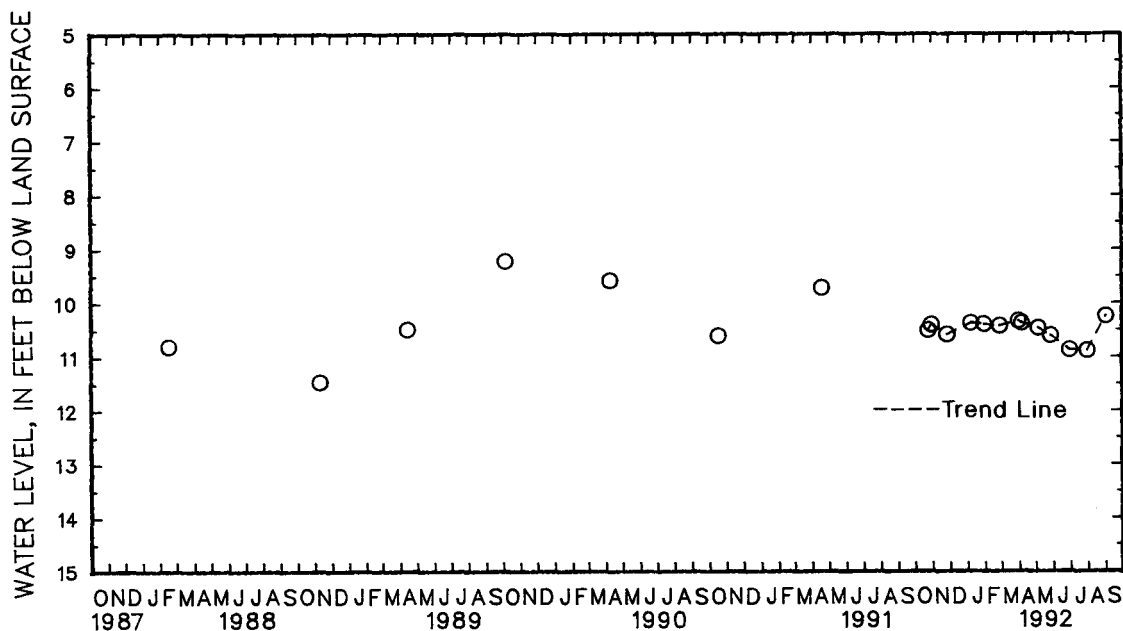
REMARKS.--Delaware Water-Level Network observation well.

PERIOD OF RECORD.-- May 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.22 ft below land surface, Oct. 6, 1989; lowest measured, 11.47 ft below land surface, Nov. 10, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	10.50	JAN 7	10.38	MAR 31	10.34	MAY 27	10.61	SEP 2	10.25
30	10.40	30	10.40	APR 6	10.38	JUN 29	10.87		
NOV 26	10.59	FEB 27	10.43	MAY 5	10.47	JUL 30	10.89		
WATER YEAR 1992		HIGHEST	10.25	SEP 2, 1992	LOWEST	10.89	JUL 30, 1992		



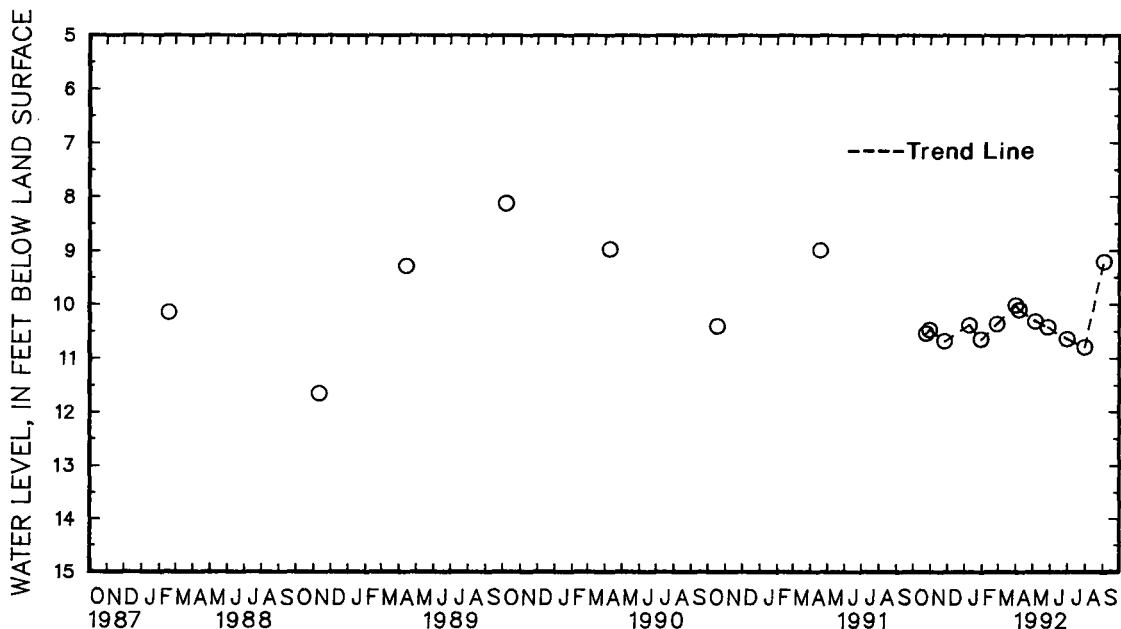
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--N152-12. SITE ID.--384558075083502. PERMIT NUMBER.--057365.
LOCATION.--Lat 38°45'58", long 75°08'35", Hydrologic Unit 02040207, in Lewes Library Park, nr railroad tracks.
Owner: Town of Lewes.
AQUIFER.--Columbia Group of Pleistocene age. Aquifer code: 112CLMB.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 80 ft; casing diameter 2 in., to 70 ft; screened from 70 to 80 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by Delaware Geological Survey personnel.
Intermittent measurements from July 1986 to July 1987. Twice yearly measurements February 1988 to January 1992.
Measurements from 1986 to 1992 taken by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface is 16 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of 6 in. casing.
REMARKS.--Delaware Water-Level Network observation well.
PERIOD OF RECORD.--July 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.13 ft below land surface, Oct. 6, 1989;
lowest measured, 11.70 ft below land surface, Nov. 20, 1986.

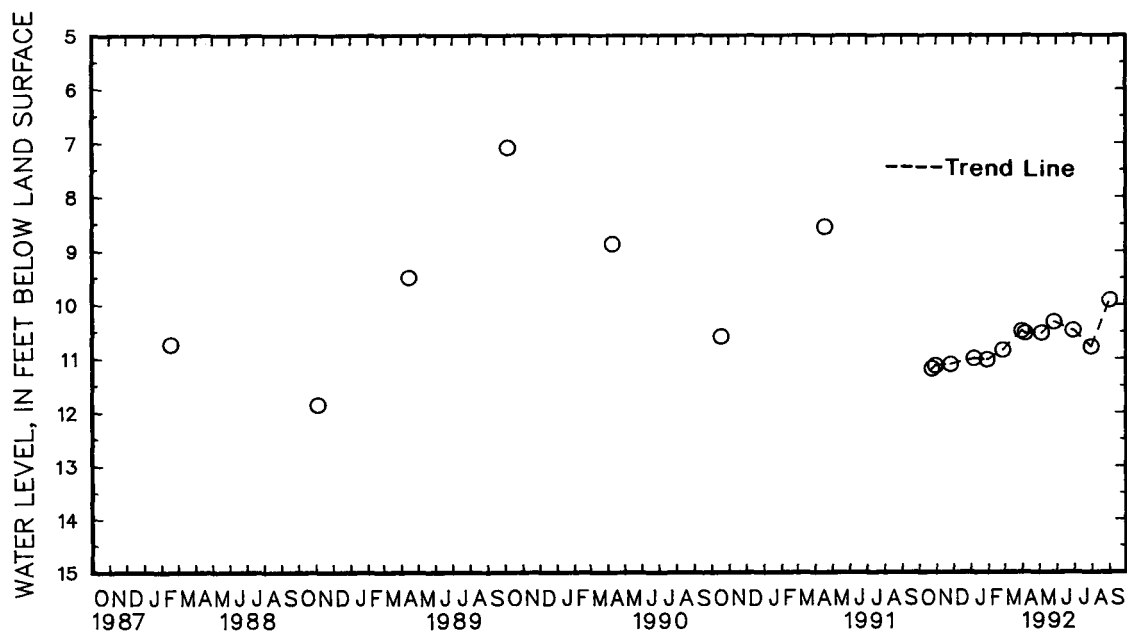
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	10.57	JAN 9	10.41	MAR 31	10.03	MAY 27	10.45	SEP 2	9.21
30	10.50	30	10.68	APR 6	10.12	JUN 29	10.68		
NOV 26	10.71	FEB 27	10.39	MAY 5	10.34	JUL 30	10.83		
WATER YEAR 1992		HIGHEST	9.21	SEP 2, 1992	LOWEST	10.83	JUL 30, 1992		



WELL NUMBER.--Oh54-01. SITE ID.--384038075110001.
LOCATION.--Lat 38°40'38", long 75°11'00", Hydrologic Unit 02060010, at intersection of DE Rts. 24 and 277,
near Angola.
Owner: U.S. Geological Survey.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 2 in., to 280 ft;
screen diameter 2 in., from 280 to 290 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Measured
monthly from November 1977 to December 1979; twice yearly from March 1980 to October 1984. Measured monthly by
USGS and Delaware Geological Survey personnel from February 1985 to July 1987.
DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of steel casing, 1.5 ft above land surface.
PERIOD OF RECORD.--November 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.35 ft below land surface, April 4, 1984;
lowest measured, 11.98 ft below land surface, Nov. 20, 1986.

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 24	11.23	JAN 7	11.03	MAR 31	10.50	MAY 27	10.34	SEP 2	9.93		
30	11.17	30	11.06	APR 6	10.54	JUN 29	10.50				
NOV 26	11.15	FEB 27	10.88	MAY 5	10.55	JUL 30	10.82				
WATER YEAR 1992		HIGHEST	9.93	SEP 2, 1992		LOWEST	11.23	OCT 24, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Oh54-02. SITE ID.--384038075110002.

LOCATION.--Lat 38°40'38", long 75°11'00", Hydrologic Unit 02060010, at intersection of DE Rts. 24 and 277,
near Angola.

Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 189 ft; casing diameter 2 in., to 179 ft; screen diameter 2 in., from 179 to 189 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Measured monthly from November 1977 to December 1979; twice yearly from March 1980 to October 1984. Measured monthly by USGS and Delaware Geological Survey personnel from February 1985 to July 1987.

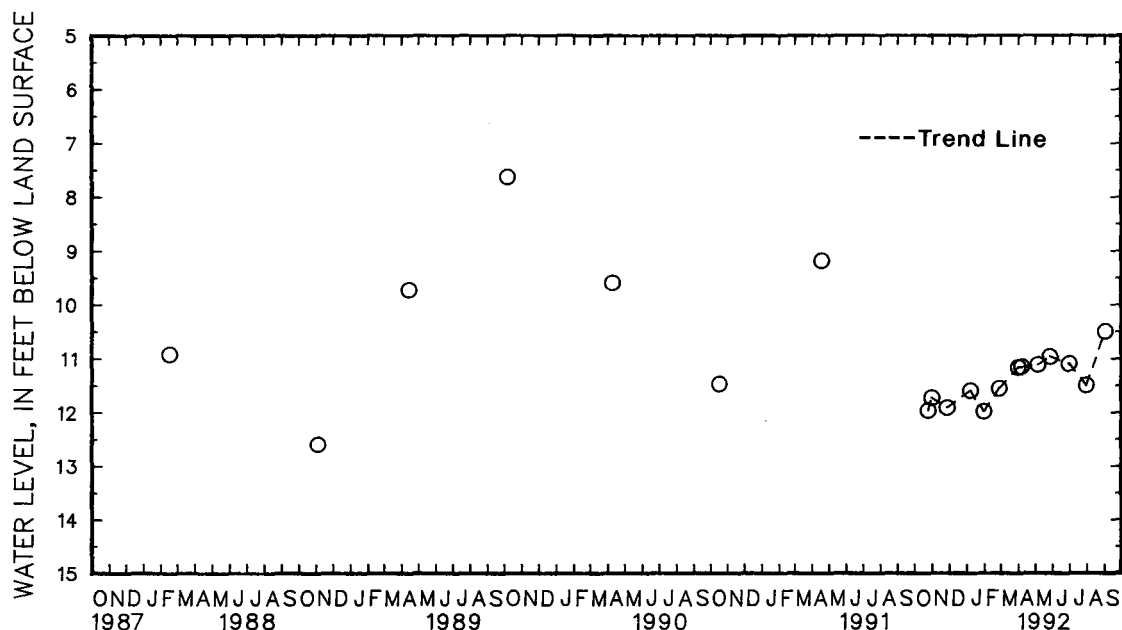
DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.44 ft below land surface, April 2, 1979;
lowest measured, 13.85 ft below land surface, Sept. 23, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 24	11.98	JAN 7	11.60	MAR 31	11.17	MAY 27	10.97	SEP 2	10.50		
30	11.74	30	11.99	6	11.16	JUN 29	11.10				
NOV 26	11.92	FEB 27	11.56	MAY 5	11.12	JUL 30	11.50				
WATER YEAR 1992		HIGHEST	10.50	SEP 2, 1992		LOWEST	11.99	JAN 30, 1992			



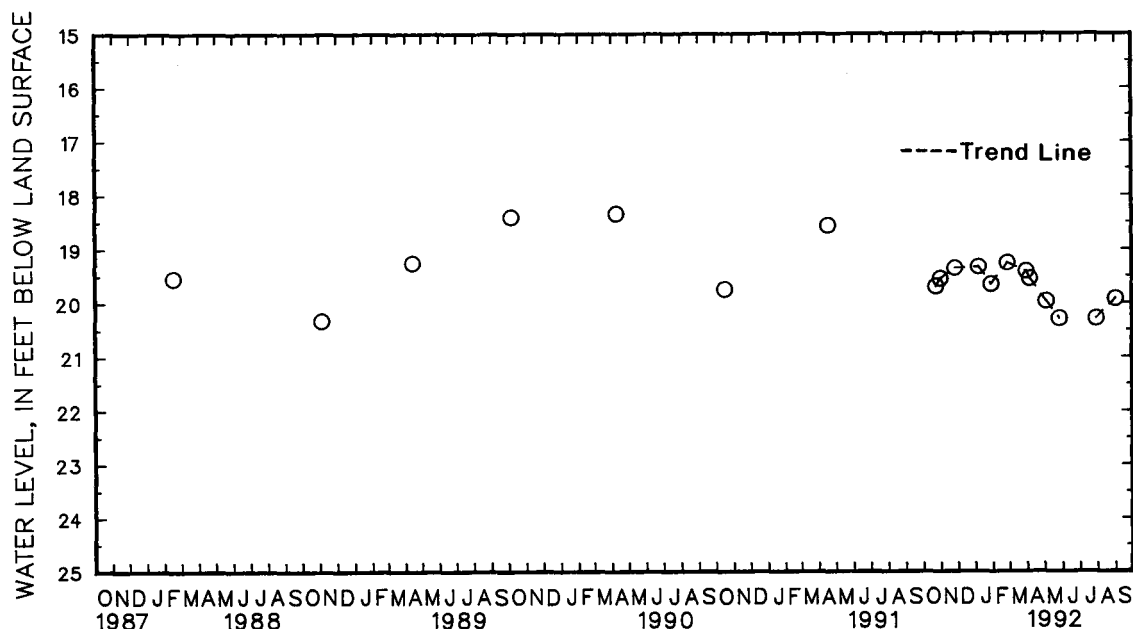
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--O124-06. SITE ID.--384258075063101. PERMIT NUMBER.--03489.
LOCATION.--Lat 38°42'58", long 75°06'31", Hydrologic Unit 02060010, nr DE Rt. 1, at Rehobeth Beach
Water Pumping Station.
Owner: City of Rehoboth.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 230 ft;
screened 230 to 250 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
Equipped with graphic water level recorder from June 1976 to December 1979.
Measured monthly January 1980 to December 1981.
DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 70 ft above land surface.
REMARKS.--Delaware Water-Level Network observation well.
PERIOD OF RECORD.--May 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.90 ft below land surface, March 25, 1979.
lowest measured, 20.49 ft below land surface, July 24, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	19.70	NOV 26	19.36	JAN 30	19.66	MAR 31	19.42	MAY 5	19.97	JUL 30	20.30
31	19.56	JAN 7	19.34	FEB 27	19.26	APR 6	19.56	27	20.30	SEP 2	19.93
WATER YEAR 1992		HIGHEST	19.26	FEB 27, 1992	LOWEST	20.30	MAY 27, 1992		JUL 30, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE-Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Pf24-02. SITE ID.--383730075213501.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, nr DE Rt. 113, nr Stockley Hospital.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 49 ft; casing diameter 4 in., to 46 ft; screened from 46 to 49 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with graphic water-level recorder from January 1970 to January 1982. Intermittent measurements

April 1982 to August 1987. Twice yearly measurements February 1988 to current year.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of 4 in. steel casing, 3.0 ft. above land surface.

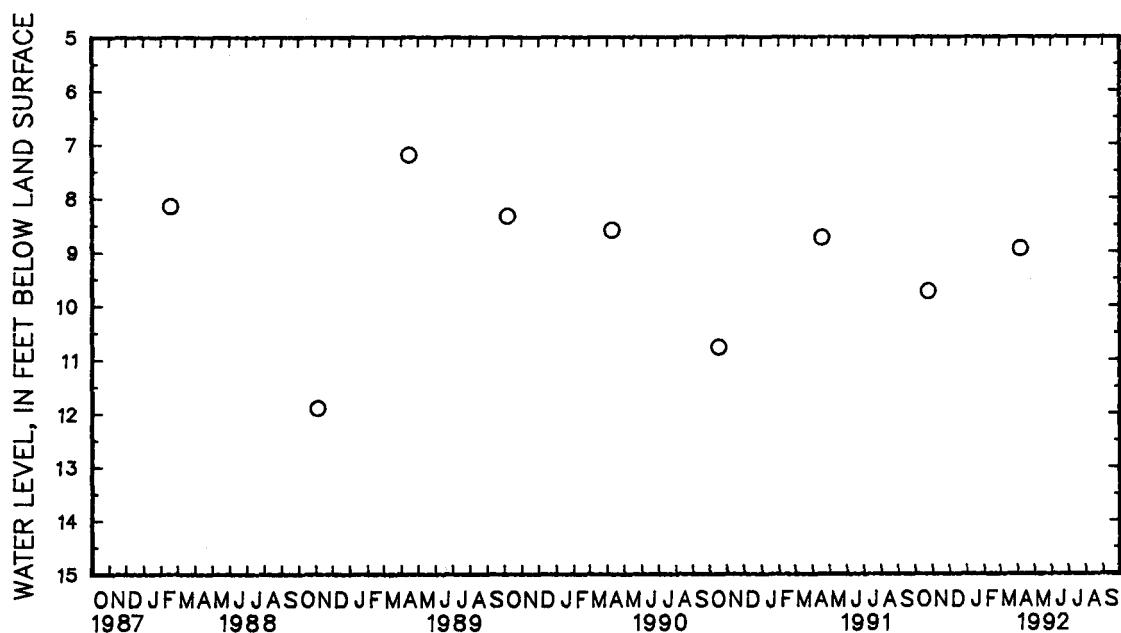
REMARKS.--Delaware Water-Level Network observation well.

PERIOD OF RECORD.--January 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.53 ft below land surface, March 10, 1979; lowest measured, 12.08 ft below land surface, October 22, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	9.74	APR 6	8.94
WATER YEAR 1992 HIGHEST 8.94 APR 6, 1992 LOWEST 9.74 OCT 24, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DALAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Pf24-03. SITE ID.--383730075213502.

LOCATION.--Lat 38°37'30", long 75°21'35", Hydrologic Unit 02060010, nr DE Rt. 113, nr Stockley Hospital.

Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, Artisan well, depth 178 ft; casing diameter 4 in., to 58 ft; casing diameter 2 in., to 168 ft; screened from 168 to 178 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.

Weekly measurements from November 1976 to May 1977. Measured monthly from June 1977 to January 1982.

Intermittent measurements April 1982 to August 1986. Measured twice yearly from February 1988 to current year.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of 4 in. PVC casing, 1.70 ft above land surface.

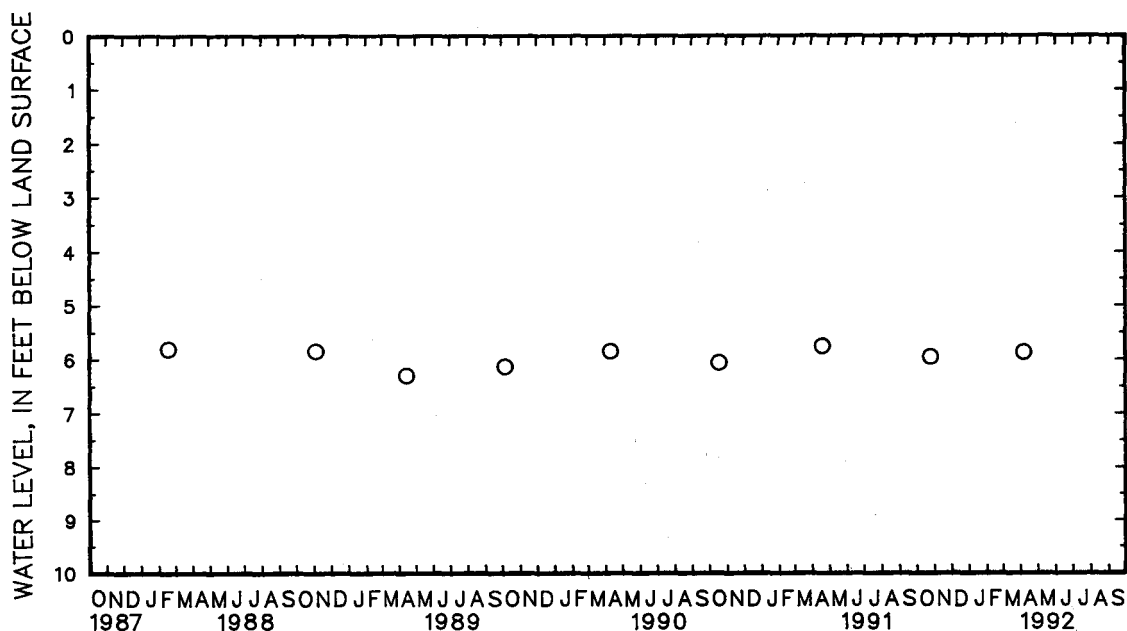
REMARKS.--Delaware Water-Level Network observation well.

PERIOD OF RECORD.--November 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.67 ft below land surface, April 2, 1979; lowest measured, 12.72 ft below land surface, August 28, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	5.99	APR 6	5.90
WATER YEAR 1992 HIGHEST 5.90 APR 6, 1992 LOWEST 5.99 OCT 24, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

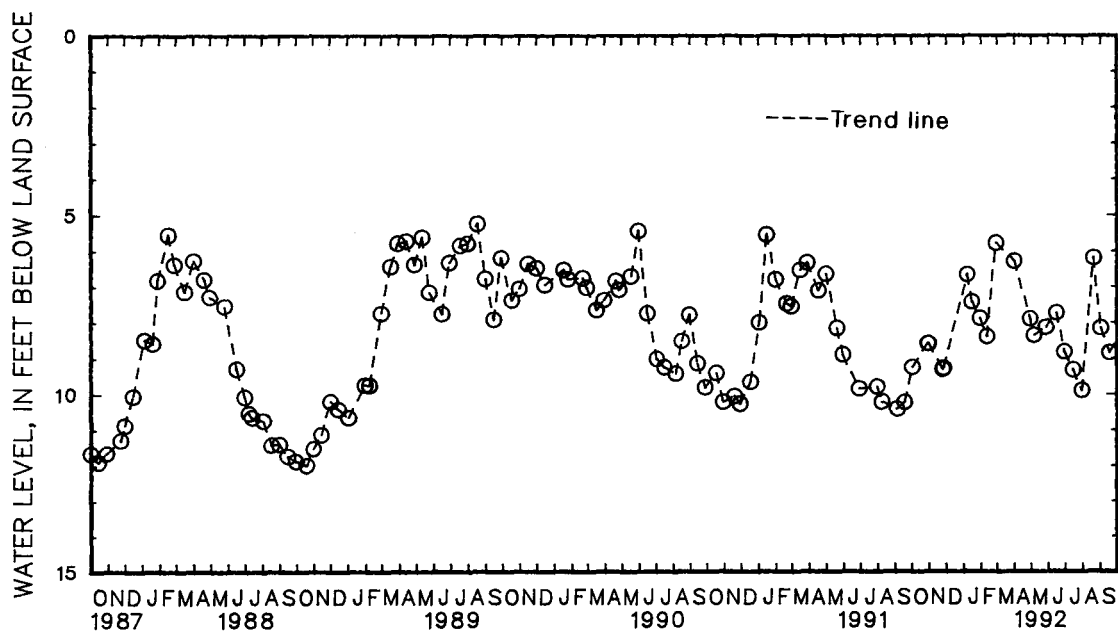
DELAWARE-- Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Qe44-01. SITE ID.--383138075260201. PERMIT NUMBER.--49320.
LOCATION.--Lat 38°31'38", long 75°26'02", Hydrologic Unit 02060008, 1.0 mi east of Whaleys Crossroads.
Owner: Delaware Department of Transportation.
AQUIFER.--Columbia Group of Pleistocene age. Aquifer code: 112CLMB.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 1 in., to 22 ft;
well point from 22 to 25 ft.
INSTRUMENTATION.--Bimonthly measurements with chalked steel tape by USGS and Delaware Geological Survey personnel.
DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing at land surface.
PERIOD OF RECORD.--September 1959 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.92 ft below land surface, Feb. 9, 1973 and
March 15, 1984; lowest measured, 12.22 ft below land surface, Dec. 2, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	9.27	NOV 26	9.31	FEB 11	8.44	MAY 5	8.41	JUL 15	9.38	SEP 17	8.90
29	8.60	JAN 7	6.67	27	5.78	27	8.18	30	9.95		
30	8.61	15	7.45	MAR 31	6.30	JUN 15	7.77	AUG 20	6.20		
NOV 25	9.34	30	7.92	APR 29	7.94	29	8.88	SEP 1	8.20		
WATER YEAR 1992		HIGHEST	5.78	FEB 27, 1992		LOWEST	9.95	JUL 30, 1992			



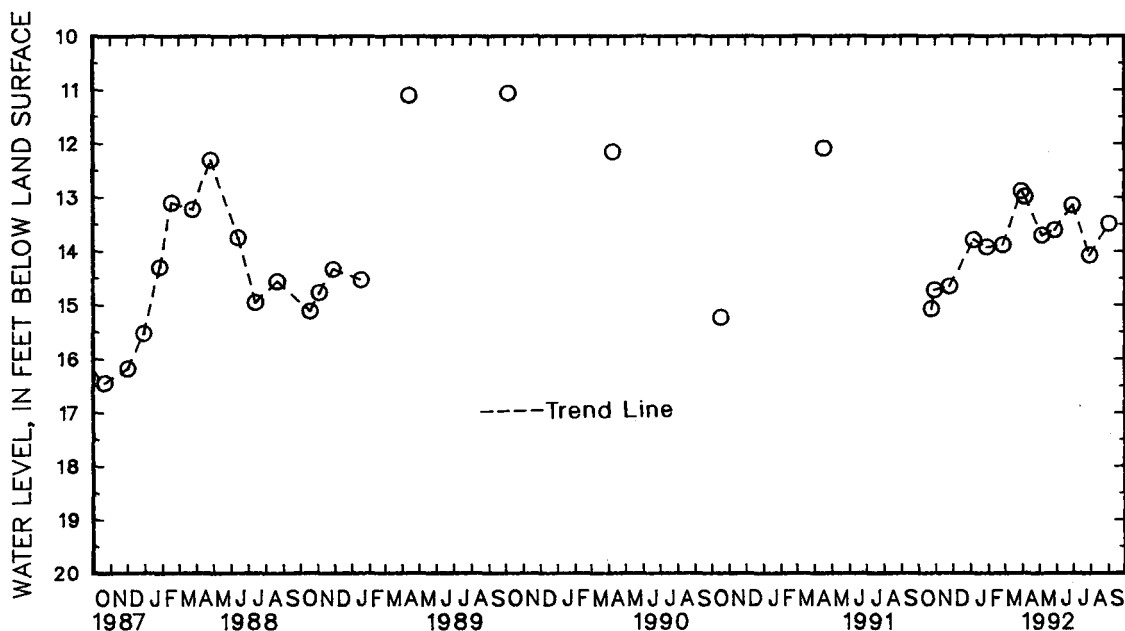
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-04. SITE ID.--383050075105201.
LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010 , at Pyle Center at Omar.
Owner: U.S. Geological Survey.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 328 ft; casing diameter 2 in., to 324 ft; screen diameter 2 in., from 324 to 328 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from November 1978 to December 1979. Intermittent measurements March 1980 to February 1985. Measured monthly from April 1985 to November 1988.
DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.0 ft above land surface.
PERIOD OF RECORD.--November 1978 to present.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.07 ft below land surface, April 2, 1979; lowest measured, 16.46 ft below land surface, Oct. 21, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	15.08	JAN 7	13.79	MAR 31	12.89	MAY 28	13.61	SEP 2	13.49
30	14.73	30	13.93	APR 6	12.99	JUN 29	13.15		
NOV 26	14.66	FEB 27	13.89	MAY 5	13.71	JUL 30	14.08		
WATER YEAR 1992		HIGHEST	12.89	MAR 31, 1992		LOWEST	15.08	OCT 24, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-05. SITE ID.--383050075105202.

LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010 , at Pyle Center at Omar.

Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 1220CNC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 232 ft; casing diameter 2 in., to 229 ft; screen diameter 2 in., from 229 to 232 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Measured monthly from November 1978 to December 1979. Intermittent measurements March 1980 to February 1985. Measured monthly from April 1985 to November 1988.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929.

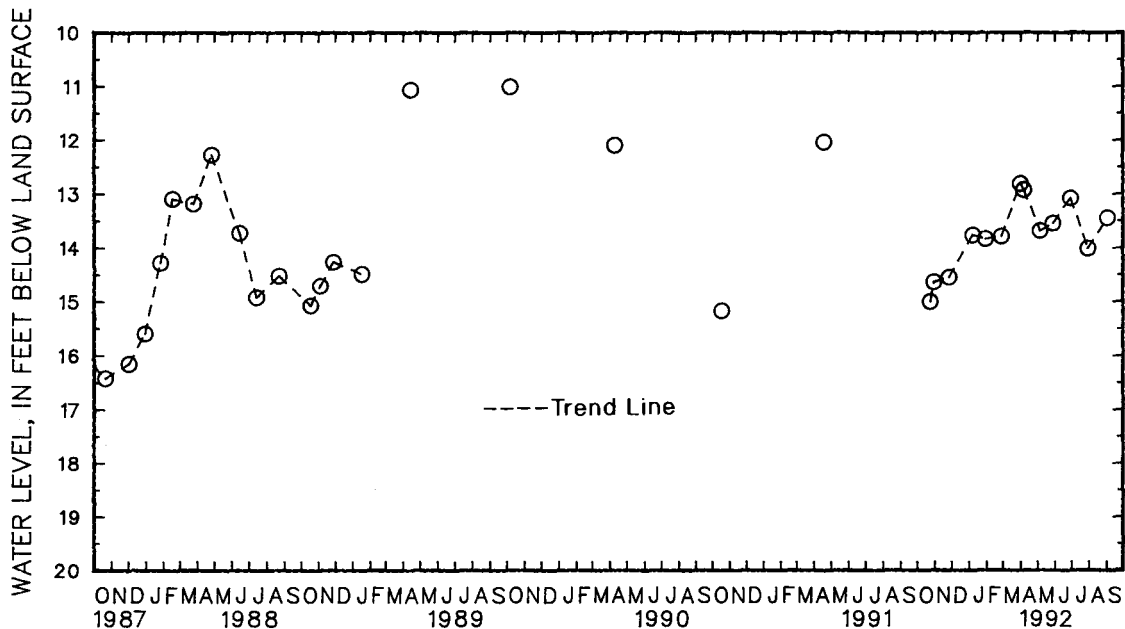
Measuring Point: Top of casing, 2.0 ft above land surface.

PERIOD OF RECORD.--November 1978 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.63 ft below land surface, March 1, 1979; lowest measured, 16.43 ft below land surface, Oct. 21, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	15.02	JAN 7	13.78	MAR 31	12.81	MAY 28	13.55	SEP 2	13.45
30	14.65	30	13.84	APR 6	12.92	JUN 29	13.09		
NOV 26	14.56	FEB 27	13.79	MAY 5	13.69	JUL 30	14.02		
WATER YEAR 1992		HIGHEST	12.81	MAR 31, 1992		LOWEST	15.02	OCT 24, 1991	



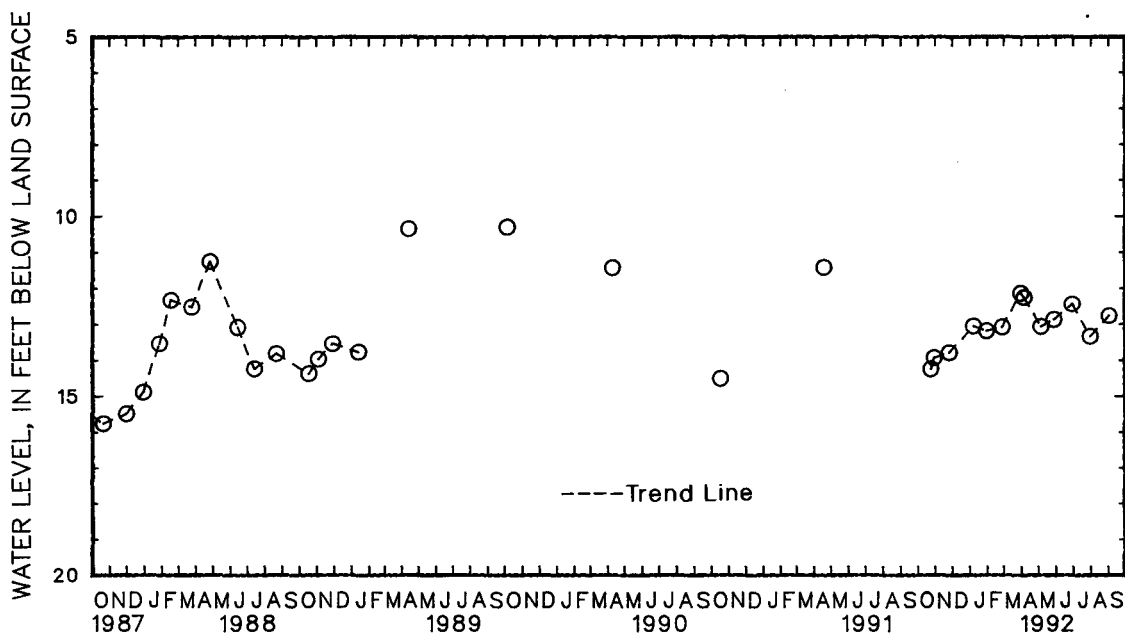
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--Qh54-06. SITE ID.--383050075105203.
LOCATION.--Lat 39°30'50", long 75°10'52", Hydrologic Unit 02060010, at Pyle Center at Omar.
Owner: U.S. Geological Survey.
AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122PCMK.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 148 ft; casing diameter 2 in., to 144 ft; screen diameter 2 in., from 144 to 148 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Measured monthly from November 1978 to December 1979. Intermittent measurements March 1980 to February 1985. Measured monthly from April 1985 to November 1988.
DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.0 ft above land surface.
PERIOD OF RECORD.--November 1978 to present.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.95 ft below land surface, March 1, 1979; lowest measured, 17.10 ft below land surface, July 24, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

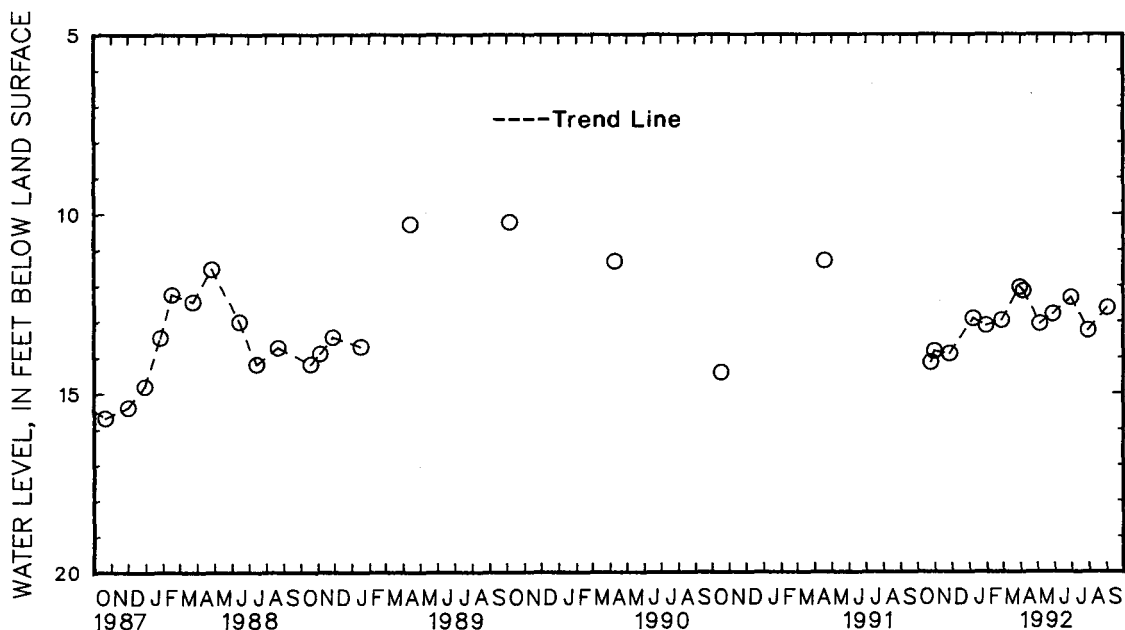
WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	14.26	JAN 7	13.06	MAR 31	12.14	MAY 28	12.88	SEP 2	12.77
30	13.95	30	13.19	APR 6	12.26	JUN 29	12.45		
NOV 26	13.82	FEB 27	13.09	MAY 5	13.07	JUL 30	13.34		
WATER YEAR 1992		HIGHEST	12.14	MAR 31, 1992	LOWEST	14.26	OCT 24, 1991		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	14.15	JAN 7	12.94	MAR 31	12.05	MAY 28	12.80	SEP 2	12.63
30	13.84	30	13.12	APR 6	12.15	JUN 29	12.34		
NOV 26	13.91	FEB 27	12.98	MAY 5	13.07	JUL 30	13.26		
WATER YEAR 1992		HIGHEST	12.05	MAR 31, 1992		LOWEST	14.15	OCT 24, 1991	



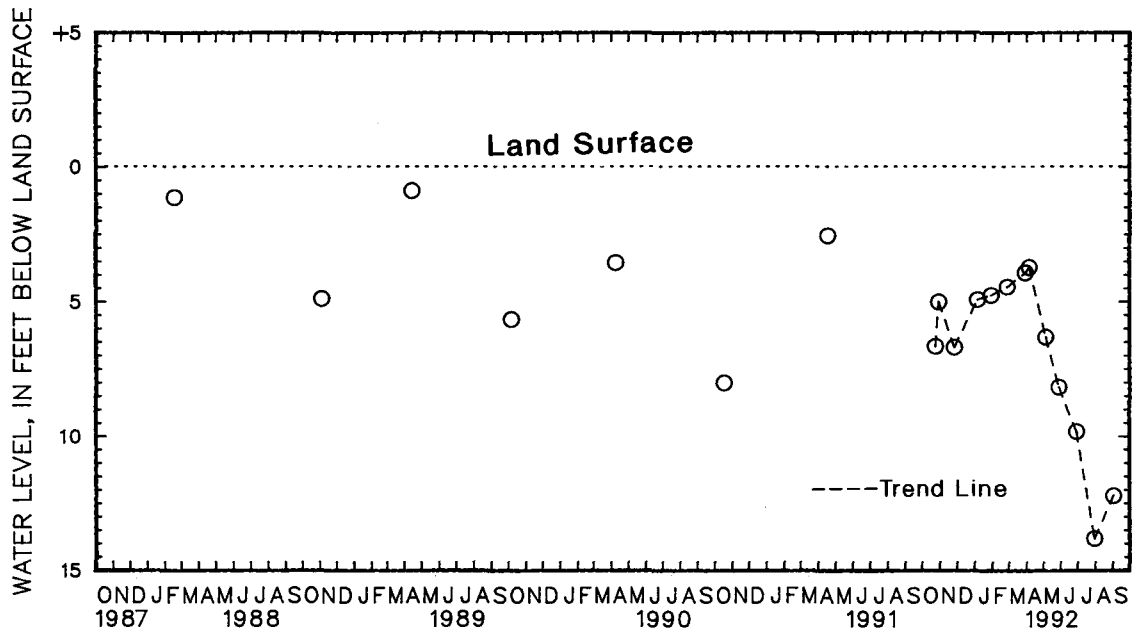
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-05. SITE ID.--382808075030501.
LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010 , at Fenwick Island State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 455 ft; casing diameter 1.25 in., to 450 ft ; screen diameter 2 in., from 450 to 455 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Measured monthly from April 1977 to March 1980. Intermittent measurements from September 1980 to February 1985. Monthly measurements from April 1985 to July 1987.
DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 1.0 ft above land surface.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, .80 ft above land surface, April 4, 1984; lowest measured, 13.81 ft below land surface, July 30, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	6.67	JAN 6	4.91	MAR 30	3.92	MAY 28	8.18	SEP 2	12.22
30	5.02	30	4.76	APR 6	3.72	JUN 29	9.83		
NOV 26	6.70	FEB 27	4.45	MAY 5	6.32	JUL 30	13.81		
WATER YEAR 1992		HIGHEST	3.72	APR 6, 1992	LOWEST	13.81	JUL 30, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

DELAWARE--Continued

SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-06. SITE ID.--382808075030502.

LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 295 ft; casing diameter 1.25 in., to 290 ft; screen diameter 2 in., from 290 to 295 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Measured monthly from April 1977 to March 1980. Intermittent measurements from September 1980 to February 1985. Monthly measurements from April 1985 to July 1987.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

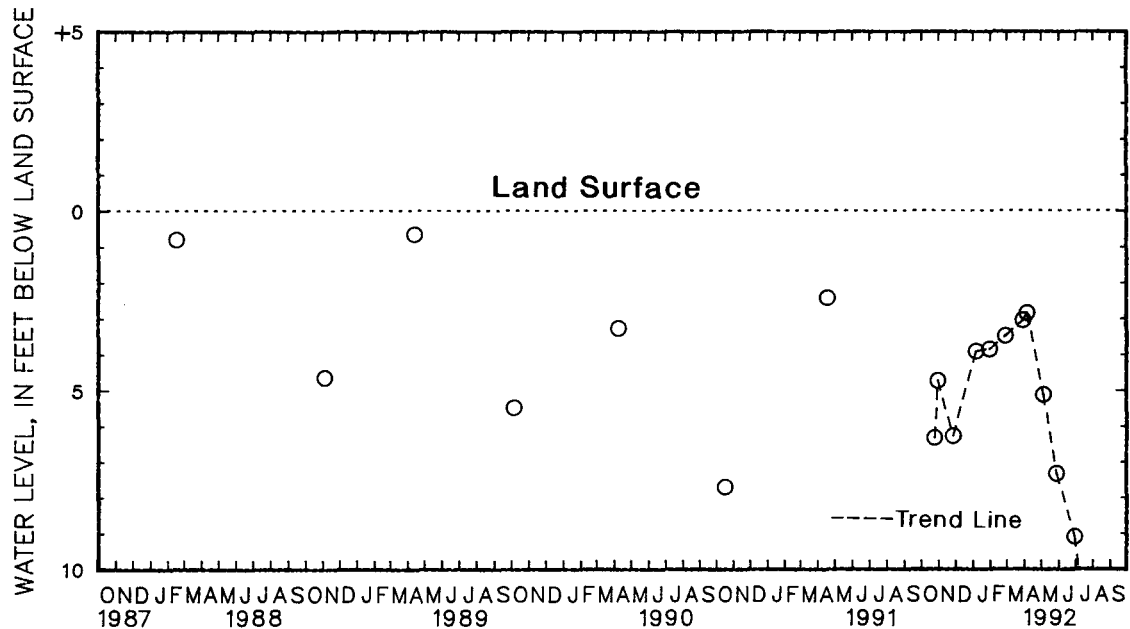
Measuring Point: Top of casing, 1.0 ft above land surface.

PERIOD OF RECORD.--April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.00 ft above land surface, April 2, 1979, and April 4, 1984; lowest measured, 9.52 ft below land surface, Aug. 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	6.32	JAN 6	3.91	MAR 30	3.04	MAY 28	7.33	SEP 2	11.58
30	4.73	30	3.85	APR 6	2.84	JUN 29	9.08		
NOV 26	6.27	FEB 27	3.48	MAY 5	5.12	JUL 30	12.86		
WATER YEAR 1992		HIGHEST	2.84	APR 6, 1992	LOWEST	12.86	JUL 30, 1992		



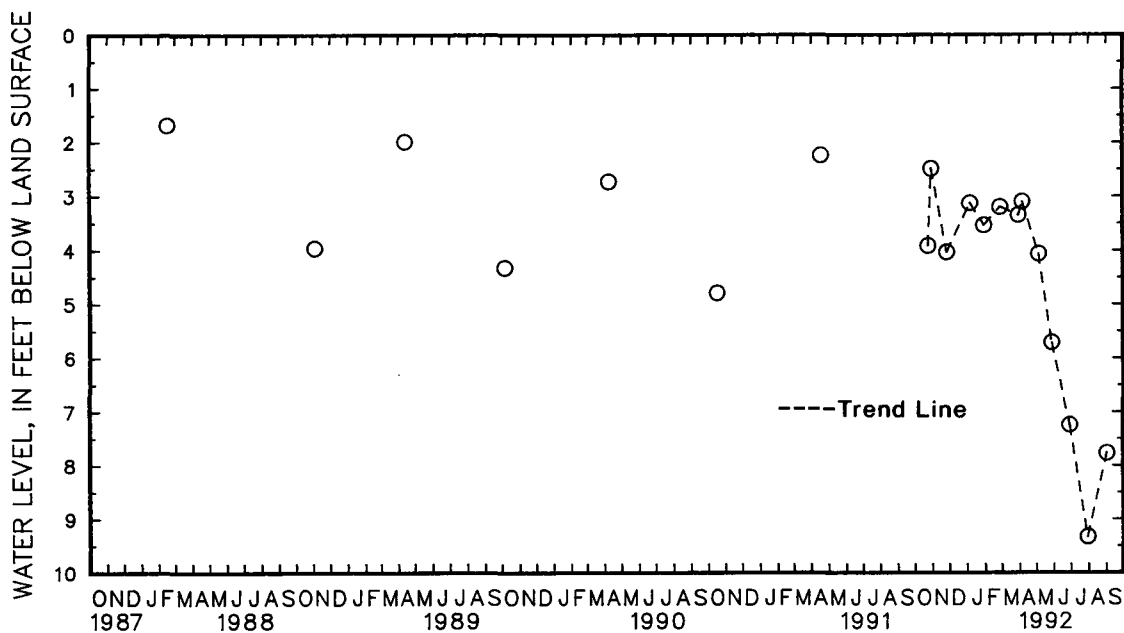
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-07. SITE ID.--382808075030503.
LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010, at Fenwick Island State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 122OCNC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 185 ft; casing diameter 1.25 in., to 180 ft; screen diameter 2 in., from 180 to 185 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Measured monthly from April 1977 to March 1980. Intermittent measurements from September 1980 to February 1985. Monthly measurements from April 1985 to July 1987.
DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 1.0 ft above land surface.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, .33 ft above land surface, Feb. 20, 1986; lowest measured, 8.63 ft below land surface, Aug 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	3.92	JAN 6	3.13	MAR 30	3.35	MAY 28	5.72	SEP 2	7.77
30	2.49	30	3.54	APR 6	3.10	JUN 29	7.25		
NOV 26	4.04	FEB 27	3.20	MAY 5	4.07	JUL 30	9.33		
WATER YEAR 1992		HIGHEST	2.49	OCT 30, 1991	LOWEST	9.33	JUL 30, 1992		



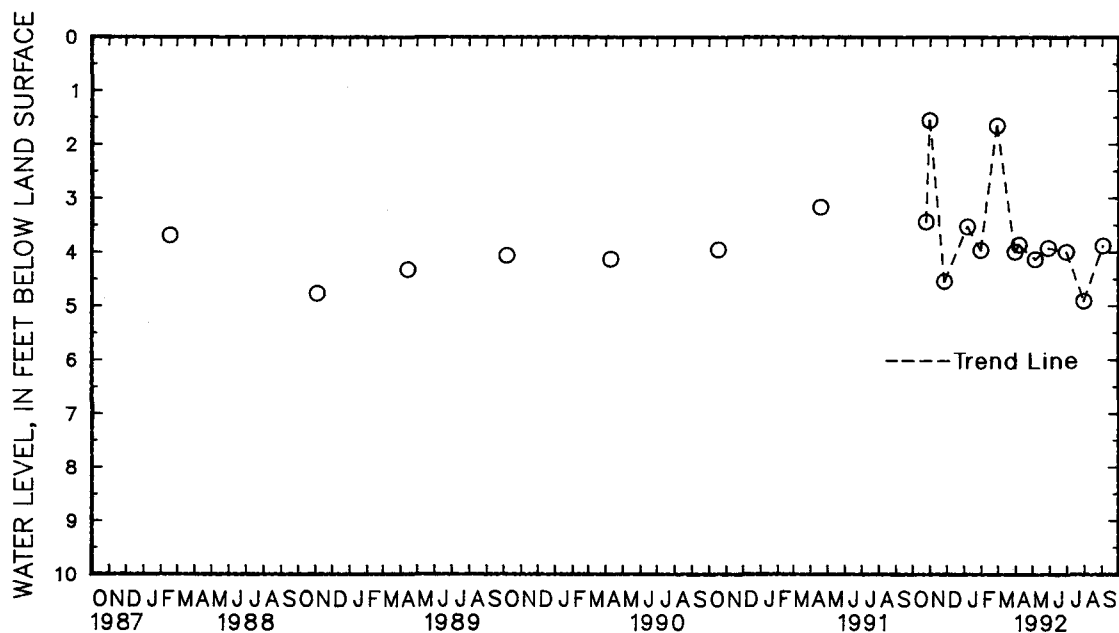
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
DELAWARE--Continued
SUSSEX COUNTY--Continued

WELL NUMBER.--Rj22-08. SITE ID.--382808075030504.
LOCATION.--Lat 38°28'08", long 75°03'05", Hydrologic Unit 02060010 , at Fenwick Island State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Pleistocene-Pliocene Formation of Pleistocene age. Aquifer code: 112PCPC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 1.25 in., to 110 ft; screen diameter 2 in., from 110 to 115 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Measured monthly from April 1977 to March 1980. Intermittent measurements from September 1980 to February 1985.
Monthly measurements from April 1985 to July 1987.
DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 1.0 ft above land surface.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, .28 ft below land surface, March 27, 1978;
lowest measured, 5.39 ft below land surface, July 24, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 24	3.44	JAN 6	3.53	MAR 30	4.00	MAY 28	3.93	SEP 2	3.89
30	1.55	30	3.97	APR 6	3.87	JUN 29	4.00		
NOV 26	4.55	FEB 27	1.65	MAY 5	4.14	JUL 30	4.92		
WATER YEAR 1992		HIGHEST	1.55	OCT 30, 1991	LOWEST	4.92	JUL 30, 1992		



GROUND-WATER LEVELS

MARYLAND

ALLEGANY COUNTY

WELL NUMBER.--AL Ah 1. SITE ID.--394024078273401.

LOCATION.--Lat 39°40'24", long 78°27'34", Hydrologic Unit 02070003, near Fifteen Mile Creek, 2.8 mi southeast of Pratt.

Owner: Green Ridge State Forest.

AQUIFER.--Jennings Formation of Upper Devonian Age. Aquifer code: 341JNGS.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, reported depth 300 ft, measured depth 113 ft; casing diameter 8 in. to unknown depth; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 720 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of sanitary seal in casing, 0.3 ft above land surface.

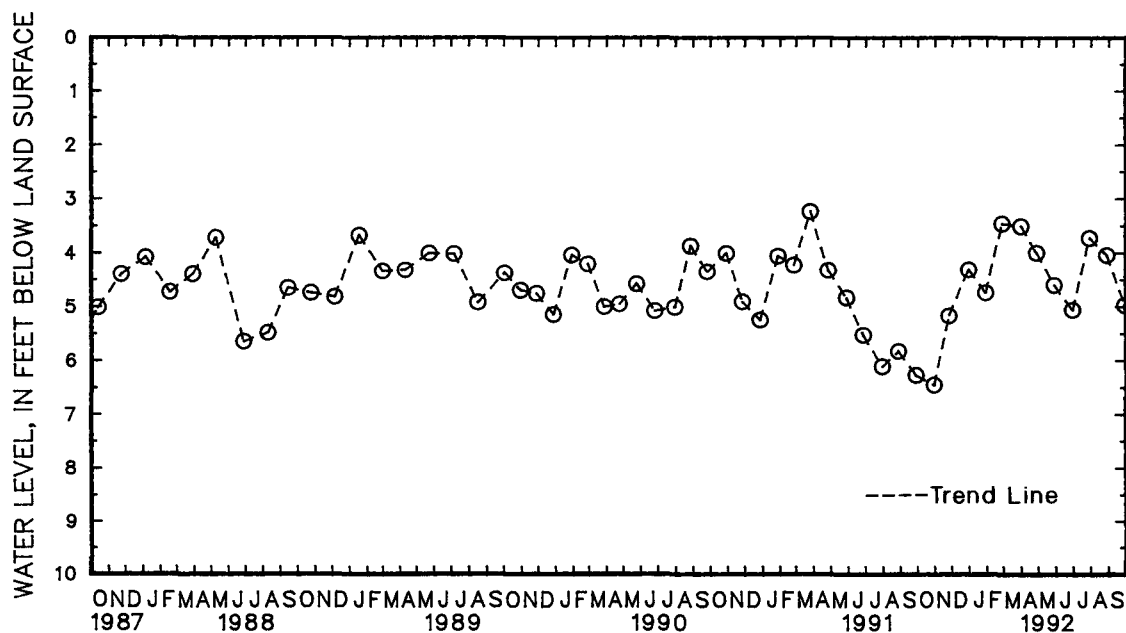
REMARKS.--Maryland Water-Level Network observation well. Water level was more than 40 ft below land surface on Nov. 19, 1969, and Feb. 12, 1970, when well was being pumped. Water levels may be affected by nearby pumping.

PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.80 ft below land surface, May 18, 1978; lowest measured 22.80 ft below land surface, July 16, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	6.49	DEC 30	4.32	FEB 26	3.46	APR 27	4.01	JUN 29	5.09	AUG 28	4.05
NOV 25	5.18	JAN 29	4.76	MAR 30	3.51	MAY 28	4.62	JUL 29	3.73	SEP 28	5.00
WATER YEAR 1992		HIGHEST	3.46	FEB 26, 1992	LOWEST	6.49	OCT 29, 1991				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ALLEGANY COUNTY--Continued

WELL NUMBER.--AL Bd 2. SITE ID.--393930078460901.

LOCATION.--Lat 39°39'30", long 78°46'09", Hydrologic Unit 02070002, at Henderson Ave. and Valley St., Cumberland

Owner: formerly Cumberland Brewing Company.

AQUIFER.--Tonoloway Limestone of Upper Silurian age. Aquifer code: 351TNLY.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 100 ft; casing diameter 6 in. to unknown depth; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing at land surface.

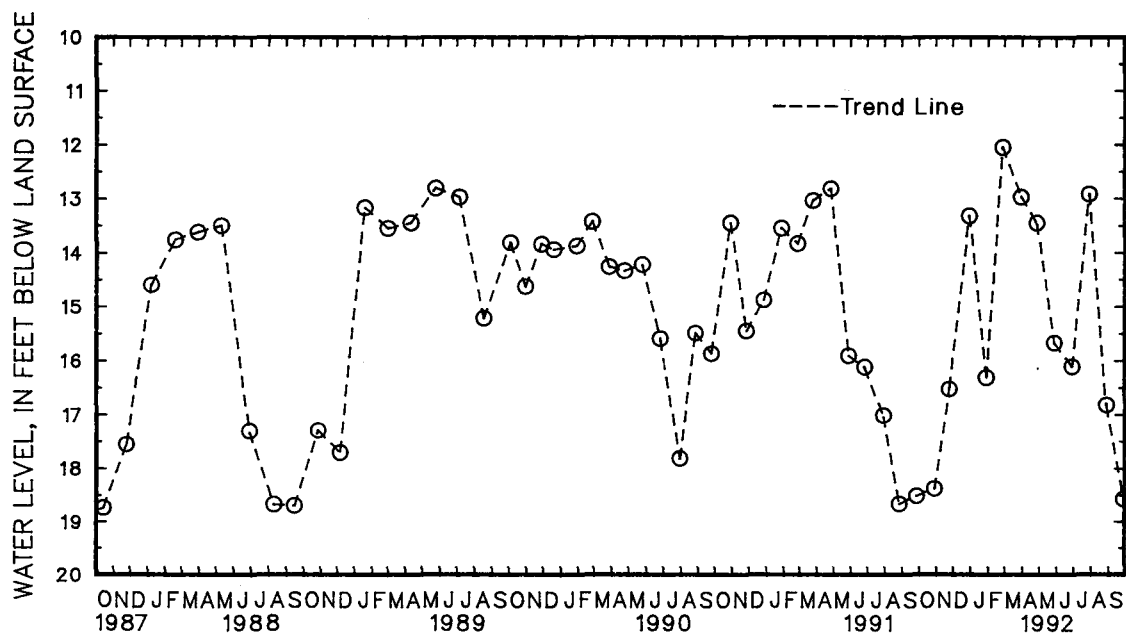
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.24 ft below land surface, Feb. 8, 1973;
lowest measured, 32.55 ft below land surface, Sept. 7, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	18.40	DEC 30	13.32	FEB 26	12.05	APR 27	13.47	JUN 29	16.15	AUG 28	16.86
NOV 25	16.53	JAN 29	16.35	MAR 30	12.98	MAY 28	15.71	JUL 29	12.92	SEP 28	18.60
WATER YEAR 1992		HIGHEST	12.05	FEB 26, 1992		LOWEST	18.60	SEP 28, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ALLEGANY COUNTY--Continued

WELL NUMBER.--AL Ca 19. SITE ID.--393009079025201. PERMIT NUMBER.--AL-05-0057.

LOCATION.--Lat 39°30'09", long 79°02'52", Hydrologic Unit 02070002, north end of Franklin.

Owner: Carl Arthur.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, reported depth 93 ft, measured depth 84.5 ft; casing diameter 6 in., to 46 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 1,035 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 2.0 ft above land surface.

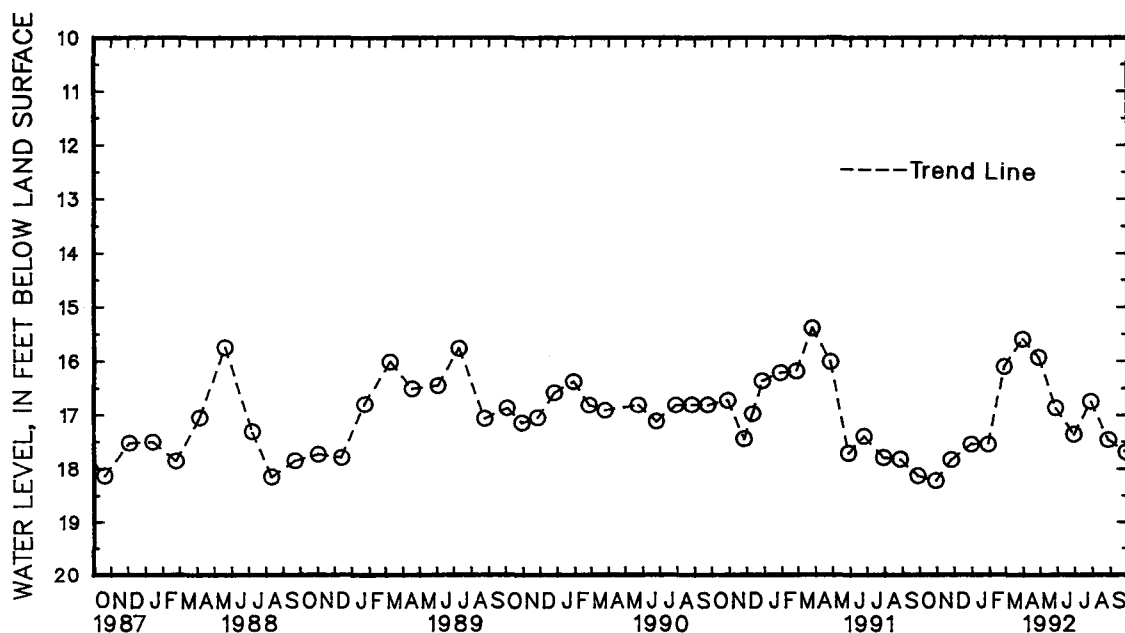
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.88 ft below land surface, March 19, 1984; lowest measured, 19.30 ft below land surface, Nov. 1, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	18.25	DEC 30	17.56	FEB 26	16.11	APR 27	15.94	JUN 29	17.39	AUG 28	17.49
NOV 25	17.85	JAN 29	17.56	MAR 30	15.60	MAY 28	16.89	JUL 29	16.76	SEP 28	17.72
WATER YEAR 1992		HIGHEST	15.60	MAR 30, 1992		LOWEST	18.25	OCT 29, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY

WELL NUMBER.--AA Ac 11. SITE ID.--391101076404001. PERMIT NUMBER.--AA-00-2445.

LOCATION.--Lat 39°11'01", long 76°40'40", Hydrologic Unit 02060003, west end of runway 15, Baltimore-Washington International Airport.

Owner: Maryland Department of Transportation.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 320 ft; casing diameter 6 in., to 312 ft; screened from 312 to 320 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 136.9 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 1.0 above land surface.

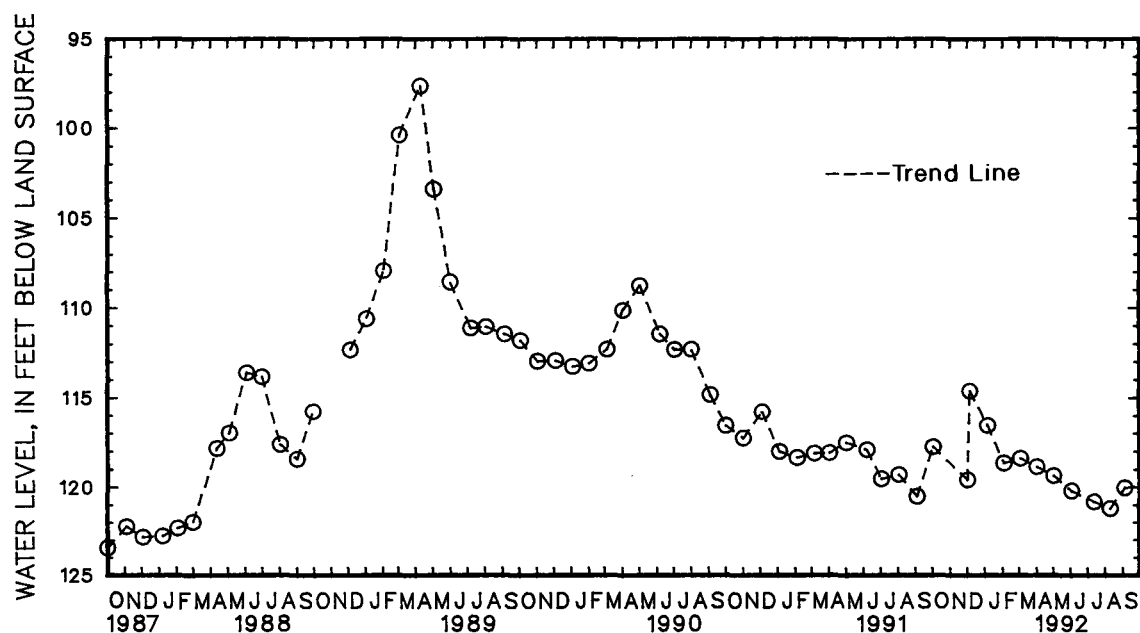
REMARKS.--Maryland Water-Level Network observation well. Well used during construction of airport. Water level reported by driller, 90 ft below land surface, April 23, 1948.

PERIOD OF RECORD.--June 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 86.60 ft below land surface, March 9, 1965; lowest measured, 125.12 ft below land surface, Oct. 9, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	117.78	DEC 6	114.64	FEB 3	118.73	APR 1	118.94	JUN 2	120.28	AUG 10	121.27
DEC 1	119.65	JAN 6	116.59	MAR 3	118.46	MAY 1	119.44	JUL 13	120.89	SEP 4	120.09
WATER YEAR 1992		HIGHEST 114.64 DEC 6, 1991		LOWEST 121.27 AUG 10, 1992							



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 29. SITE ID.--391015076373501.

LOCATION.--Lat 39°10'15", long 76°37'35", Hydrologic Unit 02060003, near Linden Lane, Glen Burnie, near the Anne Arundel County Department of Public Works office.

Owner: Anne Arundel County Department of Public Works.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 500 ft; casing diameter 3 in., to 395 ft and from 400 to 420 ft; casing diameter 2 in. from 420 to 460 ft; screened with 3 in. slotted pipe from 395 to 400 ft; screened with 2 in. slotted pipe from 460 to 500 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from July 19, 1948 to Jan. 18, 1968.

DATUM.--Elevation of land surface is 37 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.47 ft above land surface.

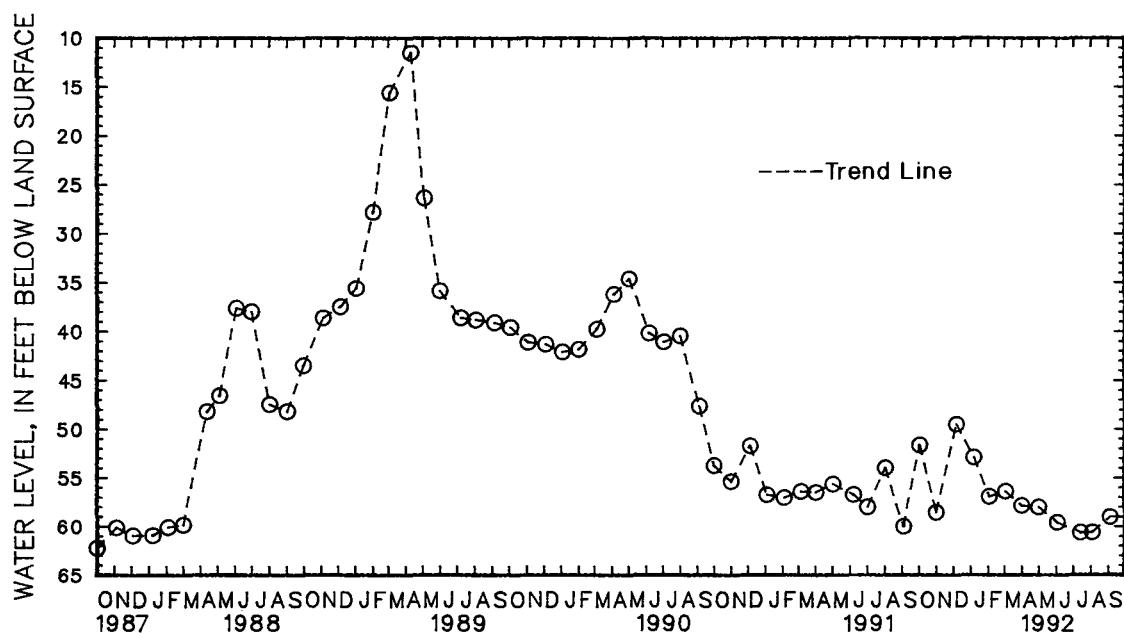
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--June 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.04 ft above land surface, Sept. 2, 1952; lowest measured, 63.63 ft below land surface, July 30, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	51.63	DEC 6	49.48	FEB 3	56.93	APR 1	57.87	JUN 2	59.59	AUG 3	60.61
NOV 1	58.55	JAN 6	52.90	MAR 3	56.40	MAY 1	58.01	JUL 13	60.64	SEP 4	59.02
WATER YEAR 1992		HIGHEST	49.48	DEC 6, 1991	LOWEST	60.64	JUL 13, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 90. SITE ID.--391032076385902. PERMIT NUMBER.--AA-04-0298.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Hammonds Ferry Rd., 0.5 mi north of Dorsey Rd. intersection.

Owner: U.S. Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 453 ft; casing diameter 6 in., to 443 ft; screen diameter 6 in. from 443 to 453 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from Aug. 19, 1977 to Sept. 4, 1979. Periodic measurements from September 1979 to March 1980. Equipped with digital water-level recorder--30--minute recorder interval from March 1980 to Dec. 31, 1984, and August 1989 to current year.

DATUM.--Elevation of land surface is 77.85 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 2.2 ft above land surface.

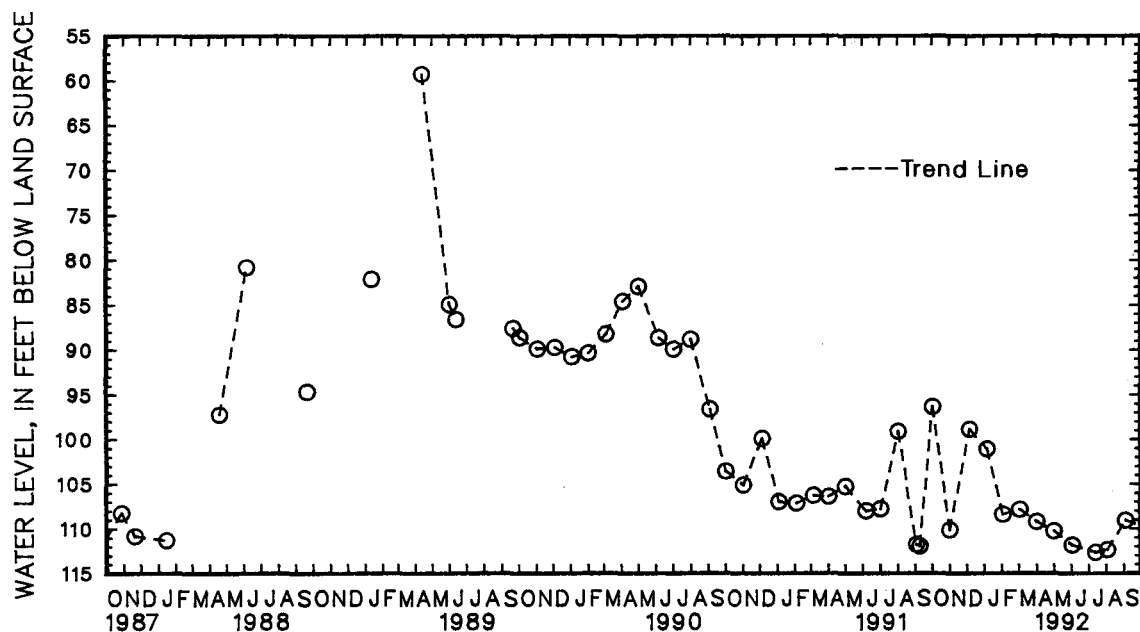
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.98 ft below land surface, Nov. 20, 1978; lowest measured, 113.46 ft below land surface, Aug. 25, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	96.33	DEC 6	98.87	FEB 3	108.38	APR 1	109.22	JUN 2	111.82	AUG 3	112.35
NOV 1	110.11	JAN 6	101.06	MAR 3	107.85	MAY 1	110.27	JUL 13	112.65	SEP 4	109.07
WATER YEAR 1992		HIGHEST	96.33	OCT 2, 1991	LOWEST	112.65	JUL 13, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

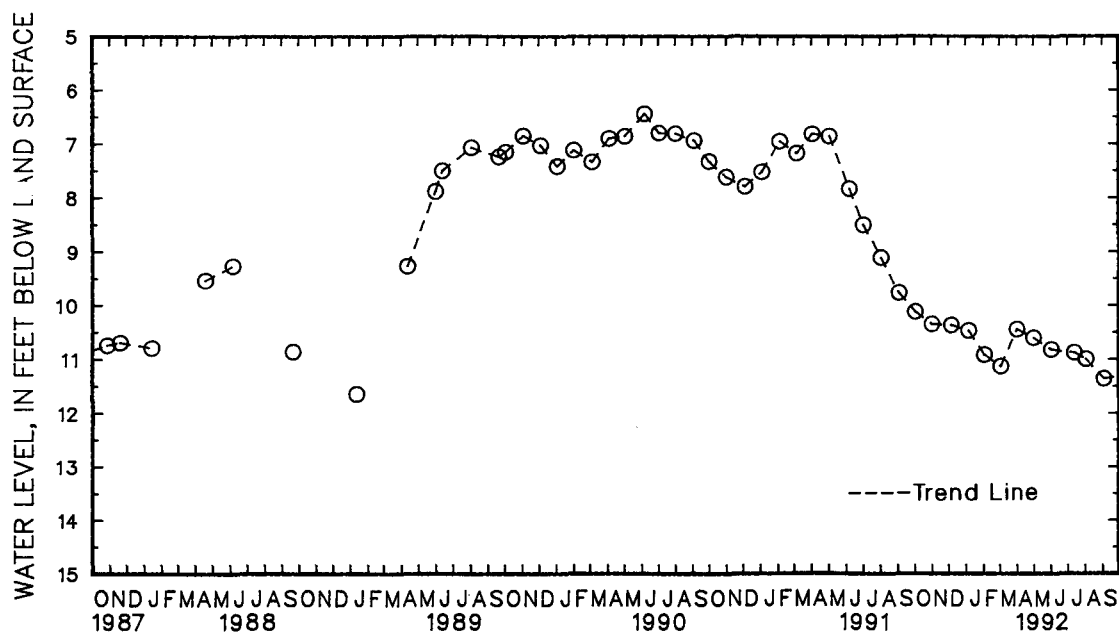
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 102. SITE ID.--391032076385904. PERMIT NUMBER.--AA-81-2641.
 LOCATION.--Lat 39°10'32", long 76°38' 59", Hydrologic Unit 02060003, off Hammonds Ferry Rd.,
 0.5 mi north of Dorsey Rd. intersection.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 108; casing diameter 6 in., to 80 ft;
 screen diameter 4 in. from 80 to 90 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval from Dec. 1983 to Oct. 2, 1990.
 DATUM.--Elevation of land surface is 77 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 2.5 ft above land-surface datum.
 REMARKS.--Maryland Water-Level Network observation well and Glen Burnie Project observation well.
 PERIOD OF RECORD.--December 1983 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.44 ft below land surface, June 6 1990;
 lowest measured, 14.74 ft below land surface, Oct. 31, 1986 and Nov. 1, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	10.13	DEC 6	10.38	FEB 3	10.93	APR 1	10.45	JUN 2	10.83	AUG 3	11.01
NOV 1	10.36	JAN 6	10.48	MAR 3	11.14	MAY 1	10.61	JUL 13	10.89	SEP 4	11.37
WATER YEAR 1992		HIGHEST	10.13	OCT 2, 1991	LOWEST	11.37	SEP 4, 1992				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 104. SITE ID.--391032076385905. PERMIT NUMBER.--AA-81-2760.

LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Hammonds Ferry Rd.,
0.5 mi north of Dorsey Rd. intersection.

Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 29 ft; casing diameter 4 in., to 19 ft; screen diameter 4 in. from 19 to 29 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--30-minute recorder interval from November 1985 to Oct. 30, 1990.

DATUM: --Elevation of land surface is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of recorder platform, 2.9 ft above land surface.

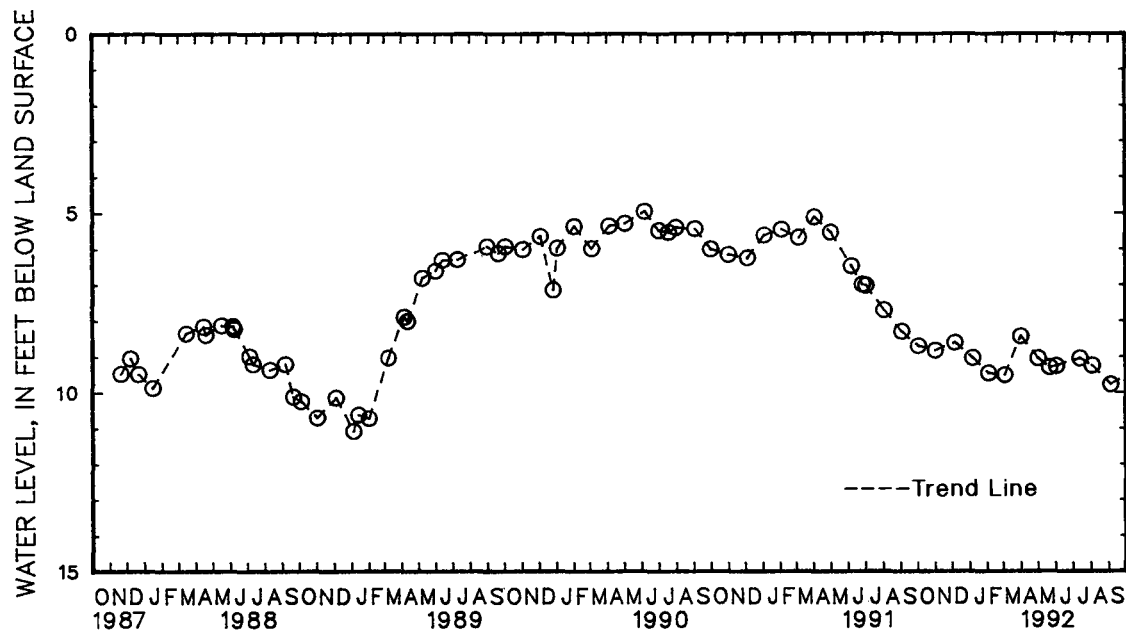
REMARKS.--Maryland Water-Level Network observation well and Glen Burnie Project observation well. Water levels before Feb. 23, 1986 are not currently available.

PERIOD OF RECORD.--February 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.95 ft below land surface, June 6, 1990;
lowest measured, 13.09 ft below land surface, Oct. 31, and Nov. 1 and 2, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL	DATE		WATER LEVEL	DATE		WATER LEVEL	DATE		WATER LEVEL			
OCT	2	8.71	JAN	6	9.05	APR	1	8.44	JUN	2	9.28	SEP	4	9.79
NOV	1	8.84	FEB	3	9.47	MAY	1	9.06	JUL	13	9.06			
DEC	6	8.62	MAR	3	9.52		21	9.31	AUG	3	9.26			
WATER YEAR 1992			HIGHEST		8.44	APR 1, 1992		LOWEST		9.79	SEP 4, 1992			

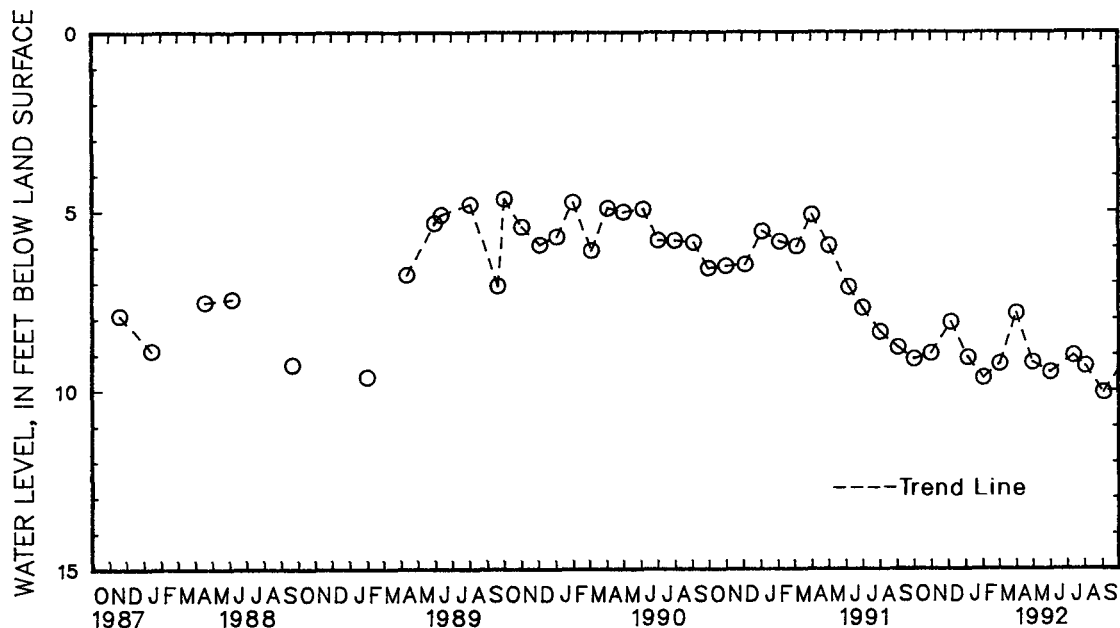


5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--AA Ad 108. SITE ID.--391032076385906. PERMIT NUMBER.--AA-81-3475.
LOCATION.--Lat 39°10'32", long 76°38'59", Hydrologic Unit 02060003, off Hammonds Ferry Rd.,
0.5 mi north of Dorsey Rd. intersection.
Owner: U.S. Geological Survey.
AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11.5 ft; casing diameter 4 in., to 6 ft;
screen diameter 4 in. from 6 to 11 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
water-level recorder--60-minute recorder interval from Feb. 23, 1986 to Sept. 30, 1990.
DATUM.--Elevation of land surface is 78 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of recorder platform, 3.7 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Glen Burnie Project observation well. Water levels
before Feb. 23, 1986 are not currently available.
PERIOD OF RECORD.--August 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.46 ft below land surface, Aug. 7, 1989;
lowest measured, Dry on Aug. 22, 1985; Jan. 17, 1986; May 20, 1986; July 8, 1986 and Nov. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 2	9.14	DEC 6	8.11	FEB 3	9.66	APR 1	7.86	JUN 2	9.50	AUG 3	9.33				
NOV 1	8.98	JAN 6	9.10	MAR 3	9.27	MAY 1	9.23	JUL 13	9.04	SEP 4	10.07				
WATER YEAR 1992		HIGHEST		7.86		APR 1, 1992		LOWEST		10.07		SEP 4, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ad 109. SITE ID.--391006076380101. PERMIT NUMBER.--AA-81-4890.
 LOCATION.--Lat 39°10'06", long 76°38'01", Hydrologic Unit 02060003, 0.05 mi south of Dorsey Rd.,
 0.17 mi west of MD Rt. 648.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 46 ft; casing diameter 4 in., to 36 ft;
 screen diameter 4 in. from 36 to 46 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval from October 1985 to current year.
 DATUM.--Elevation of land surface is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 3.0 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network. Water levels before Feb. 23, 1986 are not currently
 available. Water levels affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--October 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.07 ft above sea level, April 21, 1991;
 lowest measured, 20.20 ft above sea level, Oct. 15, 1987.

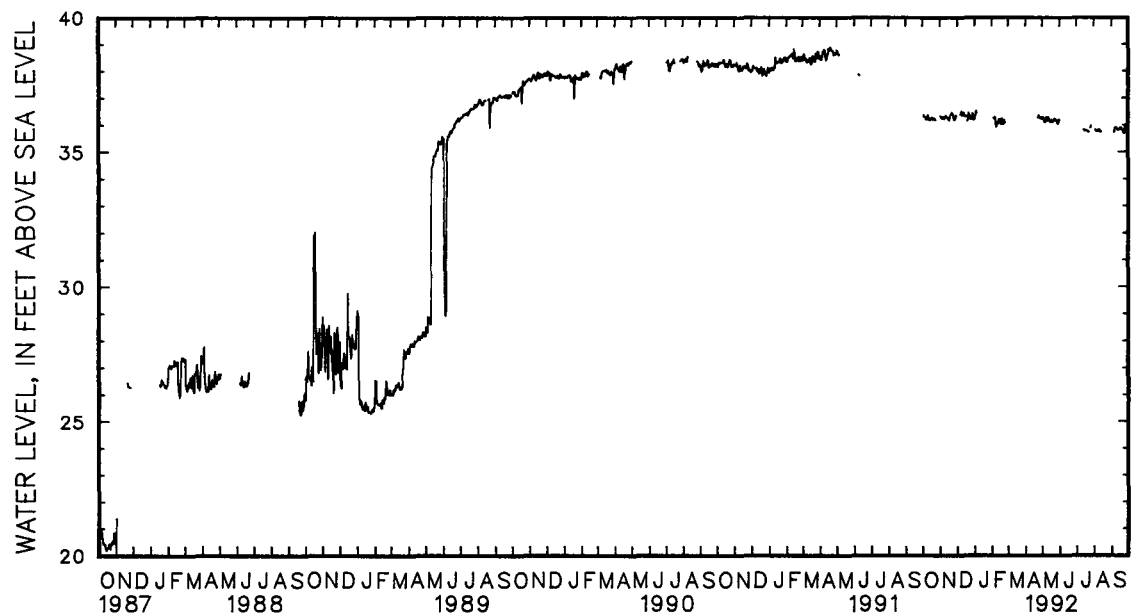
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	36.30	36.21	---	---	---	---
2	---	---	36.44	36.32	---	---	36.41	36.30	---	---	---	---
3	36.41	36.37	36.32	36.27	---	---	36.51	36.41	---	---	---	---
4	36.37	36.31	36.28	36.25	---	---	36.62	36.51	36.46	36.26	---	---
5	36.35	36.31	36.29	36.24	---	---	36.52	36.46	36.36	36.25	---	---
6	36.40	36.31	36.33	36.29	---	---	---	---	36.30	36.24	---	---
7	36.31	36.24	36.34	36.31	36.50	36.38	---	---	36.34	36.29	---	---
8	36.24	36.20	36.31	36.23	36.48	36.42	---	---	36.29	36.15	---	---
9	36.25	36.21	36.30	36.23	36.54	36.48	---	---	36.15	35.94	---	---
10	36.37	36.25	36.48	36.30	36.54	36.34	---	---	36.09	35.93	---	---
11	36.44	36.37	36.50	36.34	36.38	36.34	---	---	36.26	36.09	---	---
12	36.41	36.30	36.34	36.30	36.44	36.34	---	---	36.22	36.06	---	---
13	36.30	36.20	36.32	36.30	36.50	36.44	---	---	36.36	36.10	---	---
14	36.23	36.18	36.32	36.25	---	---	---	---	36.36	36.21	---	---
15	36.33	36.23	36.34	36.25	36.43	36.35	---	---	36.42	36.20	---	---
16	36.33	36.23	36.34	36.23	36.40	36.31	---	---	36.43	36.14	---	---
17	36.43	36.23	36.24	36.17	36.51	36.32	---	---	36.14	36.04	---	---
18	36.37	36.28	36.35	36.24	---	---	---	---	36.24	36.08	---	---
19	36.34	36.24	36.39	36.35	36.24	36.16	---	---	36.30	36.24	---	---
20	36.24	36.20	36.45	36.38	36.37	36.17	---	---	36.25	36.07	---	---
21	36.25	36.21	36.47	36.42	36.50	36.37	---	---	36.10	36.03	---	---
22	36.25	36.24	36.57	36.46	36.50	36.44	---	---	36.17	36.02	---	---
23	36.24	36.20	36.54	36.41	---	---	---	---	36.19	36.17	---	---
24	36.21	36.19	36.49	36.37	36.53	36.34	---	---	36.18	36.10	---	---
25	---	---	36.37	36.27	36.34	36.22	---	---	36.25	36.10	---	---
26	---	---	36.27	36.20	36.27	36.21	---	---	---	---	---	---
27	---	---	36.26	36.19	36.28	36.21	---	---	---	---	---	---
28	---	---	36.34	36.26	36.42	36.21	---	---	---	---	---	---
29	---	---	36.35	36.34	36.59	36.42	---	---	---	---	---	---
30	---	---	36.37	36.34	---	---	---	---	---	---	---	---
31	---	---	---	---	36.23	36.19	---	---	---	---	---	---
MONTH	36.44	36.18	36.57	36.17	36.59	36.16	36.62	36.21	36.46	35.93	---	---

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued
AA Ad 109--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	36.29	36.23	36.25	36.19	---	---	---	---	---	---
2	---	---	36.42	36.28	---	---	---	---	---	---	---	---
3	---	---	36.41	36.30	---	---	---	---	---	---	---	---
4	---	---	36.32	36.26	---	---	---	---	35.88	35.83	---	---
5	---	---	36.26	36.16	---	---	---	---	35.83	35.77	35.76	35.74
6	---	---	36.16	36.11	---	---	---	---	35.77	35.75	35.87	35.74
7	---	---	36.18	36.11	---	---	---	---	35.76	35.75	35.90	35.87
8	---	---	36.35	36.18	---	---	---	---	35.81	35.76	35.93	35.90
9	---	---	36.34	36.28	---	---	---	---	35.82	35.81	35.92	35.90
10	---	---	36.28	36.22	---	---	---	---	35.82	35.81	35.94	35.91
11	---	---	36.22	36.17	---	---	---	---	35.81	35.81	35.94	35.85
12	---	---	36.28	36.18	---	---	---	---	35.81	35.75	35.85	35.82
13	---	---	36.35	36.28	---	---	---	---	35.75	35.75	35.84	35.82
14	---	---	36.31	36.18	---	---	35.88	35.82	35.75	35.75	35.84	35.83
15	---	---	36.18	36.14	---	---	35.89	35.83	---	---	35.84	35.83
16	---	---	36.15	36.12	---	---	35.86	35.77	---	---	35.88	35.84
17	---	---	36.19	36.12	---	---	35.83	35.79	---	---	35.90	35.88
18	---	---	36.23	36.19	---	---	35.83	35.78	---	---	35.94	35.90
19	---	---	36.19	36.10	---	---	35.78	35.78	---	---	35.94	35.85
20	---	---	36.13	36.11	---	---	35.78	35.78	---	---	35.85	35.82
21	---	---	36.17	36.11	---	---	35.78	35.78	---	---	35.85	35.82
22	---	---	36.23	36.17	---	---	35.78	35.74	---	---	35.89	35.75
23	---	---	36.27	36.23	---	---	35.81	35.74	---	---	35.75	35.69
24	36.45	36.28	36.29	36.22	---	---	---	---	---	---	35.97	35.73
25	36.44	36.36	36.22	36.17	---	---	---	---	---	---	36.01	35.93
26	36.36	36.30	36.20	36.17	---	---	35.99	35.90	---	---	35.96	35.93
27	36.30	36.29	36.20	36.16	---	---	36.00	35.96	---	---	35.95	35.92
28	36.29	36.25	36.16	36.10	---	---	---	---	---	---	35.96	35.92
29	36.29	36.24	36.10	36.05	---	---	---	---	---	---	---	---
30	36.33	36.29	36.20	36.08	---	---	---	---	---	---	---	---
31	---	---	36.27	36.20	---	---	---	---	---	---	---	---
MONTH	36.45	36.24	36.42	36.05	36.25	36.19	36.00	35.74	35.88	35.75	36.01	35.69

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

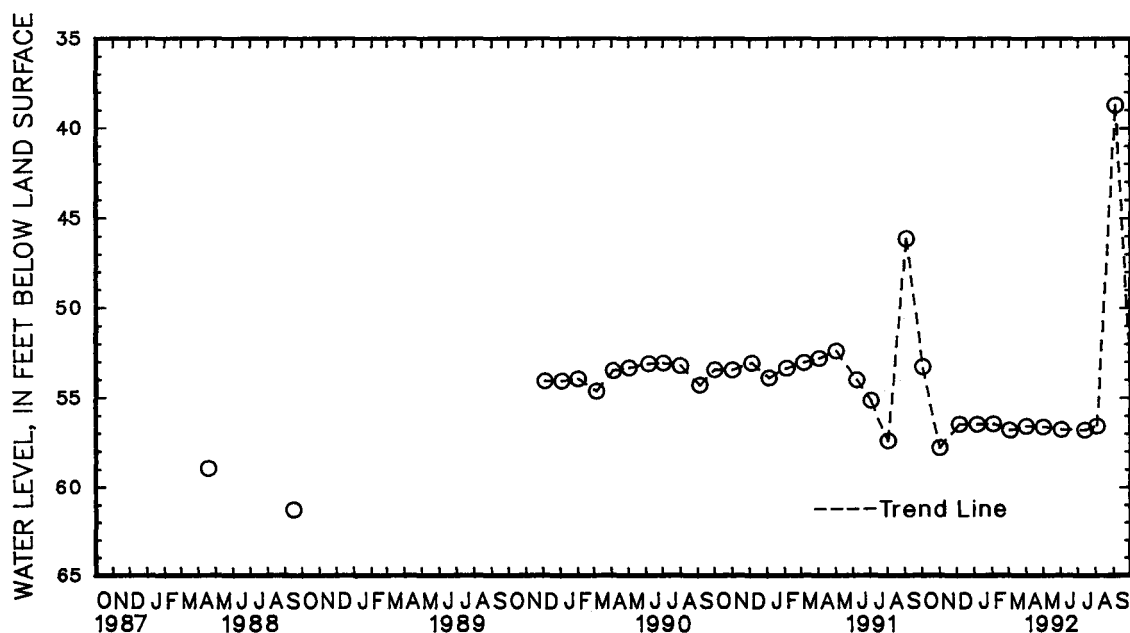
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 91. SITE ID.--390950076391101. PERMIT NUMBER.--AA-04-2029.
 LOCATION.--Lat 39°09'50", long 76°39'11", Hydrologic Unit 02060003, .3 mi southeast of the intersection of Dorsey Rd. and Baltimore Annapolis Blvd., in the median of MD Route 176, Glen Burnie.
 Owner: Anne Arundel Co. Department of Public Works.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 160 ft; casing diameter 6 in., to 119 ft; casing diameter 4 in from 119 to 155 ft; screen diameter 2 in. from 155 to 160 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 82.54 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of shelter platform, 3.25 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--April 1981 to March 1986, December 1989 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.73 ft below land surface, Sept. 4, 1992; lowest measured, 75.20 ft below land surface, Sept. 1, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	53.39	DEC 6	56.55	FEB 3	56.53	APR 1	56.66	JUN 2	56.85	AUG 3	56.65
NOV 1	57.91	JAN 6	56.55	MAR 3	56.88	MAY 1	56.71	JUL 13	56.87	SEP 4	38.73
WATER YEAR 1992		HIGHEST	38.73	SEP 4, 1992	LOWEST	57.91	NOV 1, 1991				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 152. SITE ID.--390821076365401. PERMIT NUMBER.--AA-81-3463.
 LOCATION.--Lat 39°08'21", long 76°36'54", Hydrologic Unit 02060003, 100 ft north of MD Rt 100,
 0.2 mi east of Oakwood Rd.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 103 ft; casing diameter 6 in., to 90 ft;
 screen diameter 4 in. from 90 to 100 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval from March 14, 1985 to current year.
 DATUM.--Elevation of land surface is 53 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 3.0 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network. Water levels before Feb. 23, 1986 are not currently
 available. Water levels are affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--March 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.24 ft above sea level, Jan. 14, 1992;
 lowest measured, 19.88 ft above sea level, Aug. 21, 1987.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.55	23.33	23.60	23.55	24.81	24.53	24.65	24.56	23.85	23.44	24.07	23.80
2	23.63	23.55	23.63	23.47	24.89	24.81	24.78	24.65	23.44	23.29	24.04	23.85
3	23.70	23.60	23.47	23.39	24.82	24.39	24.96	24.78	23.33	23.26	23.85	23.59
4	23.60	23.42	23.41	23.35	---	---	25.12	24.96	23.45	23.26	23.59	23.49
5	23.45	23.38	23.42	23.34	---	---	25.02	24.90	23.38	23.23	23.56	23.49
6	23.52	23.44	23.82	23.42	---	---	24.91	24.85	23.65	23.23	23.58	23.52
7	23.44	23.33	24.10	23.82	24.64	24.50	24.85	24.74	23.79	23.65	23.88	23.58
8	23.37	23.30	24.16	24.08	24.67	24.57	24.78	24.68	23.77	23.63	23.88	23.73
9	23.42	23.33	24.37	24.14	24.77	24.67	24.94	24.77	23.63	23.33	23.73	23.63
10	23.53	23.40	24.57	24.37	---	---	24.97	24.92	23.46	23.32	23.96	23.67
11	23.62	23.52	24.55	24.37	24.57	24.54	24.92	24.75	23.73	23.46	24.06	23.82
12	23.60	23.48	24.39	24.36	24.63	24.54	24.81	24.68	23.69	23.55	23.87	23.73
13	23.48	23.34	24.42	24.38	24.76	24.63	24.95	24.81	23.88	23.57	23.81	23.64
14	23.38	23.29	24.41	24.34	24.89	24.72	25.24	24.95	23.91	23.80	23.68	23.63
15	23.49	23.38	24.48	24.41	24.72	24.61	24.97	24.79	24.04	23.80	23.64	23.47
16	23.49	23.39	24.47	24.27	24.65	24.54	25.07	24.87	24.07	23.73	23.71	23.53
17	23.69	23.39	24.41	24.26	24.76	24.55	25.02	24.86	23.78	23.71	23.69	23.56
18	23.63	23.43	24.47	24.41	24.74	24.50	24.86	24.74	24.12	23.73	23.90	23.69
19	23.53	23.43	24.54	24.44	24.50	24.34	24.78	24.70	24.18	23.98	23.79	23.69
20	23.48	23.39	24.60	24.51	24.56	24.35	24.98	24.77	23.98	23.63	23.69	23.60
21	23.55	23.44	24.67	24.54	24.78	24.56	24.92	24.83	23.63	23.50	23.84	23.60
22	23.58	23.49	24.72	24.57	24.81	24.71	24.83	24.79	23.62	23.48	23.82	23.51
23	23.54	23.45	24.67	24.57	24.97	24.81	25.23	24.81	23.82	23.62	23.51	23.41
24	23.48	23.45	24.62	24.46	24.94	24.72	25.22	24.28	23.94	23.76	23.46	23.39
25	23.53	23.47	24.46	24.31	24.72	24.56	24.28	23.83	24.00	23.75	23.95	23.42
26	23.54	23.48	24.38	24.30	24.60	24.54	23.90	23.74	24.10	23.96	23.88	23.67
27	23.58	23.53	24.50	24.36	24.62	24.54	23.80	23.69	23.98	23.87	23.71	23.58
28	23.59	23.43	24.51	24.48	24.76	24.53	23.84	23.78	24.21	23.98	23.68	23.58
29	23.43	23.36	24.54	24.50	25.05	24.76	23.84	23.79	24.19	23.81	23.83	23.68
30	23.65	23.41	24.63	24.51	25.01	24.68	23.99	23.84	---	---	---	---
31	23.66	23.60	---	---	24.68	24.56	24.08	23.85	---	---	---	---
MONTH	23.70	23.29	24.72	23.34	25.05	24.34	25.24	23.69	24.21	23.23	24.07	23.39

GROUND-WATER LEVELS

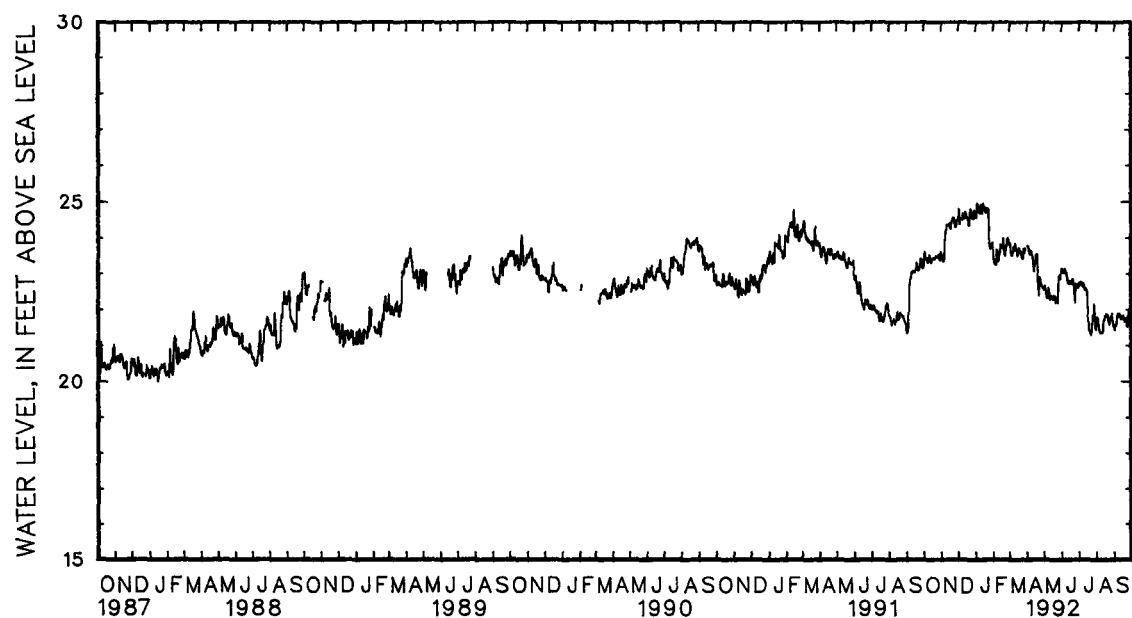
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

AA Bd 152--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	22.58	22.52	23.20	23.13	22.80	22.71	21.92	21.68	21.49	21.45
2	23.80	23.76	22.78	22.58	23.13	23.06	22.80	22.69	22.13	21.72	21.49	21.37
3	23.78	23.73	22.75	22.62	23.09	23.05	22.79	22.66	21.98	21.75	21.78	21.51
4	23.80	23.74	22.62	22.53	23.08	23.00	22.78	22.74	21.93	21.69	21.65	21.55
5	23.75	23.60	22.53	22.38	23.33	23.07	22.81	22.73	21.69	21.51	21.69	21.52
6	23.60	23.52	22.38	22.28	23.31	23.12	22.81	22.73	21.51	21.37	21.96	21.59
7	23.74	23.59	22.35	22.27	23.12	23.05	22.73	22.64	21.40	21.30	21.98	21.85
8	23.75	23.62	22.58	22.35	23.06	23.01	22.70	22.60	21.37	21.31	21.84	21.75
9	23.65	23.61	22.67	22.57	23.04	23.00	22.78	22.70	21.43	21.29	21.96	21.76
10	23.67	23.50	22.57	22.45	23.00	22.93	22.74	22.67	21.36	21.29	22.03	21.85
11	23.50	23.43	22.45	22.27	22.93	22.85	22.69	22.54	21.39	21.28	21.98	21.76
12	23.44	23.19	22.35	22.24	22.88	22.71	22.57	22.51	21.63	21.33	21.98	21.76
13	23.23	23.04	22.48	22.35	22.80	22.68	22.60	22.55	21.66	21.54	21.85	21.78
14	23.38	23.23	22.45	22.34	22.82	22.77	22.59	22.54	21.82	21.66	21.77	21.69
15	23.37	23.32	22.34	22.29	22.86	22.75	22.57	22.48	21.89	21.66	21.78	21.69
16	23.50	23.33	22.33	22.28	22.82	22.69	22.49	22.00	22.13	21.73	21.86	21.73
17	23.66	23.50	22.35	22.24	22.77	22.68	22.00	21.71	21.98	21.84	21.86	21.79
18	23.62	23.52	22.57	22.35	22.81	22.74	21.78	21.60	21.90	21.79	21.78	21.75
19	23.55	23.52	22.49	22.33	22.97	22.81	21.60	21.35	21.86	21.78	21.79	21.72
20	23.54	22.93	22.49	22.33	22.96	22.83	21.43	21.33	21.85	21.82	21.72	21.62
21	22.93	22.62	22.33	22.14	22.89	22.77	21.37	21.28	21.88	21.76	21.64	21.62
22	22.73	22.34	22.53	22.29	22.81	22.70	21.33	21.24	21.82	21.66	21.88	21.63
23	22.98	22.73	22.45	22.23	22.75	22.30	21.69	21.32	21.78	21.61	21.88	21.72
24	22.97	22.87	22.28	22.17	22.50	22.16	21.77	21.53	21.71	21.53	21.72	21.47
25	22.94	22.81	22.54	22.14	22.76	22.50	22.08	21.65	21.75	21.66	21.93	21.48
26	22.81	22.70	22.87	22.54	22.72	22.68	22.52	21.82	21.88	21.66	22.14	21.93
27	22.70	22.62	23.04	22.87	22.78	22.66	22.49	22.13	21.98	21.77	22.04	21.90
28	22.71	22.62	23.01	22.93	22.66	22.60	22.13	21.88	21.98	21.85	22.12	21.84
29	22.63	22.56	22.93	22.83	22.62	22.57	21.88	21.80	21.84	21.73	22.53	22.12
30	22.64	22.58	23.11	22.89	22.74	22.59	21.80	21.47	21.72	21.62	22.12	21.94
31	---	---	23.29	23.11	---	---	21.68	21.40	21.62	21.50	---	---
MONTH	23.80	22.34	23.29	22.14	23.33	22.16	22.81	21.24	22.13	21.28	22.53	21.37

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

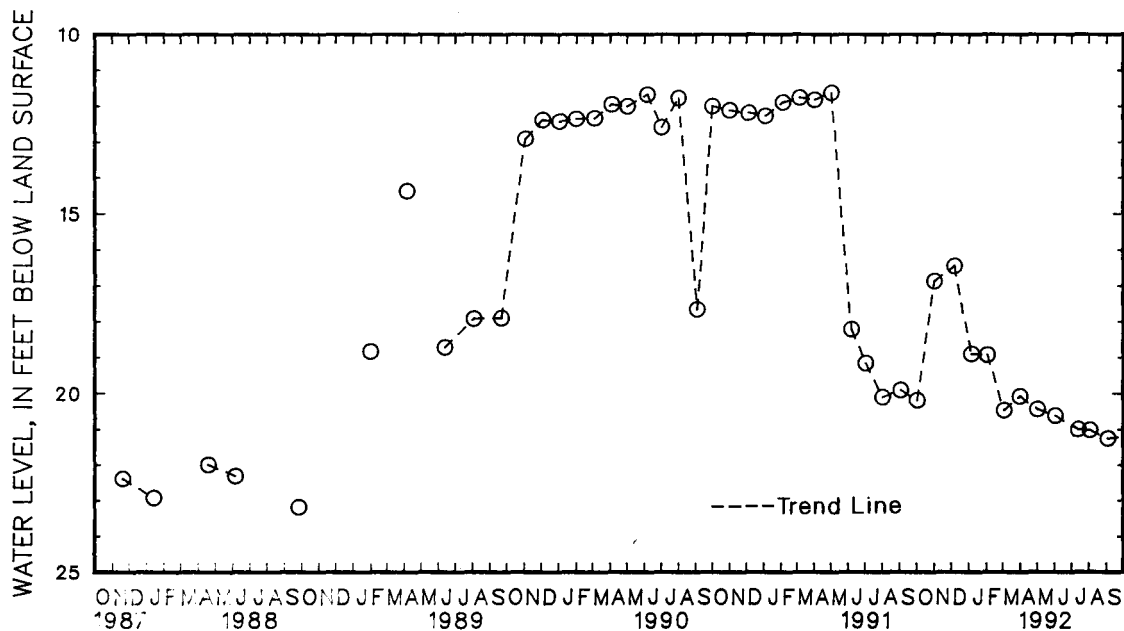
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 155. SITE ID.--390938076383701. PERMIT NUMBER.--AA-81-3460.
 LOCATION.--Lat 39°09'38", long 76°38'37", Hydrologic Unit 02060003, 200 ft off MD Rt. 3,
 0.4 mi south of MD Rt. 176 intersection.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 159 ft; casing diameter 6 in., to 145 ft.
 screen diameter 4 in. from 145 to 155 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--60-minute recorder interval from Oct. 23, 1984 to current year.
 DATUM.--Elevation of land surface is 57 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 2.5 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--October 1984 to current year
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.93 ft below land surface, August 23, 1990;
 lowest measured, 25.46 ft below land surface, Oct. 10, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	20.20	DEC 6	16.45	FEB 3	18.92	APR 1	20.09	JUN 2	20.63	AUG 3	21.03
NOV 1	16.88	JAN 6	18.91	MAR 3	20.48	MAY 1	20.45	JUL 13	21.01	SEP 4	21.27
WATER YEAR 1992		HIGHEST	16.45	DEC 6, 1991	LOWEST	21.27	SEP 4, 1992				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

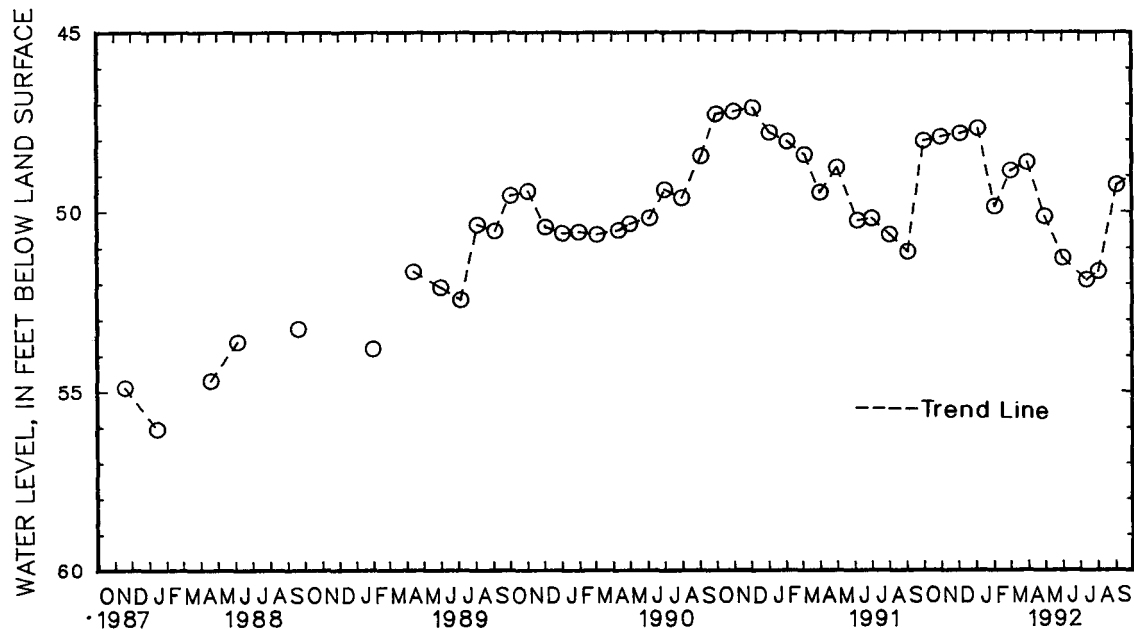
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 156. SITE ID.--390922076371001. PERMIT NUMBER.--AA-81-3462.
 LOCATION.--Lat 39°09'22", long 76°37'10", Hydrologic Unit 02060003, off Wardour Rd.,
 0.3 mi north of Aquahart Rd. intersection.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PFSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 173 ft; casing diameter 6 in., to 160 ft;
 screen diameter 4 in. from 160 to 170 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--30-minute recorder interval from October 1984 to current year.
 DATUM.--Elevation of land surface is 69 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 2.7 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well and Glen Burnie Project observation well.
 PERIOD OF RECORD.--October 1984 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.44 ft below land surface, Aug. 10, 1990;
 lowest measured, 56.53 ft below land surface, Feb. 10, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	48.03	DEC 6	47.82	FEB 3	49.86	APR 1	48.64	JUN 2	51.30	AUG 3	51.67
NOV 1	47.93	JAN 6	47.68	MAR 3	48.87	MAY 1	50.14	JUL 13	51.91	SEP 4	49.26
WATER YEAR 1992		HIGHEST	47.68	JAN 6, 1992		LOWEST	51.91	JUL 13, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 157. SITE ID.--390737076374401. PERMIT NUMBER.--AA-81-3464.
 LOCATION.--Lat 39°07'37", long 76°37'44", Hydrologic Unit 02060003, off Nolfield Dr.,
 0.14 mi east of Phirne Rd.

Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 6 in., to 167 ft;
 screen diameter 4 in. from 167 to 177 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with digital water-level recorder--60-minute recorder interval from March 1985 to current year.

DATUM.--Elevation of land surface is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of recorder platform, 2.5 ft above land surface.

REMARKS.--Anne Arundel Co. observation well network. Missing data due to recorder malfunction.

PERIOD OF RECORD.--March 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.55 ft above sea level, Jan. 31, 1991;
 lowest measured, 33.38 ft above sea level, Sept. 29, 1992.

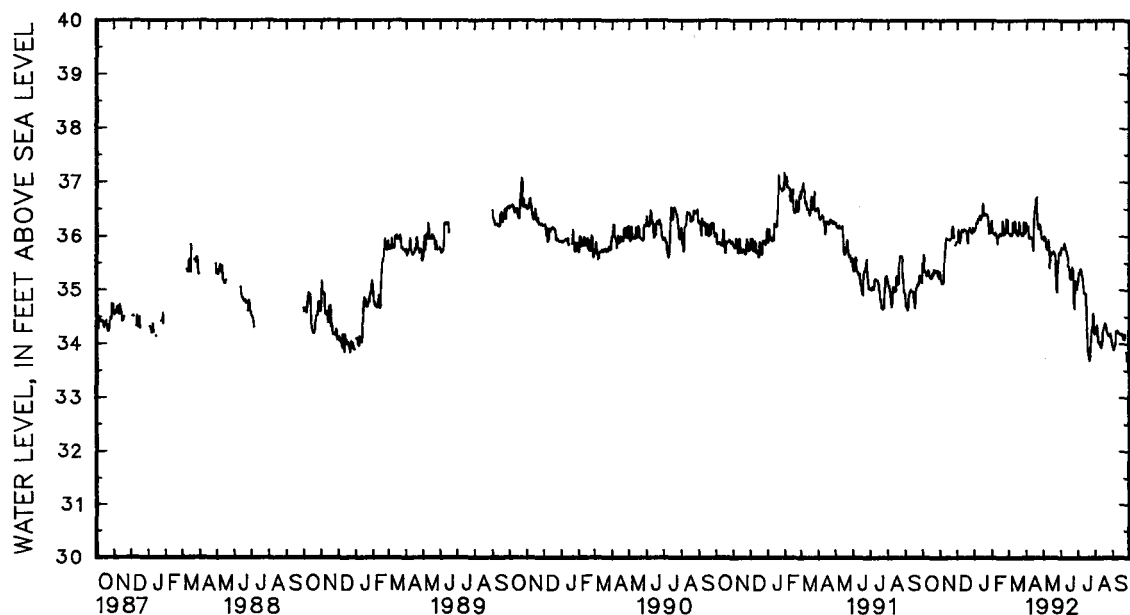
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	35.64	35.45	35.32	35.28	36.08	35.89	36.12	36.10	36.28	36.09	36.26	36.05
2	35.76	35.64	35.29	35.18	36.12	35.90	36.15	36.12	36.08	36.05	36.21	36.05
3	35.82	35.60	35.17	35.14	36.18	36.12	36.24	36.16	36.05	36.03	36.06	36.01
4	35.59	35.34	35.14	35.10	36.16	35.90	36.38	36.24	36.27	36.03	36.02	36.00
5	35.34	35.32	35.11	35.09	35.91	35.87	36.30	36.23	36.11	36.01	36.02	36.00
6	35.44	35.32	35.14	35.11	36.10	35.92	36.40	36.23	36.06	36.01	36.02	36.00
7	35.40	35.29	35.64	35.19	36.11	35.98	36.37	36.31	36.28	36.06	36.29	36.03
8	35.40	35.24	35.73	35.64	36.11	36.08	36.32	36.30	36.26	36.04	36.29	36.25
9	35.42	35.25	35.86	35.73	36.14	36.11	36.40	36.32	36.04	35.96	36.24	36.07
10	35.35	35.30	36.05	35.87	36.15	36.09	36.40	36.38	35.99	35.84	36.32	36.08
11	35.40	35.34	36.08	35.96	36.10	36.08	36.38	36.31	36.26	35.99	36.36	36.27
12	35.43	35.33	35.96	35.95	36.12	36.08	36.34	36.30	36.04	35.99	36.27	36.25
13	35.33	35.24	35.96	35.95	36.14	36.12	36.41	36.35	36.23	36.00	36.26	36.06
14	35.23	35.21	35.96	35.94	36.19	36.13	36.65	36.39	36.28	36.04	36.08	36.06
15	35.26	35.23	35.98	35.94	36.12	36.11	36.83	36.37	36.29	36.04	36.07	36.03
16	35.25	35.20	35.99	35.94	36.12	36.10	36.93	36.60	36.29	36.04	36.06	36.00
17	35.44	35.20	35.94	35.92	36.15	36.10	36.81	36.57	36.04	36.01	36.23	36.04
18	35.38	35.29	35.95	35.92	36.14	36.03	36.64	36.39	36.27	36.03	36.24	36.03
19	35.35	35.26	35.97	35.95	35.94	35.86	36.57	36.38	36.30	36.27	36.30	36.26
20	35.48	35.26	36.01	35.96	36.09	35.86	36.68	36.41	36.27	36.05	36.24	36.20
21	35.51	35.36	36.20	35.99	36.14	36.09	36.60	36.40	36.06	36.02	36.19	36.04
22	35.39	35.35	36.23	36.16	36.15	36.12	36.56	36.39	36.07	36.02	36.28	36.04
23	35.35	35.32	36.21	36.18	36.25	36.15	36.81	36.40	36.10	36.07	36.27	36.03
24	35.34	35.31	36.20	36.16	36.22	36.14	36.67	36.36	36.10	36.06	36.03	36.00
25	35.35	35.33	36.16	35.97	36.13	36.08	36.35	36.29	36.32	36.06	36.01	36.00
26	35.35	35.34	---	---	36.10	36.07	36.30	36.04	36.41	36.31	36.33	36.01
27	35.38	35.35	35.85	35.83	36.10	36.05	36.07	36.04	36.31	36.29	36.33	36.26
28	35.37	35.24	35.88	35.85	36.14	36.06	36.07	36.06	36.35	36.29	36.26	36.18
29	35.24	35.20	35.89	35.88	36.34	36.15	36.16	36.06	36.35	36.05	36.12	36.05
30	35.37	35.22	35.90	35.88	36.31	36.11	36.29	36.23	---	---	36.27	36.06
31	35.37	35.32	---	---	36.11	36.08	36.30	36.28	---	---	36.28	36.25
MONTH	35.82	35.20	36.23	35.09	36.34	35.86	36.93	36.04	36.41	35.84	36.36	36.00

GROUND-WATER LEVELS
 MARYLAND--Continued
 ANNE ARUNDEL COUNTY--Continued
 AA Bd 157--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	36.27	36.18	35.98	35.91	35.94	35.78	35.32	35.15	34.44	34.21	33.97	33.91
2	36.19	36.17	36.02	35.98	35.81	35.76	35.34	35.30	34.56	34.21	33.95	33.85
3	36.18	36.16	36.02	35.97	35.80	35.76	35.33	35.28	34.42	34.32	34.15	33.85
4	36.19	36.17	35.97	35.95	35.79	35.75	35.46	35.33	34.50	34.24	34.02	33.92
5	36.18	35.97	35.95	35.78	36.01	35.76	35.48	35.38	34.24	34.12	34.12	33.93
6	35.98	35.95	35.77	35.73	36.04	35.86	35.44	35.38	34.12	34.00	34.31	33.97
7	36.18	35.97	35.75	35.73	35.94	35.81	35.38	35.30	34.00	33.97	34.36	34.21
8	36.18	35.97	35.96	35.76	35.81	35.75	35.29	35.24	34.01	33.97	34.23	34.19
9	36.03	35.97	35.96	35.91	35.75	35.71	35.33	35.18	34.14	34.00	34.40	34.19
10	36.04	35.96	35.91	35.80	35.72	35.67	35.22	35.05	34.05	33.92	34.44	34.22
11	35.97	35.93	35.80	35.53	35.69	35.62	35.06	34.91	33.97	33.89	34.37	34.18
12	35.95	35.72	35.63	35.38	35.65	35.58	34.93	34.90	34.19	33.95	34.40	34.17
13	36.21	35.72	35.75	35.64	35.61	35.43	35.00	34.90	34.19	34.01	34.29	34.17
14	36.43	36.22	35.74	35.67	35.61	35.42	35.00	34.91	34.38	34.18	34.22	34.15
15	36.52	36.43	35.67	35.65	35.63	35.37	34.86	34.66	34.47	34.23	34.27	34.14
16	36.54	36.48	35.67	35.66	35.36	35.20	34.83	34.25	34.68	34.31	34.28	34.14
17	36.75	36.56	35.70	35.66	35.26	35.19	34.31	34.16	34.52	34.36	34.21	34.16
18	36.73	36.68	35.83	35.70	35.27	35.18	34.18	33.82	34.40	34.35	34.17	34.14
19	36.76	36.72	35.75	35.67	35.47	35.28	33.87	33.77	34.36	34.32	34.25	34.14
20	36.78	36.31	35.67	35.64	35.51	35.41	33.88	33.70	34.34	34.27	34.16	34.06
21	36.30	36.19	35.63	35.62	35.52	35.39	33.71	33.65	34.35	34.22	34.06	34.04
22	36.40	36.13	35.65	35.35	35.48	35.36	33.91	33.67	34.27	34.18	34.26	34.05
23	36.46	36.21	35.34	35.16	35.39	34.71	34.20	33.90	34.37	34.17	34.30	34.14
24	36.22	36.21	35.15	34.93	34.93	34.62	34.37	34.04	34.22	34.14	---	---
25	36.22	36.18	35.43	34.93	35.26	34.95	34.66	34.24	34.14	34.12	34.03	33.81
26	36.18	36.10	35.66	35.45	35.27	35.15	34.99	34.37	34.27	34.12	33.86	33.65
27	36.10	35.98	35.89	35.66	35.27	35.06	35.07	34.55	34.28	34.11	33.93	33.77
28	35.98	35.94	35.81	35.69	35.12	35.00	34.55	34.32	34.27	34.16	33.97	33.71
29	35.95	35.93	35.70	35.65	35.11	34.99	34.32	34.24	34.24	34.08	33.97	33.38
30	35.95	35.94	35.74	35.64	35.17	35.11	34.23	34.15	34.05	34.01	34.09	33.97
31	---	---	35.97	35.75	---	---	34.27	34.15	34.02	33.95	---	---
MONTH	36.78	35.72	36.02	34.93	36.04	34.62	35.48	33.65	34.68	33.89	34.44	33.38

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 158. SITE ID.--390744076390001. PERMIT NUMBER.--AA-81-3459.

LOCATION.--Lat 39°07'44", long 76°39'00", Hydrologic Unit 02060003, 0.05 mi off Stevenson Rd., 0.45 mi west of New Cut Rd.

Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 187 ft; casing diameter 6 in., to 174 ft; screen diameter 4 in. from 174 to 184 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from January 1985 to current year.

DATUM.--Elevation of land surface is 108 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of recorder platform, 2.7 ft above land surface.

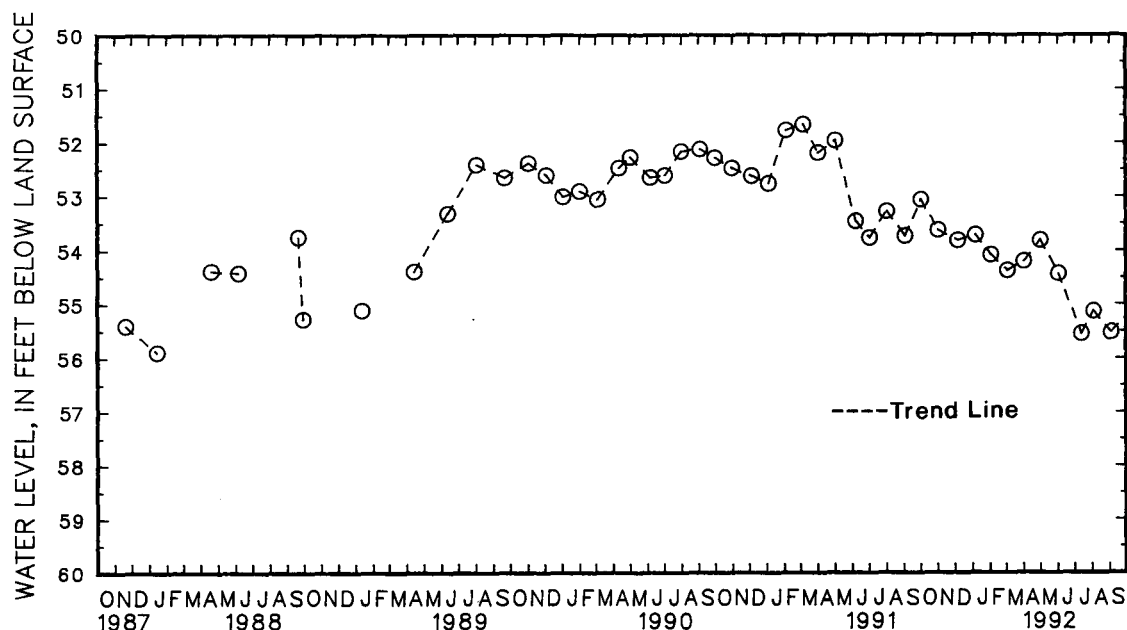
REMARKS.--Maryland Water-Level Network observation well and Ann Arundel Co. Project observation well.

PERIOD OF RECORD.--January 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.66 ft below land surface, March 6, 1991; lowest measured, 55.56 ft below land surface, July 13, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	53.06	DEC 6	53.82	FEB 3	54.09	APR 1	54.20	JUN 2	54.44	AUG 3	55.14
NOV 1	53.63	JAN 6	53.71	MAR 3	54.38	MAY 1	53.82	JUL 13	55.56	SEP 4	55.53
WATER YEAR 1992		HIGHEST	53.06	OCT 2, 1991	LOWEST	55.56	JUL 13, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

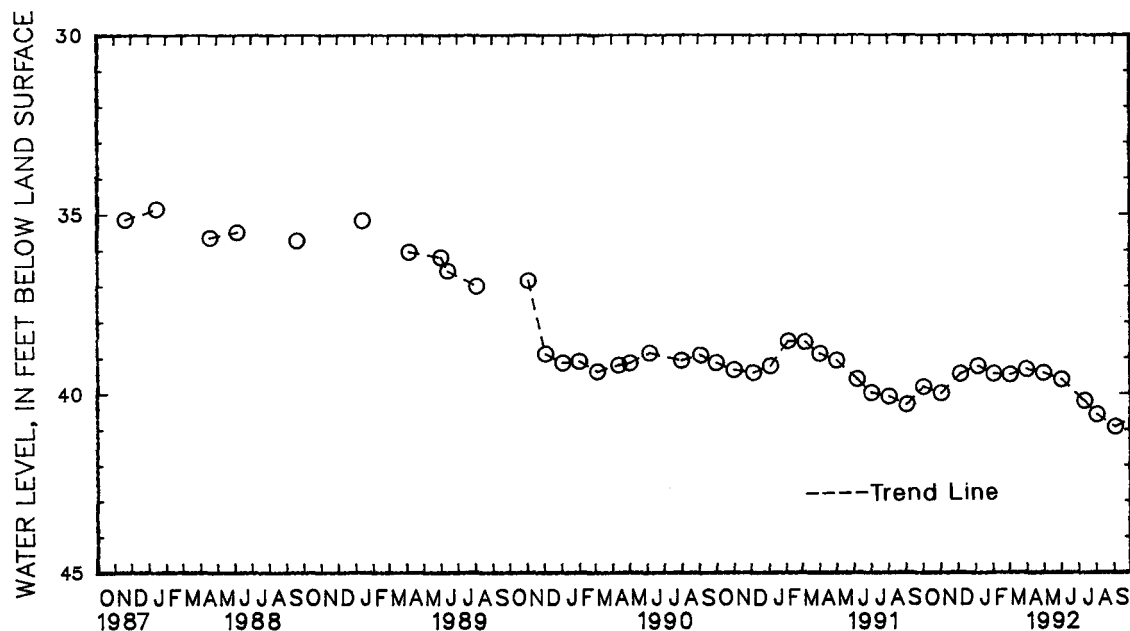
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 159. SITE ID.--390737076374402. PERMIT NUMBER.--AA-81-3949.
 LOCATION.--Lat 39°07'37", long 76°37'44", Hydrologic Unit 02060003, off Nolfield Dr.,
 0.14 mi east of Phrine Rd.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 100 ft; casing diameter 6 in., to 89 ft;
 screen diameter 4 in. from 89 to 99 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval interval from March 1985 to July 24, 1989.
 DATUM.--Elevation of land surface is 78.23 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 2.5 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well and Glen Burnie Project observation well.
 PERIOD OF RECORD.--March 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.77 ft below land surface, Sept. 14, 1987;
 lowest measured, 40.93 ft below land surface, Sept. 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	39.81	DEC 6	39.45	FEB 3	39.44	APR 1	39.32	JUN 2	39.61	AUG 3	40.58
NOV 2	39.99	JAN 6	39.23	MAR 3	39.47	MAY 1	39.42	JUL 13	40.20	SEP 4	40.93
WATER YEAR 1992		HIGHEST	39.23	JAN 6, 1992		LOWEST	40.93	SEP 4, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Bd 160. SITE ID.--390908076394402. PERMIT NUMBER.--AA-81-3461.
 LOCATION.--Lat 39°09'08", Long 76°39'44", Hydrologic Unit 02060003, 0.08 mi north of Queenstown Rd.,
 0.41 mi. east of WB & A Rd.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 118 ft; casing diameter 6 in., to 105 ft.
 screen diameter 4 in. from 105 to 115 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval from April 1985 to current year.
 DATUM.--Elevation of land surface is 88 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 2.5 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.68 ft above sea level, May 29, 1990;
 lowest measured, 68.57 ft above sea level, Oct. 7, 1986.

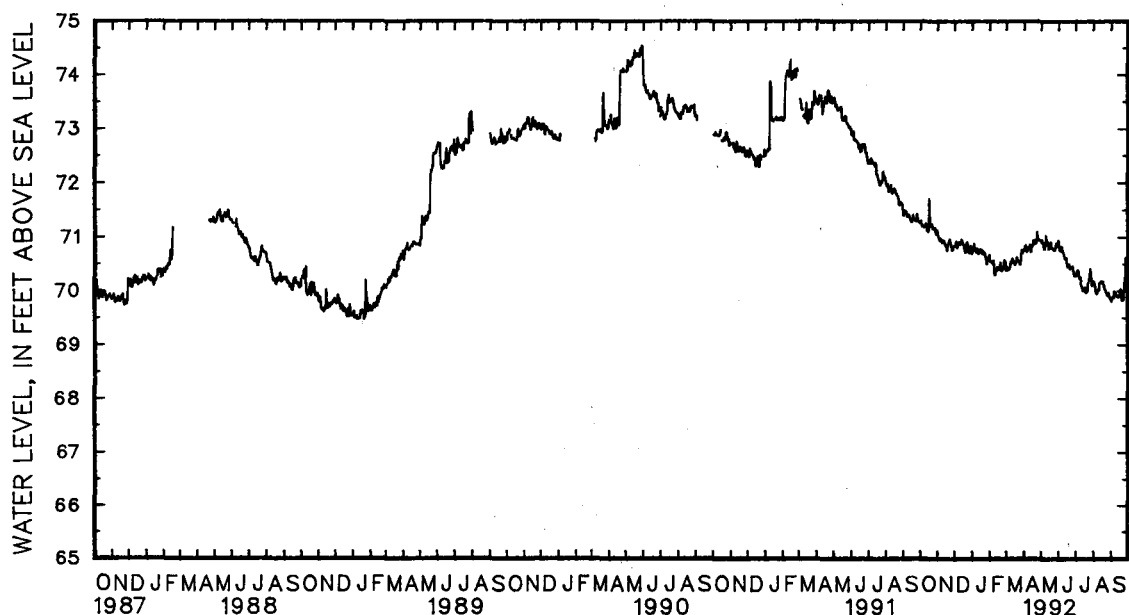
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	71.27	71.22	71.09	71.06	70.81	70.79	70.71	70.67	70.66	70.53	70.43	70.35
2	71.27	71.26	71.09	70.97	70.86	70.79	70.78	70.70	70.58	70.51	70.42	70.41
3	71.28	71.21	70.98	70.94	71.03	70.88	70.84	70.77	70.54	70.51	70.42	70.36
4	71.22	71.16	70.96	70.90	70.99	70.79	70.95	70.84	70.66	70.51	70.39	70.36
5	71.19	71.16	71.00	70.90	70.82	70.76	70.84	70.78	70.57	70.48	70.42	70.36
6	71.39	71.17	71.04	70.94	70.90	70.83	70.81	70.76	70.52	70.48	70.42	70.39
7	71.37	71.15	70.97	70.91	70.91	70.85	70.76	70.69	70.57	70.52	70.59	70.42
8	71.44	71.14	70.92	70.86	70.88	70.83	70.69	70.68	70.53	70.41	70.67	70.51
9	71.46	71.15	70.88	70.86	70.94	70.87	70.81	70.70	70.40	70.26	70.50	70.48
10	71.23	71.17	70.99	70.89	70.94	70.83	70.81	70.75	70.37	70.26	70.71	70.50
11	71.25	71.21	71.02	70.90	70.87	70.83	70.75	70.65	70.72	70.38	70.77	70.57
12	71.33	71.15	70.91	70.88	70.90	70.86	70.69	70.65	70.46	70.33	70.57	70.54
13	71.21	71.07	70.88	70.85	70.96	70.91	70.79	70.70	70.51	70.35	70.60	70.52
14	71.10	71.06	70.84	70.81	71.01	70.90	70.96	70.73	70.65	70.41	70.54	70.52
15	71.14	71.08	70.86	70.81	70.90	70.86	71.11	70.71	70.58	70.41	70.61	70.49
16	71.66	71.09	70.86	70.76	70.86	70.82	71.14	70.73	70.60	70.40	70.49	70.45
17	71.97	71.68	70.75	70.71	70.94	70.82	71.08	70.73	70.39	70.36	70.61	70.48
18	71.94	71.36	70.82	70.72	70.91	70.74	71.01	70.66	70.50	70.37	70.59	70.53
19	71.35	71.17	70.86	70.82	70.74	70.68	70.93	70.65	70.54	70.49	70.71	70.59
20	71.52	71.17	70.94	70.85	70.80	70.68	71.04	70.70	70.49	70.39	70.60	70.56
21	71.52	71.20	71.14	70.90	70.91	70.81	70.87	70.66	70.41	70.34	70.56	70.52
22	71.36	71.20	71.09	70.92	70.87	70.85	70.87	70.65	70.41	70.34	70.69	70.52
23	71.20	71.12	71.01	70.88	70.95	70.87	71.02	70.67	70.44	70.41	70.67	70.52
24	71.14	71.12	70.94	70.83	70.91	70.77	70.91	70.61	70.42	70.38	70.51	70.46
25	71.14	71.12	70.83	70.78	70.77	70.68	70.61	70.57	70.51	70.38	70.52	70.46
26	71.14	71.12	70.78	70.71	70.69	70.67	70.61	70.46	70.64	70.54	70.82	70.53
27	71.16	71.13	70.75	70.71	70.70	70.66	70.54	70.46	70.55	70.52	70.83	70.73
28	71.14	71.05	70.79	70.75	70.79	70.66	70.57	70.55	70.63	70.52	70.72	70.67
29	71.04	71.02	70.81	70.79	70.94	70.80	70.60	70.55	70.64	70.35	70.70	70.67
30	71.15	71.03	70.81	70.79	70.91	70.69	70.68	70.58	---	---	70.81	70.70
31	71.15	71.09	---	---	70.68	70.65	70.70	70.63	---	---	70.82	70.74
MONTH	71.97	71.02	71.14	70.71	71.03	70.65	71.14	70.46	70.72	70.26	70.83	70.35

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued
AA Bd 160--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	70.84	70.75	70.93	70.88	70.99	70.89	70.50	70.25	70.41	70.14	69.91	69.79
2	70.83	70.80	71.14	70.92	70.92	70.74	70.46	70.31	70.48	70.13	69.90	69.77
3	70.84	70.80	70.98	70.87	70.84	70.72	70.42	70.29	70.35	70.13	70.11	69.83
4	70.89	70.82	70.95	70.87	70.82	70.71	70.51	70.35	70.33	70.07	70.21	69.86
5	70.81	70.70	70.88	70.80	71.04	70.74	70.49	70.34	70.24	70.01	70.15	69.85
6	70.77	70.70	70.80	70.75	71.09	70.79	70.37	70.27	70.01	69.93	70.19	69.84
7	70.87	70.77	70.82	70.75	70.89	70.74	70.34	70.19	69.94	69.91	70.25	69.96
8	70.87	70.76	71.08	70.83	70.73	70.69	70.24	70.19	70.05	69.92	70.02	69.94
9	70.82	70.76	71.37	71.00	70.75	70.68	70.35	70.22	70.18	69.98	70.21	69.93
10	70.83	70.79	71.11	70.92	70.73	70.63	70.33	70.17	70.09	69.97	70.15	69.92
11	70.87	70.83	70.92	70.83	70.67	70.57	70.19	70.08	70.33	69.98	70.12	69.87
12	70.87	70.70	70.89	70.83	70.63	70.56	70.09	70.05	70.59	70.12	70.19	69.86
13	70.78	70.70	70.94	70.87	70.76	70.56	70.11	70.02	70.22	70.11	70.14	69.85
14	70.87	70.78	70.89	70.75	70.74	70.58	70.11	69.97	70.35	70.15	70.01	69.85
15	70.86	70.82	70.94	70.75	70.68	70.48	70.03	69.97	70.17	70.14	70.25	69.87
16	70.91	70.82	71.16	70.82	70.68	70.42	70.19	69.97	70.16	70.13	70.21	69.86
17	70.96	70.91	71.08	70.83	70.52	70.42	70.31	69.99	70.14	70.12	70.37	69.95
18	70.90	70.85	71.05	70.88	70.48	70.43	70.33	70.03	70.15	70.14	70.40	70.00
19	70.87	70.84	70.88	70.77	70.53	70.46	70.09	69.94	70.23	70.12	70.40	69.89
20	70.92	70.85	70.83	70.76	70.54	70.38	70.19	69.93	70.24	70.07	70.06	69.79
21	70.96	70.92	70.82	70.75	70.68	70.38	70.13	69.96	70.20	70.01	69.88	69.78
22	70.97	70.91	70.82	70.75	70.61	70.41	70.15	69.95	70.19	69.99	70.03	69.79
23	71.08	70.87	70.89	70.73	70.51	70.40	70.40	70.10	70.24	69.95	70.04	69.81
24	71.25	71.07	70.88	70.73	70.49	70.41	70.43	70.17	70.11	69.94	70.28	70.04
25	71.09	70.96	71.05	70.75	70.63	70.43	70.74	70.29	69.94	69.90	70.60	70.28
26	70.97	70.92	71.02	70.79	70.43	70.37	70.68	70.38	70.15	69.88	70.64	70.60
27	70.94	70.91	71.10	70.85	70.52	70.30	70.55	70.28	70.09	69.87	70.60	70.21
28	71.15	70.91	71.03	70.82	70.39	70.25	70.37	70.18	70.17	69.93	70.40	70.12
29	70.95	70.91	70.83	70.81	70.29	70.24	70.26	70.14	70.17	69.87	70.57	70.26
30	70.97	70.92	70.93	70.81	70.34	70.24	70.14	70.07	69.87	69.83	70.44	70.21
31	---	---	71.05	70.91	---	---	70.28	70.07	70.20	69.84	---	---
MONTH	71.25	70.70	71.37	70.73	71.09	70.24	70.74	69.93	70.59	69.83	70.64	69.77

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

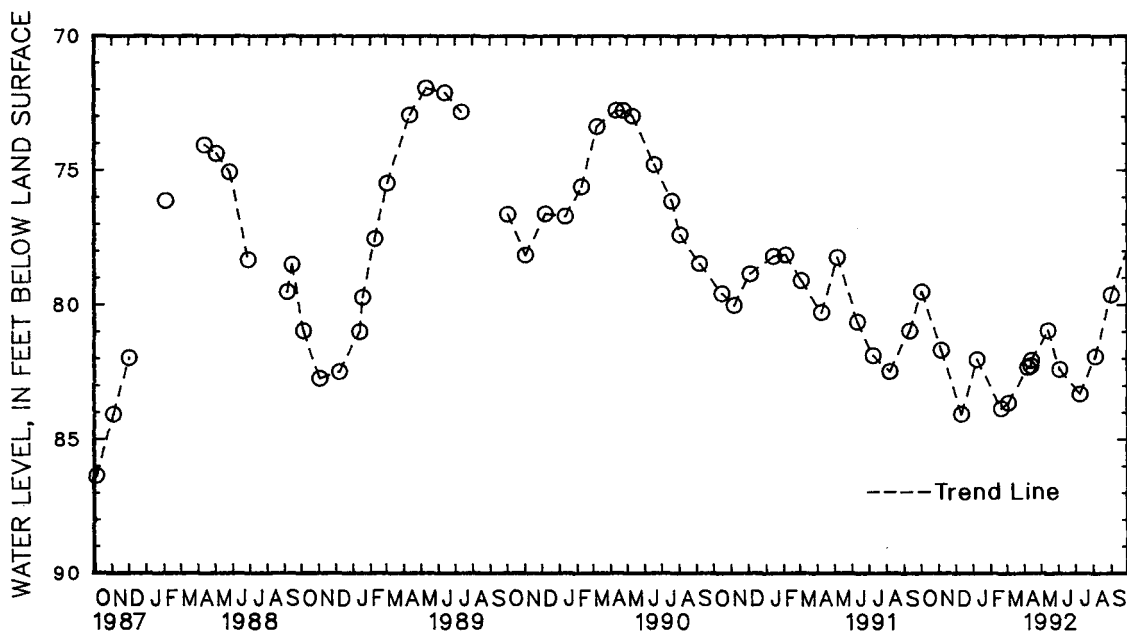
GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cb 1. SITE ID.--390303076463201. PERMIT NUMBER.--AA-03-5695.
LOCATION.--Lat 39°03'03", long 76°46'32", Hydrologic Unit 02060006, on Duvall Bridge Rd.,
Patuxent Wildlife Research Center.
Owner: U.S. Army.
AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 505 ft; casing diameter 6 in. to 485 ft;
screen diameter 6 in. from 485 to 505 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
water-level recorder--60-minute recorder interval from July 2, 1984 to current year.
DATUM.--Elevation of land surface is 126 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top lip of 3 in. extension pipe, 3.35 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well and Glen Burnie Project observation well.
PERIOD OF RECORD.--March 1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.60 ft below land surface, May 1, 1962;
lowest measured, 92.84 ft below land surface, Aug. 10, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	79.52	JAN 8	82.04	APR 7	82.33	MAY 13	80.95	AUG 5	81.93
NOV 6	81.70	FEB 20	83.86	13	82.27	JUN 3	82.40	SEP 1	79.63
DEC 11	84.07	MAR 4	83.65	14	82.07	JUL 8	83.32		

WATER YEAR 1992 HIGHEST 79.52 OCT 2, 1991 LOWEST 84.07 DEC 11, 1991



GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ce 117. SITE ID.--390450076343402. PERMIT NUMBER.--AA-73-0172.
 LOCATION.--Lat 39°04'50", long 76°34'34", Hydrologic Unit 02060004, 0.1 mi southwest of intersection
 of Severndale Rd. and Southway Rd.
 Owner: Anne Arundel County Department of Public Utilities.
 AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,060 ft; casing diameter 6 in., to 836 ft,
 851 to 870 ft, and 890 to 907 ft; screen diameter 6 in. from 836 to 851 ft, 870 to 890 ft, and 907 to 922 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--30-minute recorder interval from Aug. 18, 1977 to current year.
 DATUM.--Elevation of land surface is 85 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 0.5 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network. Water levels affected by nearby pumping.
 PERIOD OF RECORD.--August 1977 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.58 ft above sea level, March 27, 1978;
 lowest measured, 3.14 ft above sea level, Sept. 4, 1987.

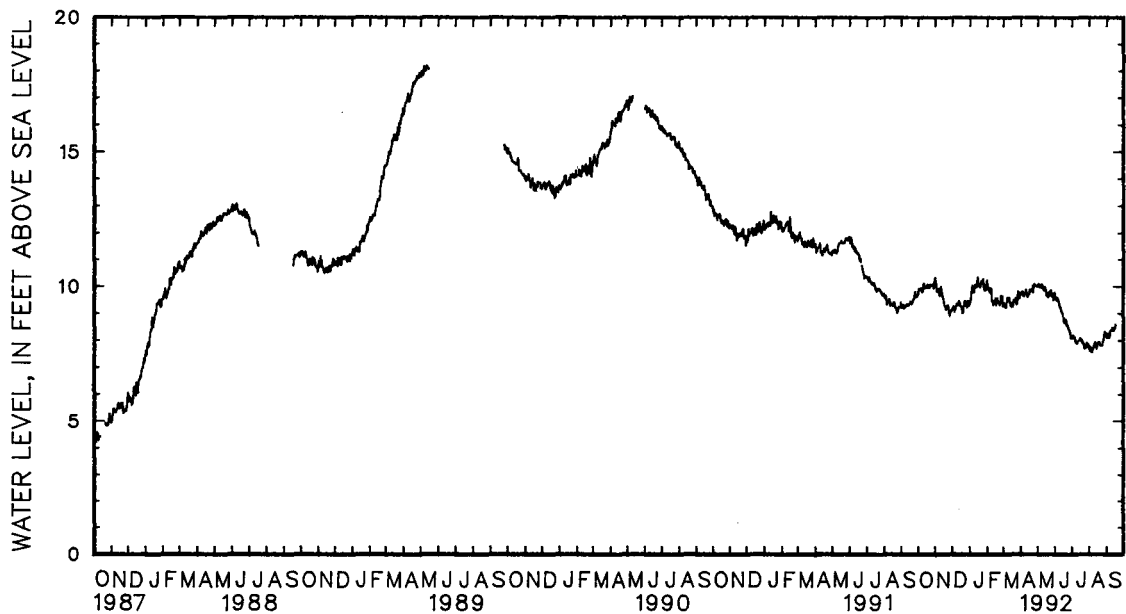
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.98	9.67	10.49	10.28	9.27	9.09	9.58	9.29	10.21	9.97	9.52	9.20
2	10.06	9.85	10.47	10.11	9.28	9.12	9.71	9.42	10.02	9.88	9.46	9.32
3	10.14	9.85	10.18	9.95	9.65	9.19	9.89	9.51	10.11	9.84	9.43	9.27
4	10.14	9.83	10.13	9.77	9.57	9.14	10.16	9.82	10.28	9.88	9.52	9.20
5	10.14	9.86	10.03	9.84	9.17	8.99	10.18	9.98	10.11	9.76	9.47	9.15
6	10.16	9.88	10.07	9.85	9.34	9.13	10.18	9.93	10.15	9.74	9.55	9.16
7	10.04	9.80	10.10	9.87	9.35	9.10	10.11	9.85	10.21	9.87	9.76	9.37
8	9.99	9.74	10.01	9.62	9.37	9.19	10.03	9.73	10.16	9.87	9.75	9.53
9	10.00	9.75	9.88	9.60	9.52	9.26	10.25	9.85	9.89	9.45	9.60	9.41
10	10.14	9.83	10.16	9.74	9.45	9.29	10.31	10.01	9.52	9.37	10.13	9.43
11	10.23	10.06	10.17	9.94	9.43	9.25	10.22	10.00	9.61	9.39	10.08	9.54
12	10.27	10.06	9.94	9.74	9.47	9.24	10.22	9.92	9.47	9.24	9.67	9.46
13	10.14	9.90	9.86	9.69	9.55	9.39	10.37	10.05	9.71	9.26	9.51	9.25
14	10.05	9.88	9.77	9.57	9.73	9.26	10.62	10.31	9.70	9.38	9.53	9.34
15	10.15	9.94	9.72	9.50	9.46	9.29	10.39	10.10	9.88	9.42	9.52	9.24
16	10.13	9.90	9.72	9.38	9.35	9.20	10.27	9.98	9.86	9.50	9.38	9.19
17	10.17	9.96	9.42	9.25	9.52	9.18	10.35	9.97	9.63	9.23	9.62	9.29
18	10.13	10.02	9.50	9.23	9.46	9.18	10.23	10.04	9.75	9.41	9.62	9.18
19	10.24	9.98	9.43	9.22	9.16	8.94	10.14	9.92	9.82	9.50	9.78	9.44
20	10.04	9.91	9.46	9.08	9.18	8.93	10.37	10.03	9.72	9.37	9.73	9.39
21	10.16	9.89	9.48	9.08	9.43	9.18	10.41	10.14	9.64	9.39	9.66	9.43
22	10.18	9.95	9.49	9.21	9.47	9.23	10.31	10.09	9.53	9.30	9.89	9.37
23	10.24	10.02	9.40	9.24	9.74	9.40	10.59	10.11	9.60	9.31	9.81	9.51
24	10.13	9.97	9.49	9.25	9.66	9.40	10.56	10.23	9.54	9.26	9.61	9.32
25	10.19	10.00	9.30	9.09	9.49	9.24	10.22	10.03	9.69	9.36	9.70	9.27
26	10.23	10.02	9.17	8.88	9.39	9.21	10.23	9.84	9.88	9.61	10.07	9.40
27	10.27	10.03	9.04	8.84	9.38	9.22	10.16	9.80	9.78	9.51	9.97	9.77
28	10.25	9.98	9.16	8.95	9.42	9.15	10.14	9.97	9.81	9.58	9.83	9.51
29	10.15	9.89	9.20	9.02	9.83	9.40	10.21	9.82	9.77	9.21	9.73	9.51
30	10.32	10.04	9.19	9.02	9.68	9.39	10.38	9.94	---	---	9.96	9.53
31	10.41	10.23	---	---	9.47	9.23	10.38	10.18	---	---	9.96	9.69
MONTH	10.41	9.67	10.49	8.84	9.83	8.93	10.62	9.29	10.28	9.21	10.13	9.15

GROUND-WATER LEVELS
 MARYLAND--Continued
 ANNE ARUNDEL COUNTY--Continued
 AA Ce 117--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.11	9.72	10.23	10.00	10.00	9.63	8.41	7.98	8.00	7.69	8.27	8.02
2	10.06	9.70	10.36	10.04	9.88	9.53	8.21	8.10	7.82	7.52	8.31	8.01
3	10.04	9.66	10.29	10.02	9.86	9.46	8.19	8.05	7.82	7.67	8.42	8.19
4	10.10	9.76	10.24	9.93	9.84	9.43	8.20	8.07	7.90	7.62	8.35	8.13
5	9.93	9.67	10.22	10.01	9.99	9.51	8.29	8.00	7.92	7.51	8.32	8.04
6	9.87	9.59	10.15	9.96	9.91	9.49	8.29	8.02	7.70	7.47	8.54	8.09
7	10.06	9.58	10.15	9.90	9.81	9.40	8.19	7.87	7.77	7.59	8.58	8.29
8	10.10	9.69	10.33	10.03	9.72	9.33	8.12	7.90	7.79	7.63	8.64	8.29
9	10.01	9.67	10.35	9.99	9.60	9.23	8.15	7.84	7.91	7.74	8.61	8.33
10	10.05	9.82	10.18	9.92	9.50	9.17	8.13	7.80	7.93	7.78	8.72	8.38
11	10.07	9.75	10.08	9.82	9.34	9.13	8.10	7.87	8.01	7.86	8.68	8.41
12	10.04	9.65	10.20	9.93	9.29	9.04	8.09	7.88	7.90	7.81	8.52	8.29
13	9.80	9.55	10.32	9.93	9.30	8.99	8.12	7.92	7.89	7.69	8.59	8.30
14	9.98	9.64	10.22	9.93	9.24	8.96	8.17	7.94	7.87	7.62	8.68	8.32
15	9.95	9.68	10.06	9.87	9.16	8.89	8.16	7.99	7.97	7.76	8.67	8.39
16	10.05	9.67	10.00	9.67	9.01	8.60	8.10	7.95	8.01	7.81	8.75	8.52
17	10.13	9.84	10.02	9.61	8.96	8.60	8.11	7.90	8.04	7.86	---	---
18	9.99	9.77	10.13	9.71	8.92	8.55	8.08	7.94	8.11	7.87	---	---
19	10.01	9.77	9.98	9.57	9.03	8.70	7.99	7.83	8.12	7.87	---	---
20	10.04	9.82	9.91	9.55	9.00	8.63	7.98	7.87	8.09	7.78	---	---
21	10.18	9.79	9.90	9.72	8.82	8.48	7.96	7.82	8.04	7.74	---	---
22	10.26	9.98	9.90	9.62	8.72	8.50	7.93	7.71	8.05	7.73	---	---
23	10.14	9.72	9.96	9.77	8.64	8.43	7.94	7.62	8.03	7.73	---	---
24	10.25	9.99	10.05	9.82	8.78	8.38	7.91	7.60	8.06	7.75	---	---
25	10.22	10.04	10.05	9.61	8.67	8.33	8.05	7.63	8.15	7.86	---	---
26	10.28	9.97	10.05	9.69	8.54	8.30	8.11	7.71	8.19	7.93	---	---
27	10.30	9.99	10.03	9.69	8.46	8.21	8.12	7.83	8.31	8.11	---	---
28	---	---	9.98	9.58	8.33	8.08	7.94	7.68	8.53	8.24	---	---
29	10.24	9.98	9.83	9.44	8.27	7.99	7.88	7.79	8.39	8.22	---	---
30	10.35	9.96	9.98	9.49	8.26	7.99	7.84	7.75	8.33	8.12	---	---
31	---	---	10.08	9.71	---	---	8.00	7.65	8.33	8.15	---	---
MONTH	10.35	9.55	10.36	9.44	10.00	7.99	8.41	7.60	8.53	7.47	8.75	8.01

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

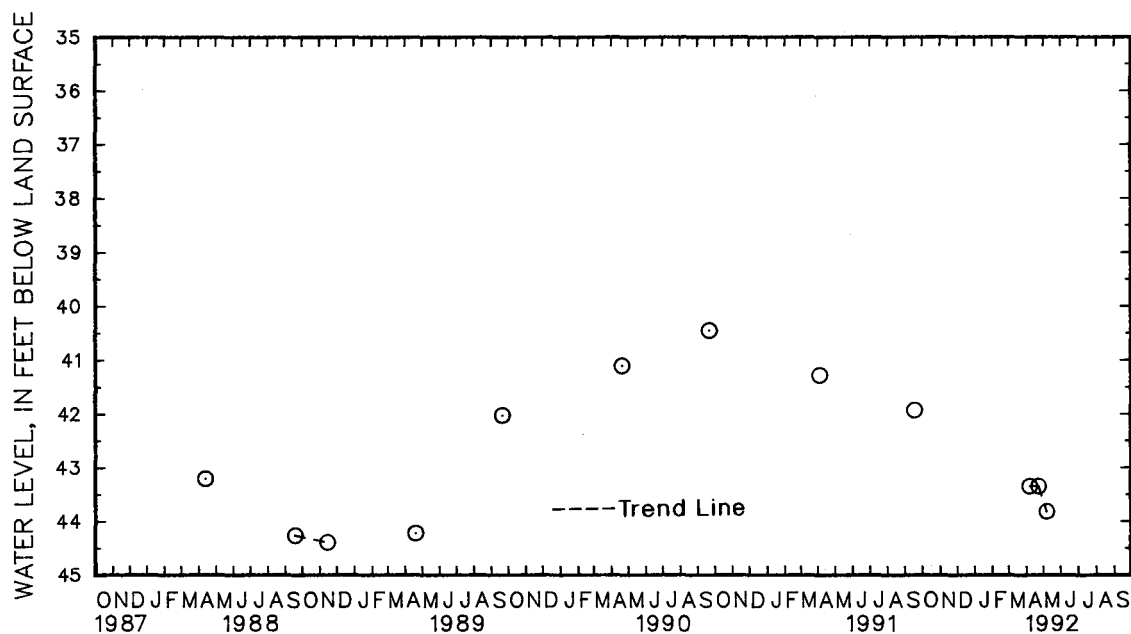
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cf 98. SITE ID.--390150076283003. PERMIT NUMBER.--AA-70-0099.
 LOCATION.--Lat 39°01'50", long 76°28'30", Hydrologic Unit 02060004, 3.1 mi northeast of Annapolis,
 at Broad Neck.
 Owner: Anne Arundel Co. Dept. of Recreation and Parks.
 AQUIFER.--Monmouth Formation of Upper Cretaceous age. Aquifer code: 211MNM.T.
 WELL CHARACTERISTICS.--Drilled, artesian, observation well, depth 100 ft; casing diameter 2 in., to 90 ft;
 screen diameter 2 in. from 90 to 100 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 93.42 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.59 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well,
 PERIOD OF RECORD.--September 1962 to September 1986, April 1989 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.14 ft below land surface, Aug. 3, 1972;
 lowest measured, 44.22 ft below land surface, April 2, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 7	43.35	APR 23	43.35	MAY 7	43.82
WATER YEAR 1992 HIGHEST 43.35 APR 7, 1992 APR 23, 1992 LOWEST 43.82 MAY 7, 1992					



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cg 23. SITE ID.--390123076241602. PERMIT NUMBER.--AA-73-8959.
 LOCATION.--Lat 39°01'23", long 76°24'16", Hydrologic Unit 02060004, 1500 ft northeast of Oceanic Dr
 and South Beach Rd intersection in Sandy Point State Park.
 Owner: U.S. Geological Survey
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 986 ft; casing diameter 4 in., to 968 ft;
 screen diameter 4 in. from 968 to 978 ft.
 INSTRUMENTATION.-- Equipped with a graphic water-level recorder from Sept. 9, 1978 to Feb. 21, 1980.
 Equipped with digital water-level recorder--60-minute recorder interval from Sept. 11, 1990 to current year.
 DATUM.--Elevation of land surface is 12.57 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 3.43 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network.
 PERIOD OF RECORD.-- September 1978 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.07 ft above sea level, May 3, 1980;
 lowest measured, 11.96 ft below sea level, Sept. 23, and 24, 1992.

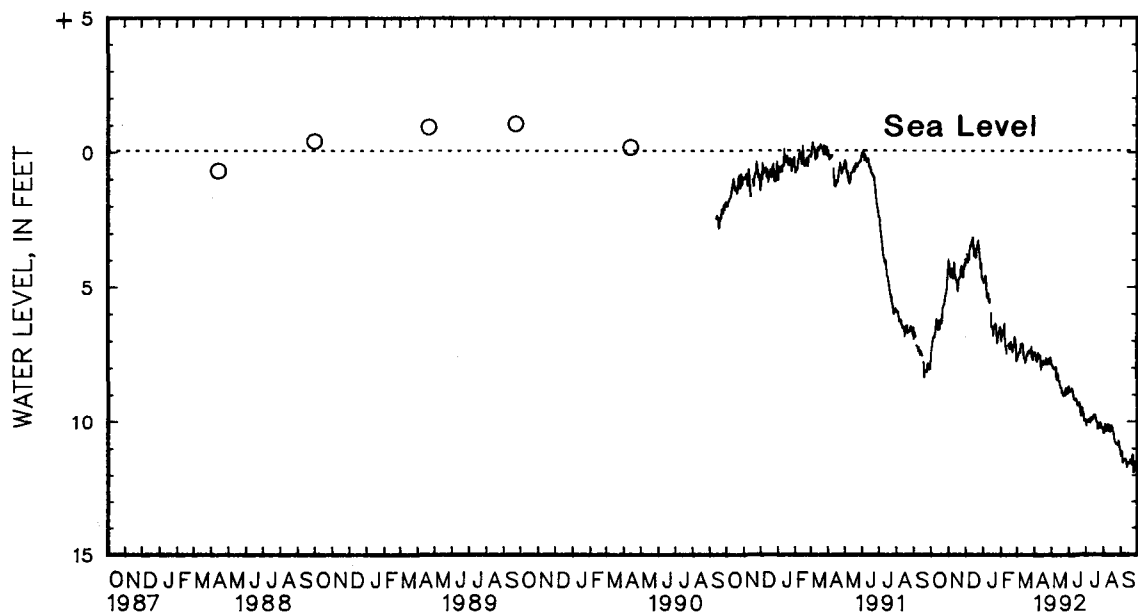
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.39	7.79	3.80	3.98	3.79	3.98	4.60	4.79	6.50	6.86	7.23	7.80
2	7.22	7.41	3.81	4.14	---	---	4.73	4.89	6.85	7.08	7.44	7.67
3	7.10	7.28	4.16	4.50	3.14	3.78	4.54	4.87	6.62	6.90	7.41	7.63
4	6.90	7.09	4.30	4.59	3.30	3.81	4.37	4.69	6.29	6.70	7.27	7.51
5	6.63	6.93	4.40	4.66	3.86	4.12	4.36	4.62	6.50	6.83	7.33	7.47
6	6.52	6.87	4.20	4.54	3.63	3.94	4.63	4.76	6.64	6.87	7.31	7.48
7	6.69	6.91	4.13	4.34	3.53	4.00	4.79	5.20	6.35	6.67	6.90	7.49
8	6.54	6.81	4.29	4.63	3.41	3.68	5.24	5.45	6.23	6.43	6.90	7.16
9	6.32	6.62	4.46	4.71	3.18	3.48	5.17	5.41	6.43	6.99	7.13	7.25
10	6.15	6.45	3.87	4.51	3.27	3.52	5.15	5.29	7.03	7.29	6.68	7.24
11	6.09	6.23	3.87	4.11	3.15	3.32	5.20	5.58	7.18	7.33	6.61	7.16
12	6.19	6.32	4.14	4.55	3.18	3.35	5.45	5.63	7.19	7.53	7.16	7.35
13	6.24	6.59	4.44	4.66	3.01	3.23	5.39	5.52	---	---	7.35	7.68
14	6.30	6.63	4.54	4.77	2.90	3.16	---	---	7.02	7.25	7.40	7.71
15	6.16	6.27	4.67	4.82	3.17	3.51	5.38	6.02	6.84	7.25	7.38	7.69
16	6.18	6.61	4.64	4.96	3.43	3.87	5.83	6.57	6.74	7.17	7.66	7.88
17	6.31	6.44	4.93	5.20	3.16	3.78	6.02	6.53	7.14	7.36	7.26	7.79
18	6.14	6.31	4.70	4.95	3.16	3.60	6.30	6.58	7.00	7.32	7.51	7.76
19	5.91	6.22	4.51	4.75	3.59	3.93	6.59	6.87	6.83	7.11	7.19	7.57
20	6.07	6.36	4.47	4.74	3.44	3.89	6.24	6.66	6.93	7.21	7.20	7.59
21	5.71	6.04	4.43	4.66	3.13	3.46	6.26	6.51	7.12	7.41	7.23	7.45
22	5.56	5.78	4.20	4.62	3.18	3.49	6.36	6.56	7.25	7.48	6.91	7.50
23	5.50	5.72	4.18	4.40	2.99	3.28	5.77	6.43	7.14	7.32	6.98	7.42
24	5.40	5.67	4.01	4.25	3.11	3.46	5.80	6.48	7.16	7.30	7.40	7.50
25	5.24	5.54	4.13	4.34	3.43	3.69	6.54	6.85	6.86	7.21	7.34	7.51
26	5.13	5.36	4.32	4.65	3.67	3.93	6.73	7.16	6.79	6.91	7.16	7.43
27	4.95	5.25	4.32	4.67	3.81	4.22	6.72	7.09	6.81	6.99	7.04	7.28
28	4.99	5.24	4.07	4.35	4.18	4.34	6.65	6.79	6.97	7.19	7.28	7.67
29	4.71	5.06	4.01	4.18	3.91	4.15	6.52	6.79	6.93	7.81	7.63	7.76
30	4.41	4.69	3.93	4.23	4.05	4.70	6.40	6.65	---	---	7.42	7.74
31	4.03	4.38	---	---	4.59	4.79	6.37	6.55	---	---	7.23	7.50
MONTH	4.03	7.79	3.80	5.20	2.90	4.79	4.36	7.16	6.23	7.81	6.61	7.88

GROUND-WATER LEVELS
 MARYLAND--Continued
 ANNE ARUNDEL COUNTY--Continued
 AA Cg 23--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.11	7.49	7.55	7.93	8.60	8.95	9.79	10.07	10.05	10.52	11.08	11.36
2	7.25	7.48	7.60	7.93	8.79	8.96	9.99	10.22	10.17	10.50	11.14	11.35
3	7.41	7.60	7.68	8.00	8.75	8.95	---	---	10.06	10.28	11.10	11.19
4	7.36	7.59	7.84	8.08	---	---	9.79	10.03	10.05	10.18	11.14	11.58
5	7.46	7.80	7.90	8.10	8.62	8.88	9.82	10.11	10.03	10.39	11.44	11.60
6	7.69	7.83	7.93	8.07	8.63	8.83	9.81	10.01	10.19	10.44	11.18	11.54
7	7.42	7.74	7.98	8.12	8.72	8.93	---	---	10.23	10.38	11.17	11.46
8	7.33	7.52	7.83	8.09	8.82	9.06	9.85	10.12	10.18	10.30	11.29	11.46
9	7.43	7.63	7.86	8.04	8.91	9.20	9.65	9.94	9.94	10.19	11.27	11.45
10	7.42	7.59	8.03	8.45	9.01	9.27	9.81	9.95	10.06	10.41	11.18	11.49
11	7.43	7.60	8.35	8.53	9.05	9.27	9.73	10.02	9.97	10.22	11.26	11.64
12	7.46	7.79	8.15	8.44	9.04	9.25	9.76	10.02	10.13	10.45	11.56	11.78
13	7.78	8.14	8.02	8.28	9.01	9.24	9.55	9.90	10.18	10.46	11.43	11.65
14	7.64	7.89	8.09	8.54	9.04	9.28	9.68	9.92	10.17	10.36	11.42	11.60
15	7.63	7.96	8.36	8.68	9.10	9.45	9.58	9.82	10.08	10.23	11.44	11.63
16	7.66	7.96	8.50	8.81	9.33	9.50	9.65	9.88	10.10	10.27	11.39	11.60
17	7.59	7.81	8.63	8.82	9.23	9.45	9.61	9.82	10.15	10.41	11.38	11.56
18	7.72	7.92	8.51	8.80	9.34	9.50	9.67	9.95	10.29	10.45	11.27	11.49
19	7.71	7.91	8.61	9.00	9.17	9.38	9.86	10.05	10.33	10.49	11.24	11.59
20	7.71	7.91	---	---	9.21	9.54	9.86	10.12	10.39	10.69	11.35	11.66
21	7.56	7.84	8.89	9.03	9.51	9.69	9.97	10.11	10.52	10.81	11.26	11.37
22	7.48	7.70	8.97	9.11	9.62	9.87	10.02	10.34	10.58	10.84	11.15	11.30
23	7.70	7.92	---	---	9.52	9.76	---	---	10.69	10.90	11.18	11.96
24	7.61	7.87	8.78	8.96	9.34	9.55	10.05	10.32	10.71	10.90	11.74	11.96
25	7.65	7.91	8.82	9.09	9.42	9.72	9.97	10.16	10.66	10.90	11.38	11.81
26	7.43	7.76	8.66	8.82	9.53	9.76	9.93	10.11	10.68	10.95	11.26	11.55
27	7.38	7.72	8.66	8.81	9.52	9.90	9.76	10.16	10.64	10.96	11.25	11.55
28	7.64	7.90	8.69	9.03	9.76	10.07	9.97	10.31	10.30	10.80	11.42	11.64
29	7.66	7.88	8.84	9.02	9.84	10.07	10.04	10.31	10.46	10.97	11.50	11.80
30	7.46	7.67	8.69	8.97	9.74	10.02	10.01	10.29	10.83	11.11	11.71	11.86
31	---	---	8.35	8.76	---	---	9.88	10.32	10.84	11.14	---	---
MONTH	7.11	8.14	7.55	9.11	8.60	10.07	9.55	10.34	9.94	11.14	11.08	11.96

Daily Low Water Levels



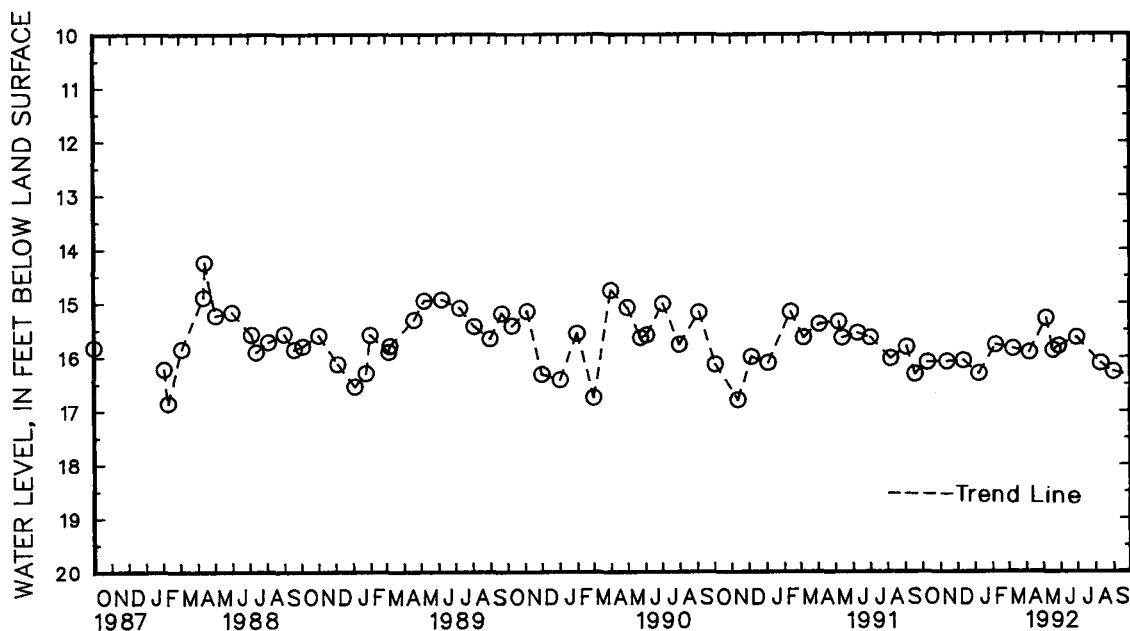
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Cg 25. SITE ID.--390127076240301. PERMIT NUMBER.--AA-74-1240.
LOCATION.--Lat 39°01'27", long 76°24'03", Hydrologic Unit 02060004, at Sandy Point State Park, nr maintenance area.
Owner: Maryland Department of Natural Resources.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 107 ft; casing diameter 3 in., to 100 ft; screen diameter 3 in. from 100 to 107 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface is 17.33 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.1 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--April 1981 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.24 ft below land surface, April 13, 1988; lowest measured, 18.25 ft below land surface, Oct. 1, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	16.09	JAN 8	16.31	APR 7	15.92	MAY 29	15.80	SEP 1	16.28
NOV 13	16.09	FEB 7	15.78	MAY 7	15.28	JUN 30	15.64		
DEC 12	16.07	MAR 9	15.85	19	15.88	AUG 10	16.12		
WATER YEAR 1992		HIGHEST	15.28	MAY 7, 1992	LOWEST	16.31	JAN 8, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

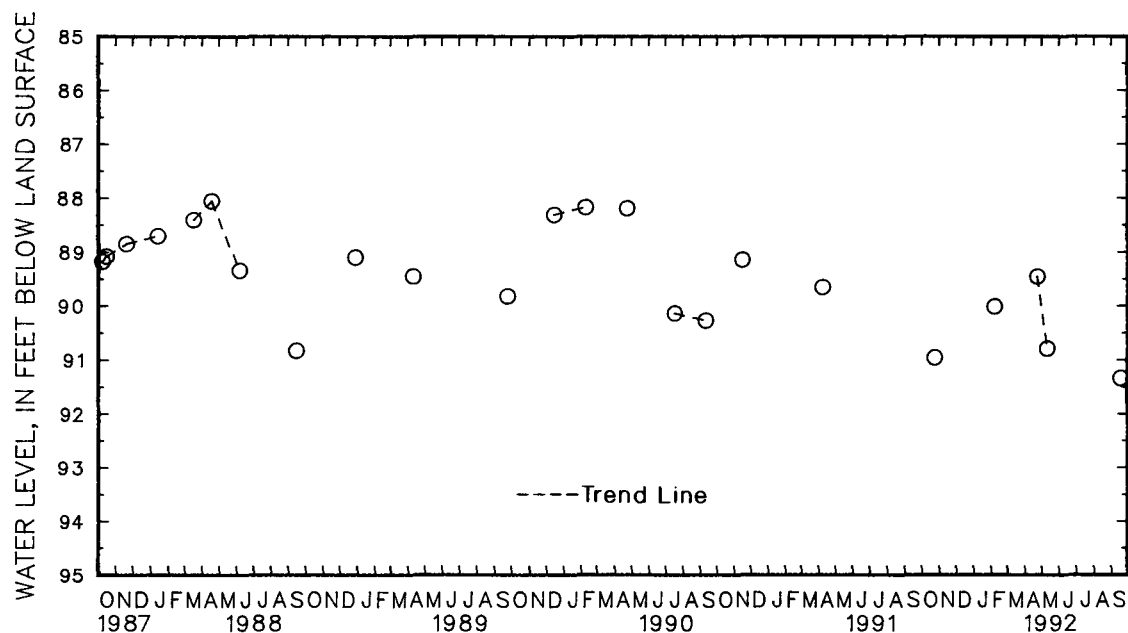
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Dd 42. SITE ID.--385808076373502. PERMIT NUMBER.--AA-71-0231.
 LOCATION.--Lat 38°58'08", long 76°37'35", Hydrologic Unit 02060004, 30 ft south of MD Rt 50,
 0.5 mi from intersection with Howard Grove Rd. and Rutland Rd.
 Owner: U.S. Geological Survey.
 AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 275 ft; casing diameter 4 in.,
 to 190 ft; screen diameter 2 in. from 190 to 220 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with graphic water-level recorder from December 1971 to August 1975 and with a digital
 water-level recorder--30-minute recorder interval from August 1975 to May 10, 1992.
 DATUM.--Elevation of land surface is 105.2 ft above National Geodetic Vertical Datum of 1929,
 from topographic map.
 Measuring Point: Top of recorder platform, 1.0 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network.
 PERIOD OF RECORD.--December 1971 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.14 ft below land surface Aug. 3, and 4, 1974.
 lowest measured, 93.08 ft below land surface, June 17, and 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	90.97	FEB 7	90.02	APR 23	89.46	MAY 11	90.80	SEP 18	91.35
WATER YEAR 1992		HIGHEST	89.46	APR 23, 1992		LOWEST	91.35	SEP 18, 1992	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA De 1. SITE ID.--385915076340401.

LOCATION.--Lat 38°59'15", Long 76°34'04", Hydrologic Unit 02060004, 0.07 mi north of MD Rt 450, 1.1 mi west of Generals Highway.

Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 237 ft; casing diameter 10 in., to 207 ft; screen diameter 6 in. from 207 to 237 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from May 1969 to Dec. 28, 1977 and with a digital water-level recorder--15-minute recorder interval from December 1977 to current year.

DATUM.--Elevation of land surface is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of recorder platform, 2.5 ft above land surface.

REMARKS.--Anne Arundel Co. observation well network. Missing data due to recorder malfunction.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.25 ft above sea level, Nov. 14, 1988; lowest measured, 36.19 ft below sea level, Oct. 25, 1989.

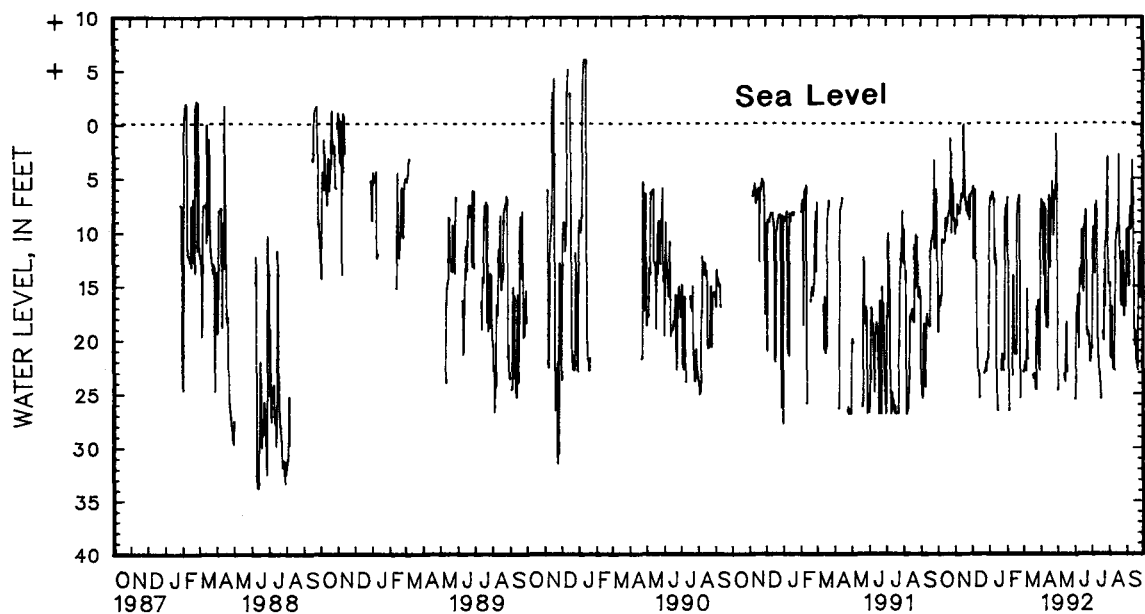
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.29	19.47	3.02	10.27	2.42	6.38	3.61	8.00	2.11	6.81	9.48	23.09
2	7.30	18.54	4.52	9.62	5.83	6.31	2.88	7.18	3.49	13.97	8.11	22.95
3	5.66	16.05	4.37	9.52	1.79	5.85	2.39	6.67	2.59	22.45	9.38	22.49
4	5.98	16.93	4.09	9.47	1.64	12.64	2.39	6.67	7.29	26.74	9.07	22.15
5	6.49	16.95	4.02	7.48	2.12	6.17	2.25	6.94	---	---	8.53	22.93
6	6.24	16.33	4.45	7.75	2.06	6.10	2.04	6.29	---	---	9.47	22.97
7	5.74	15.99	4.32	8.34	2.84	6.82	2.87	6.37	---	---	7.68	15.28
8	5.69	10.69	3.88	7.99	2.74	12.86	2.21	6.95	---	---	8.02	21.74
9	5.46	10.70	3.91	8.31	12.88	15.43	1.56	6.99	---	---	8.43	21.93
10	10.43	10.94	3.23	7.89	6.59	20.93	.56	12.99	9.94	23.38	---	---
11	5.61	11.00	1.19	7.16	6.77	21.12	2.18	11.60	5.31	14.01	---	---
12	5.63	10.81	.62	6.52	7.77	23.23	3.20	12.99	8.59	14.18	---	---
13	5.46	10.84	1.93	6.46	8.66	23.42	1.91	24.44	7.11	21.17	---	---
14	5.72	10.68	2.09	6.80	9.44	25.58	6.68	25.97	8.67	21.48	---	---
15	5.97	8.65	.32	6.68	---	---	10.04	26.76	7.64	20.23	---	---
16	5.85	9.91	+4.0	.32	---	---	---	---	8.06	21.35	---	---
17	4.60	9.34	+4.6	.02	---	---	---	---	8.56	21.53	11.22	23.45
18	4.69	9.20	+7.3	6.11	---	---	---	---	4.16	8.61	11.54	23.74
19	8.07	8.54	2.18	6.97	---	---	---	---	3.25	7.59	9.52	23.32
20	7.91	8.29	1.69	7.37	---	---	---	---	2.95	7.01	11.41	23.47
21	1.92	8.12	3.10	8.07	---	---	10.31	22.93	2.90	6.80	12.62	24.13
22	1.41	7.29	2.02	7.31	---	---	9.77	22.72	2.41	6.55	19.16	24.75
23	1.24	6.79	3.04	8.17	10.03	23.21	9.16	21.38	3.34	12.97	16.27	24.78
24	.24	1.27	3.35	8.45	9.00	23.01	9.00	22.00	6.26	25.54	15.33	16.93
25	+0.7	10.16	3.75	8.55	8.97	23.06	9.51	22.95	---	---	8.14	21.10
26	.14	5.13	2.41	6.63	8.04	22.21	10.09	21.71	---	---	15.41	21.47
27	.26	5.84	3.27	8.91	9.08	23.00	8.04	21.91	---	---	8.53	16.33
28	+0.4	6.71	2.41	6.79	9.07	22.19	4.04	8.70	---	---	9.07	22.21
29	2.66	8.75	2.32	6.48	21.79	21.88	3.76	7.99	---	---	9.75	22.91
30	3.79	8.97	2.38	6.47	7.89	21.84	3.14	7.50	---	---	9.67	22.51
31	3.91	8.85	---	---	5.45	16.13	5.38	11.35	---	---	5.24	10.36
MONTH	+0.7	19.47	+7.3	10.27	1.64	25.58	.56	26.76	2.11	26.74	5.24	24.78

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued
AA De 1--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.33	7.94	+ .96	24.80	14.40	25.66	11.43	20.96	2.40	14.97	9.71	9.81
2	2.70	6.94	---	---	14.38	23.79	7.42	14.79	2.32	14.86	9.68	9.75
3	6.94	7.06	---	---	8.97	18.43	7.29	10.99	5.99	21.68	6.59	9.68
4	2.61	7.29	---	---	8.22	17.61	6.53	9.49	7.25	21.88	6.43	14.15
5	3.93	9.16	---	---	7.40	16.99	6.15	12.58	7.30	17.00	7.71	15.13
6	4.34	14.09	---	---	5.14	15.79	3.36	13.92	7.58	17.77	6.24	9.73
7	3.64	7.30	---	---	6.19	18.75	2.32	7.50	8.57	21.78	2.53	8.75
8	5.15	17.62	---	---	7.95	20.93	2.36	7.77	10.00	22.94	1.98	7.67
9	3.23	7.71	---	---	8.40	13.45	1.68	7.13	8.63	22.96	1.23	9.75
10	2.62	18.95	---	---	6.49	14.10	7.13	7.93	9.67	23.00	1.27	7.24
11	3.10	18.64	---	---	6.30	13.23	5.06	19.91	9.96	16.90	1.24	3.34
12	3.07	18.30	---	---	8.53	14.94	4.66	20.21	8.62	12.96	.65	5.51
13	5.06	19.04	12.14	23.30	9.58	9.75	8.00	21.77	7.23	10.89	1.21	6.91
14	3.58	16.08	13.99	23.73	7.31	9.70	21.77	23.28	7.09	10.13	.84	18.91
15	3.94	7.01	14.56	23.99	3.84	15.29	23.28	24.04	6.67	9.83	5.72	19.32
16	6.11	6.56	11.93	18.99	4.57	15.63	20.09	24.51	5.94	9.30	15.11	20.65
17	2.20	13.35	12.15	18.40	5.69	9.49	24.51	25.64	2.81	9.01	7.13	19.39
18	2.96	12.57	18.16	23.07	5.41	9.43	---	---	1.76	2.81	17.19	22.02
19	2.78	8.22	---	---	2.68	8.77	---	---	1.62	9.70	7.48	21.90
20	2.04	7.66	---	---	2.80	7.89	---	---	5.14	11.00	6.64	22.92
21	1.03	5.30	---	---	1.79	8.00	13.28	19.32	5.55	15.93	9.33	22.48
22	1.42	8.69	---	---	1.58	19.09	13.32	20.07	6.12	16.94	7.86	13.00
23	1.58	6.19	---	---	6.63	19.70	10.39	13.52	8.19	16.95	10.02	11.94
24	2.39	10.34	---	---	7.36	19.35	6.14	16.98	6.66	11.95	9.63	11.39
25	2.07	6.47	---	---	7.76	19.63	5.30	11.00	11.31	17.03	6.31	15.71
26	3.19	6.98	---	---	15.52	19.80	10.00	10.91	11.48	11.85	5.54	16.02
27	.02	5.77	---	---	15.94	21.14	3.87	10.03	11.65	17.95	6.13	11.66
28	.88	5.81	---	---	21.14	22.17	3.01	3.95	8.80	17.95	6.02	11.19
29	+ .68	.88	---	---	15.47	22.21	2.19	3.01	7.78	13.99	6.26	11.92
30	+ .87	5.90	---	---	15.65	20.49	2.11	14.69	6.72	17.03	5.65	16.98
31	---	---	11.92	25.66	---	---	3.00	14.95	7.66	13.94	---	---
MONTH	+ .87	19.04	+ .96	25.66	1.58	25.66	1.68	25.64	1.62	23.00	.65	22.92

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA De 140. SITE ID.--385920076322401. PERMIT NUMBER.--AA-81-6267.

LOCATION.--Lat 38°59'19", long 76°32'24", Hydrologic Unit 02040004, at Annapolis Mall.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 45 ft; casing diameter 3 in., to 32 ft; screen diameter 3 in. from 32 to 42 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 85.03 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.82 ft above land surface.

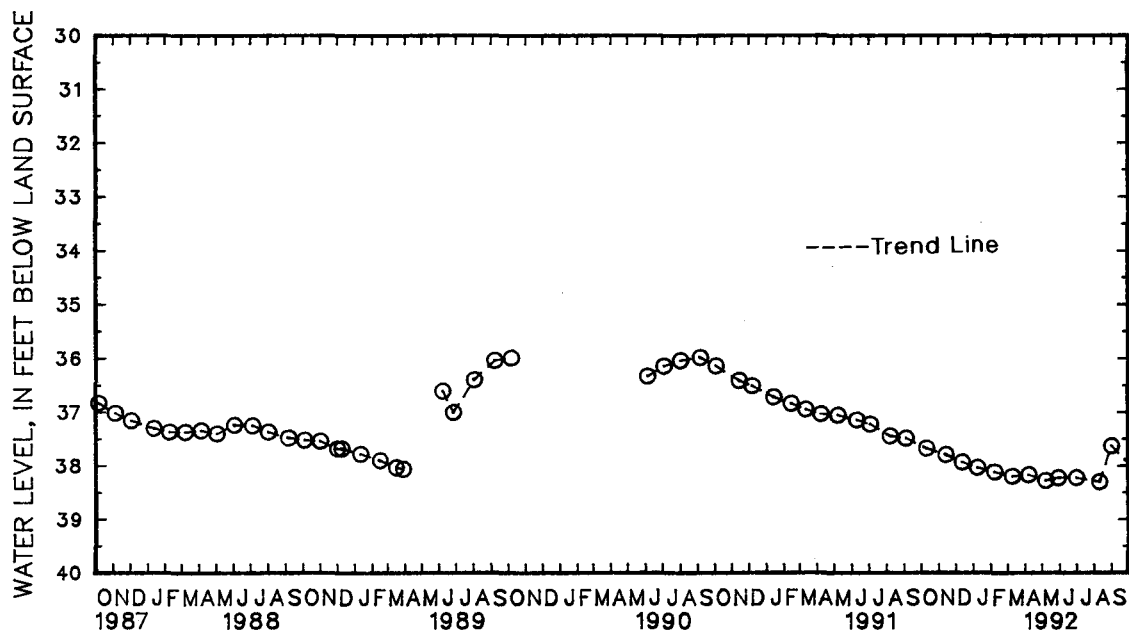
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.98 ft below land surface, Sept. 5, 1990; lowest measured, 38.31 ft below land surface, Aug. 10, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	37.68	DEC 12	37.94	FEB 7	38.12	APR 7	38.17	MAY 29	38.23	AUG 10	38.31
NOV 13	37.80	JAN 8	38.04	MAR 9	38.20	MAY 7	38.28	JUN 30	38.23	SEP 1	37.64
WATER YEAR 1992		HIGHEST	37.64	SEP 1, 1992		LOWEST	38.31	AUG 10, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

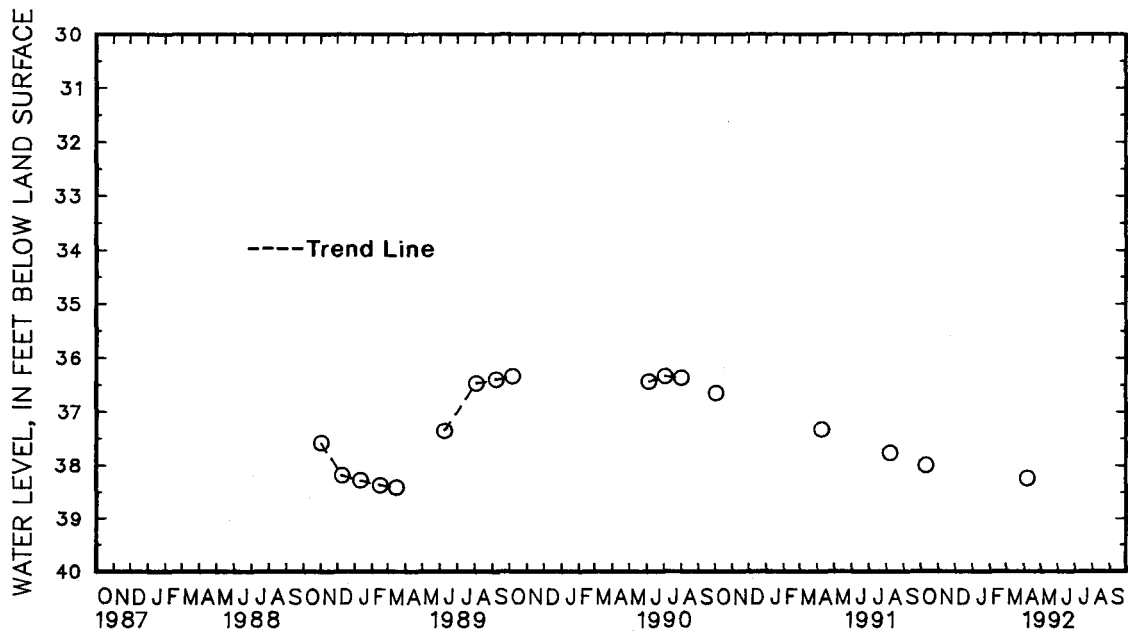
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA De 144. SITE ID.--385920076322402. PERMIT NUMBER.--AA-81-6267.
 LOCATION.--Lat 38°59'19", long 76°32'21", Hydrologic Unit 02040004, at Annapolis Mall.
 Owner: U.S. Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 89 ft; casing diameter 3 in., to 71 ft; screen diameter 3 in. from 71 to 86 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 85.24 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.00 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--November 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.35 ft below land surface, Oct. 6, 1989, and July 3, 1990; lowest measured, 38.44 ft below land surface, March 16, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	38.03	APR 7	38.27
WATER YEAR 1992 HIGHEST 38.03 OCT 10, 1991 LOWEST 38.27 APR 7, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA De 177. SITE ID.--385852076333201. PERMIT NUMBER.--AA-81-9213.
 LOCATION.--Lat 38°58'52", long 76°33'32", Hydrologic Unit 02060004, at Broadcreek Water Treatment Plant,
 Harry Truman Parkway, Annapolis.
 Owner: Anne Arundel County Dept. of Public Works.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 974 ft; casing diameter 26 in., to 72 ft;
 casing diameter 18 in., to 800 ft; casing diameter 12 in. from 800 to 836 ft, 868 to 880 ft, 894 to 918 ft,
 and 964 to 974 ft; screen diameter 12 in. from 836 to 868 ft, 880 to 894 ft, and 918 to 964 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--30-minute recorder interval from Aug. 16, 1988 to current year.
 DATUM.--Elevation of land surface is 93.85 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 4.37 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network. Water levels are affected by nearby pumping.
 PERIOD OF RECORD.--August 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.08 ft above sea level, April 1, 1991;
 lowest measured, 16.15 ft below sea level, Sept. 14, 1992.

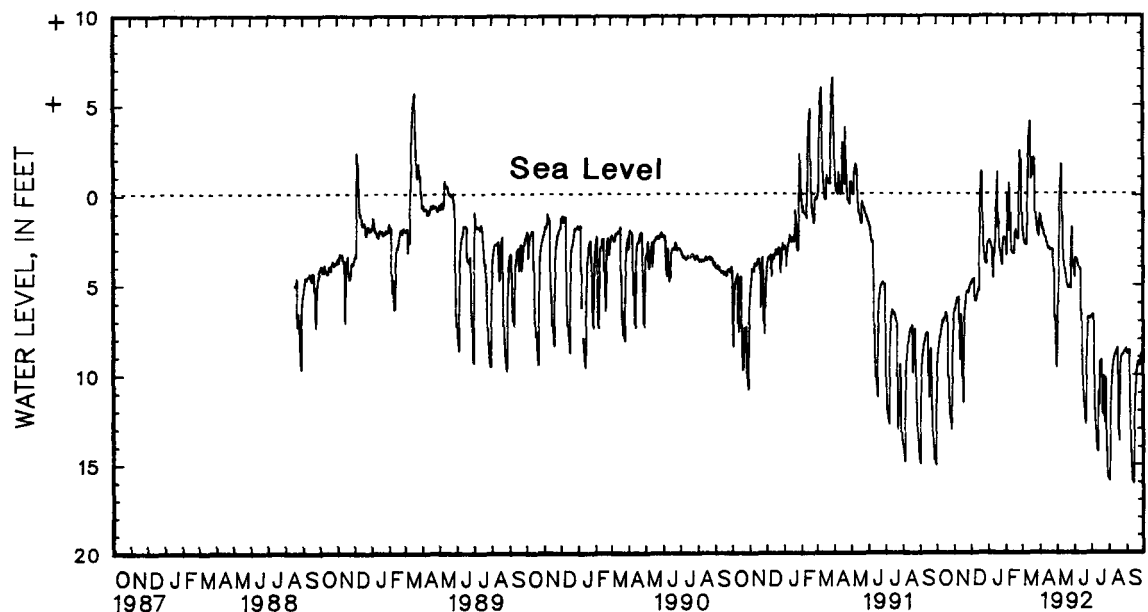
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.97	11.52	6.26	6.92	4.60	4.89	2.43	2.68	2.12	2.50	+3.37	1.14
2	9.20	9.95	6.02	6.36	4.71	4.90	2.44	2.66	2.37	2.61	.55	1.83
3	8.60	9.18	5.93	6.42	4.29	4.76	2.41	2.65	1.72	3.16	1.24	2.13
4	8.26	8.65	5.80	6.23	4.32	4.69	2.20	2.54	.08	3.40	1.68	2.51
5	7.91	8.32	5.56	6.05	4.61	4.74	2.34	2.64	+1.32	.03	1.90	2.62
6	7.66	7.99	5.40	5.86	4.38	4.67	2.34	2.69	+1.34	1.78	1.95	2.77
7	7.50	7.85	5.34	5.70	4.27	4.62	2.50	2.91	+1.21	1.99	2.21	2.80
8	7.37	7.74	5.52	5.82	4.34	5.61	2.73	3.02	+2.19	+6.66	2.21	2.72
9	7.05	7.43	5.51	5.87	5.63	5.85	2.46	3.03	+1.56	.10	1.50	2.83
10	7.11	7.28	5.25	5.69	5.31	5.91	1.87	4.66	+0.02	1.05	+1.03	1.50
11	6.71	7.18	5.18	8.04	5.23	5.88	3.38	3.93	.85	2.49	+2.38	+1.08
12	6.68	6.96	6.62	9.21	5.15	5.72	3.26	3.50	2.52	3.13	+3.19	+2.40
13	6.69	7.01	6.62	8.66	4.79	5.45	1.29	3.33	2.66	3.23	+3.64	+3.20
14	6.71	7.02	6.07	6.63	4.76	5.26	.36	2.68	2.56	3.26	+4.09	+3.65
15	6.54	6.86	5.93	8.91	4.75	5.32	+6.65	.72	2.70	3.34	+4.31	+4.10
16	6.57	6.81	8.73	10.46	1.85	5.35	+3.33	1.81	2.49	3.25	+4.43	+2.80
17	6.22	6.82	10.41	11.43	.35	2.63	+1.26	+1.15	2.14	3.32	+2.67	+1.84
18	6.30	6.53	8.39	11.64	+7.72	.31	+1.89	+1.28	1.79	2.16	+3.36	+1.59
19	6.43	6.69	7.08	8.35	+1.28	+7.73	+1.67	1.36	1.65	1.95	+3.30	+1.06
20	6.65	6.78	6.36	7.06	+2.06	+1.31	+9.99	1.48	1.86	2.16	+4.00	+1.99
21	6.64	9.49	5.98	6.36	+2.60	+1.19	1.52	2.58	2.05	2.34	+3.80	+2.02
22	7.76	10.30	5.28	6.05	+1.07	1.13	2.30	3.03	2.15	2.44	+4.19	+2.05
23	8.56	11.10	5.25	5.54	1.01	2.17	2.55	3.10	2.26	2.37	+4.21	+2.26
24	10.82	12.13	5.02	5.35	1.97	2.88	2.51	3.38	.35	2.48	+2.22	1.05
25	10.74	12.31	5.04	5.32	2.64	3.28	3.04	3.57	+1.54	.30	.80	1.37
26	11.34	12.46	5.12	5.40	2.56	3.35	3.52	3.88	+2.46	+1.57	1.38	1.61
27	11.87	12.73	5.08	5.42	3.12	3.71	2.49	3.98	+2.99	+2.47	1.22	1.88
28	10.34	13.13	4.89	5.23	3.37	3.85	2.22	2.50	+3.18	+1.95	1.51	2.18
29	8.50	10.29	4.77	5.03	3.62	3.74	2.15	2.41	+3.13	+4.45	1.74	2.31
30	7.33	8.48	4.70	5.00	2.82	3.88	2.04	2.37	---	---	1.09	2.36
31	6.85	7.32	---	---	2.34	2.85	2.22	2.44	---	---	.80	1.12
MONTH	6.22	13.13	4.70	11.64	+2.60	5.91	+1.89	4.66	+3.18	3.40	+4.43	2.83

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued
AA De 177--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.66	1.13	7.86	9.68	3.98	4.53	6.62	6.79	14.98	15.85	8.54	8.76
2	.99	1.29	5.38	7.84	3.58	4.63	6.58	6.78	15.14	15.95	8.76	8.83
3	1.30	1.62	5.71	6.16	3.31	3.59	6.54	6.83	12.48	16.00	8.47	8.80
4	1.33	1.64	2.81	6.00	3.34	3.57	6.41	6.69	10.88	12.48	8.43	8.67
5	1.56	1.88	.86	3.39	3.29	3.56	6.41	6.71	10.30	10.88	8.41	8.72
6	1.70	1.98	+ .28	.83	3.32	3.63	6.47	10.15	9.93	10.30	8.35	8.66
7	1.86	2.02	+1.08	+ .30	3.49	3.74	10.20	12.05	9.55	9.93	8.25	11.48
8	2.00	2.30	+1.72	+1.09	3.71	3.88	11.62	12.65	9.25	9.55	11.48	13.38
9	2.14	2.35	+2.10	+1.73	3.84	4.02	12.27	13.23	9.04	9.26	13.38	14.41
10	2.17	2.42	+2.24	+ .49	3.97	4.13	13.24	13.89	8.84	9.08	14.41	15.14
11	2.20	2.44	+1.50	1.44	3.98	4.16	13.67	14.19	8.64	8.89	15.14	15.85
12	2.29	2.64	1.47	2.61	4.07	4.27	13.86	14.38	8.52	8.84	15.18	16.01
13	2.52	2.76	2.29	3.15	4.40	6.57	10.87	14.38	8.46	8.86	15.22	16.06
14	2.51	2.77	3.17	3.74	5.12	6.56	9.79	10.94	8.42	8.66	12.68	16.15
15	2.73	2.97	3.53	4.17	6.25	9.04	9.89	11.76	8.29	8.61	11.22	12.68
16	2.98	3.10	3.90	4.43	9.07	10.41	9.31	9.89	8.18	8.52	10.58	11.22
17	2.78	3.03	4.23	4.58	10.09	11.24	9.01	9.31	8.17	11.87	10.05	10.58
18	2.88	3.09	4.57	4.83	10.73	11.59	9.01	9.60	11.87	13.40	9.83	10.05
19	2.92	3.17	4.84	5.03	10.90	11.86	9.10	9.20	11.20	13.77	9.55	9.83
20	2.87	3.16	5.03	5.14	11.23	12.30	9.04	10.44	9.89	11.20	9.26	9.64
21	2.85	3.11	5.14	5.25	11.68	12.64	10.43	12.26	9.32	9.89	9.19	9.33
22	2.89	3.10	5.19	5.25	9.43	12.84	10.11	12.30	8.88	9.32	8.95	9.25
23	2.99	3.18	4.60	5.19	7.85	9.40	9.39	10.11	8.84	8.99	9.07	9.41
24	2.90	3.16	4.56	5.14	6.96	7.82	9.10	12.19	8.69	8.92	9.38	9.47
25	2.86	4.35	4.63	5.24	6.75	6.98	10.21	12.74	8.72	8.85	8.99	9.43
26	3.47	4.28	2.02	5.27	6.74	6.82	9.37	10.21	8.69	8.88	8.72	9.02
27	3.28	6.90	.20	1.96	6.66	6.80	9.10	12.53	8.65	8.78	8.56	8.91
28	4.63	6.83	+ .37	1.78	6.73	6.83	12.53	14.29	8.37	8.68	8.53	8.82
29	5.59	8.27	1.86	3.70	6.73	6.90	14.29	15.08	8.36	8.66	8.61	8.79
30	8.32	9.36	3.35	4.04	6.73	6.84	15.08	15.59	8.37	8.71	8.46	8.86
31	---	---	3.36	4.13	---	---	15.45	15.81	8.30	8.54	---	---
MONTH	.66	9.36	+2.24	9.68	3.29	12.84	6.41	15.81	8.17	16.00	8.25	16.15

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 19. SITE ID.--385921076270701.

LOCATION.--Lat 38°59'21", long 76°27'07", Hydrologic Unit 02060004, 200 ft east of intersection with McLean and Hooper Rd.

Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 590 ft; casing diameter 10 in., to 565 ft; screen diameter 10 in. from 565 to 590 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from November 1979 to April 1980. Equipped with digital water-level recorder--60-minute recorder interval from May 1980 to current year.

DATUM.--Elevation of land surface is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of recorder platform, 3.0 ft above land surface.

REMARKS.--Southern Maryland Observation Well Network.

PERIOD OF RECORD.--January 1986 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.76 ft below sea level, May 14, 1980; lowest measured, 33.65 ft below sea level, Sept. 14, 1987.

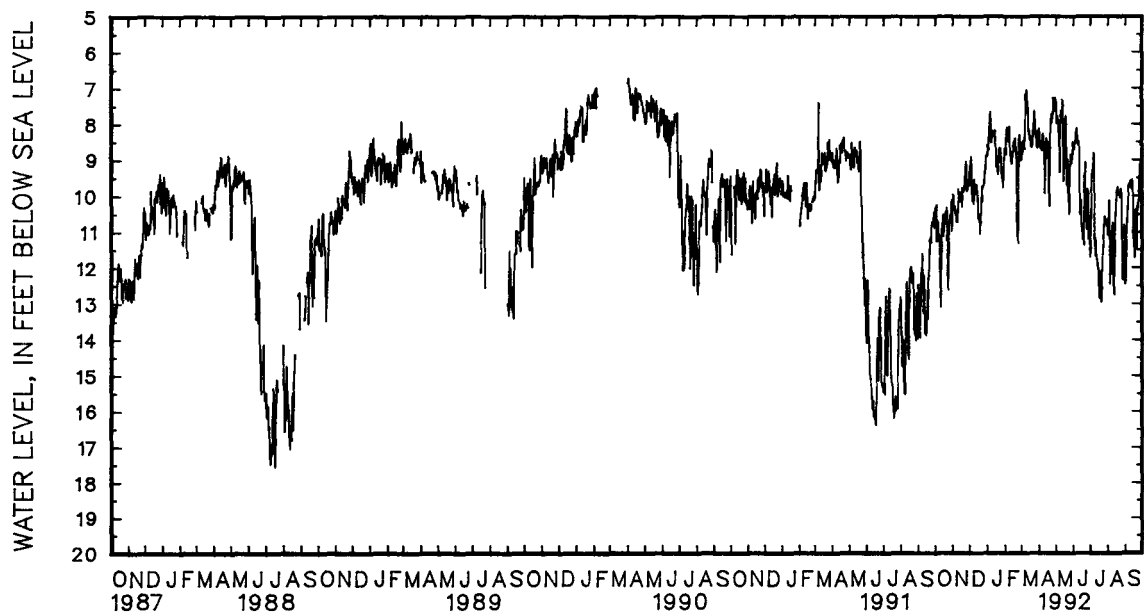
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.96	10.33	9.63	10.03	8.76	9.19	8.18	8.60	8.41	8.70	7.80	8.87
2	9.90	10.36	9.39	9.97	8.75	9.19	8.29	8.74	8.19	8.86	8.34	8.80
3	9.90	10.25	9.91	10.36	8.01	8.92	7.75	8.58	7.84	8.30	8.27	8.67
4	9.74	11.29	9.73	10.30	8.51	9.59	7.27	8.22	7.53	8.12	8.10	8.49
5	9.89	10.71	10.04	10.46	9.59	10.16	7.27	7.67	7.83	8.49	8.23	8.62
6	9.78	10.76	10.04	10.54	9.41	10.11	7.37	7.83	8.08	8.48	8.28	8.70
7	10.65	11.07	9.93	10.43	9.52	10.23	7.62	8.26	7.84	8.28	6.89	8.35
8	10.61	11.12	10.21	10.73	9.32	9.84	8.16	8.52	7.71	8.09	6.75	7.19
9	10.65	11.96	10.22	10.73	9.20	9.57	7.93	8.40	8.07	8.75	6.82	7.20
10	12.12	12.87	9.33	10.34	9.35	9.98	7.80	8.21	8.73	8.94	6.22	7.05
11	11.78	13.15	9.36	9.82	9.54	9.82	7.84	8.34	8.61	9.05	6.29	7.47
12	10.62	11.76	9.59	10.17	9.55	9.92	7.90	8.24	8.70	9.12	7.35	7.67
13	10.56	10.96	9.72	10.11	9.35	9.71	7.90	8.23	8.42	8.92	7.67	8.16
14	10.09	10.76	9.65	9.92	9.41	9.87	7.43	8.19	8.39	8.80	7.68	8.27
15	10.08	10.51	9.70	10.00	9.86	10.28	8.03	8.95	7.99	8.77	7.67	8.23
16	10.40	11.13	9.68	10.11	10.03	10.68	8.34	9.22	7.86	8.53	8.08	8.43
17	10.49	10.75	9.70	10.30	9.84	10.55	8.08	9.15	8.18	8.71	7.78	8.37
18	10.41	10.63	9.38	9.79	9.97	10.61	8.48	9.02	7.85	8.43	8.17	8.67
19	9.99	10.46	9.33	9.79	10.53	11.09	8.77	9.42	7.87	8.41	7.83	8.64
20	10.23	10.77	9.34	9.90	9.86	10.77	8.21	8.93	8.12	8.76	7.87	8.64
21	9.89	10.33	9.42	9.84	9.52	10.04	8.21	8.72	8.43	10.59	7.95	8.38
22	9.98	10.50	8.89	9.76	9.48	10.17	8.40	8.83	10.66	11.09	6.78	8.17
23	10.35	12.19	8.79	9.36	9.09	9.75	7.82	8.70	10.85	11.20	6.97	7.66
24	11.26	12.67	8.62	9.04	9.27	9.79	7.83	8.94	9.15	11.36	7.57	7.87
25	10.44	11.39	8.88	9.36	9.37	9.72	8.88	9.37	8.18	9.13	7.80	8.08
26	10.10	10.72	9.20	9.89	9.06	9.67	8.87	9.52	7.98	8.33	7.97	8.30
27	10.07	10.55	9.36	9.85	9.05	9.35	9.16	9.47	7.86	8.30	7.81	8.25
28	10.17	10.75	9.26	9.63	8.90	9.39	9.31	9.80	8.11	8.53	8.25	8.69
29	9.68	10.25	9.25	9.72	8.35	8.90	8.60	9.41	8.02	9.02	8.38	8.68
30	9.62	10.12	9.03	9.72	8.41	8.92	8.34	8.86	---	---	7.91	8.49
31	9.58	10.99	---	---	8.33	8.90	8.26	8.71	---	---	7.67	8.20
MONTH	9.58	13.15	8.62	10.73	8.01	11.09	7.27	9.80	7.53	11.36	6.22	8.87

GROUND-WATER LEVELS
 MARYLAND--Continued
 ANNE ARUNDEL COUNTY--Continued
 AA Df 19--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.62	8.15	6.94	7.65	8.03	8.72	10.57	11.62	10.51	11.09	10.99	12.51
2	8.03	8.53	7.24	7.99	8.18	8.72	9.58	10.66	9.91	10.76	10.99	12.42
3	8.31	8.69	7.19	7.80	8.02	8.55	8.87	9.71	9.59	10.13	10.21	11.03
4	8.15	8.59	7.39	7.90	8.07	8.56	8.82	9.32	9.61	11.69	10.21	10.70
5	8.23	8.75	7.35	7.92	7.84	8.50	8.59	9.39	10.98	12.51	9.85	10.31
6	8.34	8.75	7.44	8.25	7.70	8.16	8.40	8.82	10.42	10.99	9.33	9.85
7	8.00	8.52	7.76	9.38	7.72	8.14	8.40	8.87	10.30	11.43	9.27	9.75
8	7.85	8.31	7.36	8.37	7.84	8.36	8.59	11.27	10.76	12.21	9.36	9.68
9	8.00	8.48	7.23	7.65	7.98	8.54	9.88	11.71	10.14	10.76	9.32	9.68
10	8.00	9.06	7.39	7.94	8.06	8.61	10.28	11.21	10.21	11.34	9.08	9.60
11	8.44	9.97	7.32	7.85	8.07	8.51	10.32	11.69	11.34	12.75	9.23	9.76
12	8.16	8.55	7.03	7.33	8.03	10.54	10.54	11.80	11.53	12.81	9.33	9.80
13	8.21	8.97	6.85	7.49	9.08	10.52	10.85	11.87	10.37	11.53	9.18	9.55
14	8.00	8.43	7.40	9.63	8.51	10.16	10.93	12.06	9.93	10.60	9.28	9.68
15	8.03	8.66	8.21	9.25	9.80	10.82	11.09	12.09	9.66	10.11	9.46	11.45
16	8.11	8.54	7.77	8.40	9.69	11.03	11.24	12.83	9.35	9.95	10.01	11.31
17	7.98	8.53	7.29	8.00	9.40	11.03	11.83	12.91	9.47	9.85	10.03	11.77
18	8.04	10.32	6.95	7.80	9.54	11.27	11.21	12.15	9.44	9.84	9.39	10.59
19	8.59	10.32	7.54	7.97	9.34	11.42	10.84	12.37	9.42	9.77	9.39	10.39
20	7.90	8.64	7.92	9.72	8.88	9.42	12.12	13.02	9.46	9.99	9.76	11.49
21	7.41	8.21	8.08	9.02	8.89	9.78	11.49	12.64	9.53	9.96	9.69	11.25
22	7.21	7.74	8.48	10.19	8.61	9.07	11.46	11.99	9.53	10.05	9.48	10.21
23	7.70	7.99	8.59	9.64	8.61	10.76	10.89	11.46	9.59	9.94	9.34	10.35
24	7.40	7.85	8.75	10.55	9.04	10.54	10.63	11.21	9.42	9.82	9.52	10.16
25	7.29	7.71	8.61	9.77	8.99	10.97	10.43	10.85	9.29	9.85	9.05	9.90
26	6.77	7.29	8.56	8.87	8.88	9.86	10.21	10.58	9.40	11.50	8.65	9.36
27	6.74	7.37	8.64	8.88	8.56	9.90	9.93	10.68	11.37	12.33	8.53	9.08
28	7.19	7.64	8.54	9.12	9.90	11.26	10.18	10.81	11.75	12.39	8.71	9.23
29	7.14	7.50	8.63	8.99	10.26	11.16	10.19	10.76	10.58	12.25	8.95	9.50
30	6.87	7.29	8.25	8.83	10.20	11.76	10.10	10.69	9.71	10.83	9.14	9.55
31	---	---	7.64	8.52	---	---	10.05	10.71	9.84	11.94	---	---
MONTH	6.74	10.32	6.85	10.55	7.70	11.76	8.40	13.02	9.29	12.81	8.53	12.51

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 20. SITE ID.--385916076270702.

LOCATION.--Lat 38°59'16", long 76°27'07", Hydrologic Unit 02060004, off Hooper Rd, 400 ft from McLean Rd.
Owner: U.S. Navy.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 255 ft; casing diameter 10 in., to 233 ft; screen diameter 8 in. from 233 to 253 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from June 1969 to December 1977. Equipped with digital water-level recorder--30-minute recorder interval from December 1977 to current year.

DATUM.--Elevation of land surface is 22 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Anne Arundel Co. observation well network. Missing data due to recorder malfunction.

PERIOD OF RECORD.--June 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.91 ft below sea level, June 20, 1980;
lowest measured, 13.77 ft below sea level, July 25, 1988.

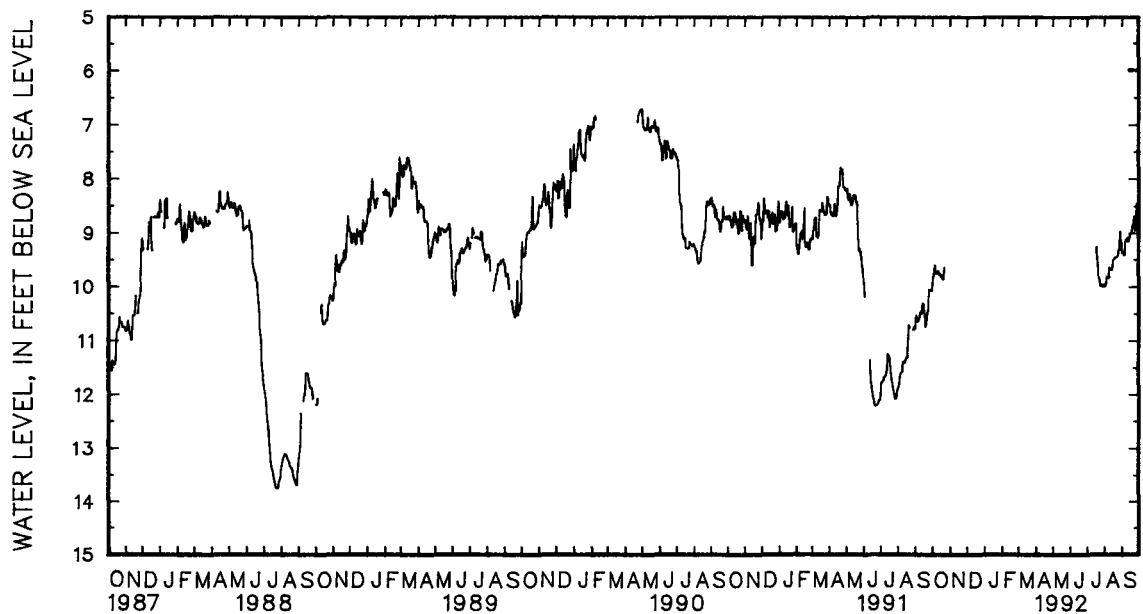
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

GROUND-WATER LEVELS
 MARYLAND--Continued
 ANNE ARUNDEL COUNTY--Continued
 AA Df 20--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	9.90	9.98	9.19	9.34
2	---	---	---	---	---	---	---	---	9.98	10.01	9.34	9.37
3	---	---	---	---	---	---	---	---	9.93	10.00	9.31	9.36
4	---	---	---	---	---	---	---	---	9.83	9.93	9.31	9.39
5	---	---	---	---	---	---	---	---	9.81	9.83	9.39	9.42
6	---	---	---	---	---	---	---	---	9.82	9.84	9.16	9.42
7	---	---	---	---	---	---	---	---	9.84	9.85	9.12	9.16
8	---	---	---	---	---	---	---	---	9.83	9.85	9.13	9.13
9	---	---	---	---	---	---	---	---	9.65	9.83	9.13	9.13
10	---	---	---	---	---	---	---	---	9.65	9.66	9.07	9.13
11	---	---	---	---	---	---	---	---	9.63	9.66	9.06	9.09
12	---	---	---	---	---	---	---	---	9.63	9.67	9.09	9.16
13	---	---	---	---	---	---	---	---	9.67	9.69	9.10	9.15
14	---	---	---	---	---	---	---	---	9.68	9.70	9.05	9.10
15	---	---	---	---	---	---	---	---	9.61	9.68	9.02	9.05
16	---	---	---	---	---	---	---	---	9.51	9.61	8.99	9.02
17	---	---	---	---	---	---	---	---	9.50	9.51	8.98	8.99
18	---	---	---	---	---	---	9.14	9.26	9.49	9.50	8.87	8.98
19	---	---	---	---	---	---	9.26	9.43	9.47	9.49	8.84	8.87
20	---	---	---	---	---	---	9.43	9.53	9.46	9.47	8.84	8.84
21	---	---	---	---	---	---	9.53	9.63	9.46	9.47	8.69	8.84
22	---	---	---	---	---	---	9.63	9.86	9.44	9.46	8.63	8.69
23	---	---	---	---	---	---	9.86	9.89	9.44	9.45	8.61	8.87
24	---	---	---	---	---	---	9.89	10.00	9.43	9.45	8.87	8.95
25	---	---	---	---	---	---	9.98	10.00	9.35	9.43	8.61	8.94
26	---	---	---	---	---	---	9.98	9.99	9.32	9.35	8.45	8.61
27	---	---	---	---	---	---	9.93	9.98	9.25	9.33	8.39	8.45
28	---	---	---	---	---	---	9.95	10.01	8.84	9.25	8.39	8.45
29	---	---	---	---	---	---	10.01	10.02	8.84	8.98	8.44	8.56
30	---	---	---	---	---	---	9.99	10.01	8.98	9.16	8.56	8.66
31	---	---	---	---	---	---	9.90	10.00	9.15	9.19	---	---
MONTH	---	---	---	---	---	---	9.14	10.02	8.84	10.01	8.39	9.42

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 79. SITE ID.--385905076293601. PERMIT NUMBER.--AA-03-7867.
 LOCATION.--Lat 38°59'05", Long 76°29'36", Hydrologic Unit 02060004, off Creek Rd., 500 ft north
 of MD Rt. 450.
 Owner: U.S. Navy.
 AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 705 ft; casing diameter 6 in., to 300 ft;
 screen diameter 6 in. from 300 to 320 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from May 20, 1969 to Dec. 19, 1977. Equipped with digital water-level
 recorder--60-- minute recorder interval from Dec. 19, 1977 to current year.
 DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder platform, 2.8 ft above land surface.
 REMARKS.--Anne Arundel Co. observation well network.
 PERIOD OF RECORD.--May 1969 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.12 ft below sea level, Jan. 4, 1982;
 lowest measured, 13.67 ft below sea level, Aug. 21 and 23, 1987.

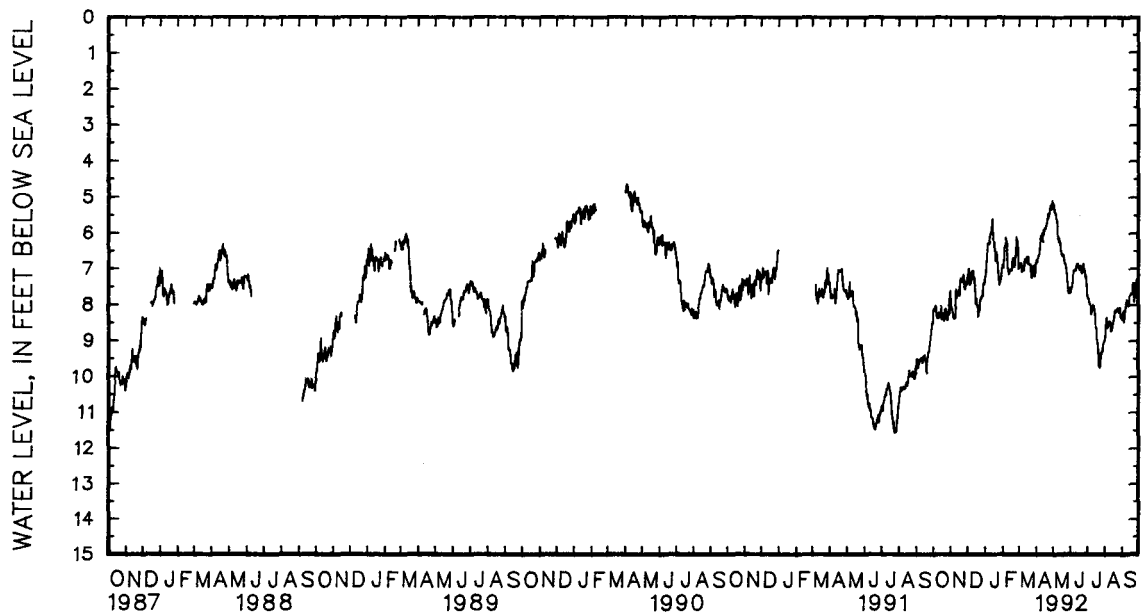
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.90	8.13	7.42	7.62	7.00	7.24	6.99	7.23	6.71	6.93	6.49	6.97
2	7.86	8.10	7.45	7.84	7.00	7.25	6.95	7.22	6.59	6.99	6.71	6.95
3	7.87	8.12	7.82	8.14	6.53	7.01	6.52	7.00	6.28	6.71	6.56	6.87
4	7.84	8.11	7.91	8.21	6.74	7.21	6.16	6.71	6.02	6.39	6.50	6.86
5	7.80	8.03	8.03	8.27	7.21	7.47	6.08	6.27	6.16	6.36	6.65	6.88
6	7.77	8.27	7.97	8.38	7.06	7.39	5.97	6.27	6.04	6.32	6.63	7.11
7	8.14	8.37	7.93	8.30	7.02	7.41	6.08	6.28	5.82	6.14	6.52	7.11
8	8.12	8.34	8.13	8.40	6.97	7.25	6.09	6.29	5.94	6.28	6.60	6.96
9	8.12	8.38	8.04	8.38	6.85	7.08	5.86	6.17	6.32	6.79	6.84	7.03
10	8.07	8.31	7.41	8.08	6.94	7.18	5.72	6.01	6.74	7.03	6.54	7.06
11	8.03	8.23	7.42	7.58	6.94	7.07	5.80	6.00	6.84	7.09	6.37	6.75
12	8.05	8.25	7.57	7.81	7.05	7.28	5.65	5.95	7.01	7.18	6.57	6.82
13	8.16	8.35	7.53	7.74	7.06	7.26	5.57	5.76	6.83	7.11	6.52	6.79
14	7.98	8.32	7.51	7.65	7.13	7.41	5.13	5.60	6.78	7.06	6.39	6.75
15	7.92	8.05	7.38	7.63	7.43	7.71	5.51	5.99	6.62	7.06	6.37	6.70
16	8.01	8.41	7.38	7.59	7.59	8.00	5.79	6.39	6.55	7.04	6.60	6.84
17	8.13	8.30	7.37	7.75	7.32	7.86	5.88	6.27	6.76	7.06	6.35	6.69
18	8.12	8.26	7.16	7.41	7.51	8.04	6.15	6.49	6.36	6.83	6.56	6.88
19	7.99	8.30	7.01	7.27	7.98	8.37	6.47	6.78	6.31	6.72	6.42	6.89
20	8.14	8.47	7.07	7.36	8.00	8.33	6.24	6.56	6.47	6.86	6.49	6.89
21	7.90	8.16	7.10	7.37	7.84	8.13	6.16	6.55	6.63	6.91	6.54	6.90
22	7.90	8.12	6.97	7.36	7.81	8.18	6.52	6.83	6.63	6.97	6.60	6.93
23	7.95	8.21	7.00	7.29	7.54	7.96	6.33	6.83	6.46	6.74	6.81	7.25
24	7.97	8.23	6.92	7.17	7.62	7.89	6.36	7.14	6.33	6.67	7.09	7.28
25	7.94	8.40	7.13	7.30	7.59	7.83	7.14	7.32	6.04	6.39	6.99	7.19
26	8.04	8.44	7.32	7.57	7.58	7.81	7.13	7.48	5.79	6.12	6.90	7.14
27	7.93	8.22	7.30	7.59	7.58	7.77	7.03	7.41	6.00	6.19	6.73	6.93
28	7.98	8.15	7.16	7.43	7.41	7.78	7.10	7.27	6.17	6.46	6.92	7.19
29	7.78	8.27	7.17	7.39	7.10	7.42	6.98	7.32	6.29	7.04	7.07	7.23
30	7.66	7.99	7.10	7.44	7.12	7.44	6.77	7.08	---	---	6.74	7.11
31	7.47	7.87	---	---	7.11	7.41	6.65	6.91	---	---	6.63	6.88
MONTH	7.47	8.47	6.92	8.40	6.53	8.37	5.13	7.48	5.79	7.18	6.35	7.28

GROUND-WATER LEVELS
MARYLAND--Continued
ANNE ARUNDEL COUNTY--Continued
AA Df 79--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.47	6.78	4.90	5.29	7.32	7.71	7.26	7.72	8.71	9.04	8.16	8.43
2	6.59	6.80	4.94	5.19	7.43	7.68	7.52	7.85	8.46	8.94	8.06	8.34
3	6.64	6.82	4.94	5.33	7.29	7.60	7.51	7.85	8.25	8.61	8.04	8.19
4	6.41	6.72	5.12	5.43	7.25	7.54	7.57	7.89	8.21	8.38	8.10	8.49
5	6.42	6.64	5.15	5.43	7.04	7.46	7.66	7.97	8.23	8.57	8.21	8.41
6	6.36	6.62	5.20	5.47	6.92	7.22	7.70	8.02	8.32	8.66	7.95	8.21
7	6.11	6.44	5.36	5.59	6.86	7.07	7.89	8.30	8.42	8.63	7.89	8.13
8	5.96	6.21	5.39	5.64	6.85	7.07	7.85	8.28	8.33	8.53	7.84	8.02
9	5.92	6.21	5.53	5.76	6.83	7.08	7.82	8.13	8.23	8.47	7.79	7.95
10	5.90	6.08	5.76	6.17	6.69	7.04	7.88	8.08	8.28	8.49	7.58	7.87
11	5.84	6.09	6.03	6.27	6.65	7.06	7.79	8.09	8.18	8.52	7.62	7.97
12	5.83	6.01	5.91	6.13	6.71	6.92	7.84	8.05	8.35	8.76	7.76	8.05
13	5.82	6.24	5.85	6.20	6.63	6.88	7.75	8.14	8.47	8.75	7.58	7.98
14	5.69	5.90	5.93	6.40	6.61	6.88	7.97	8.25	8.41	8.67	7.54	7.98
15	5.66	6.02	6.15	6.52	6.56	6.98	8.04	8.44	8.29	8.55	7.41	7.77
16	5.66	5.91	6.29	6.63	6.75	6.98	8.37	8.69	8.16	8.48	7.49	7.74
17	5.55	5.85	6.34	6.60	6.68	7.04	8.43	8.69	8.17	8.40	7.51	7.70
18	5.60	5.86	6.26	6.65	6.84	7.04	8.63	8.98	8.06	8.32	7.40	7.71
19	5.49	5.79	6.44	6.67	6.68	6.95	8.91	9.08	7.96	8.17	7.40	7.71
20	5.43	5.71	6.43	6.66	6.79	7.04	8.99	9.23	7.98	8.22	7.28	7.70
21	5.28	5.62	6.51	6.80	6.91	7.09	9.14	9.39	7.94	8.15	7.26	7.40
22	5.16	5.46	6.72	6.89	6.96	7.15	9.29	9.75	7.94	8.18	7.22	7.41
23	5.44	5.57	6.70	6.89	6.68	7.03	9.46	9.62	7.94	8.16	7.27	7.94
24	5.28	5.51	6.78	6.98	6.65	6.89	9.47	9.80	7.89	8.10	7.59	7.83
25	5.24	5.47	6.93	7.15	6.71	7.02	9.36	9.56	7.83	8.10	7.25	7.60
26	4.96	5.24	6.93	7.17	6.77	7.06	9.15	9.44	7.85	8.22	7.05	7.47
27	4.95	5.24	7.10	7.40	6.78	7.15	9.04	9.35	7.93	8.17	7.03	7.33
28	5.14	5.32	7.25	7.66	6.93	7.27	9.07	9.34	7.65	8.09	7.14	7.41
29	4.99	5.22	7.45	7.71	6.96	7.25	8.95	9.25	7.90	8.36	7.19	7.46
30	4.87	5.10	7.36	7.64	7.04	7.47	8.83	9.12	8.01	8.38	7.24	7.47
31	---	---	7.13	7.58	---	---	8.54	9.07	8.02	8.28	---	---
MONTH	4.87	6.82	4.90	7.71	6.56	7.71	7.26	9.80	7.65	9.04	7.03	8.49

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

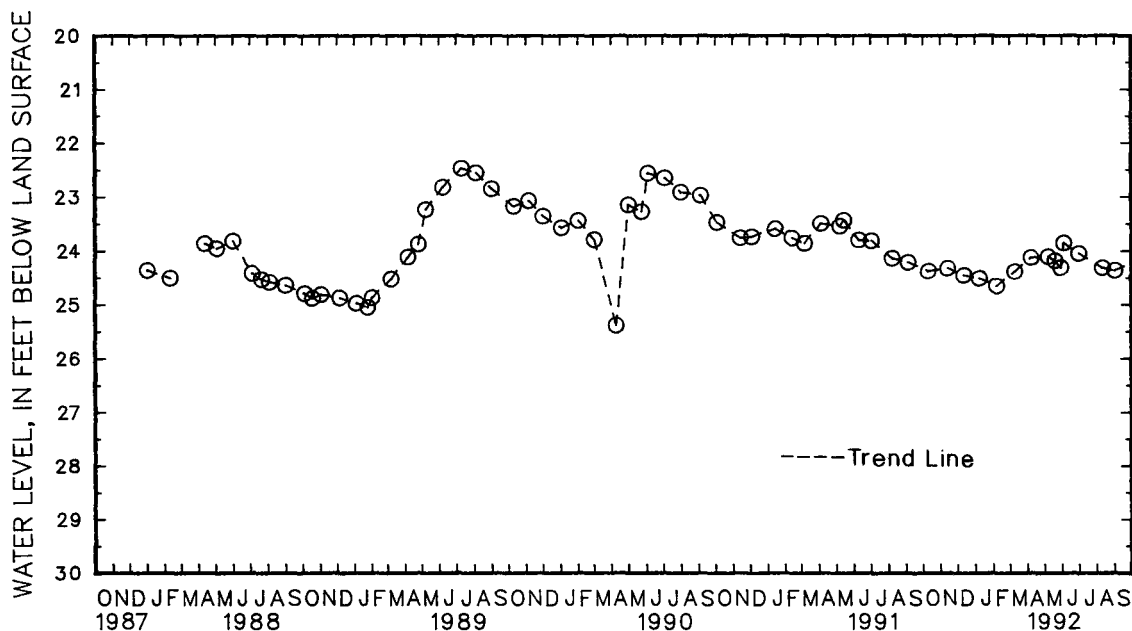
MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Df 103. SITE ID.--385623076274401. PERMIT NUMBER.--AA-73-3315.
 LOCATION.--Lat 38°56'23", long 76°27'44", Hydrologic Unit 02060004, off West Lake Dr, 900 ft north of intersection with Farragut Rd.
 Owner: Mildred Hudson.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 46 ft; casing diameter 4 in., to 39 ft; screen diameter 2 in. from 39 to 46 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 26.5 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 1.2 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1987, January 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.46 ft below land surface, July 10, 1989; lowest measured, 25.39 ft below land surface, April 9, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	24.38	JAN 8	24.52	APR 7	24.13	MAY 29	24.32	AUG 10	24.32
NOV 13	24.33	FEB 7	24.66	MAY 7	24.11	JUN 4	23.86	SEP 1	24.37
DEC 12	24.46	MAR 9	24.39	19	24.19	30	24.06		
WATER YEAR 1992		HIGHEST	23.86	JUN 4, 1992	LOWEST	24.66	FEB 7, 1992		



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Ed 45, SITE ID.--385406076383901. PERMIT NUMBER.--AA-74-1005.

LOCATION.--Lat 38°54'06", long 76°38'39", Hydrologic Unit 02060006, at Anne Arundel County Police Academy, near Davidsonville.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 157 ft; casing diameter 4 in., to 147 ft; screen diameter 2 in. from 147 to 157 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of coupling, 0.87 ft above land surface.

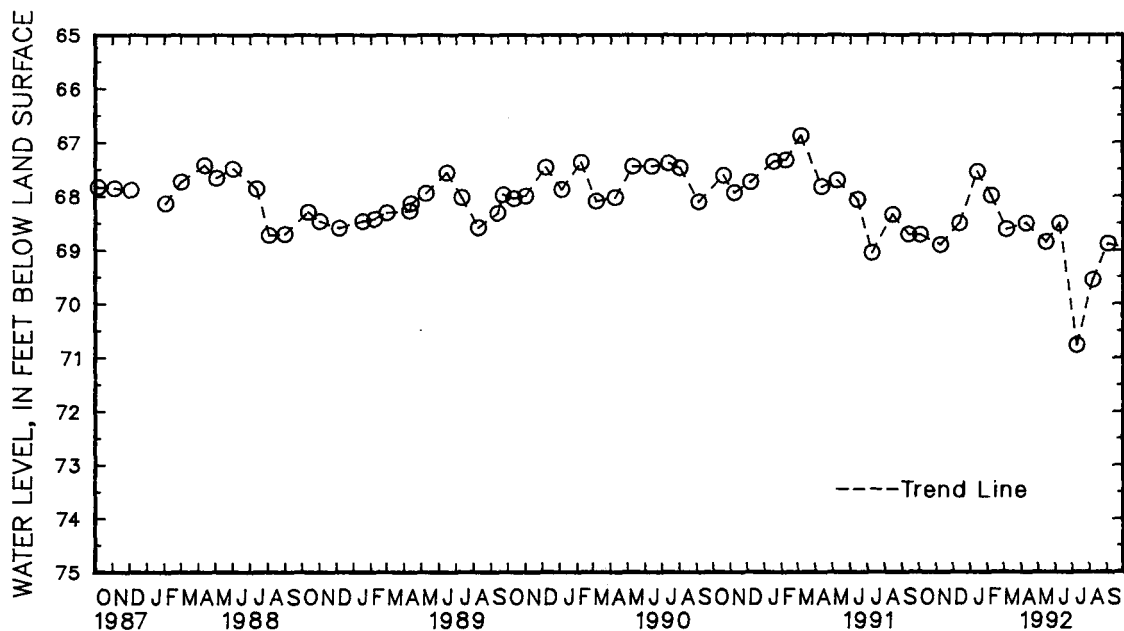
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.51 ft below land surface, May 6, 1980; lowest measured, 70.78 ft below land surface, July 10, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	68.72	DEC 13	68.51	FEB 7	68.00	APR 10	68.51	JUN 9	68.51	AUG 7	69.56
NOV 8	68.91	JAN 14	67.55	MAR 6	68.62	MAY 15	68.86	JUL 10	70.78	SEP 3	68.88
WATER YEAR 1992		HIGHEST	67.55	JAN 14, 1992		LOWEST	70.78	JUL 10, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ANNE ARUNDEL COUNTY--Continued

WELL NUMBER.--AA Fd 43. SITE ID.--384646076352401. PERMIT NUMBER.--AA-74-1004.

LOCATION.--Lat 38°46'46", long. 76°35'24", Hydrologic Unit 02060004 at Tracys Landing Regional Park, 0.2 mi east of Tracys Landing.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 280 ft, casing diameter 4 in., to 231 ft; casing diameter 2 in. from 231 to 270 ft; screen diameter 2 in. from 270 to 280 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of coupling, 0.94 ft above land surface.

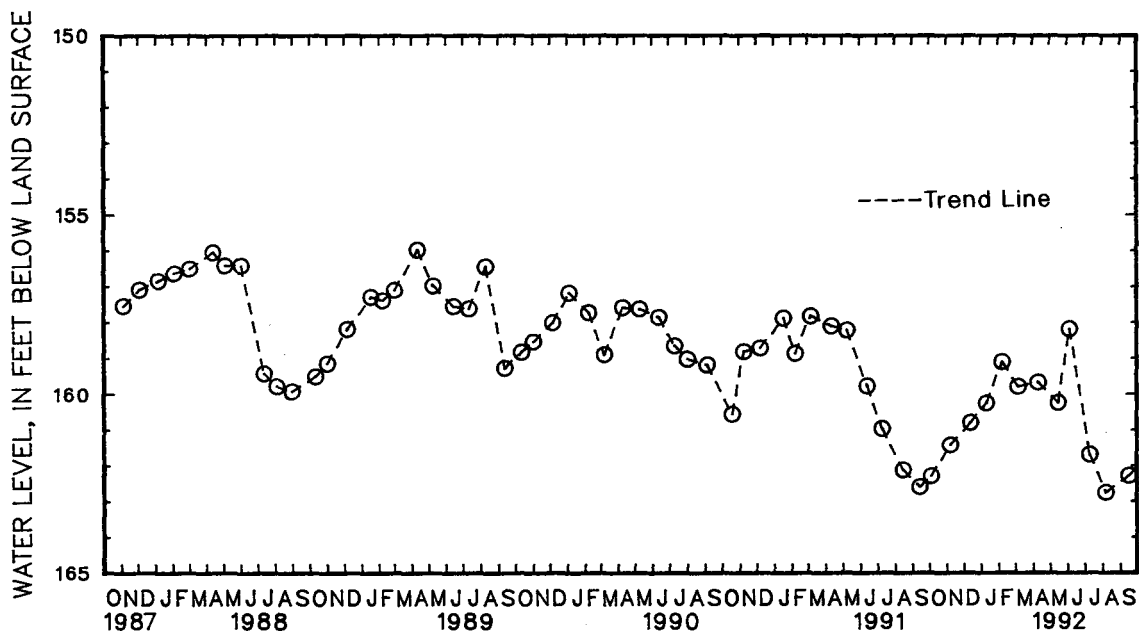
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 143.90 ft below land surface, May 6, 1980; lowest measured, 162.76 ft below land surface, Aug. 7, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	162.30	DEC 13	160.80	FEB 7	159.10	APR 10	159.67	JUN 5	158.18	AUG 7	162.76
NOV 8	161.43	JAN 10	160.25	MAR 6	159.78	MAY 15	160.23	JUL 10	161.70	SEP 16	162.29
WATER YEAR 1992		HIGHEST	158.18	JUN 5, 1992	LOWEST	162.76	AUG 7, 1992				

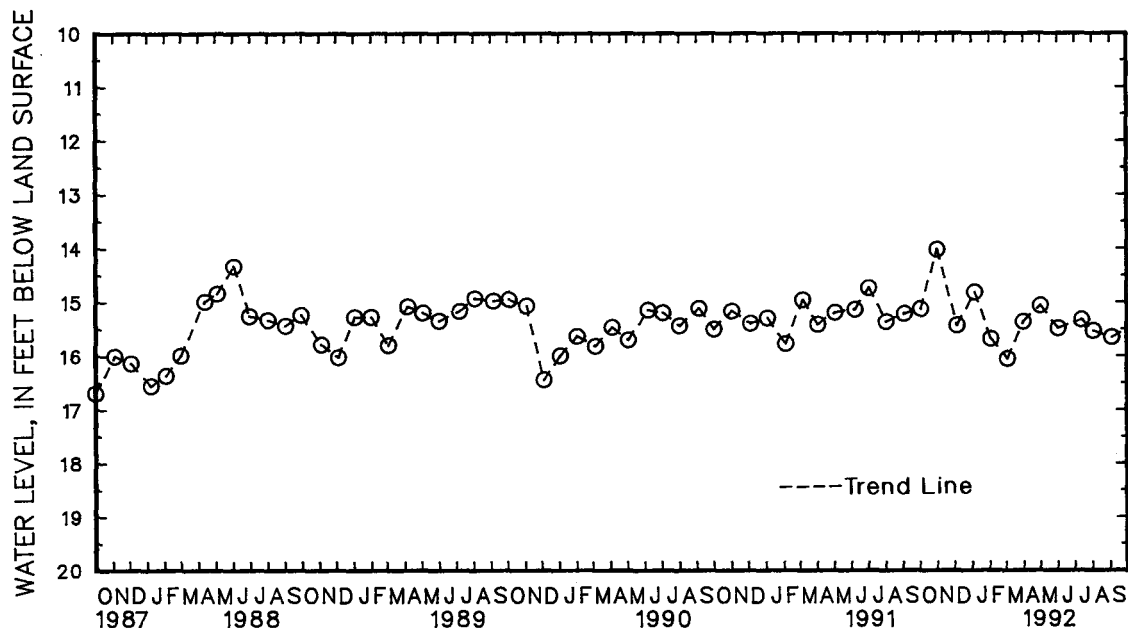


5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

BALTIMORE CITY--Continued

WATER LEVEL. IN FEET BELOW LAND SURFACE. WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

BALTIMORE CITY--Continued

WELL NUMBER.--3S5E- 46, SITE ID.--391556076315301. PERMIT NUMBER.--BC-81-0088.

LOCATION.--Lat 39°15'56", long 76°31'53", Hydrologic Unit 02060003, at Holabird Industrial Park, near Colgate Creek.

Owner: U.S. Geological Survey.

AQUIFER.-- Patapsco Formation of Lower Cretaceous age. Aquifer code: 217FPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 75 ft; casing diameter 4 in., to 63 ft; screen diameter 4 in. from 63 to 73 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.8 ft above land surface.

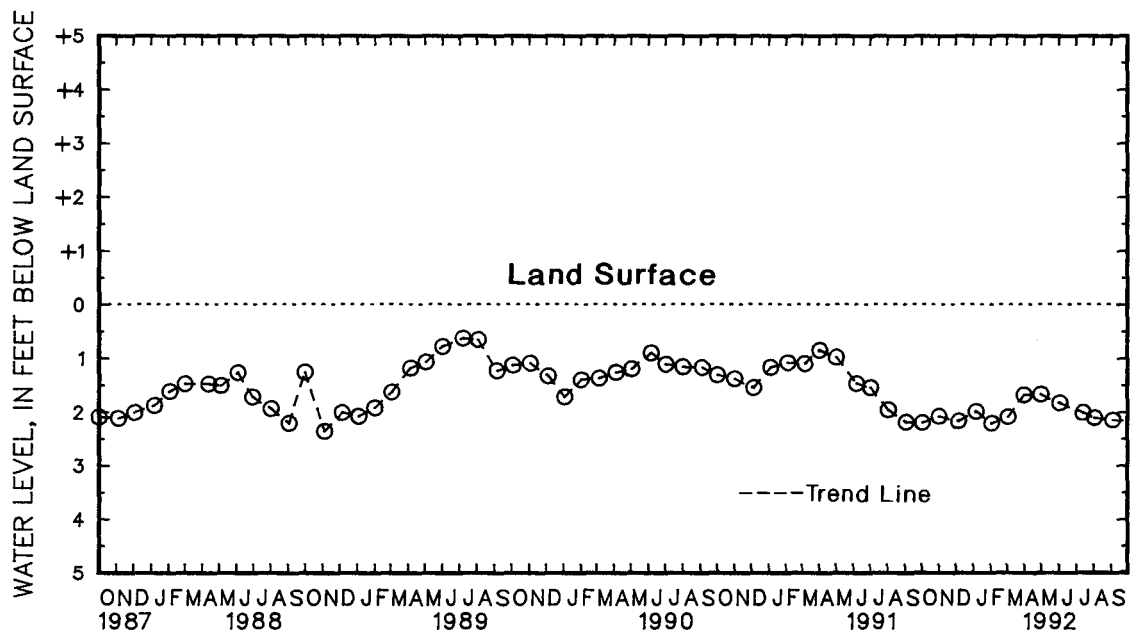
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.22 ft above land surface, May 5, 1983; lowest measured, 3.07 ft below land surface, July 8, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	2.20	DEC 6	2.17	FEB 3	2.21	APR 1	1.68	JUN 2	1.83	AUG 3	2.11
NOV 1	2.08	JAN 6	1.99	MAR 3	2.09	MAY 1	1.66	JUL 13	2.01	SEP 4	2.15
WATER YEAR 1992		HIGHEST		1.66	MAY 1, 1992		LOWEST		2.21	FEB 3, 1992	



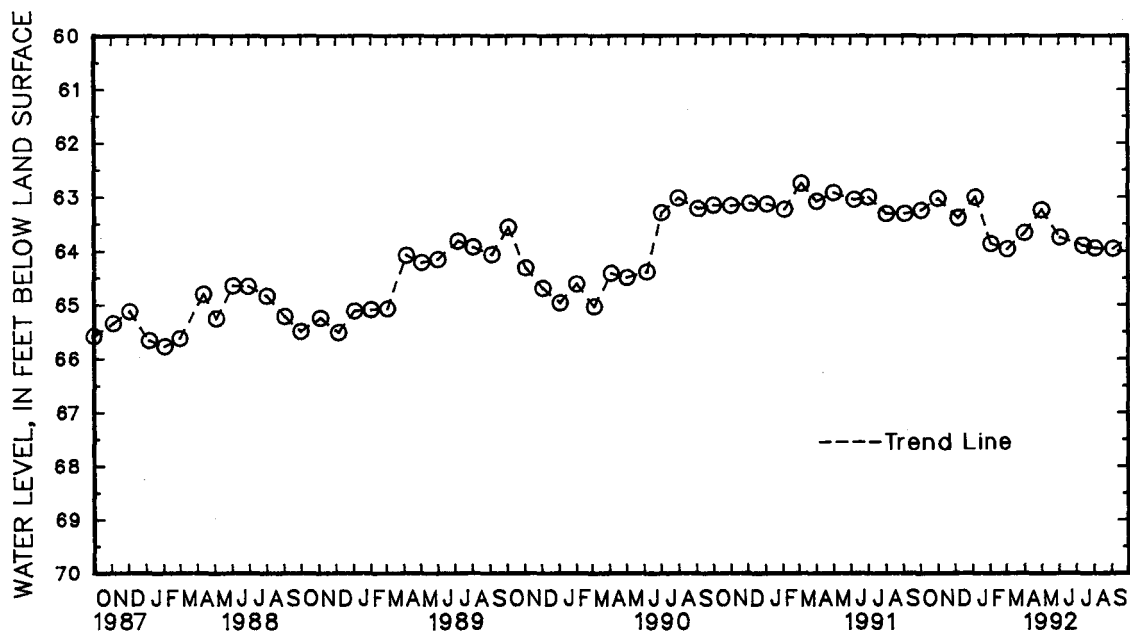
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
BALTIMORE CITY--Continued

WELL NUMBER.--5S2E- 24. SITE ID.--391349076354501. PERMIT NUMBER.--BC-81-0089.
LOCATION.--Lat 39°13'49", long 76°35'45", Hydrologic Unit 02060003, at Farrington Park.
Owner: U.S. Geological Survey.
AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 272 ft; casing diameter 4 in., to 262 ft; screen diameter 3 in. from 262 ft to 272 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 0.35 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--January 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.74 ft below land surface, Jan. 7, 1985;
lowest measured, 66.36 ft below land surface, May 5, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	63.26	DEC 6	63.39	FEB 3	63.87	APR 1	63.67	JUN 2	63.75	AUG 3	63.95
NOV 1	63.03	JAN 6	63.00	MAR 3	63.97	MAY 1	63.24	JUL 13	63.90	SEP 4	63.96
WATER YEAR 1992		HIGHEST	63.00	JAN 6, 1992		LOWEST	63.97	MAR 3, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

BALTIMORE COUNTY

WELL NUMBER.--BA Cd 26: SITE ID.--393129076384201. PERMIT NUMBER.--BA-02-8527.
LOCATION.--Lat 39°31'29", long 76°38'42", Hydrologic Unit, 02060003, 1.4 mi south of Sparks near York Rd.

Owner: Diecraft, Inc.

AQUIFER.--Baltimore Gneiss of Precambrian age. Aquifer code: 400BLMR.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 250 ft; casing diameter 6 in., to 19 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.30 ft above land surface.

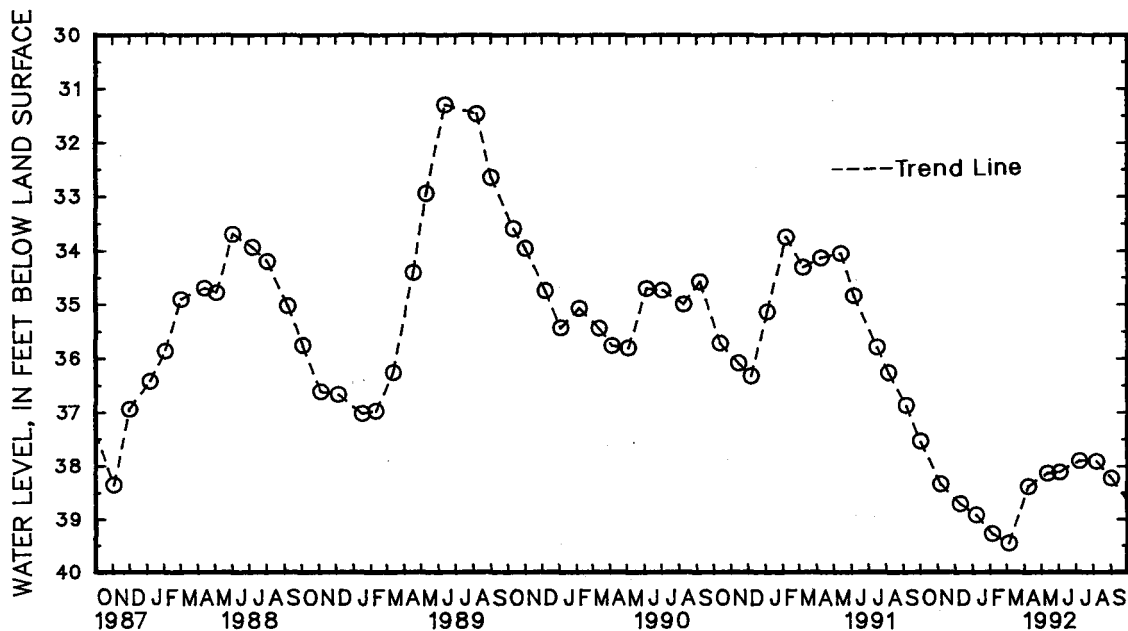
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.42 ft below land surface, Sept. 9, 1975;
lowest measured, 80.20 ft below land surface, Dec. 23, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 1	37.57	DEC 10	38.73	FEB 4	39.29	APR 8	38.39	JUN 2	38.12	AUG 6	37.92	NOV 6	38.37	JAN 7	38.94
WATER YEAR 1992		HIGHEST		37.57		OCT 1, 1991		LOWEST		39.47		MAR 4, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ea 18. SITE ID.--392045076512501. PERMIT NUMBER.--BA-01-8151.

LOCATION.--Lat 39°20'45", long 76°51'25", Hydrologic Unit 02060003, at Granite.

Owner: Maryland National Guard.

AQUIFER.--Woodstock Granite of Paleozoic age. Aquifer code: 300WDCK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 250 ft; casing diameter 10 in., to 50.7 ft; casing diameter 6 in. with depth to 71.3 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 491 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.5 ft above land surface.

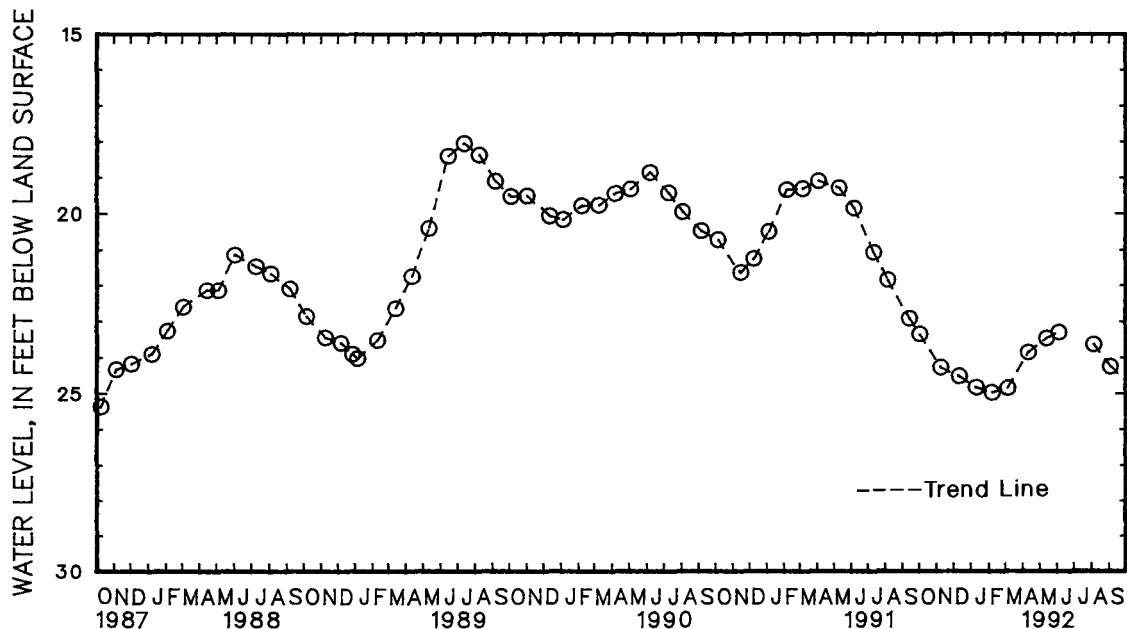
REMARKS.--Maryland Water-Level Network observation well. Water level measured 24 ft below land surface, Dec. 20, 1954.

PERIOD OF RECORD.-- November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.94 ft below land surface, June 24, 1972; lowest measured, 27.57 ft below land surface, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 1	23.41	DEC 11	24.58	FEB 6	25.03	APR 10	23.89	JUN 3	23.32	SEP 3	24.30	
NOV 8	24.33	JAN 10	24.89	MAR 5	24.90	MAY 12	23.49	AUG 4	23.67			
WATER YEAR 1992		HIGHEST	23.32	JUN 3, 1992		LOWEST	25.03	FEB 6, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Ec 43. SITE ID.--392305076432001.

LOCATION.--Lat 39°23'05", long 76°43'20", Hydrologic Unit 02060003, near Pikesville at Druid Ridge Cemetery.

Owner: Druid Ridge Cemetery.

AQUIFER.--Baltimore Gneiss of Precambrian age. Aquifer code: 400BLMR.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 111 ft; casing diameter 6 in., to 40 ft; open hole.

DATUM.--Elevation of land surface is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.0 ft above land surface.

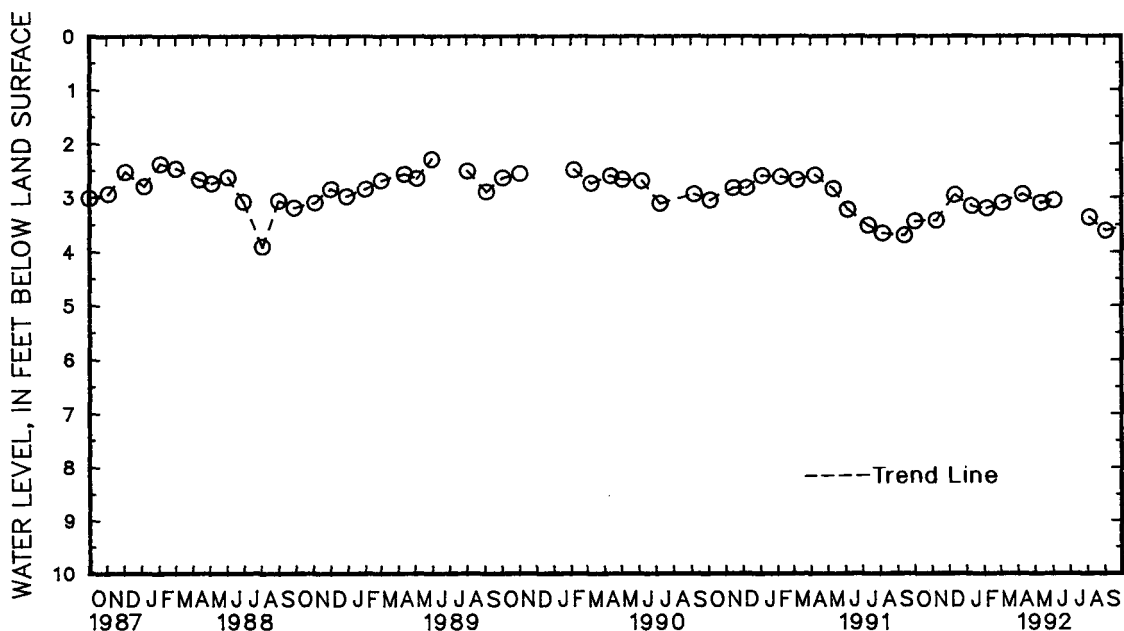
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--March 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.27 ft below land surface, June 24, 1972;
lowest measured, 4.69 ft below land surface, Nov. 11, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	3.47	DEC 11	2.97	FEB 6	3.22	APR 10	2.95	JUN 3	3.07	SEP 2	3.64
NOV 8	3.45	JAN 10	3.18	MAR 5	3.12	MAY 12	3.12	AUG 4	3.39		
WATER YEAR 1992		HIGHEST	2.95	APR 10, 1992		LOWEST	3.64	SEP 2, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Gf 11, SITE ID.--391356076293501.

LOCATION.--Lat 39°13'56", long 76°29'35", Hydrologic Unit 02060003, near Tin Mill Rd., Sparrows Point.

Owner: Bethlehem Steel Co.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 645 ft; casing diameter 14 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 13.6 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing 2.55 ft above land surface.

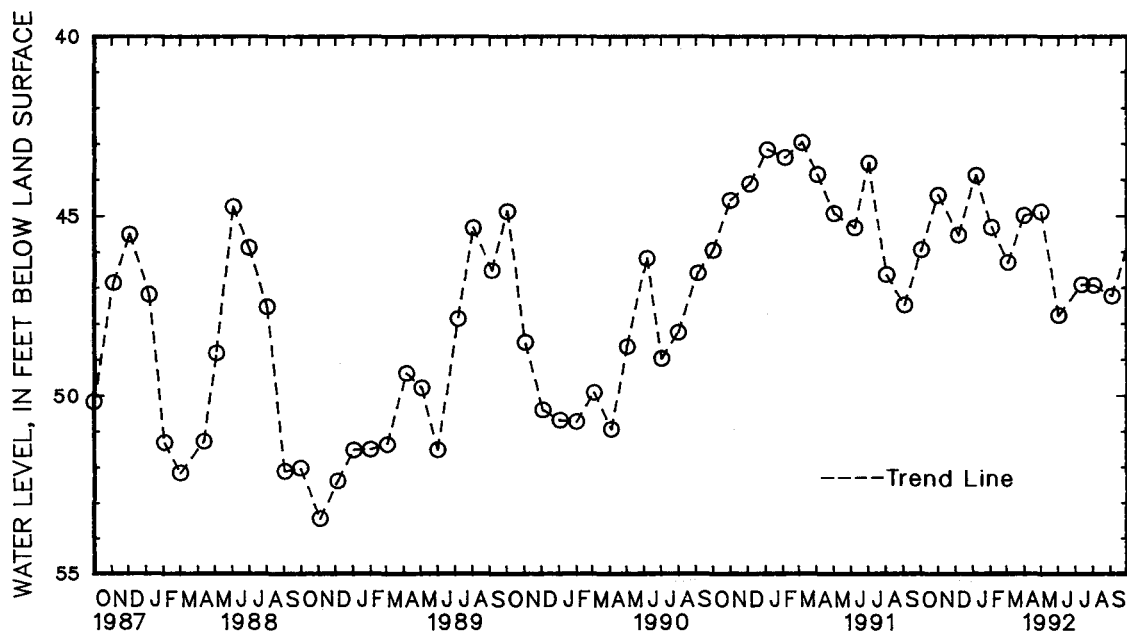
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--September 1981, March 1982, September 1982, January 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.25 ft below land surface, June 3, 1983;
lowest measured, 53.47 ft below land surface, Nov. 4, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	45.96	DEC 6	45.55	FEB 3	45.35	APR 1	45.01	JUN 2	47.82	AUG 3	46.96
NOV 1	44.43	JAN 6	43.88	MAR 3	46.34	MAY 1	44.92	JUL 13	46.94	SEP 4	47.27
WATER YEAR 1992		HIGHEST	43.88	JAN 6, 1992		LOWEST	47.82	JUN 2, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
BALTIMORE COUNTY--Continued

WELL NUMBER.--BA Gf 178. SITE ID.--391226076253401.

LOCATION.--Lat 39°12'26", long 76°25'34", Hydrologic Unit 02060003, at former Bay Shore Park.

Owner: Bethlehem Steel Co.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 339.5 ft; casing diameter 8 in. to unknown depth; screen at unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.00 ft above land surface.

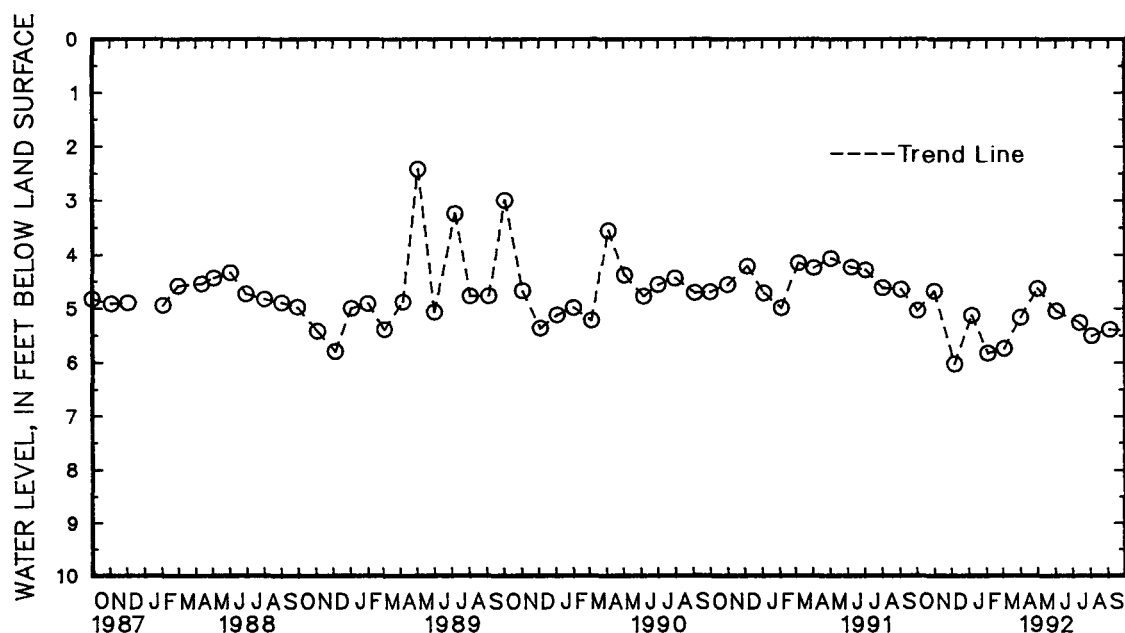
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, April 6, 1984;
lowest measured, 61.97 ft below land surface, Dec. 2, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	5.07	DEC 6	6.07	FEB 3	5.87	APR 1	5.19	JUN 2	5.07	AUG 3	5.54
NOV 1	4.70	JAN 6	5.15	MAR 3	5.78	MAY 1	4.65	JUL 13	5.29	SEP 4	5.42
WATER YEAR 1992		HIGHEST	4.65	MAY 1, 1992		LOWEST	6.07	DEC 6, 1991			



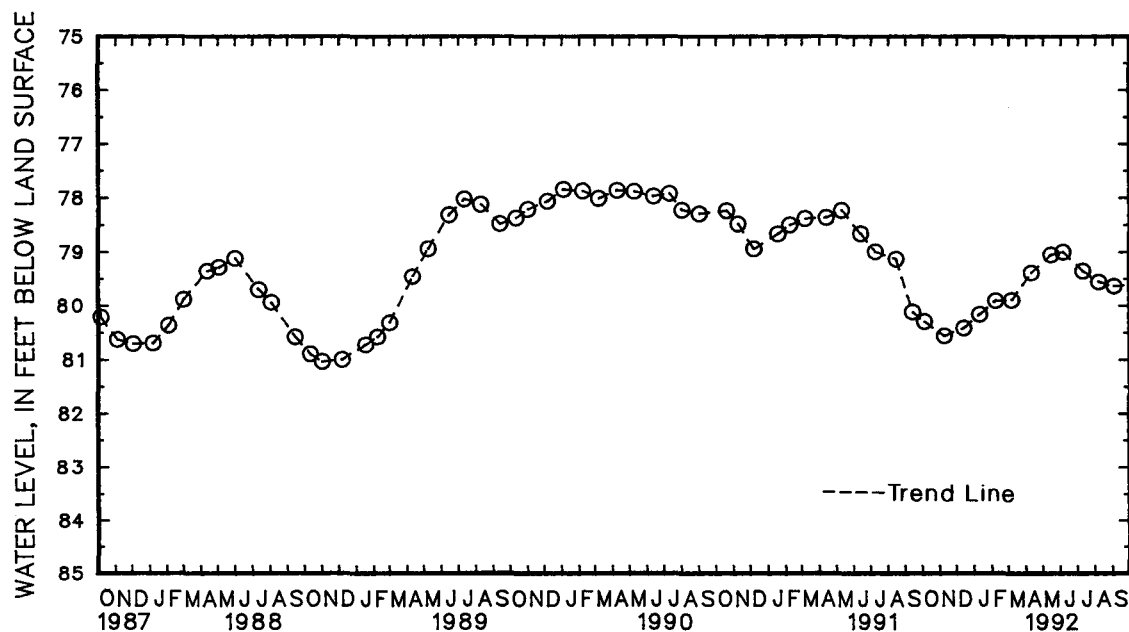
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Bb 28. SITE ID.--384333076394702. PERMIT NUMBER.--CA-73-3721.
LOCATION.--Lat 38°43'33", long 76°39'47", Hydrologic Unit 02060006, at Dunkirk Regional Park, Dunkirk.
Owner: U.S. Geological Survey.
AQUIFER.--Nanjemoy Formation of Eocene age. Aquifer code: 124NNJM.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 170 ft; casing diameter 4 in., to 147 ft; casing diameter 2 in. from 147 to 160 ft; screen diameter 2 in. from 160 to 170 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 140 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 1.60 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--July 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 77.60 ft below land surface, June 7, 1983;
lowest measured, 81.18 ft below land surface, Jan. 5, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	80.33	DEC 13	80.45	FEB 7	79.93	APR 10	79.40	JUN 5	79.01	AUG 7	79.58
NOV 8	80.60	JAN 10	80.19	MAR 6	79.93	MAY 15	79.06	JUL 10	79.37	SEP 3	79.66
WATER YEAR 1992		HIGHEST	79.01	JUN 5, 1992	LOWEST	80.60	NOV 8, 1991				



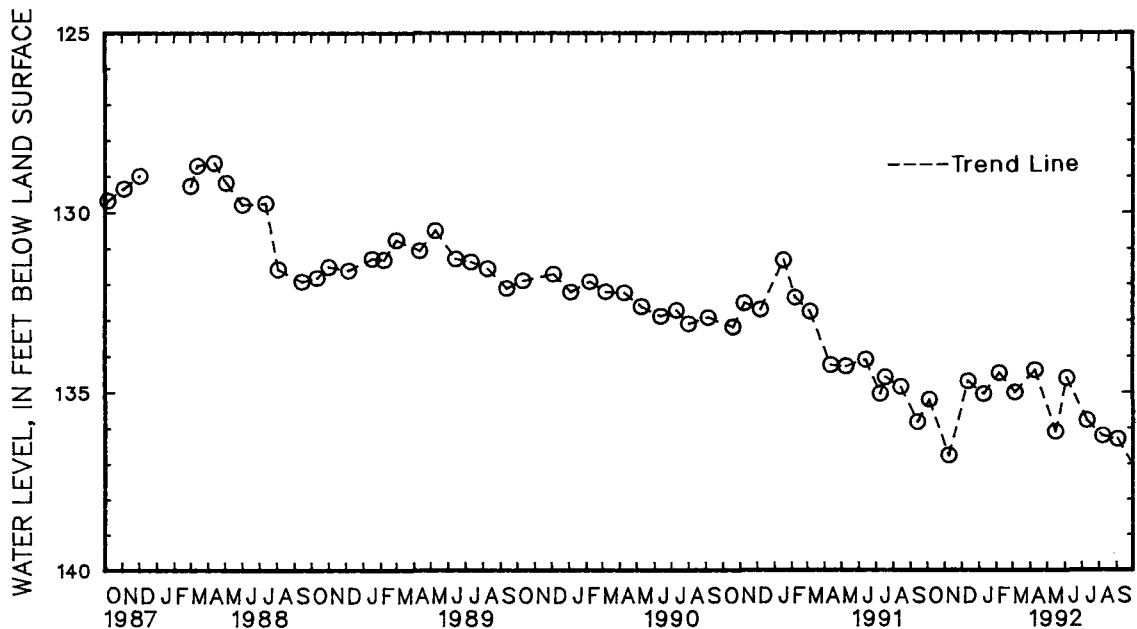
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 18. SITE ID.--383940076314801.
LOCATION.--Lat 38°39'40", long 76°31'48", Hydrologic Unit 02060006, at Naval Research Laboratory, Randle Cliff.
Owner: U.S. Navy.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 476 ft; casing diameter 6 in., to 462 ft; screened from 462 to 476 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder Sept. 15, 1958 to Dec. 7, 1962.
DATUM.--Elevation of land surface is 111.31 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 0.3 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Water level measured 76.68 ft below land surface Sept. 10, 1952.
PERIOD OF RECORD.--September 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.63 ft below land surface, May 14, 1961; lowest measured, 136.82 ft below land surface, Nov. 8, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	135.25	DEC 13	134.71	FEB 7	134.48	APR 10	134.40	JUN 5	134.62	AUG 7	136.27
NOV 8	136.82	JAN 10	135.07	MAR 6	135.03	MAY 15	136.15	JUL 10	135.83	SEP 3	136.36
WATER YEAR 1992		HIGHEST	134.40	APR 10, 1992		LOWEST	136.82	NOV 8, 1991			



GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 39. SITE ID.--383934076320202. PERMIT NUMBER.--CA-01-2070.
 LOCATION.--Lat 38°39'34", long 76°32'02", Hydrologic Unit 02060004, at Naval Research Laboratory,
 Randle Cliff.
 Owner: U.S. Navy.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 540 ft; casing diameter 8 in., to 520 ft;
 screen diameter 8 in. from 520 to 540 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from Dec. 6, 1977 to Jan. 2, 1980. Equipped with digital water-level recorder
 --60-minute recorder interval from Feb. 8, 1980 to current year.
 DATUM.--Elevation of land surface is 93.74 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.70 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping.
 PERIOD OF RECORD.--December 1977 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.72 ft below sea level, Jan. 26, 1978;
 lowest measured, 46.15 ft below sea level, Feb. 2, 1980.

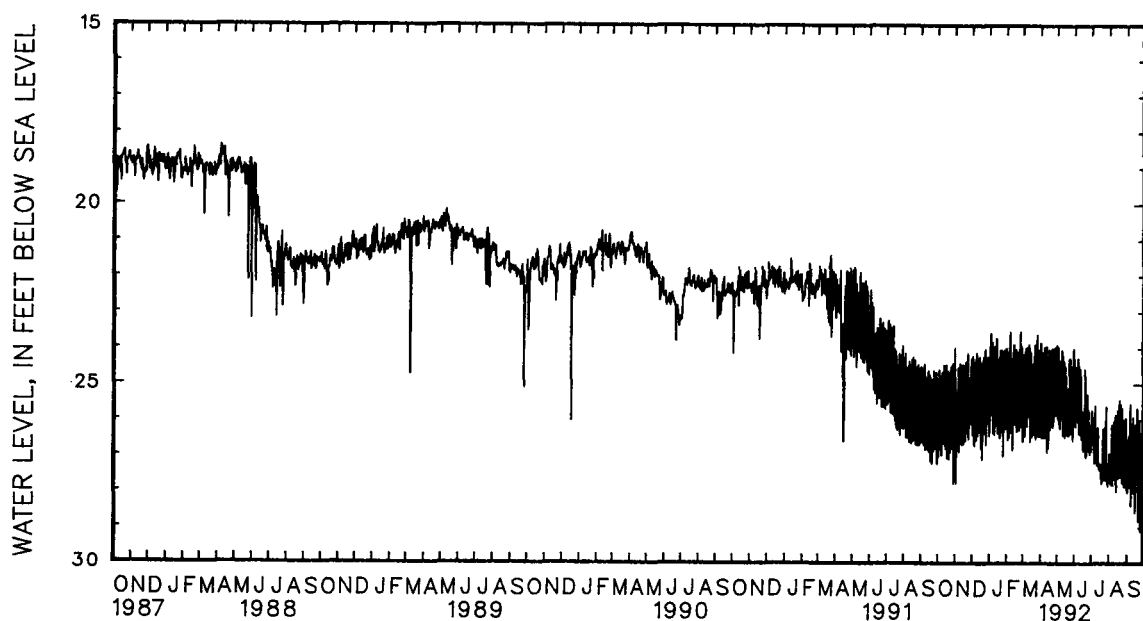
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.53	25.03	23.77	23.99	24.12	24.28	23.86	26.47	23.79	24.01	24.01	26.60
2	24.49	27.05	23.68	26.36	24.28	26.44	24.13	25.99	23.94	24.13	24.21	24.50
3	24.64	25.52	24.69	27.78	23.70	24.23	23.63	24.09	23.86	26.57	23.98	24.17
4	24.46	24.60	24.74	25.40	23.72	26.10	23.27	23.58	23.60	24.16	23.87	26.47
5	24.26	26.82	24.55	26.68	24.57	26.73	23.21	25.86	23.72	26.50	24.11	24.70
6	24.59	25.23	24.57	25.47	24.24	24.52	23.53	23.86	23.94	24.94	23.97	24.13
7	24.58	24.78	24.30	24.55	24.05	24.38	23.60	23.84	23.50	23.92	23.45	24.00
8	24.57	27.01	24.33	26.89	24.05	26.57	23.79	26.38	23.37	23.55	23.92	26.18
9	24.65	25.41	24.44	25.02	23.94	24.38	23.73	24.47	23.55	26.35	23.79	23.98
10	24.30	24.68	23.80	24.43	23.98	24.14	23.91	26.42	24.26	24.48	23.39	25.91
11	24.17	26.67	23.74	26.34	23.92	26.45	23.85	23.95	24.02	24.30	23.71	24.66
12	24.33	24.85	24.25	24.47	24.06	24.33	23.70	26.17	24.05	26.85	23.82	23.90
13	24.36	24.48	24.17	26.70	23.89	26.35	23.75	25.70	23.89	25.00	23.85	23.98
14	24.23	24.48	24.44	26.38	24.02	24.74	23.26	23.72	23.80	23.92	23.96	26.61
15	24.22	26.81	24.15	24.46	24.12	24.25	23.53	23.90	23.48	23.90	24.00	24.11
16	24.43	24.61	24.15	26.67	24.17	24.46	23.72	26.38	23.42	26.13	24.05	24.20
17	24.30	24.48	24.51	25.41	24.28	26.79	23.94	24.48	24.05	24.33	23.89	26.48
18	24.32	27.08	24.24	24.48	24.26	24.42	24.14	24.34	23.73	24.04	23.98	24.46
19	24.35	24.72	24.09	26.59	24.40	27.12	24.16	24.38	23.49	26.32	23.70	26.40
20	24.46	24.66	24.40	25.18	24.48	26.10	23.99	26.50	24.08	25.72	23.84	24.44
21	24.33	27.10	24.18	24.38	24.08	24.44	23.93	24.32	23.94	24.12	23.77	26.39
22	24.37	24.72	24.18	26.36	23.98	24.25	23.88	24.06	23.87	24.10	23.59	24.33
23	24.33	26.91	24.15	24.55	23.83	26.38	23.68	26.35	23.80	26.29	23.64	23.90
24	24.45	24.94	23.90	24.15	23.98	24.16	23.66	24.05	23.91	24.26	23.86	26.54
25	24.27	24.52	24.07	26.54	23.96	24.05	24.06	24.23	23.56	24.05	24.02	24.99
26	24.25	26.80	24.61	24.81	24.01	26.70	24.07	27.03	23.44	23.54	23.57	24.02
27	24.28	24.92	24.56	25.68	24.22	24.51	24.19	25.82	23.46	26.20	23.49	23.63
28	24.26	24.44	24.26	24.85	23.89	24.26	24.04	24.20	23.63	23.93	23.65	26.47
29	24.20	27.78	24.26	26.10	23.57	26.09	23.82	24.05	23.57	24.21	24.07	24.26
30	24.54	27.56	24.26	24.68	24.25	26.02	23.80	26.25	---	---	23.73	24.06
31	24.04	25.24	---	---	24.02	24.25	23.82	24.17	---	---	23.61	26.46
MONTH	24.04	27.78	23.68	27.78	23.57	27.12	23.21	27.03	23.37	26.85	23.39	26.61

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued
CA Cc 39--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	23.78	24.67	23.73	23.91	24.28	26.12	24.53	26.85	25.44	27.73	25.72	28.02
2	23.72	23.85	23.83	25.93	24.06	24.30	24.84	25.73	25.58	26.95	25.71	27.58
3	23.75	24.94	23.82	23.97	23.93	26.19	24.45	26.65	25.34	27.55	25.54	27.67
4	24.07	26.51	23.79	26.10	24.00	24.54	24.75	25.93	25.46	27.23	25.80	26.47
5	23.94	24.13	23.97	24.41	23.77	25.96	24.54	26.11	25.46	27.82	25.72	27.88
6	23.96	24.13	23.86	26.24	23.90	24.52	24.82	26.78	25.63	26.14	25.54	26.60
7	23.76	26.50	23.90	24.35	23.89	26.05	24.83	27.21	25.54	27.82	25.47	25.56
8	23.90	24.28	23.59	25.89	24.04	24.27	24.88	25.61	25.52	26.20	25.44	28.40
9	23.71	23.97	23.90	25.36	24.02	26.37	24.72	26.95	25.30	27.52	25.82	26.87
10	23.68	26.49	23.90	24.06	24.21	24.50	25.00	27.19	25.51	26.01	25.49	27.74
11	23.84	24.36	23.98	26.44	24.11	26.40	25.20	26.35	25.32	27.65	25.82	26.76
12	23.82	23.95	23.81	24.21	24.25	24.57	25.04	27.27	25.60	25.86	25.70	25.92
13	23.94	26.90	23.69	26.05	24.09	26.34	25.05	26.20	25.50	28.00	25.59	28.04
14	24.07	24.35	24.00	24.37	24.22	26.53	25.25	27.26	25.46	25.92	25.68	26.13
15	23.96	26.78	23.93	26.48	24.44	25.77	25.23	27.30	25.24	27.62	25.64	28.58
16	24.08	24.73	24.19	24.51	24.35	26.69	25.18	27.40	25.25	25.74	25.72	26.31
17	23.86	24.04	24.01	26.30	24.42	26.86	25.08	27.25	25.25	27.62	25.66	27.76
18	23.86	26.28	24.16	25.48	24.49	26.08	25.35	27.25	25.41	26.11	25.62	26.58
19	24.03	24.46	24.14	26.42	24.25	26.53	25.26	27.62	25.23	25.44	25.54	25.67
20	23.84	24.09	24.25	25.14	24.38	24.57	25.42	27.78	25.25	27.59	25.63	27.96
21	23.88	26.06	24.14	26.00	24.43	26.66	25.55	27.62	25.39	25.57	25.66	28.82
22	23.77	24.01	24.30	26.43	24.75	27.04	25.53	26.25	25.39	27.56	25.67	26.60
23	23.88	26.20	24.01	24.30	24.73	26.94	25.32	27.55	25.52	25.67	25.61	26.02
24	23.73	24.22	24.01	26.08	24.53	25.28	25.58	27.67	25.47	27.75	25.85	28.28
25	23.73	26.04	23.98	24.28	24.49	26.86	25.35	26.20	25.53	25.99	25.84	29.11
26	23.56	23.99	23.85	26.38	24.63	25.72	25.26	27.43	25.43	27.64	25.71	26.36
27	23.53	25.86	24.09	24.54	24.47	26.71	25.29	25.64	25.54	27.87	25.47	27.90
28	23.92	24.14	24.03	25.27	24.89	26.77	25.19	27.69	25.18	26.01	25.77	27.86
29	23.72	23.97	24.29	26.57	24.62	26.96	25.41	27.48	25.22	27.68	25.68	25.82
30	23.86	25.87	24.05	24.63	24.79	26.13	25.49	27.85	25.46	25.95	25.75	28.19
31	---	---	23.79	24.00	---	---	25.41	27.50	25.38	27.82	---	---
MONTH	23.53	26.90	23.59	26.57	23.77	27.04	24.45	27.85	25.18	28.00	25.44	29.11

Daily Low Water Levels



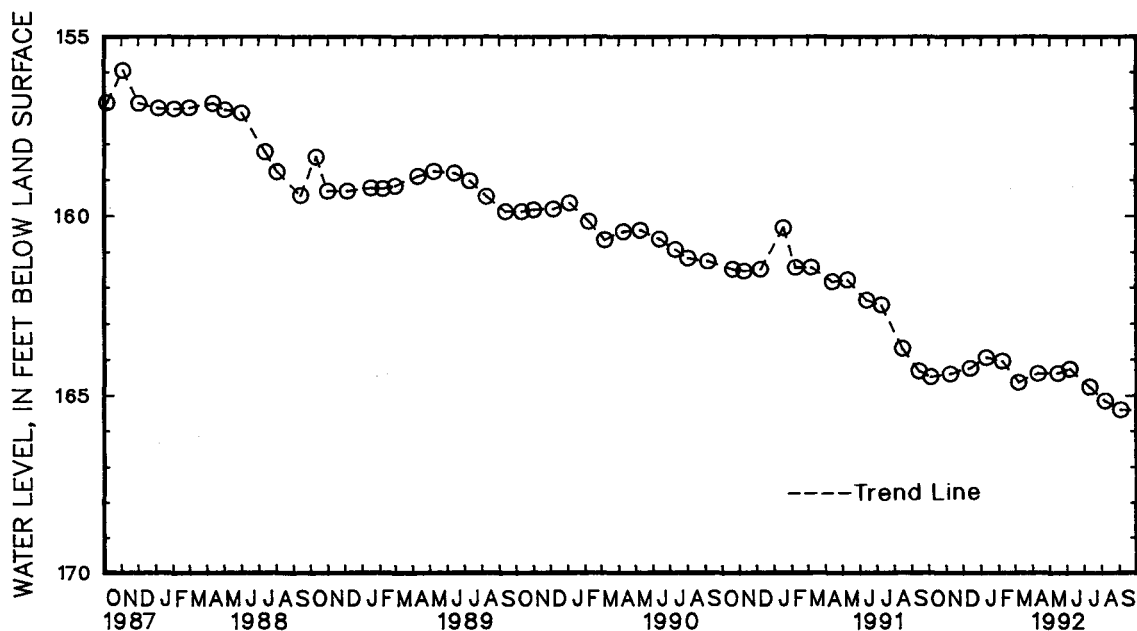
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Cc 57. SITE ID.--383605076344601. PERMIT NUMBER.--CA-73-2893.
LOCATION.--Lat 38°36'05", long 76°34'46", Hydrologic Unit 02060006, Cox Rd. nr MD Rt. 263, Huntingtown.
Owner: U.S. Geological Survey.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 4 in., to 211 ft; casing diameter 2 in. from 211 to 511 ft, and 521 to 579 ft; screen diameter 3 in. from 511 to 521 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 135 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 1.66 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--December 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 140.00 ft below land surface, March 7, 1979; lowest measured, 165.46 ft below land surface, Sept. 3, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

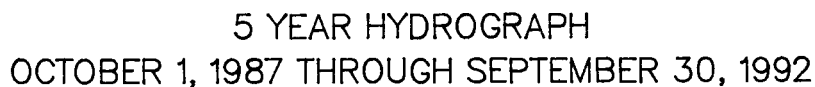
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	164.54	DEC 13	164.29	FEB 7	164.09	APR 10	164.42	JUN 5	164.31	AUG 7	165.21
NOV 8	164.47	JAN 10	163.99	MAR 6	164.69	MAY 15	164.43	JUL 10	164.82	SEP 3	165.46
WATER YEAR 1992		HIGHEST	163.99	JAN 10, 1992		LOWEST	165.46	SEP 3, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--CA Db 65. SITE ID.--383216076351401. PERMIT NUMBER.--CA-81-2415.
LOCATION.--Lat 38°32'16", long 76°35'14", Hydrologic Unit 02060006, at St. Pauls Epicopal Church parking lot,
Prince Frederick.
Owner: U.S. Geological Survey.
AQUIFER.--Upland Deposit of Peistocene age. Aquifer code: 112UPLD.
WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 49 ft; casing diameter 3 in., to 22 ft;
screen diameter 3 in. from 22 to 32 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 159.33 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of protective casing, 2.56 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--August 1986, Oct. 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.64 ft below land surface, May 9, 1990;
lowest measured, 27.09 ft below land surface, Feb. 14, 1989.

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 4	25.18	DEC 13	25.68	FEB 7	25.34	APR 10	24.86	JUN 5	24.24	AUG 7	24.68				
NOV 8	25.54	JAN 10	25.62	MAR 6	25.76	MAY 15	24.44	JUL 10	24.39	SEP 3	24.72				
WATER YEAR 1992		HIGHEST	24.24	JUN 5, 1992		LOWEST	25.76	MAR 6, 1992							

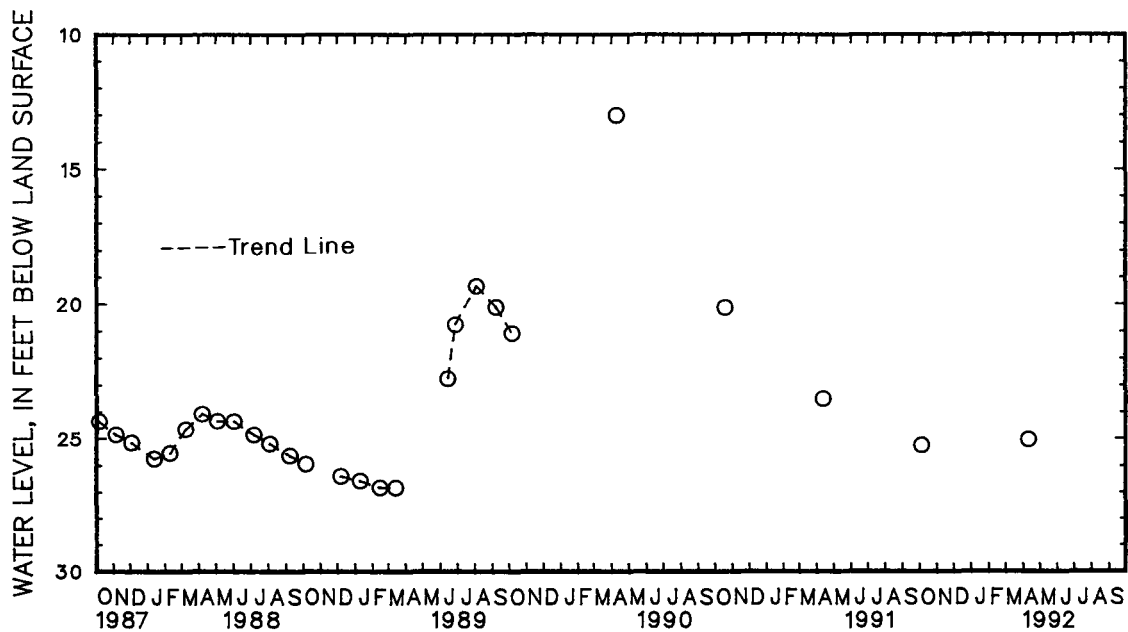


GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 66. SITE ID.--383216076351402. PERMIT NUMBER.--CA-81-2415.
LOCATION.--Lat 38°32'16", long 76°35'14", Hydrologic Unit 02060006, at St. Pauls Epicopal Church parking lot,
Prince Frederick.
Owner: U.S. Geological Survey.
AQUIFER.--Upland Deposit of Peistocene age. Aquifer code: 112UPLD.
WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 34 ft; casing diameter 3 in., to 21 ft;
screen diameter 3 in. from 21 to 31 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 159.59 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of protective casing, 2.64 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--July 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.01 ft below land surface, April 9, 1990;
lowest measured, 26.89 ft below land surface, Feb. 14, 1989 and March 14, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	25.32	APR 10	25.10
WATER YEAR 1992 HIGHEST 25.10 APR 10, 1992 LOWEST 25.32 OCT 4, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

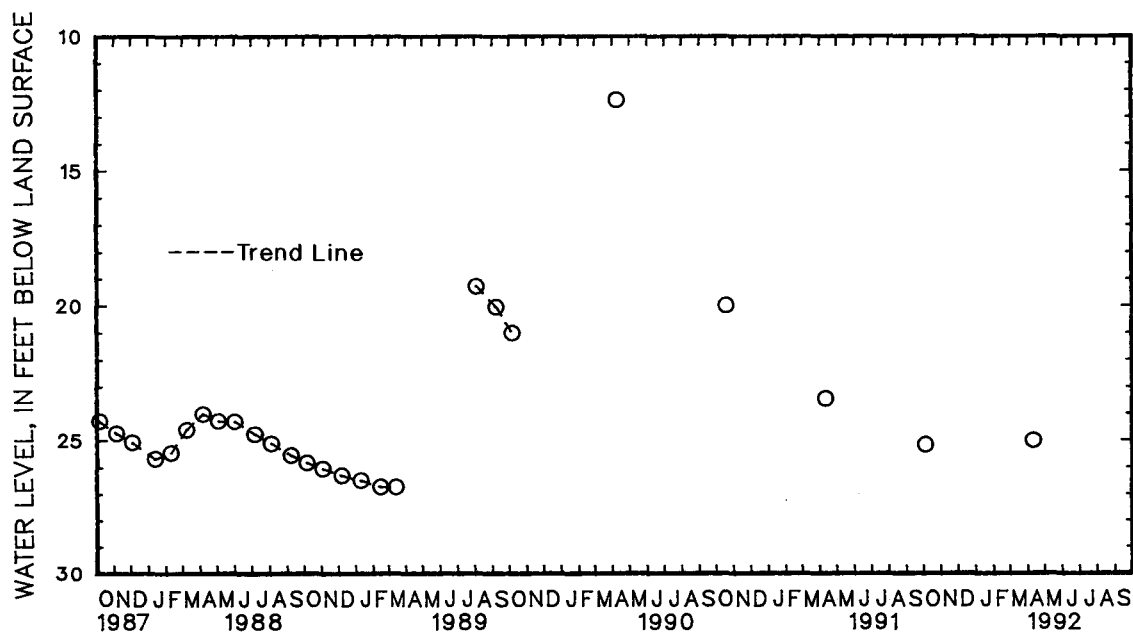
MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Db 67. SITE ID.--383216076351403. PERMIT NUMBER.--CA-81-2415.
 LOCATION.--Lat 38°32'16", long 76°35'14", Hydrologic Unit 02060006, at St. Pauls Episcopal Church parking lot, Prince Frederick.
 Owner: U.S. Geological Survey.
 AQUIFER.--Upland Deposit of Peistocene age. Aquifer code: 112UPLD.
 WELL CHARACTERISTICS.--Drilled, water-table, observation well, depth 31 ft; casing diameter 3 in., to 18 ft; screen diameter 3 in. from 18 to 28 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 159.59 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of protective casing, 2.70 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well,
 PERIOD OF RECORD.--July 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.37 ft below land surface, April 9, 1990;
 lowest measured, 26.79 ft below land surface, Feb. 14, 1989 and March 14, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	25.24	APR 10	25.07
WATER YEAR 1992 HIGHEST 25.07 APR 10, 1992 LOWEST 25.24 OCT 4, 1991			



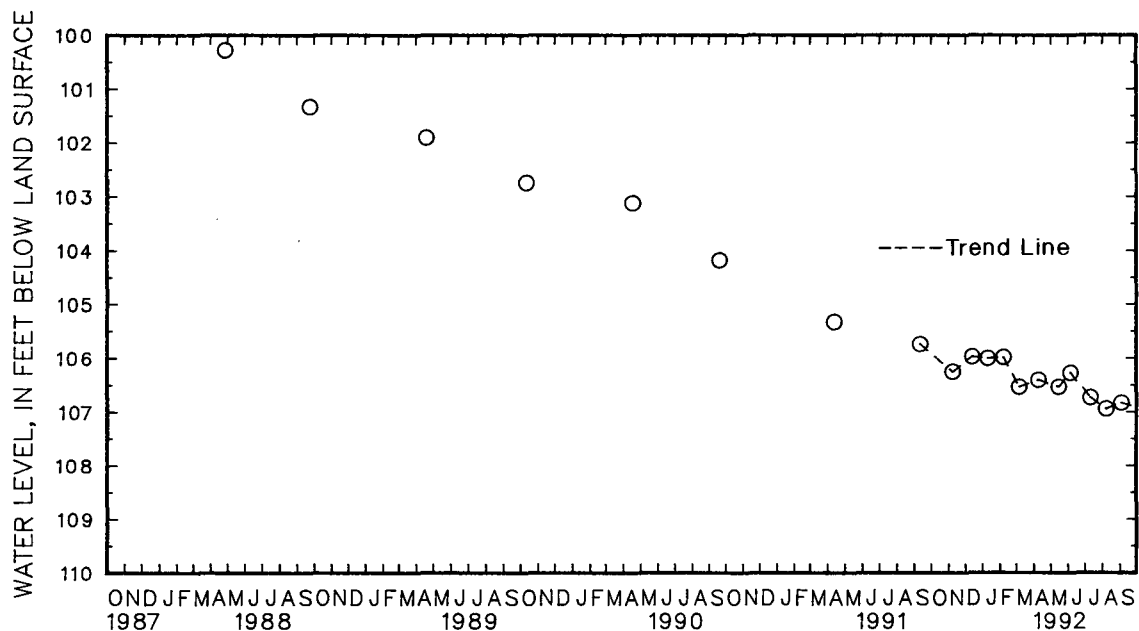
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Dc 35. SITE ID.--383050076305501. PERMIT NUMBER.--CA-73-0718.
LOCATION.--Lat 38°30'50", long 76°30'55", Hydrologic Unit 02060004, 5.1 mi. southeast of Prince Frederick.
at Scientist Cliff community.
Owner: U.S. Geological Survey.
AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 760 ft; casing diameter 4 in., to 750 ft;
screen diameter 2 in. from 750 to 760 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel from
November 1991 to current year.
DATUM.--Elevation of land surface is 91.60 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.9 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--October 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.30 ft below land surface, Sept. 12, 1975.
lowest measured, 106.95 ft below land surface, Aug. 7, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	106.26	JAN 10	106.01	MAR 6	106.54	MAY 15	106.54	JUL 10	106.74	SEP 3	106.84
DEC 13	105.98	FEB 7	105.99	APR 9	106.41	JUN 5	106.28	AUG 7	106.95		
WATER YEAR 1992		HIGHEST	105.98	DEC 13, 1991	LOWEST	106.95	AUG 7, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Ed 47. SITE ID.--382549076260101. PERMIT NUMBER.--CA-81-0754.
LOCATION.--Lat 38°25'49", long 76°26'01", Hydrologic Unit 020600004, at Calvert Cliffs Nuclear Power Plant, 4.3 mi. southeast of St. Leonard.
Owner: Baltimore Gas and Electric Co.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 523 ft; casing diameter 4 in., to 455 ft; casing diameter 2 in. from 455 to 477 ft, 482 to 503 ft, and 508 to 518 ft; screen diameter 2 in. from 477 to 482 ft, 503 to 508 ft, and 518 to 523 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from April 11, 1984 to June 6, 1984, and Nov. 13, 1985 to Dec. 17, 1985. Equipped with digital water-level recorder--30-minute recorder interval from June 6, 1984 to Nov. 13, 1985, and Dec. 17, 1985 to current year.
DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of recorder platform, 4.0 ft above land surface.
REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping. Missing data due to recorder malfunction.
PERIOD OF RECORD.--April 1984 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.11 ft below sea level, May 4, 1987; lowest measured, 65.01 ft below sea level, Nov. 4, 1991.

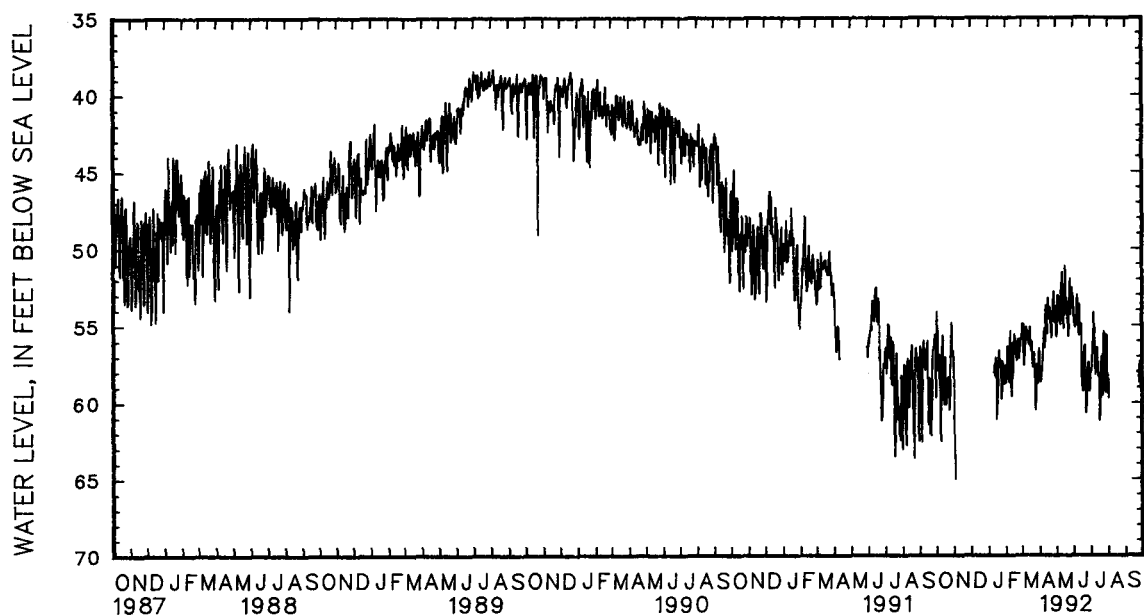
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	53.84	56.09	55.07	57.86	---	---	---	---	57.74	58.75	53.95	54.93
2	52.47	54.11	57.18	61.94	---	---	---	---	57.08	58.36	53.36	55.05
3	51.99	55.71	61.28	63.48	---	---	---	---	55.77	58.22	53.05	54.94
4	55.28	57.92	58.78	65.01	---	---	---	---	55.09	56.35	54.52	57.00
5	54.83	57.03	---	---	---	---	---	---	55.17	57.10	56.28	57.61
6	55.73	56.93	---	---	---	---	---	---	55.33	58.19	55.44	56.70
7	55.90	58.85	---	---	---	---	---	---	54.04	58.70	54.95	56.12
8	57.54	61.97	---	---	---	---	---	---	54.23	56.43	54.38	55.14
9	57.84	62.56	---	---	---	---	---	---	54.53	55.36	54.23	55.47
10	56.58	57.69	---	---	---	---	---	---	55.13	58.71	53.97	55.40
11	55.31	56.92	---	---	---	---	56.61	58.08	55.62	59.60	53.61	55.69
12	54.71	55.65	---	---	---	---	56.10	57.52	55.83	57.65	54.55	56.05
13	55.01	55.95	---	---	---	---	56.56	58.29	55.30	56.17	55.14	56.24
14	55.01	59.86	---	---	---	---	55.80	57.10	55.82	58.40	54.37	55.68
15	58.04	59.81	---	---	---	---	56.58	58.55	54.95	57.24	54.28	55.10
16	56.70	60.16	---	---	---	---	57.67	61.13	54.61	55.55	54.23	56.26
17	55.87	57.05	---	---	---	---	58.20	59.93	54.92	56.14	54.82	56.59
18	55.66	60.16	---	---	---	---	56.53	58.91	54.87	55.92	54.56	56.05
19	57.84	59.11	---	---	---	---	54.74	57.07	54.93	56.58	54.31	56.78
20	57.16	58.83	---	---	---	---	54.61	56.59	55.62	57.07	55.97	57.70
21	56.81	58.77	---	---	---	---	55.60	57.43	55.65	57.28	55.54	57.19
22	55.89	58.39	---	---	---	---	56.07	57.24	55.32	56.87	54.93	56.81
23	55.57	59.29	---	---	---	---	56.46	57.72	54.86	55.98	54.36	57.53
24	57.83	60.49	---	---	---	---	56.72	59.81	54.05	55.89	56.69	60.10
25	56.66	59.48	---	---	---	---	57.06	59.25	54.58	57.15	58.89	60.49
26	54.70	57.03	---	---	---	---	56.45	57.34	54.75	56.52	56.46	58.72
27	53.87	55.78	---	---	---	---	56.16	57.45	55.16	56.19	56.44	57.52
28	52.80	54.83	---	---	---	---	56.69	58.11	54.69	55.88	56.68	57.74
29	52.12	56.88	---	---	---	---	56.36	58.78	54.56	55.69	57.39	58.74
30	54.68	56.97	---	---	---	---	57.05	58.33	---	---	55.25	58.04
31	55.00	56.70	---	---	---	---	56.47	57.61	---	---	54.69	56.49
MONTH	51.99	62.56	55.07	65.01	---	---	54.61	61.13	54.04	59.60	53.05	60.49

GROUND-WATER LEVELS
 MARYLAND--Continued
 CALVERT COUNTY--Continued
 CA Ed 47--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	54.46	56.76	53.96	55.75	51.53	53.94	57.12	58.08	56.97	58.18	---	---
2	56.20	57.94	53.18	55.22	53.44	54.71	57.04	58.01	57.10	59.71	---	---
3	57.23	58.67	51.90	53.08	53.87	55.14	56.26	57.77	---	---	---	---
4	57.38	58.44	51.13	53.04	53.16	54.67	54.84	56.18	---	---	---	---
5	57.59	58.28	52.90	54.67	53.02	54.80	54.00	56.03	---	---	---	---
6	56.61	57.78	53.12	54.48	53.07	54.98	53.16	54.13	---	---	---	---
7	55.43	56.97	52.24	53.75	51.52	53.03	52.76	55.20	---	---	---	---
8	54.62	56.03	52.77	54.95	51.24	53.44	54.97	56.83	---	---	---	---
9	53.63	55.22	51.76	52.81	53.24	55.33	55.88	57.56	---	---	---	---
10	54.49	56.45	51.10	52.34	53.73	55.66	56.77	58.20	---	---	---	---
11	53.83	56.05	50.86	51.55	52.64	53.63	56.63	58.04	---	---	---	---
12	52.22	53.78	51.08	52.84	52.09	54.78	54.01	56.45	---	---	---	---
13	52.18	53.71	52.48	54.59	53.79	55.04	53.43	56.50	---	---	---	---
14	53.55	55.54	53.83	55.20	53.63	54.93	56.07	57.67	---	---	---	---
15	52.62	54.05	52.75	54.18	54.38	58.23	56.73	58.12	---	---	---	---
16	52.13	53.22	51.20	52.62	57.15	59.00	57.32	58.87	---	---	---	---
17	51.52	53.94	50.40	51.15	56.63	59.32	58.27	61.22	---	---	---	---
18	53.24	54.55	49.79	53.15	55.72	57.74	57.88	60.89	---	---	---	---
19	51.63	53.81	52.75	54.27	55.99	56.84	57.04	58.50	---	---	---	---
20	51.01	54.16	52.03	53.49	55.66	56.36	54.07	57.04	---	---	---	---
21	53.31	55.32	52.64	54.54	55.87	56.32	55.44	57.38	---	---	---	---
22	54.13	55.81	54.14	55.73	55.97	60.42	56.92	59.58	---	---	---	---
23	52.57	54.61	53.63	55.23	59.38	60.69	54.84	57.22	---	---	---	---
24	52.00	54.17	51.34	53.55	57.14	60.17	54.05	55.42	---	---	57.83	58.73
25	52.64	54.71	50.83	51.94	57.06	57.95	52.08	55.56	---	---	57.23	57.86
26	50.81	52.82	52.01	54.28	56.92	57.80	54.77	57.67	---	---	55.14	57.38
27	50.54	52.85	52.22	53.53	56.66	57.47	56.37	59.38	---	---	55.85	59.15
28	52.70	54.77	51.46	52.55	56.75	57.43	55.53	57.80	---	---	56.71	58.41
29	52.67	53.97	51.25	53.03	57.09	59.32	54.27	55.64	---	---	57.21	59.85
30	52.53	54.79	50.67	53.00	57.46	58.50	54.05	56.53	---	---	59.85	61.44
31	---	---	49.99	53.55	---	---	55.78	59.43	---	---	---	---
MONTH	50.54	58.67	49.79	55.75	51.24	60.69	52.08	61.22	56.97	59.71	55.14	61.44

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

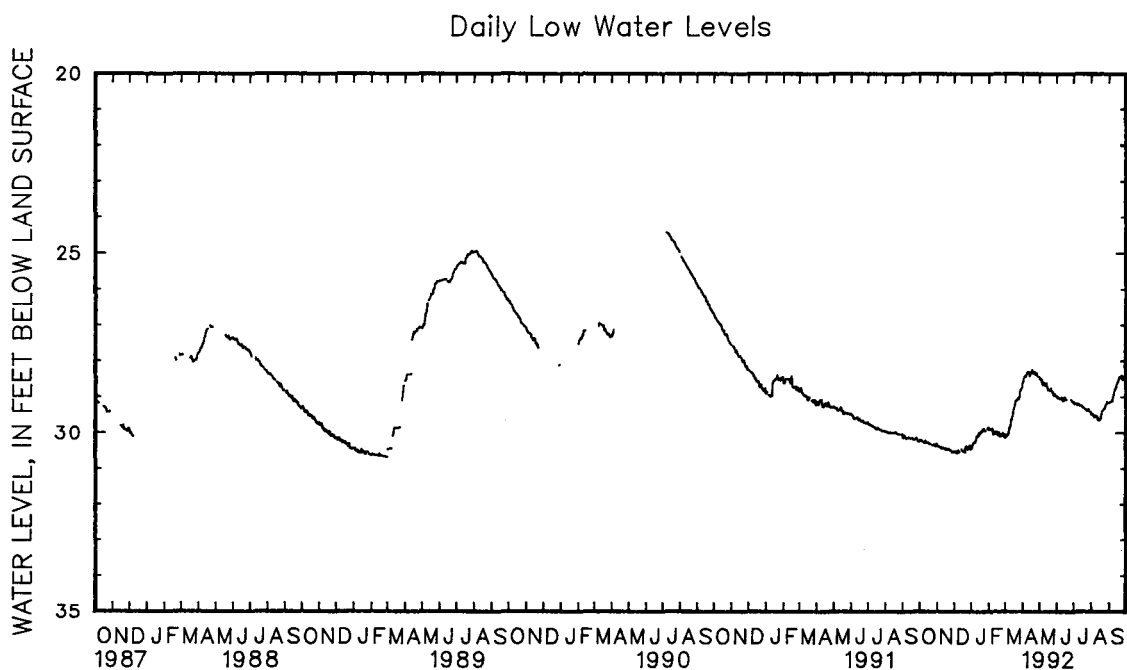
WELL NUMBER.--CA Fc 13. SITE ID.--382343076302901. PERMIT NUMBER.--CA-81-2391.
 LOCATION.--Lat 38°23'41", long 76°30'29", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
 Owner: U.S. Geological Survey.
 AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 34 ft; casing diameter 3.5 in., to 29 ft; screen diameter 3.5 in. from 29 to 34 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from Oct. 2, 1986 to current year.
 DATUM.--Elevation of land surface is 47.44 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.10 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well, Maryland Water Quality Network observation well and Best Management Practices Project observation well.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.39 ft below land surface, July 7, 1990; lowest measured, 30.69 ft below land surface, Feb. 27, and 28, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	30.25	30.21	30.34	30.32	30.54	30.53	30.46	30.42	29.90	29.85	30.14	30.07
2	30.21	30.21	30.37	30.34	30.55	30.53	30.42	30.37	29.92	29.90	30.08	30.06
3	30.21	30.20	30.40	30.37	30.54	30.43	30.37	30.30	29.90	29.89	30.08	30.06
4	30.24	30.21	30.40	30.40	30.57	30.45	30.30	30.17	29.90	29.82	30.09	30.08
5	30.24	30.23	30.41	30.40	30.58	30.54	30.28	30.26	29.91	29.87	30.08	30.05
6	30.25	30.22	30.41	30.40	30.54	30.51	30.27	30.26	29.91	29.88	30.04	30.02
7	30.27	30.25	30.40	30.40	30.51	30.49	30.27	30.26	29.88	29.86	30.01	29.85
8	30.29	30.27	30.44	30.40	30.51	30.49	30.27	30.22	29.95	29.87	29.86	29.85
9	30.29	30.28	30.44	30.43	30.50	30.46	30.22	30.11	30.04	29.95	29.86	29.83
10	30.28	30.23	30.43	30.35	30.54	30.46	30.11	30.08	30.05	30.00	29.82	29.61
11	30.23	30.19	30.42	30.35	---	---	30.11	30.08	30.00	29.93	29.64	29.54
12	30.25	30.21	30.45	30.42	---	---	30.11	30.06	30.03	29.95	29.64	29.56
13	30.29	30.25	30.45	30.45	---	---	30.06	29.96	30.01	29.91	29.56	29.49
14	30.30	30.29	30.46	30.45	30.47	30.41	30.01	29.87	29.98	29.91	29.49	29.39
15	30.29	30.26	30.46	30.45	30.51	30.47	30.07	29.98	29.98	29.89	29.39	29.34
16	30.29	30.26	30.45	30.44	30.53	30.50	30.01	29.95	30.03	29.89	29.35	29.28
17	30.30	30.29	30.49	30.45	30.53	30.44	30.01	29.93	30.07	30.03	29.28	29.17
18	30.32	30.30	30.49	30.48	30.51	30.43	29.98	29.95	30.04	29.99	29.22	29.12
19	30.32	30.30	30.48	30.48	30.55	30.51	29.99	29.95	30.00	29.97	29.12	29.04
20	30.33	30.32	30.48	30.47	30.55	30.45	29.95	29.88	30.08	30.00	29.12	29.07
21	---	---	30.47	30.47	30.45	30.38	29.91	29.89	30.11	30.08	29.09	29.08
22	---	---	30.47	30.45	30.39	30.38	29.94	29.90	30.11	30.06	29.08	28.93
23	30.35	30.33	30.49	30.45	30.38	30.31	29.90	29.73	30.06	30.04	29.05	28.94
24	30.36	30.35	30.49	30.47	30.41	30.32	29.93	29.75	30.09	30.04	29.07	29.05
25	30.35	30.34	30.53	30.49	30.47	30.41	29.95	29.87	30.10	30.01	29.06	28.98
26	30.34	30.34	30.55	30.53	30.47	30.45	29.95	29.87	30.02	29.99	28.98	28.77
27	30.34	30.33	30.55	30.54	30.45	30.44	---	---	30.04	30.02	28.80	28.77
28	30.38	30.33	30.54	30.53	30.45	30.36	---	---	30.04	29.96	28.81	28.77
29	30.39	30.38	30.53	30.53	30.36	30.29	29.90	29.88	30.14	29.96	28.78	28.74
30	30.39	30.29	30.54	30.53	30.45	30.30	29.88	29.83	---	---	28.74	28.61
31	30.32	30.29	---	---	30.47	30.45	29.85	29.83	---	---	28.61	28.58
MONTH	30.39	30.19	30.55	30.32	30.58	30.29	30.46	29.73	30.14	29.82	30.14	28.58

GROUND-WATER LEVELS
 MARYLAND--Continued
 CALVERT COUNTY--Continued
 CA Fc 13--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	28.59	28.47	28.51	28.46	28.99	28.95	29.15	29.15	29.50	29.44	---	---
2	28.50	28.45	28.49	28.40	29.04	28.95	29.19	29.14	29.50	29.48	29.16	29.14
3	28.47	28.41	28.49	28.40	29.04	29.04	29.20	29.18	29.48	29.46	29.14	29.11
4	28.42	28.37	28.53	28.48	29.04	29.02	29.19	29.18	29.52	29.46	29.13	29.11
5	28.43	28.37	28.63	28.52	29.04	29.02	29.19	29.16	29.55	29.52	29.13	29.12
6	28.44	28.37	28.67	28.63	29.06	29.04	29.20	29.16	29.57	29.55	29.13	29.04
7	28.37	28.29	28.67	28.61	29.07	29.06	29.24	29.20	29.57	29.57	29.04	28.98
8	28.32	28.29	28.61	28.51	29.06	29.03	29.24	29.21	29.57	29.54	28.98	28.91
9	28.35	28.29	28.62	28.54	29.03	29.02	29.21	29.17	29.54	29.52	28.91	28.84
10	28.31	28.29	28.66	28.62	29.04	29.02	29.23	29.20	29.55	29.54	28.84	28.78
11	28.30	28.27	28.69	28.66	29.12	29.04	29.24	29.23	29.58	29.54	28.78	28.77
12	28.32	28.27	28.68	28.63	29.12	29.10	29.25	29.24	29.64	29.58	28.77	28.70
13	28.42	28.33	28.63	28.61	29.10	29.03	29.25	29.23	29.64	29.62	28.70	28.64
14	28.37	28.28	28.72	28.63	29.03	28.96	29.25	29.24	29.66	29.62	28.64	28.60
15	28.32	28.28	28.76	28.72	29.03	28.97	29.25	29.23	29.66	29.62	28.60	28.57
16	28.31	28.26	28.81	28.76	29.08	29.03	29.28	29.25	29.63	29.60	28.57	28.52
17	28.26	28.24	28.82	28.81	29.09	29.08	29.28	29.28	29.60	29.52	28.52	28.47
18	28.33	28.25	28.82	28.81	29.08	29.04	29.31	29.28	29.52	29.44	28.47	28.42
19	28.35	28.32	28.83	28.79	---	---	29.32	29.31	29.44	29.39	28.45	28.42
20	28.35	28.31	28.79	28.77	---	---	29.33	29.32	29.39	29.38	28.45	28.44
21	28.31	28.28	28.77	28.75	---	---	29.35	29.33	29.38	29.37	28.44	28.40
22	28.35	28.28	28.84	28.75	---	---	29.37	29.35	29.37	29.34	28.40	28.36
23	28.38	28.35	28.85	28.84	---	---	29.37	29.35	29.34	29.32	28.50	28.38
24	28.35	28.24	28.87	28.85	---	---	29.39	29.36	29.32	29.26	28.52	28.50
25	28.34	28.29	28.94	28.87	---	---	29.39	29.38	29.26	29.22	28.50	28.38
26	28.40	28.34	28.97	28.94	29.09	29.07	29.39	29.33	29.22	29.20	28.44	28.38
27	28.42	28.40	28.97	28.93	29.10	29.06	29.36	29.33	29.20	29.15	28.43	28.40
28	28.44	28.42	28.93	28.89	29.13	29.10	29.41	29.36	29.15	29.06	28.43	28.41
29	---	---	28.97	28.91	---	---	29.42	29.41	29.18	29.10	28.48	28.41
30	28.46	28.42	29.00	28.97	29.17	29.15	29.44	29.42	29.18	29.15	28.48	28.47
31	---	---	29.00	28.99	---	---	29.44	29.41	---	---	---	---
MONTH	28.59	28.24	29.00	28.40	29.17	28.95	29.44	29.14	29.66	29.06	29.16	28.36



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

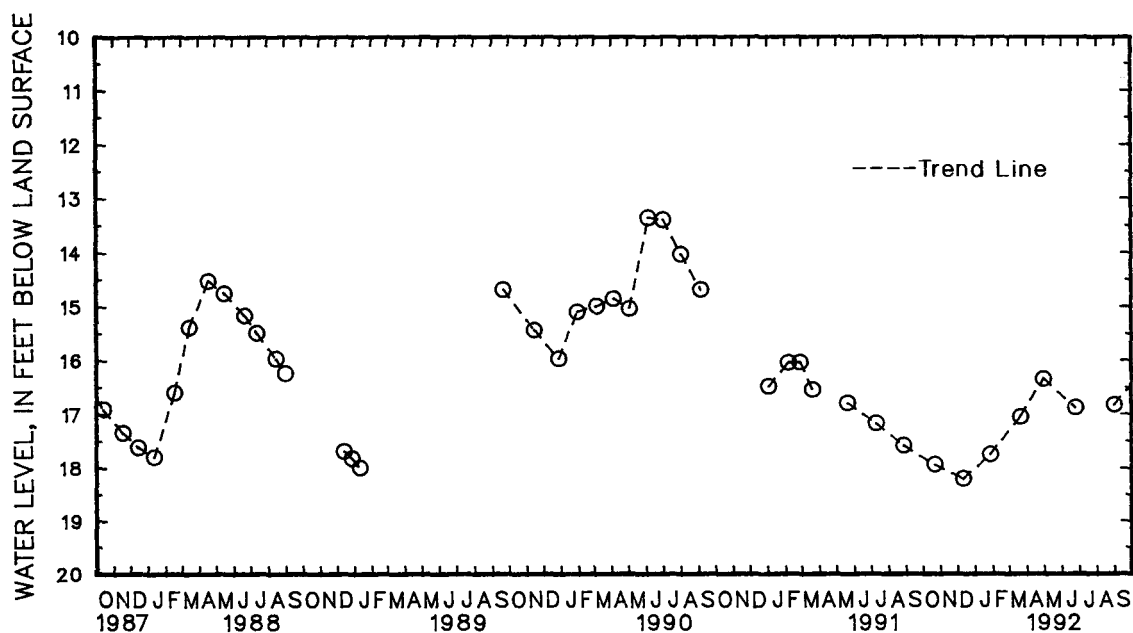
MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 15. SITE ID.--382340076303001. PERMIT NUMBER.--CA-81-2389.
 LOCATION.--Lat 38°23'39", long 76°30'35", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
 Owner: U.S. Geological Survey.
 AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 36 ft; casing diameter 3.5 in., to 31 ft; screen diameter 3.5 in. from 31 to 36 ft.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--15-minute recorder interval from Oct. 2, 1986 to Sept. 5, 1990.
 DATUM.--Elevation of land surface is 30.56 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.78 ft above land surface.
 REMARKS.--Best Management Practices Project observation well.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.36 ft below land surface, June 6, 1990; lowest measured, 18.25 ft below land surface, Feb. 19, 20, and 21, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	17.97	JAN 27	17.77	APR 29	16.36	AUG 31	16.85
DEC 11	18.24	MAR 20	17.06	JUN 24	16.90		
WATER YEAR 1992		HIGHEST	16.36	APR 29, 1992	LOWEST	18.24	DEC 11, 1991



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 16. SITE ID.--382340076303002. PERMIT NUMBER.--CA-81-2392.
 LOCATION.--Lat 38°23'40", long 76°30'35", Hydrologic Unit 02060006, Jefferson Patterson Park and Museum.
 Owner: U. S. Geological Survey.
 AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 23 ft; casing diameter 3.5 in., to 18 ft; screen diameter 3.5 in. from 18 to 23 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--30-minute recorder interval from Dec. 24, 1986 to Sept. 3, 1987, and Jan. 11, 1989 to current year.
 DATUM.--Elevation of land surface is 30.75 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.72 ft above land surface.
 REMARKS.--Best Management Practices Project observation well. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.70 ft below land surface, July 2, 1990; lowest measured, 19.34 ft below land surface, Jan. 27, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.11	18.10	18.27	18.27	18.51	18.50	18.44	18.43	17.95	17.95	17.96	17.94
2	18.12	18.11	18.28	18.27	18.52	18.51	18.43	18.42	17.95	17.95	17.94	17.92
3	18.12	18.12	18.29	18.28	18.52	18.36	18.42	18.40	17.95	17.95	17.92	17.91
4	18.14	18.12	18.29	18.29	18.48	18.44	18.40	18.33	17.95	17.95	17.91	17.90
5	18.14	18.14	18.30	18.29	18.44	18.39	18.38	18.33	17.95	17.95	17.90	17.89
6	18.15	18.14	18.31	18.30	18.39	18.36	18.33	18.28	17.95	17.95	17.89	17.88
7	18.16	18.15	18.31	18.31	18.36	18.34	18.28	18.24	17.95	17.95	17.89	17.72
8	18.17	18.16	18.32	18.31	18.34	18.33	18.23	18.20	17.96	17.95	17.85	17.82
9	18.18	18.17	18.33	18.32	18.33	18.32	18.19	18.16	17.98	17.96	17.82	17.76
10	18.18	18.18	18.33	18.33	18.33	18.32	18.16	18.13	17.99	17.98	17.76	17.58
11	18.19	18.18	18.34	18.33	---	---	18.13	18.12	17.99	17.99	17.69	17.58
12	18.20	18.19	18.35	18.34	---	---	18.12	18.10	18.00	17.99	17.63	17.55
13	18.20	18.20	18.35	18.35	---	---	18.10	18.08	18.00	18.00	17.55	17.48
14	18.21	18.20	18.36	18.35	18.32	18.31	18.07	18.06	18.00	18.00	17.48	17.42
15	18.22	18.21	18.37	18.36	18.33	18.32	18.06	18.05	18.00	18.00	17.42	17.39
16	18.23	18.22	18.39	18.37	18.34	18.33	18.05	18.05	18.02	18.00	17.39	17.35
17	18.23	18.19	18.40	18.39	18.34	18.34	18.05	18.04	18.02	18.02	17.35	17.31
18	18.22	18.20	18.40	18.40	18.36	18.34	18.04	18.03	18.02	18.02	17.31	17.27
19	18.20	18.19	18.41	18.40	18.38	18.36	18.03	18.03	18.03	18.02	17.27	17.24
20	18.19	18.19	18.42	18.41	18.38	18.38	18.03	18.02	18.04	18.03	17.25	17.22
21	18.19	18.19	18.42	18.42	18.38	18.38	18.02	18.01	18.06	18.04	17.23	17.21
22	---	---	18.43	18.42	18.39	18.38	18.01	18.01	18.06	18.06	17.21	17.17
23	18.21	18.21	18.44	18.43	18.39	18.38	18.01	17.99	18.07	18.06	17.18	17.17
24	18.21	18.21	18.45	18.44	18.40	18.39	17.99	17.98	18.08	18.07	17.18	17.17
25	18.22	18.21	18.46	18.45	18.42	18.40	18.00	17.99	18.08	18.05	17.17	17.14
26	18.23	18.22	18.47	18.46	18.43	18.42	17.99	17.99	18.07	18.04	17.14	16.96
27	18.24	18.23	18.47	18.47	18.44	18.43	---	---	18.05	18.01	17.06	16.95
28	18.25	18.24	18.48	18.47	18.44	18.44	---	---	18.01	17.97	17.03	16.90
29	18.25	18.25	18.49	18.48	18.44	18.42	17.97	17.97	17.97	17.96	16.90	16.84
30	18.26	18.25	18.50	18.49	18.44	18.43	17.97	17.96	---	---	16.84	16.80
31	18.27	18.26	---	---	18.44	18.44	17.96	17.95	---	---	16.81	16.78
MONTH	18.27	18.10	18.50	18.27	18.52	18.31	18.44	17.95	18.08	17.95	17.96	16.78

Daily Low Water Levels

WATER LEVEL, IN FEET BELOW LAND SURFACE

10
15
20
25

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JFMAMJJASOND 1990
JFMAMJJASOND 1991
JFMAMJJASOND 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

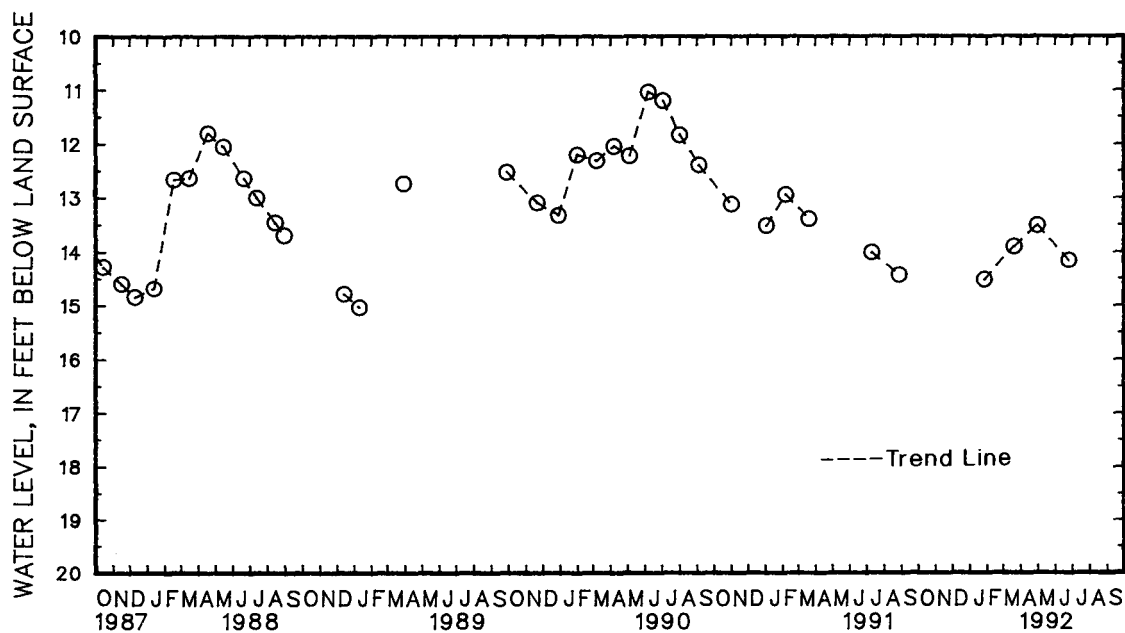
MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 17. SITE ID.--382343076303801. PERMIT NUMBER.--CA-81-2388.
 LOCATION.--Lat 38°23'40", long 76°30'39", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
 Owner: U.S. Geological Survey.
 AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 32 ft; casing diameter 3.5 in., to 27 ft; screen diameter 3.5 in. from 27 to 32 ft.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 22.59 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.37 ft above land surface.
 REMARKS.--Best Management Practices Project observation well.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.04 ft below land surface, June 7, 1990;
 lowest measured, 15.07 ft below land surface, Jan. 11, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27	14.56	MAR 20	13.93	APR 29	13.53	JUN 25	14.19
WATER YEAR 1992		HIGHEST	13.53	APR 29, 1992	LOWEST	14.56	JAN 27, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

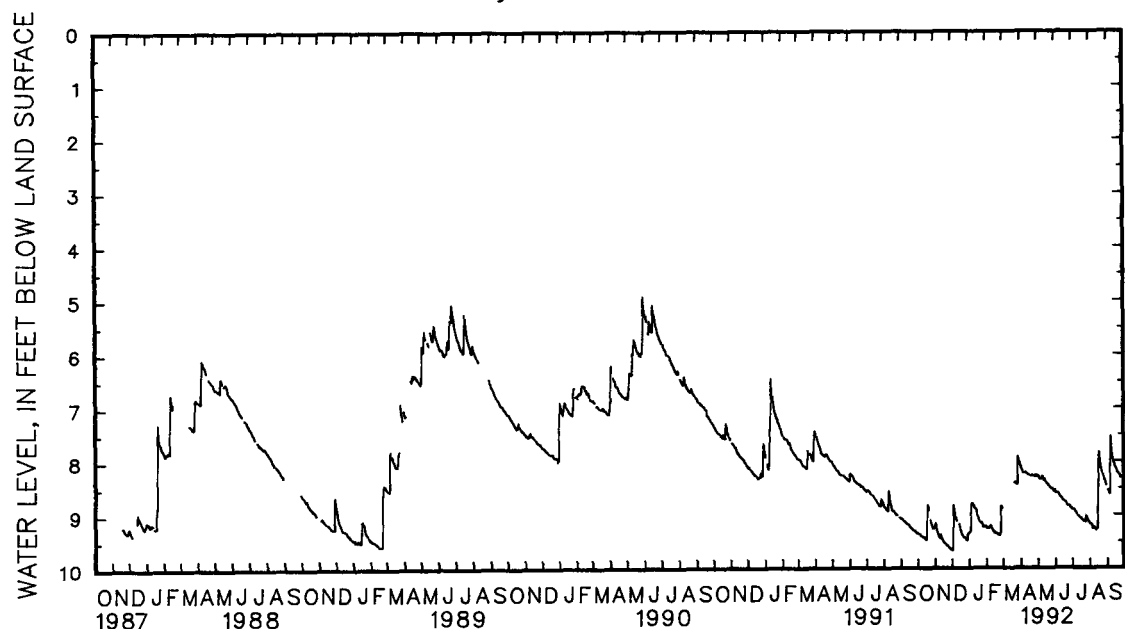
CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 18. SITE ID.--382340076303801. PERMIT NUMBER.--CA-81-2387.
 LOCATION.--Lat 38°23'39", long 76°30'39", Hydrologic Unit 02060006, Jefferson Patterson Park and Museum.
 Owner: U.S. Geological Survey.
 AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 23 ft; casing diameter 3.5 in., to 18 ft; screen diameter 3.5 in. from 18 to 23 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--15-minute recorder interval from Oct. 2, 1986 to current year.
 DATUM.--Elevation of land surface is 15.56 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.81 ft above land surface.
 REMARKS.--Best Management Practices Project observation well. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.67 ft below land surface, July 16, 1989; lowest measured, 9.67 ft below land surface, Dec. 2, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.35	9.35	9.19	9.16	9.66	9.66	9.34	9.33	9.24	9.22	---	---
2	9.35	9.35	9.17	9.15	9.67	9.66	9.33	9.32	9.26	9.24	---	---
3	9.36	9.35	9.23	9.17	9.66	8.82	9.32	9.29	9.26	9.24	---	---
4	9.37	9.36	9.29	9.23	8.82	8.81	9.29	8.87	9.25	9.21	---	---
5	9.37	9.37	9.33	9.29	8.88	8.82	8.87	8.79	9.24	9.22	---	---
6	9.39	9.37	9.36	9.33	8.95	8.88	8.79	8.75	9.25	9.24	---	---
7	9.40	9.39	9.38	9.36	9.01	8.95	8.78	8.75	9.24	9.20	---	---
8	9.40	9.39	9.42	9.38	9.06	9.01	8.81	8.78	9.21	9.17	---	---
9	9.41	9.40	9.44	9.42	9.10	9.06	8.82	8.80	9.21	9.18	---	---
10	9.42	9.41	9.44	9.38	9.11	9.09	8.84	8.82	9.25	9.21	---	---
11	9.42	9.42	9.38	9.36	---	---	8.87	8.84	9.27	9.25	---	---
12	9.42	9.42	9.42	9.37	---	---	8.89	8.87	9.30	9.27	---	---
13	9.44	9.42	9.45	9.42	---	---	8.90	8.89	9.30	9.30	---	---
14	9.45	9.44	9.47	9.45	9.18	9.15	8.91	8.88	9.33	9.30	---	---
15	9.45	9.45	9.49	9.47	9.23	9.18	8.96	8.91	9.34	9.31	---	---
16	9.47	9.45	9.51	9.49	9.29	9.23	9.02	8.96	9.33	9.30	---	---
17	9.46	8.82	9.53	9.51	9.30	9.29	9.05	9.02	9.35	9.33	---	---
18	8.82	8.79	9.53	9.53	9.34	9.30	9.09	9.05	9.35	9.34	---	---
19	8.84	8.79	9.54	9.53	9.38	9.34	9.12	9.09	9.35	9.32	---	---
20	8.91	8.84	9.55	9.54	9.39	9.38	9.14	9.12	9.35	9.33	---	---
21	---	---	9.57	9.55	9.40	9.39	9.15	9.14	9.37	9.34	8.40	8.37
22	---	---	9.58	9.57	9.42	9.40	9.16	9.14	9.38	9.37	8.40	8.35
23	9.10	9.05	9.58	9.57	9.42	9.41	9.15	9.12	9.38	9.38	8.42	8.38
24	9.14	9.10	9.58	9.57	9.43	9.42	9.16	9.12	9.39	9.38	8.43	8.42
25	9.18	9.14	9.60	9.58	9.44	9.43	9.19	9.16	9.38	9.33	8.43	8.43
26	9.21	9.18	9.62	9.60	9.45	9.44	9.23	9.19	9.33	8.84	8.43	7.84
27	9.24	9.21	9.63	9.62	9.47	9.45	---	---	8.84	8.84	7.91	7.83
28	9.27	9.24	9.64	9.63	9.48	9.47	---	---	8.84	8.83	7.96	7.91
29	9.27	9.25	9.65	9.64	9.48	9.36	9.23	9.22	8.88	8.83	8.01	7.96
30	9.26	9.25	9.66	9.65	9.36	9.36	9.22	9.20	---	---	8.03	8.01
31	9.25	9.19	---	---	9.36	9.34	9.22	9.21	---	---	8.08	8.03
MONTH	9.47	8.79	9.66	9.15	9.67	8.81	9.34	8.75	9.39	8.83	8.43	7.83

Daily Low Water Levels



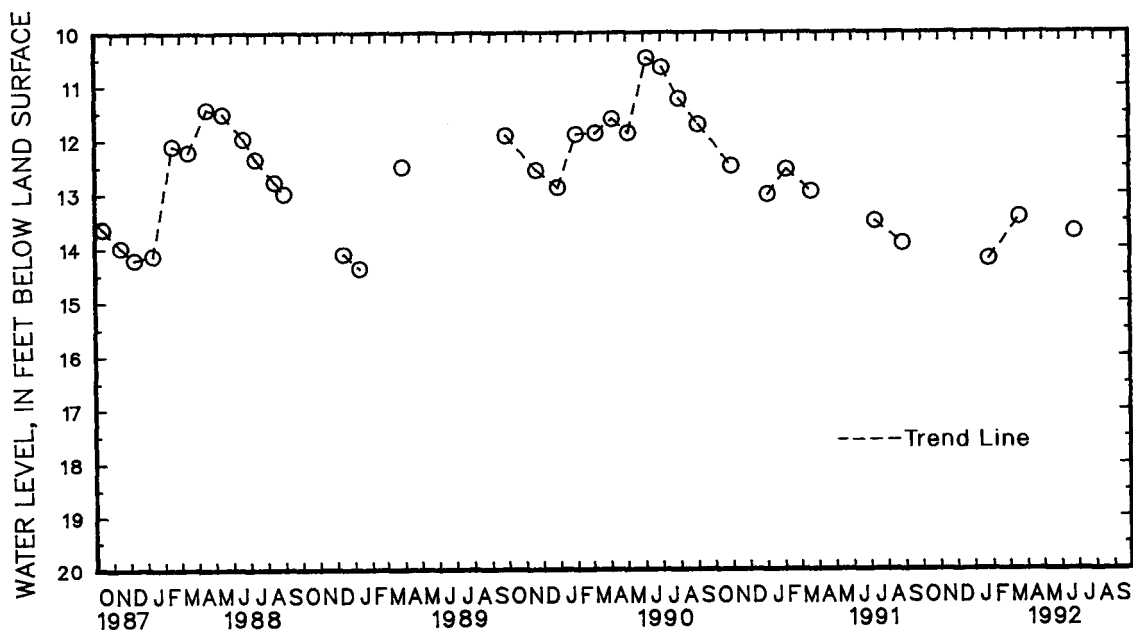
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 20. SITE ID.--382337076303702. PERMIT NUMBER.--CA-81-2385.
LOCATION.--Lat 38°23'38", long 76°30'39", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
Owner: U.S. Geological Survey.
AQUIFER.--Chesapeake Group of Miocene age. Aquifer code: 122CSPK.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 27 ft; casing diameter 3.5 in., to 22 ft; screen diameter 3.5 in. from 22 to 27 ft.
INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 20.62 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.84 ft above land surface.
REMARKS.--Best Management Practices Project observation well.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.48 ft below land surface, June 7, 1990;
lowest measured, 14.41 ft below land surface, Jan. 11, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27	14.25	MAR 20	13.46	JUN 25	13.73
WATER YEAR 1992 HIGHEST 13.46 MAR 20, 1992 LOWEST 14.25 JAN 27, 1992					



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 33. SITE ID.--382339076304201.
LOCATION.--Lat 38°23'39", long 76°30'41", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
Owner: U.S. Geological Survey.
AQUIFER.--Lowland deposits of Pleistocene age. Aquifer code: 111LLND.
WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 14 ft; casing diameter 2 in., to 12 ft; screen diameter 2 in. from 12 to 14 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water level recorder--1-hour recorder interval from September 1990 to current year.
DATUM.--Elevation of land surface is 12.17 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 3.31 ft above land surface.
REMARKS.--Best Management Practices Project observation well. Missing data due to recorder malfunctions.
PERIOD OF RECORD.--March 1989 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.88 ft below land surface, Jan. 11, and 12, 1991; lowest measured, 9.25 ft below land surface, Nov. 28, and Dec. 1, 1991.

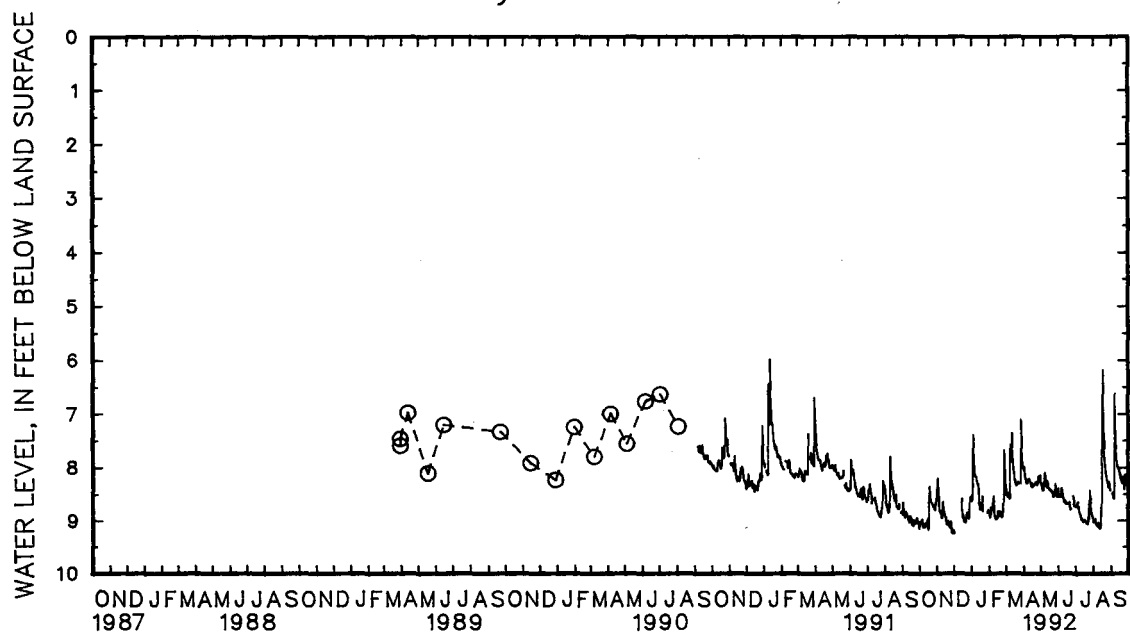
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.05	8.89	8.30	7.92	9.25	9.10	8.63	8.50	8.87	8.72	8.43	8.34
2	9.07	8.89	8.22	8.04	---	---	8.61	8.35	8.96	8.87	8.57	8.40
3	9.08	8.94	8.55	8.20	---	---	8.36	5.41	8.91	8.69	8.56	8.45
4	9.05	8.85	8.66	8.53	---	---	7.39	6.51	8.77	8.55	8.50	8.36
5	9.00	8.82	8.82	8.60	---	---	7.77	7.39	8.82	8.59	8.56	8.40
6	9.07	8.80	8.85	8.70	---	---	8.06	7.77	8.82	8.70	8.60	8.46
7	9.14	9.03	8.83	8.67	---	---	8.18	8.06	8.76	8.46	8.60	5.12
8	9.14	9.01	8.90	8.67	---	---	8.19	8.11	8.56	8.30	7.58	6.68
9	9.14	9.01	8.96	8.89	---	---	8.19	8.10	8.71	8.45	7.90	7.58
10	9.12	8.99	8.96	8.65	---	---	8.30	8.19	8.90	8.72	7.90	5.97
11	9.08	8.89	8.66	8.34	---	---	8.32	8.25	8.95	8.90	7.36	5.97
12	9.06	8.93	8.74	8.47	---	---	8.32	8.24	8.99	8.90	7.78	7.36
13	9.10	8.97	8.83	8.74	---	---	8.43	8.13	8.99	8.84	8.00	7.78
14	9.11	8.99	8.89	8.80	8.60	8.49	8.69	8.43	8.94	8.83	8.09	8.00
15	9.00	8.86	8.94	8.80	8.80	8.61	8.70	8.59	8.97	8.70	8.21	8.01
16	9.19	8.94	8.95	8.86	8.96	8.80	8.80	8.67	8.84	8.64	8.30	8.18
17	9.14	7.69	9.08	8.91	8.90	8.78	8.81	8.62	8.93	8.77	8.27	8.13
18	8.36	7.77	9.08	8.97	8.98	8.86	8.76	8.60	8.91	8.76	8.35	8.21
19	8.52	8.33	9.04	8.87	9.04	8.91	8.71	8.50	8.85	8.65	8.33	8.15
20	8.65	8.52	9.02	8.81	8.96	8.80	8.56	8.34	8.85	8.65	8.33	8.12
21	---	---	9.08	8.96	9.03	8.89	8.83	8.56	8.93	8.77	8.30	8.11
22	---	---	9.12	9.00	8.96	8.74	---	---	8.95	8.85	8.30	8.07
23	8.68	8.52	9.14	8.95	8.89	8.73	---	---	8.95	8.82	8.30	8.08
24	8.72	8.56	9.09	8.93	8.86	8.73	---	---	8.92	8.78	8.32	8.23
25	8.74	8.57	9.03	8.85	8.89	8.79	---	---	8.81	8.53	8.31	8.20
26	8.76	8.61	9.15	8.98	8.93	8.81	---	---	8.52	6.54	8.31	4.95
27	8.78	8.62	9.24	9.15	8.97	8.85	---	---	7.68	6.88	7.10	5.01
28	8.81	8.62	9.25	9.16	8.87	8.05	---	---	8.09	7.68	7.62	7.10
29	8.71	8.48	9.20	9.06	8.57	8.25	8.87	8.72	8.42	8.07	7.92	7.63
30	8.60	8.42	9.20	9.08	8.63	8.49	8.82	8.69	---	---	7.98	7.89
31	8.58	8.20	---	---	8.55	8.43	8.84	8.71	---	---	8.04	7.85
MONTH	9.19	7.69	9.25	7.92	9.25	8.05	8.87	5.41	8.99	6.54	8.60	4.95

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued
CA Fc 33--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.01	7.87	8.34	8.01	8.57	8.27	8.75	8.47	9.04	8.72	---	---
2	8.13	7.95	8.32	8.14	8.57	8.40	8.75	8.55	9.05	8.88	8.52	8.35
3	8.21	8.08	8.45	8.19	8.57	8.34	8.75	8.42	9.02	8.84	8.49	8.30
4	8.23	8.12	8.45	8.26	8.57	8.35	8.67	8.36	8.99	8.79	8.60	8.34
5	8.31	8.14	8.45	8.23	8.53	8.24	8.76	8.55	9.07	8.86	8.59	8.34
6	8.31	8.24	8.34	8.10	8.41	8.22	8.75	8.52	9.11	8.92	8.36	4.34
7	8.31	8.15	8.23	8.01	8.46	8.22	8.85	8.62	9.12	8.95	6.62	5.06
8	8.24	8.11	8.12	7.93	8.57	8.32	8.88	8.66	9.11	8.94	7.36	6.62
9	8.26	8.13	8.18	7.99	8.60	8.42	8.90	8.63	9.06	8.83	7.66	7.28
10	8.23	8.12	8.37	8.10	8.67	8.46	8.96	8.75	9.14	8.92	7.78	7.53
11	8.26	8.16	8.40	8.22	8.64	8.45	9.00	8.77	9.08	8.93	7.97	7.64
12	8.29	8.15	8.28	8.10	8.65	8.42	8.98	8.82	9.16	8.92	8.02	7.91
13	8.36	8.20	8.30	8.06	8.68	8.43	9.02	8.75	9.15	8.89	8.02	7.88
14	8.31	8.14	8.40	8.12	8.70	8.46	9.04	8.84	8.93	8.51	8.06	7.91
15	8.39	8.18	8.42	8.23	8.71	8.48	9.03	8.78	8.70	5.30	8.11	7.96
16	8.32	8.19	8.44	8.25	8.71	8.51	9.01	8.80	6.87	4.77	8.15	8.02
17	8.37	8.16	8.44	8.28	8.69	8.39	9.00	8.71	6.18	5.35	8.23	8.08
18	8.36	8.22	8.47	8.25	8.69	8.51	9.02	8.73	7.14	6.20	8.26	8.12
19	8.35	8.17	8.47	8.33	8.67	8.46	9.05	8.87	7.53	7.16	8.29	8.12
20	8.32	8.16	8.47	8.30	8.70	8.47	9.06	8.81	7.83	7.54	8.32	8.09
21	8.30	8.14	8.51	8.33	8.73	8.60	9.08	8.86	7.98	7.78	8.19	8.03
22	8.29	8.06	8.57	8.48	8.81	8.64	9.06	8.90	8.10	7.88	8.23	8.03
23	8.34	8.26	8.56	8.44	8.80	8.60	8.95	8.80	8.18	8.01	8.44	8.03
24	8.35	8.24	8.55	8.40	---	---	8.98	8.04	8.27	8.07	8.36	8.16
25	8.34	8.24	8.51	8.29	---	---	8.44	8.04	8.29	8.10	8.16	7.84
26	8.24	7.95	8.33	8.22	8.55	8.34	8.59	8.31	8.39	8.12	8.17	7.93
27	8.18	7.95	8.40	8.22	8.62	8.37	8.72	8.37	8.35	8.17	8.20	7.95
28	8.29	8.13	8.56	8.27	8.73	8.46	8.86	8.53	8.30	8.04	8.28	8.06
29	8.23	8.10	8.57	8.43	8.74	8.52	8.89	8.63	8.43	8.07	8.37	8.15
30	8.17	8.01	8.47	8.30	8.73	8.49	8.94	8.63	8.45	8.25	8.42	8.28
31	---	---	8.42	8.17	---	---	8.94	8.67	---	---	---	---
MONTH	8.39	7.87	8.57	7.93	8.81	8.22	9.08	8.04	9.16	4.77	8.60	4.34

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fc 34. SITE ID.--382339076304202.

LOCATION.--Lat 38°23'39", long 76°30'41", Hydrologic Unit 02060006, Jefferson Patterson State Park and Museum.
Owner: U. S. Geological Survey.

AQUIFER.--Lowland deposits of Pleistocene age. Aquifer code: 111LLND.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 18 ft; casing diameter 2 in., to 16 ft; screen diameter 2 in. from 16 to 18 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--1-hour recorder interval from September 1990 to current year.

DATUM.--Elevation of land surface is 12.01 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 3.54 ft above land surface.

REMARKS.--Best Management Practices Project observation well.

PERIOD OF RECORD.--May 1989 to current year.

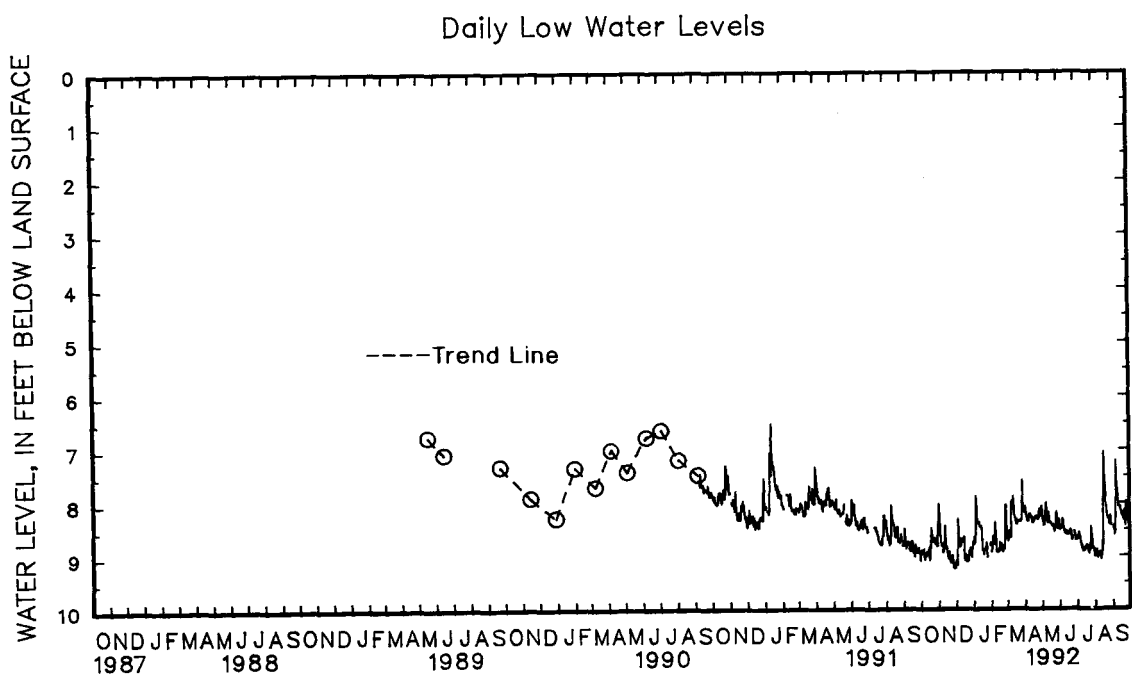
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.97 ft below land surface, Sept. 6, 1992; lowest measured, 9.25 ft below land surface, Nov. 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.92	8.65	8.03	7.60	9.13	8.92	8.66	8.44	8.82	8.56	8.69	8.42
2	8.97	8.65	8.22	7.78	9.18	8.93	8.77	8.54	8.95	8.79	8.74	8.51
3	8.98	8.71	8.63	8.09	9.02	7.20	8.73	8.34	8.80	8.47	8.67	8.44
4	8.94	8.62	8.76	8.38	8.31	7.19	8.44	7.03	8.65	8.31	8.54	8.28
5	8.89	8.58	8.83	8.60	8.66	8.31	7.88	7.29	8.78	8.36	8.63	8.33
6	8.99	8.56	8.83	8.50	8.77	8.51	8.06	7.76	8.78	8.51	8.67	8.38
7	9.08	8.84	8.79	8.49	8.84	8.61	8.32	7.95	8.65	8.21	8.67	6.82
8	9.03	8.77	8.95	8.59	8.82	8.60	8.40	8.21	8.38	8.04	7.98	7.32
9	9.03	8.77	8.95	8.69	8.79	8.54	8.41	8.20	8.65	8.22	8.13	7.80
10	9.01	8.74	8.75	8.13	8.69	8.42	8.37	8.12	8.90	8.64	8.13	7.18
11	8.94	8.63	8.45	8.11	---	---	8.47	8.28	8.94	8.82	7.89	7.10
12	8.94	8.68	8.80	8.45	---	---	8.46	8.28	8.95	8.78	8.07	7.89
13	9.00	8.78	8.87	8.69	---	---	8.45	8.25	8.95	8.71	8.25	8.07
14	8.99	8.76	8.86	8.65	8.66	8.50	8.45	8.10	8.88	8.68	8.30	8.05
15	8.84	8.61	8.90	8.72	8.93	8.66	8.71	8.26	8.93	8.49	8.33	8.05
16	9.10	8.73	9.00	8.72	9.10	8.91	8.90	8.65	8.76	8.41	8.42	8.22
17	8.96	8.06	9.07	8.85	9.09	8.76	8.89	8.67	8.91	8.60	8.33	8.08
18	8.48	8.08	8.99	8.73	8.99	8.76	8.92	8.74	8.88	8.59	8.42	8.17
19	8.58	8.31	8.93	8.63	9.12	8.98	8.99	8.83	8.79	8.42	8.36	8.07
20	8.74	8.51	9.06	8.80	9.12	8.90	8.92	8.61	8.83	8.43	8.36	8.04
21	---	---	9.12	8.87	9.02	8.74	8.87	8.58	8.93	8.61	8.36	8.00
22	---	---	9.14	8.84	9.11	8.86	8.84	8.52	8.94	8.73	8.36	7.98
23	8.68	8.38	9.06	8.76	8.99	8.64	8.76	8.31	8.93	8.68	8.34	7.97
24	8.73	8.41	9.01	8.65	8.93	8.63	8.84	8.23	8.89	8.62	8.37	8.15
25	8.75	8.40	9.10	8.87	8.87	8.62	8.98	8.84	8.74	8.42	8.33	8.11
26	8.79	8.45	9.24	9.09	8.94	8.71	9.03	8.91	8.42	7.61	8.33	6.71
27	8.79	8.46	9.25	9.05	8.95	8.73	---	---	8.06	7.67	7.59	6.71
28	8.82	8.50	9.17	8.92	9.03	8.83	---	---	8.38	8.06	8.01	7.59
29	8.61	8.16	9.17	8.95	8.91	8.39	8.81	8.54	8.69	8.25	8.17	7.97
30	8.52	8.18	9.24	8.98	8.76	8.48	8.76	8.53	---	---	8.20	7.94
31	8.26	7.67	---	---	8.79	8.52	8.79	8.54	---	---	8.16	7.88
MONTH	9.10	7.67	9.25	7.60	9.18	7.19	9.03	7.03	8.95	7.61	8.74	6.71

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued
CA Fc 34--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.09	7.82	8.33	7.80	8.53	8.08	8.71	8.23	9.02	8.51	---	---
2	8.20	7.92	8.29	7.98	8.51	8.22	8.71	8.34	9.03	8.68	8.50	8.19
3	8.29	8.09	8.45	8.03	8.51	8.12	8.66	8.13	8.95	8.61	8.46	8.13
4	8.29	8.09	8.44	8.11	8.51	8.14	8.59	8.10	8.90	8.56	8.63	8.24
5	8.37	8.09	8.44	8.05	8.45	8.01	8.70	8.33	9.02	8.70	8.56	8.19
6	8.37	8.20	8.27	7.88	8.32	7.98	8.66	8.27	9.05	8.72	8.29	5.97
7	8.36	8.06	8.12	7.76	8.36	7.98	8.79	8.43	9.04	8.75	7.22	6.18
8	8.25	7.98	8.02	7.68	8.51	8.17	8.82	8.42	9.01	8.70	7.65	7.10
9	8.27	8.00	8.13	7.78	8.58	8.22	8.82	8.40	8.94	8.56	7.84	7.40
10	8.23	7.98	8.38	7.97	8.61	8.28	8.89	8.54	9.03	8.70	7.89	7.56
11	8.26	8.05	8.40	8.06	8.57	8.24	8.92	8.55	8.95	8.66	8.09	7.60
12	8.28	8.01	8.20	7.88	8.56	8.19	8.88	8.61	9.08	8.69	8.09	7.90
13	8.38	8.06	8.27	7.84	8.60	8.20	8.92	8.50	9.01	8.64	8.08	7.79
14	8.30	8.00	8.38	7.93	8.62	8.24	8.92	8.63	8.79	8.36	8.10	7.85
15	8.39	8.04	8.39	8.08	8.62	8.25	8.86	8.49	8.59	8.61	8.16	7.89
16	8.31	8.06	8.42	8.09	8.62	8.28	8.85	8.52	7.49	6.00	8.20	7.96
17	8.35	8.02	8.41	8.13	8.57	8.11	8.82	8.37	7.06	6.56	8.25	8.00
18	8.33	8.06	8.45	8.09	8.57	8.28	8.87	8.39	7.55	7.08	8.28	8.02
19	8.28	7.99	8.45	8.19	8.53	8.20	8.89	8.57	7.79	7.43	8.30	8.02
20	8.28	7.99	8.44	8.14	8.57	8.23	8.92	8.52	8.02	7.72	8.35	7.95
21	8.28	7.98	8.48	8.17	8.61	8.36	8.92	8.59	8.09	7.81	8.17	7.87
22	8.27	7.88	8.56	8.36	8.72	8.48	8.97	8.69	8.20	7.86	8.20	7.86
23	8.33	8.14	8.51	8.30	8.66	8.33	8.81	8.51	8.28	8.00	8.46	7.85
24	8.33	8.10	8.49	8.20	---	---	8.88	8.06	8.32	8.03	8.32	7.96
25	8.30	8.09	8.42	8.08	---	---	8.47	8.06	8.33	8.02	8.00	7.58
26	8.14	7.71	8.19	7.99	8.56	8.22	8.61	8.21	8.43	8.04	8.18	7.73
27	8.13	7.71	8.31	8.01	8.60	8.22	8.75	8.22	8.36	8.03	8.18	7.74
28	8.26	7.98	8.51	8.06	8.73	8.28	8.88	8.39	8.27	7.84	8.28	7.89
29	8.15	7.89	8.50	8.25	8.69	8.33	8.87	8.45	8.42	7.89	8.37	8.05
30	8.09	7.79	8.33	8.09	8.66	8.26	8.92	8.41	8.45	8.09	8.41	8.16
31	---	---	8.35	7.93	---	---	8.89	8.41	---	---	---	---
MONTH	8.39	7.71	8.56	7.68	8.73	7.98	8.97	8.06	9.08	6.00	8.63	5.97



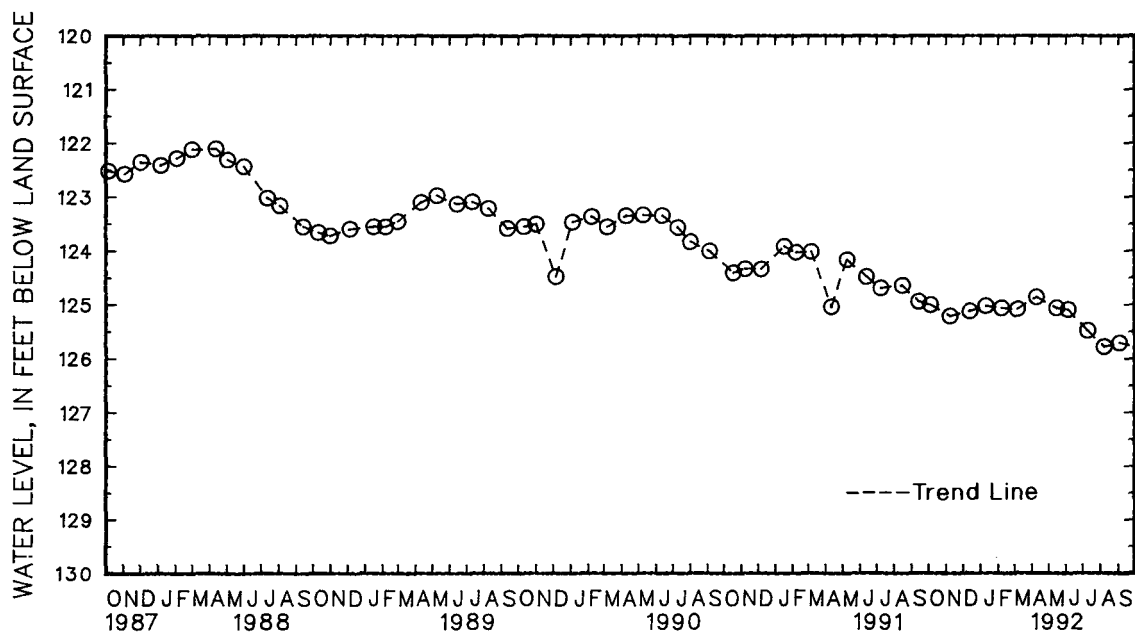
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CALVERT COUNTY--Continued

WELL NUMBER.--CA Fd 51. SITE ID.--382408076260401. PERMIT NUMBER.--CA-73-1449.
LOCATION.--Lat 38°24'08", long 76°26'04", Hydrologic Unit 02060004, at Calvert Cliffs State Park.
Owner: U.S. Geological Survey.
AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 352 ft; casing diameter 6 in., to 140 ft; casing diameter 2 in. from 140 to 342 ft; screen diameter 2 in. from 342 to 352 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of protective casing, 3.63 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--February 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 116.36 ft below land surface, Jan. 8, 1980; lowest measured, 125.79 ft below land surface, Aug. 7, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	125.01	DEC 13	125.13	FEB 7	125.07	APR 9	124.87	JUN 5	125.10	AUG 7	125.79
NOV 8	125.22	JAN 10	125.03	MAR 6	125.09	MAY 15	125.07	JUL 10	125.49	SEP 3	125.72
WATER YEAR 1992		HIGHEST 124.87		APR 9, 1992		LOWEST 125.79		AUG 7, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Fd 54. SITE ID.--382407076260301. PERMIT NUMBER.--CA-73-2892.

LOCATION.--Lat 38°24'07", long 76°26'03", Hydrologic Unit 02060006, at Calvert Cliffs State Park.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 698 ft; casing diameter 4 in., to 234 ft; casing diameter 2 in. from 234 to 641 ft, and 651 to 698 ft; screen diameter 2 in. from 641 to 651 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.92 ft above land surface.

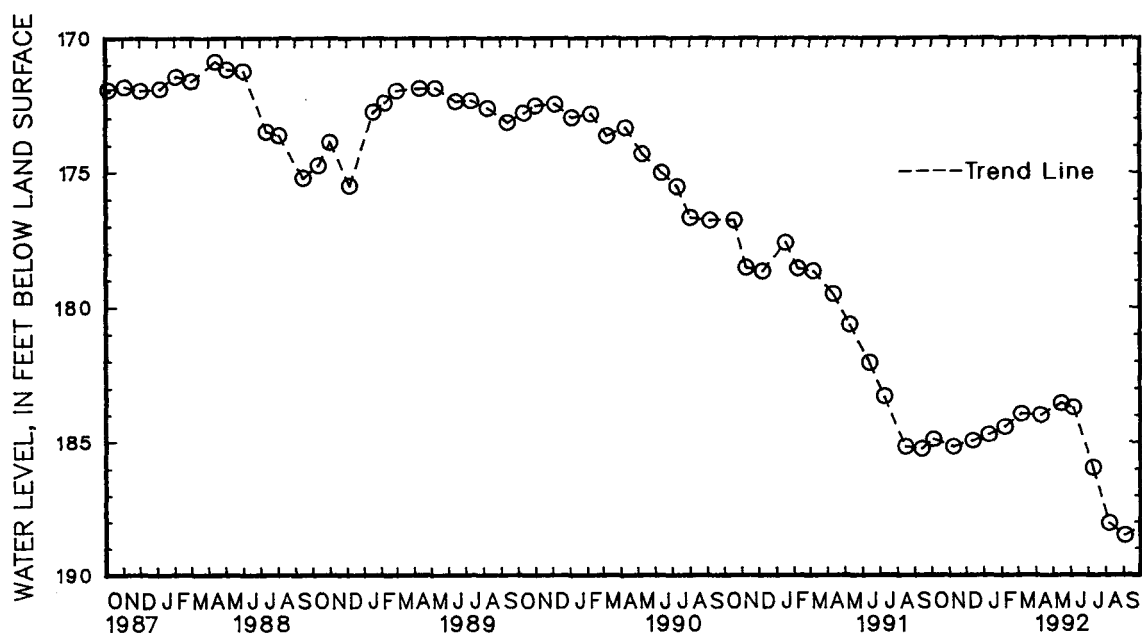
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.69 ft below land surface, April 21, 1980; lowest measured, 188.53 ft below land surface, Sept. 3, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

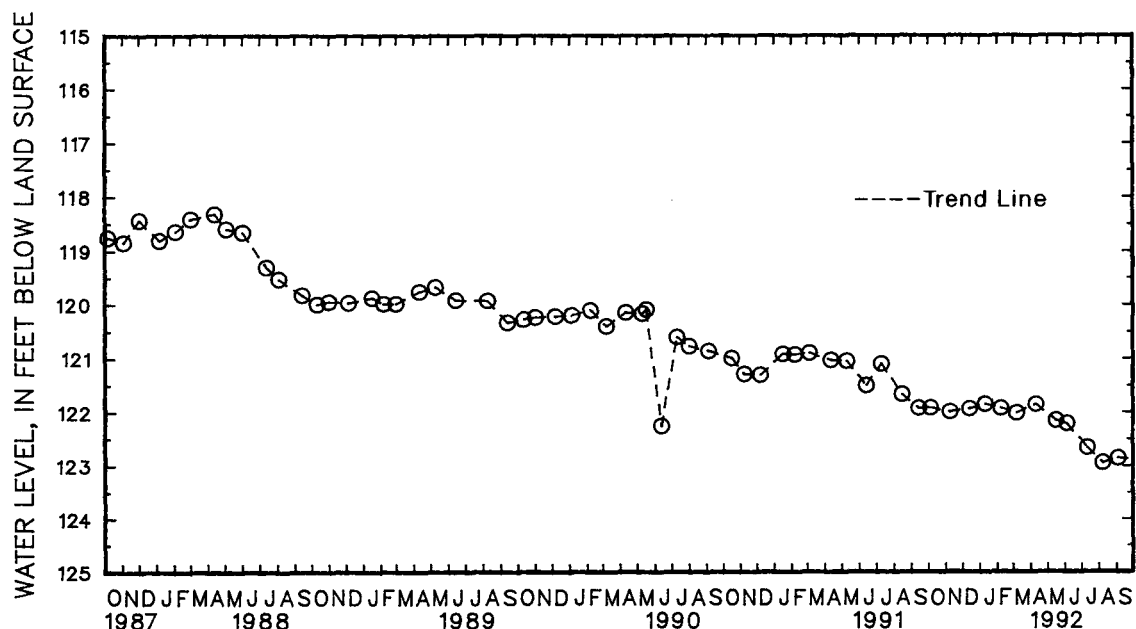
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	184.96	DEC 13	185.01	FEB 7	184.48	APR 9	184.03	JUN 5	183.75	AUG 7	188.08
NOV 8	185.23	JAN 10	184.77	MAR 6	183.98	MAY 15	183.58	JUL 10	186.03	SEP 3	188.53
WATER YEAR 1992		HIGHEST	183.58	MAY 15, 1992		LOWEST	188.53	SEP 3, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--CA Fe 22. SITE ID.--382318076242401. PERMIT NUMBER.--CA-73-1386.
LOCATION.--Lat 38°23'18", long 76°24'24", Hydrologic Unit 02060004, at Columbia LNG Plant, Cove Point.
Owner: U.S. Geological Survey.
AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 350 ft; casing diameter 6 in., to 10 ft;
casing diameter 2 in. from 10 to 340 ft; screen diameter 2 in. from 340 to 350 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 2.82 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--June 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.50 ft below land surface, Oct. 5, 1976;
lowest measured, 122.98 ft below land surface, Aug. 7, 1992.

DATE			WATER LEVEL			DATE			WATER LEVEL			DATE			WATER LEVEL			DATE			WATER LEVEL		
OCT	4	121.95	DEC	13	121.97	FEB	7	121.96	APR	9	121.88	JUN	4	122.25	AUG	7	122.98	SEP	3	122.89			
NOV	8	122.03	JAN	10	121.88	MAR	6	122.05	MAY	15	122.19	JUL	10	122.70									
WATER YEAR 1992			HIGHEST 121.88			JAN 10, 1992			APR 9, 1992			LOWEST 122.98			AUG 7, 1992								



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CALVERT COUNTY--Continued

WELL NUMBER.--CA Gd 6. SITE ID.--381952076270901.

LOCATION.--Lat 38°19'52", long 76°27'09", Hydrologic Unit 02060006, at the Lord Calvert Yacht Club, 0.5 mi northeast of Solomons.

Owner: Calvert Marina.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 493 ft; casing diameter 8 in., to 272 ft and casing diameter 6 in., to 472 ft; screened from 469 to 493 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder Oct. 19, 1949 to Feb. 25, 1960.

DATUM.--Elevation of land surface is 12.58 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of sanitary seal, 1.59 ft above land surface.

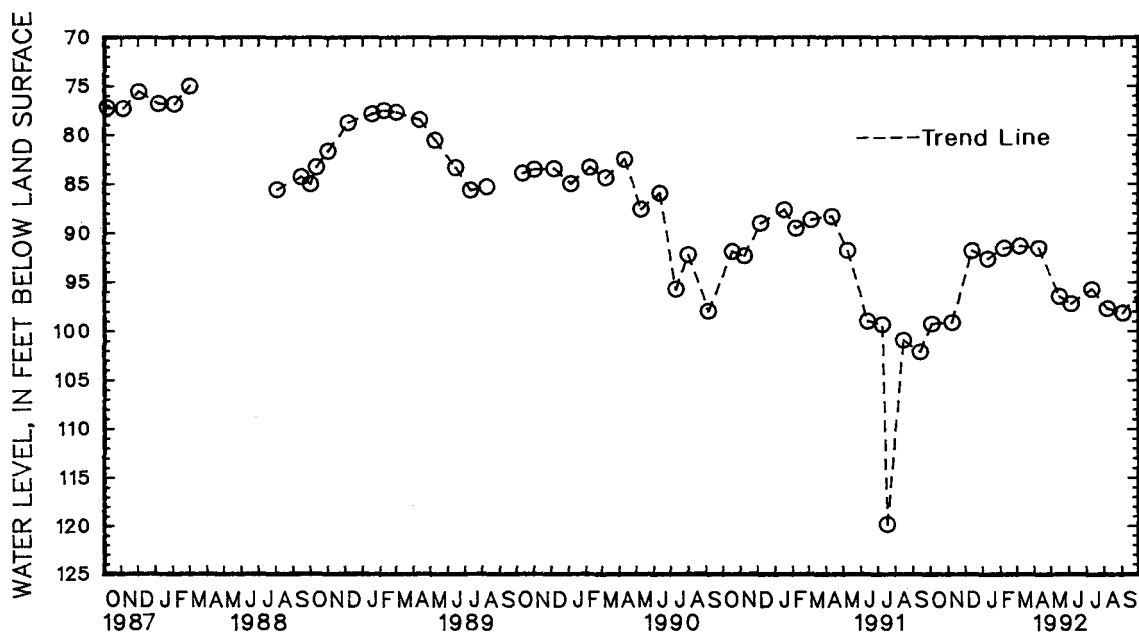
REMARKS.--Maryland Water-Level Network observation well. Water level reported at land surface 1942; water-level measured 58.9 ft below land surface, Jan. 13, 1944. Well not measured from April through July 1988 during building construction at well site. Water levels are affected by pumping. On July 18, 1991 the water-level measured, 119.93 ft below land surface during an extended pumping period.

PERIOD OF RECORD.--October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.15 ft below land surface, May 18, 1950; lowest measured, 119.93 ft below land surface, July 18, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
OCT 4	99.27	DEC 13	91.81	FEB 7	91.54	APR 9	91.55	JUN 4	97.34	AUG 7	97.84
NOV 8	99.14	JAN 10	92.65	MAR 6	91.33	MAY 15	96.57	JUL 10	95.82	SEP 3	98.31
WATER YEAR 1992		HIGHEST	91.33	MAR 6, 1992		LOWEST	99.27	OCT 4, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CAROLINE COUNTY

WELL NUMBER.--CO Bc 1. SITE ID.--390333075504501.

LOCATION.--Lat 39°03'33", long 75°50'45", Hydrologic Unit 02060005, at Baltimore Corner.

Owner: Maryland State Highway Administration.

AQUIFER.--Pleistocene Series of Pleistocene age. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 20.5 ft; well point diameter 1.25 in., to 20.5 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.10 ft above land surface.

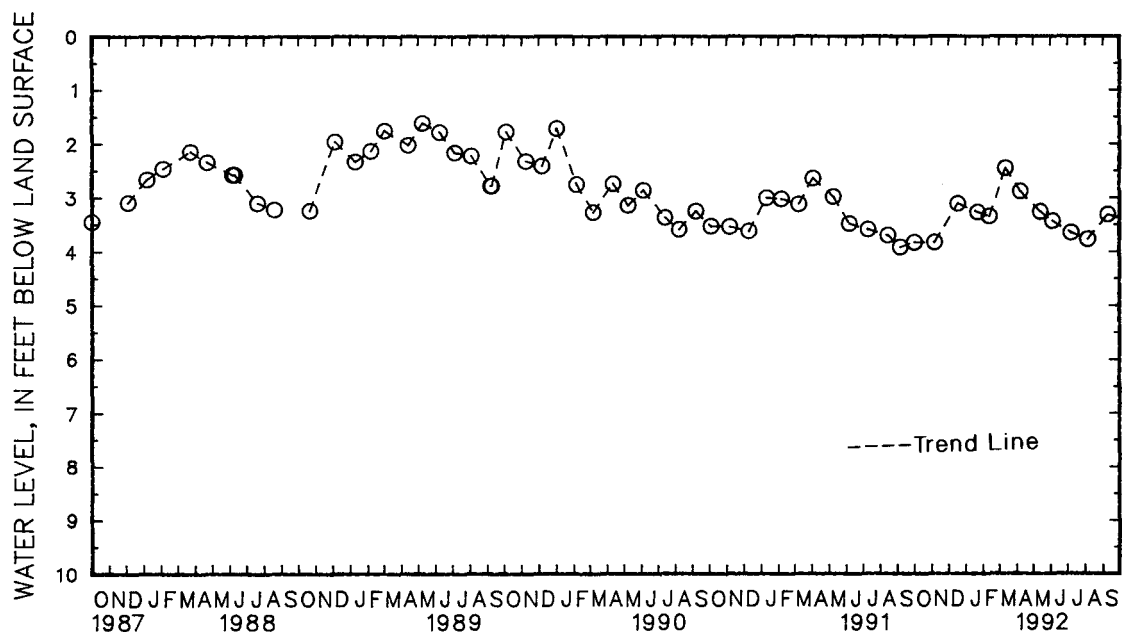
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft above land surface, Nov. 27, 1951; lowest measured, 4.37 ft below land surface, Oct. 11, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 1	3.84	DEC 17	3.12	FEB 12	3.35	APR 8	2.89	JUN 4	3.44	AUG 5	3.78	
NOV 6	3.84	JAN 22	3.28	MAR 12	2.46	MAY 13	3.27	JUL 7	3.66			
WATER YEAR 1992		HIGHEST	2.46	MAR 12, 1992		LOWEST	3.84	OCT 1, 1991		NOV 6, 1991		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CAROLINE COUNTY--Continued

WELL NUMBER.--CO Bd 53. SITE ID.--390227075470201. PERMIT NUMBER.--CO-73-0541.

LOCATION.--Lat 39°02'27", long 75°47'02", Hydrologic Unit 02060005, near MD Rt. 311, Goldsboro.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 312 ft; casing diameter 6 in., to 70 ft; casing diameter 2 in. from 70 to 300 ft; screen diameter 2 in. from 300 to 312 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 2.20 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well.

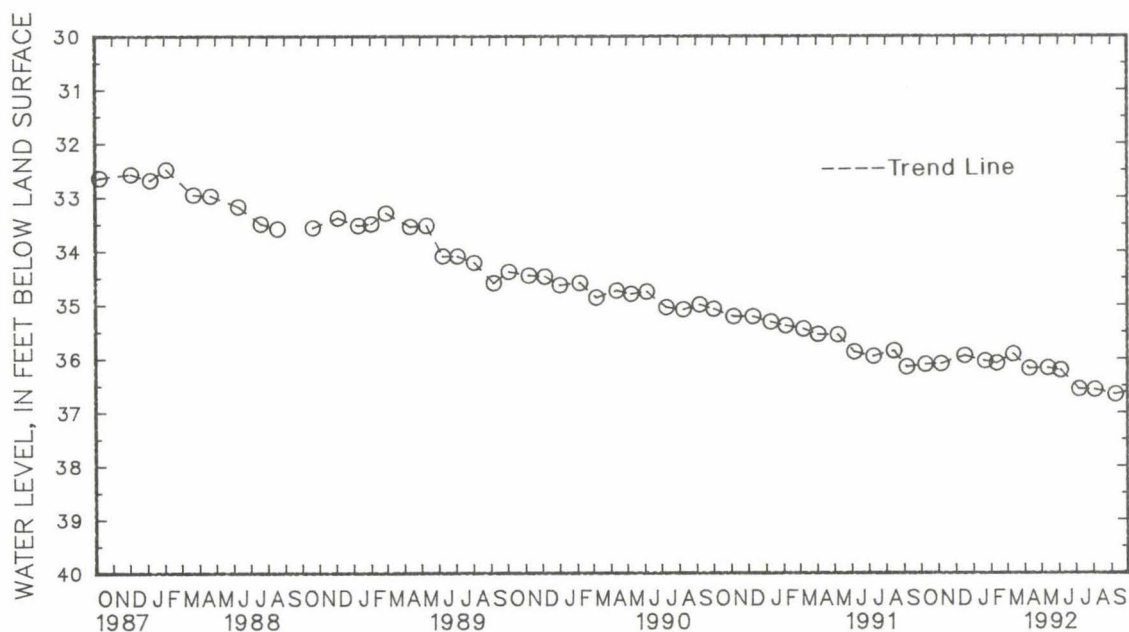
PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.64 ft below land surface, Dec. 10, 1976;

lowest measured, 36.58 ft below land surface, Aug. 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 9	36.11	DEC 17	35.95	FEB 12	36.09	APR 10	36.19	JUN 4	36.22	AUG 4	36.58				
NOV 6	36.10	JAN 22	36.05	MAR 12	35.92	MAY 13	36.18	JUL 7	36.57						
WATER YEAR 1992		HIGHEST	35.92	MAR 12, 1992		LOWEST	36.58	AUG 4, 1992							



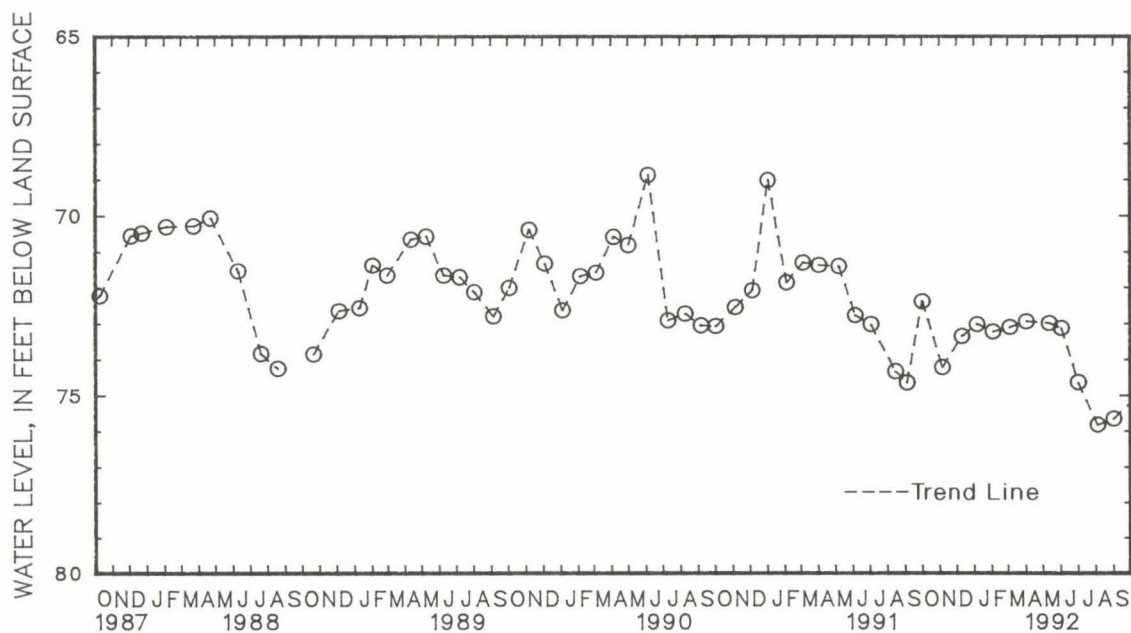
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CAROLINE COUNTY--Continued

WELL NUMBER.--CO Dd 47. SITE ID.--385217075490601. PERMIT NUMBER.--CO-73-0486.
LOCATION.--Lat 38°52'17", long 75°49'06", Hydrologic Unit 02060005, at Denton Sewage Lagoon.
Owner: U.S. Geological Survey.
AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 380 ft; casing diameter 4 in., to 86 ft; casing diameter 2 in. from 86 to 365 ft; screen diameter 2 in. from 365 to 375 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 46 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 2.40 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.78 ft below land surface, May 27, 1976;
lowest measured, 75.88 Ft below land surface, Aug. 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	72.40	DEC 10	73.39	FEB 3	73.26	APR 2	72.97	JUN 2	73.16	AUG 4	75.88
NOV 5	74.27	JAN 6	73.05	MAR 4	73.13	MAY 12	73.02	JUL 1	74.69	SEP 1	75.70
WATER YEAR 1992		HIGHEST	72.40	OCT 1, 1991	LOWEST	75.88	AUG 4, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CARROLL COUNTY

WELL NUMBER.--CL Bf 1. SITE ID.--393638076510001.

LOCATION.--Lat 39°36'38", long 76°51'00", Hydrologic Unit 02060003, on Hillcrest St., Hampstead.

Owner: Town of Hampstead.

AQUIFER.-- Prettyboy Schist of Paleozoic age. Aquifer code: 300PRTB.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 407 ft; casing diameter 8 in., to approximately 65 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder from July 1, 1952, to Nov. 7, 1962.

DATUM.--Elevation of land surface is 933 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of 2 in. casing extension, 2.35 ft above land surface.

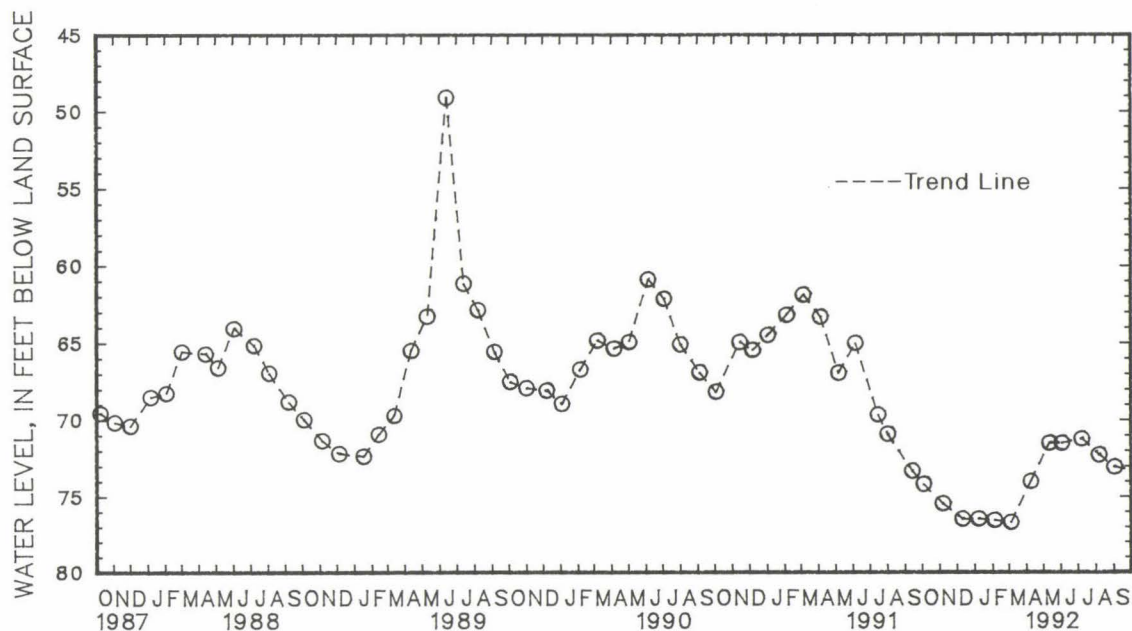
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--September and December 1946, April and September 1947, February 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.10 ft below land surface, June 13, 1989; lowest measured, 76.76 ft below land surface, March 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL			
OCT	3	74.30	DEC	10	76.55	FEB	4	76.63	APR	8	74.06	JUN	2	71.56	AUG	6	72.34
NOV	6	75.56	JAN	7	76.54	MAR	4	76.76	MAY	11	71.55	JUL	7	71.28	SEP	2	73.15
WATER YEAR 1992			HIGHEST			71.28			JUL 7, 1992			LOWEST			76.76 MAR 4, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CARROLL COUNTY--Continued

WELL NUMBER.--CL Bf 184. SITE ID.--393754076512401. PERMIT NUMBER.--CL-73-6466.

LOCATION.--Lat 39°37'54", long 76°51'24", Hydrologic Unit 02060003, near Utz Rd., Greenmount.

Owner: U.S. Geological Survey.

AQUIFER.--Prettyboy Schist of Paleozoic age. Aquifer code: 300PRTB.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 340 ft; casing diameter 6 in., to 50 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.81 ft above land surface.

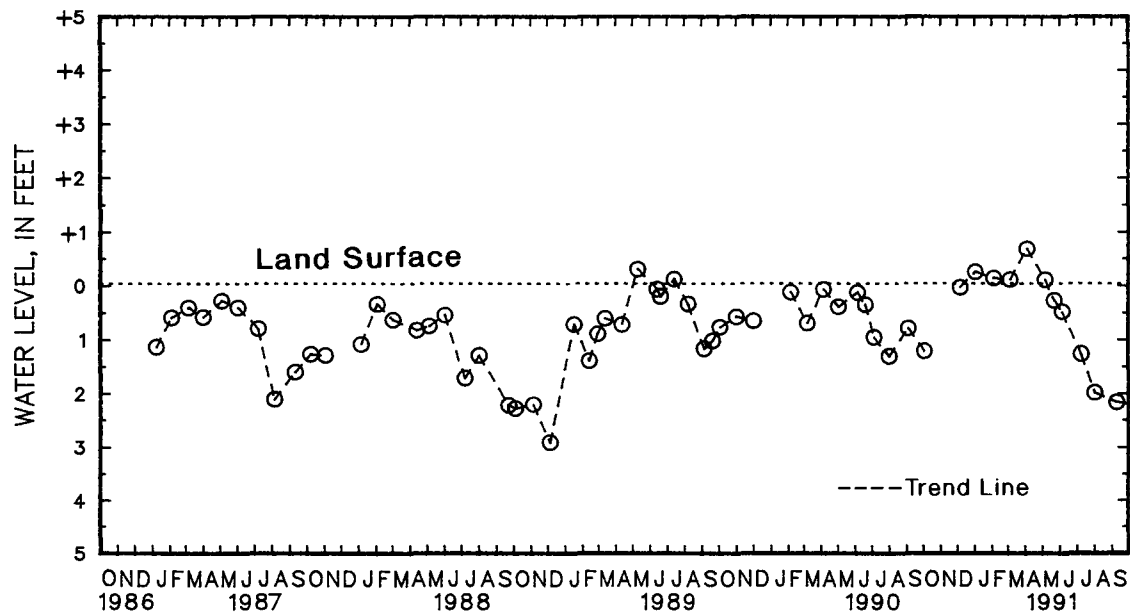
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.68 ft above land surface, April 4, 1991; lowest measured, 3.24 ft below land surface, Oct. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	2.24	JAN 7	1.50	APR 8	1.37	JUN 2	1.17	SEP 2	2.92
NOV 6	2.45	FEB 4	1.94	MAY 11	1.27	JUL 7	1.98		
DEC 10	1.33	MAR 4	1.64	13	1.32	AUG 6	2.37		
WATER YEAR 1992		HIGHEST	1.17	JUN 2, 1992	LOWEST	2.92	SEP 2, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1986 THROUGH SEPTEMBER 30, 1991

GROUND-WATER LEVELS

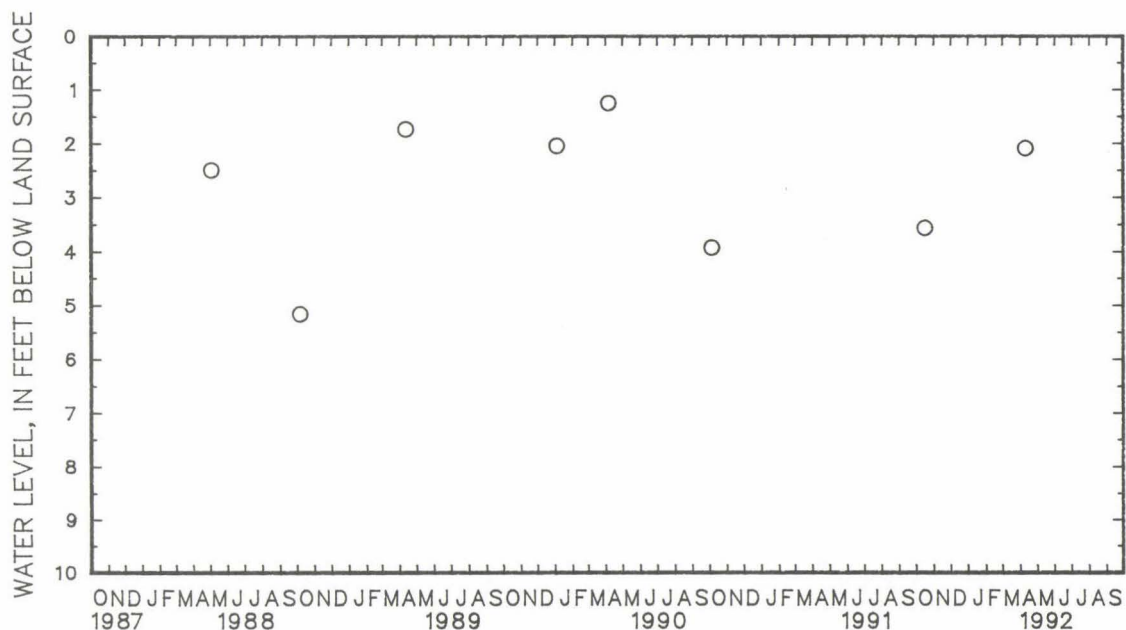
MARYLAND--Continued

CARROLL COUNTY--Continued

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WELL NUMBER.--CL Ec 75. SITE ID.--392259077052401. PERMIT NUMBER.--CL-73-2722.
LOCATION.--Lat 39°22'59", long 77°05'24", Hydrologic Unit 02060003,
Owner: U.S. Geological Survey.
AQUIFER.--Prettyboy Schist of Paleozoic age. Aquifer code: 300PRTB.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 248 ft; casing diameter 6 in., to 21 ft;
open hole.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Equipped with graphic
recorder December 26, 1974 to July 19, 1980.
DATUM.--Elevation of land surface is 550 ft above National Geodetic Vertical Datum of 1929.
Measuring Point:Top of casing, 2.31 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--December 1974 to July 1980, August 1985 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.25 ft below land surface, April 6, 1990;
lowest measured, 5.20 ft below land surface, Oct. 6, 1988.
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WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	3.59	APR 10	2.10
WATER YEAR 1992		HIGHEST	2.10
		APR 10, 1992	LOWEST
		3.59	OCT 16, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

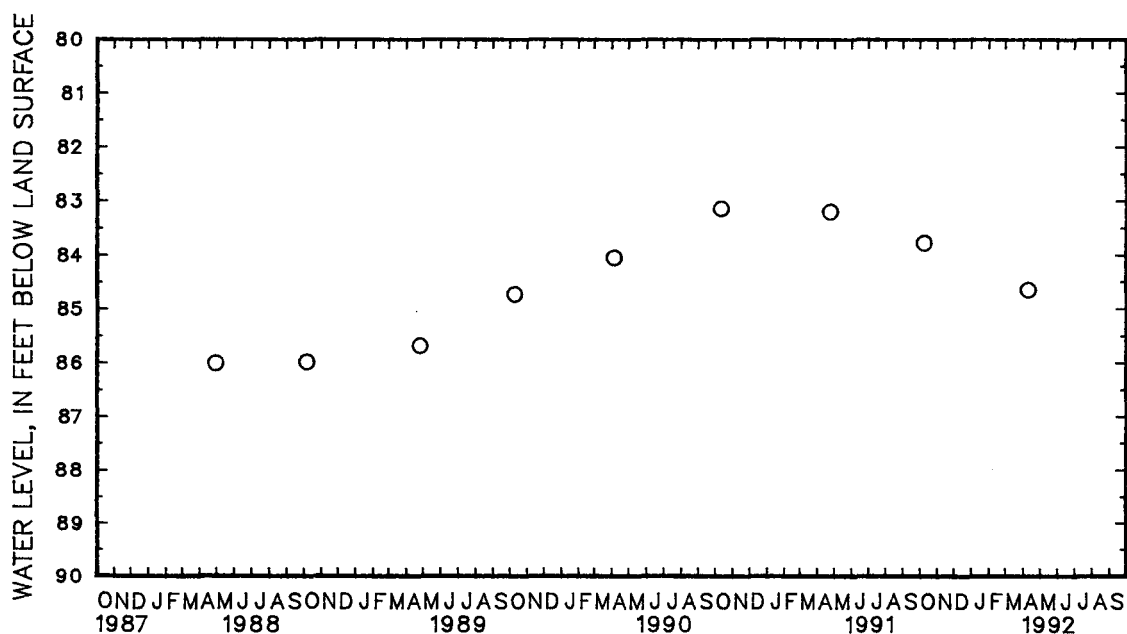
MARYLAND--Continued

CECIL COUNTY

WELL NUMBER.--CE Be 73. SITE ID.--393637075535001. PERMIT NUMBER.--CE-81-0464.
 LOCATION.--Lat 39°36'37", long 75°53'50", Hydrologic Unit 02060002, 2 mi west of Elkton nr US Rt. 40.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 152 ft; casing diameter 2 in., to 147 ft;
 screen diameter 2 in. from 147 to 152 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 162 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 1.95 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since April 1988.
 PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.06 ft below land surface, July 31, 1984;
 lowest measured, 86.06 ft below land surface, April 29, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR, OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	83.79	APR 10	84.68
WATER YEAR 1992 HIGHEST 83.79 OCT 8, 1991 LOWEST 84.68 APR 10, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

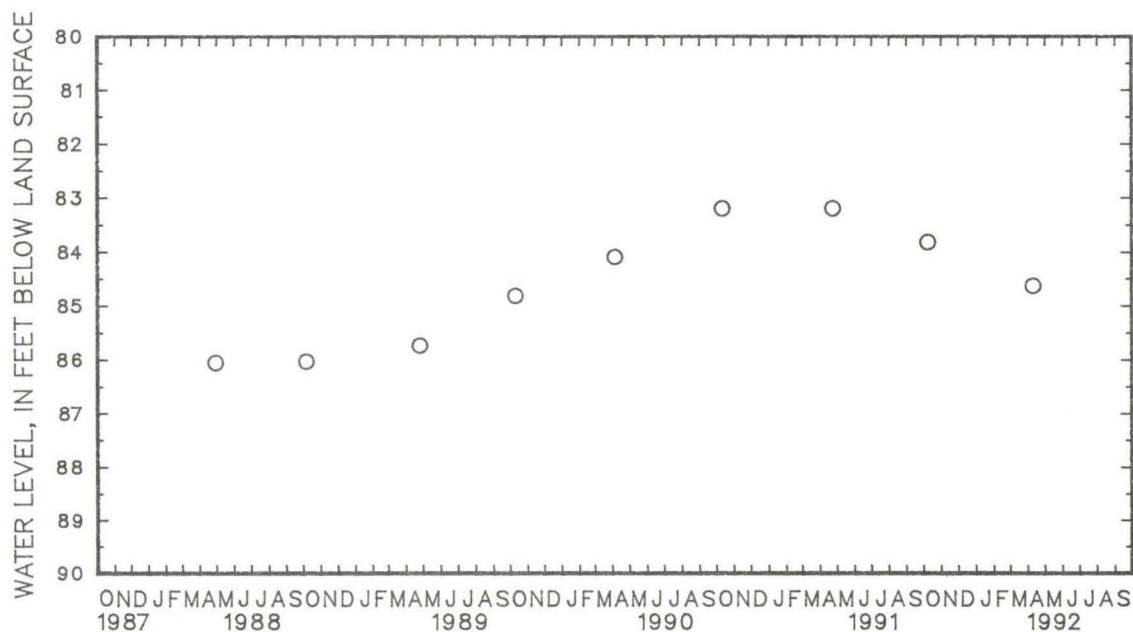
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Be 74. SITE ID.--393637075535002. PERMIT NUMBER.--CE-81-0464.
 LOCATION.--Lat 39°36'37", long 75°53'50", Hydrologic Unit 02060002, 2 mi west of Elkton nr US Rt. 40.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 2 in., to 110 ft;
 screen diameter 2 in. from 110 to 115 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 2.00 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since April 1988.
 PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 82.12 ft below land surface, July 31, 1984;
 lowest measured, 86.10 ft below land surface, April 29, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	83.83	APR 10	84.66
WATER YEAR 1992 HIGHEST 83.83 OCT 8, 1991 LOWEST 84.66 APR 10, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

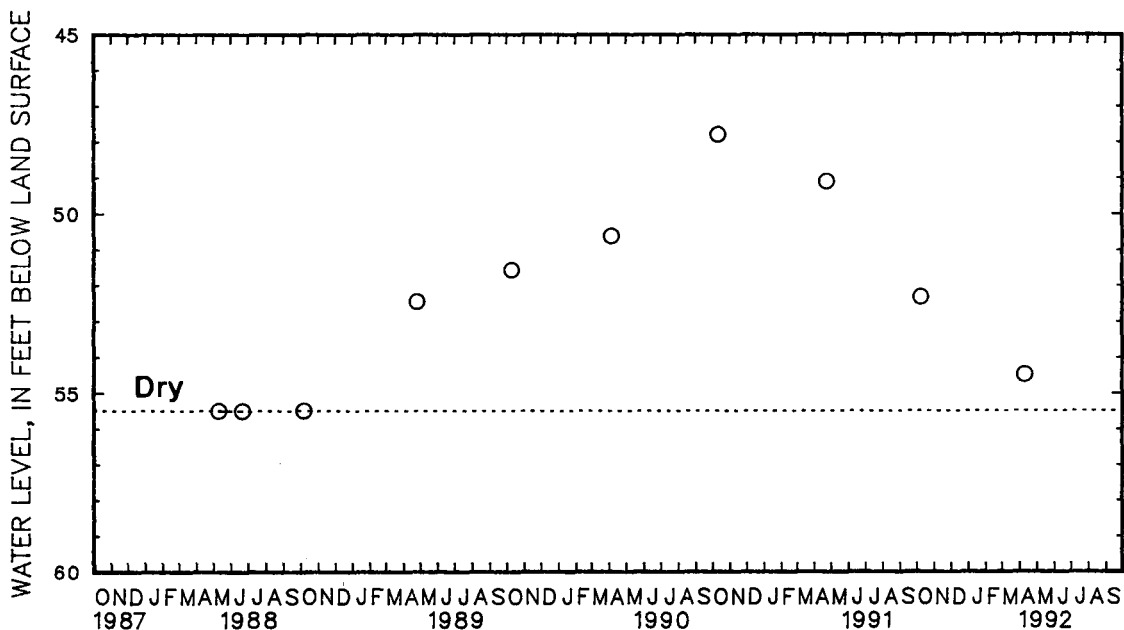
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Bf 81. SITE ID.--393615075475901. PERMIT NUMBER.--CE-81-0537.
 LOCATION.--Lat 39°36'15", long 75°47'59", Hydrologic Unit 02060002, at Thompson Estates Elementary School, Elkton.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 55.5 ft; casing diameter 4 in., to 50 ft; screen diameter 2 in. from 50 to 55 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 2.0 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly starting October 1988.
 PERIOD OF RECORD.--March 1983 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.26 ft below land surface, July 9, 1983; lowest measured, dry, Nov. 6, 1985, May 12, 1986, May 10, 1988, June 21, 1988 and Oct. 6, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	52.33	APR 10	54.49
WATER YEAR 1992 HIGHEST 52.33 OCT 8, 1991 LOWEST 54.49 APR 10, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Bf 82. SITE ID.--393537075492001. PERMIT NUMBER.--CE-81-0470.

LOCATION.--Lat 39°35'37", long 75°49'20", Hydrologic Unit 02060002, at Holly Hall Elementary School, Elkton.

Owner: U.S. Geological Survey.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 125 ft; casing diameter 4 in., to 120 ft; screen diameter 2 in. from 120 to 125 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder July 1, 1983 to Nov. 6, 1984.

DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.6 ft above land surface.

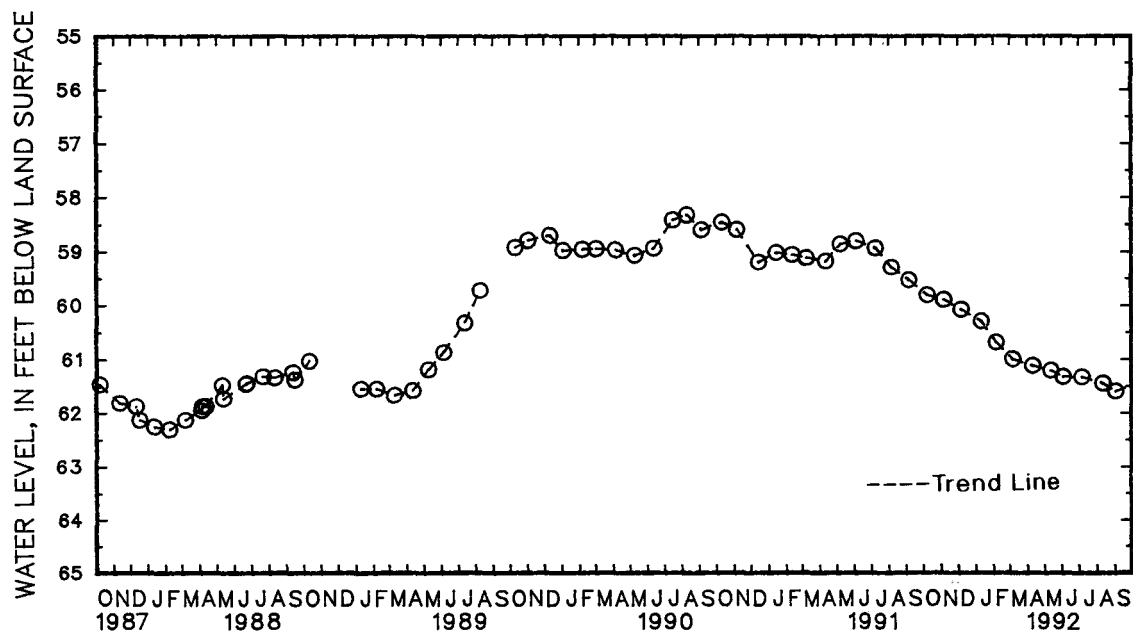
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--February 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.13 ft below land surface, July 1, 1983; lowest measured, 62.34 ft below land surface, Feb. 8, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	59.82	DEC 6	60.10	FEB 6	60.72	APR 10	61.15	JUN 3	61.36	AUG 11	61.48
NOV 6	59.91	JAN 10	60.32	MAR 6	61.03	MAY 12	61.24	JUL 6	61.36	SEP 2	61.63
WATER YEAR 1992		HIGHEST	59.82	OCT 8, 1991	LOWEST	61.63	SEP 2, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

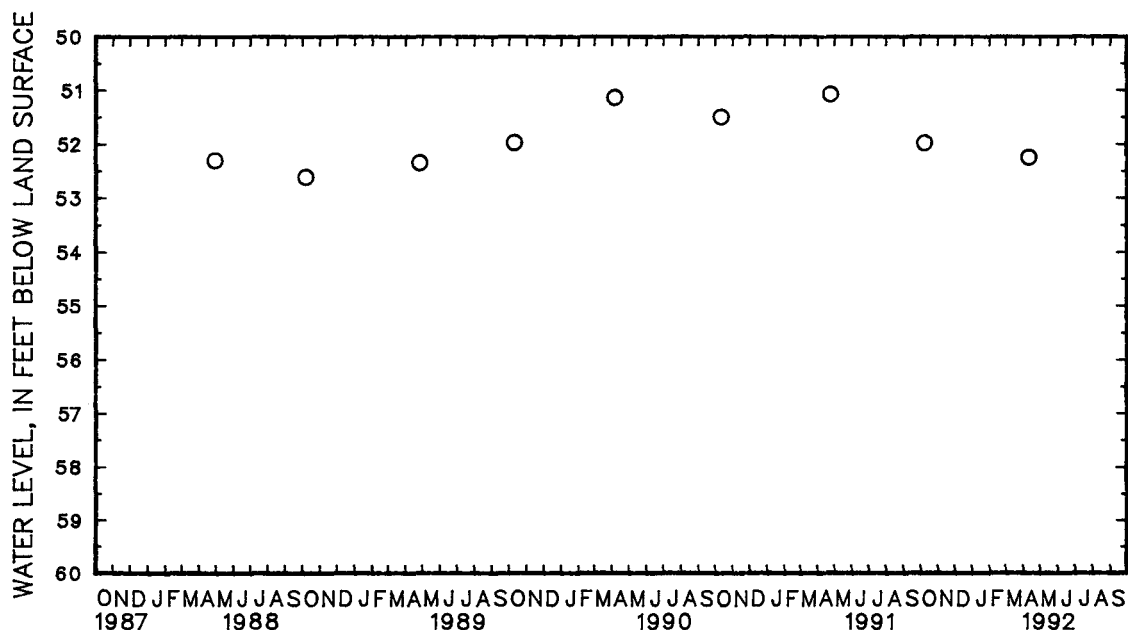
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 51. SITE ID.--393432075593601. PERMIT NUMBER.--CE-81-0440.
 LOCATION.--Lat 39°34'32", long 75°59'36", Hydrologic Unit 02060002, nr intersection of
 MD Rts. 7 and 267, 1 mi west of Charlestown.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 125 ft; casing diameter 4 in., to 120 ft;
 screen diameter 2 in. from 120 to 125 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 3.12 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since April 1988.
 PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.80 ft below land surface, April 6, 1984;
 lowest measured, 53.17 ft below land surface, Dec. 8, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	52.00	APR 10	52.27
WATER YEAR 1992 HIGHEST 52.00 OCT 8, 1991 LOWEST 52.27 APR 10, 1992			



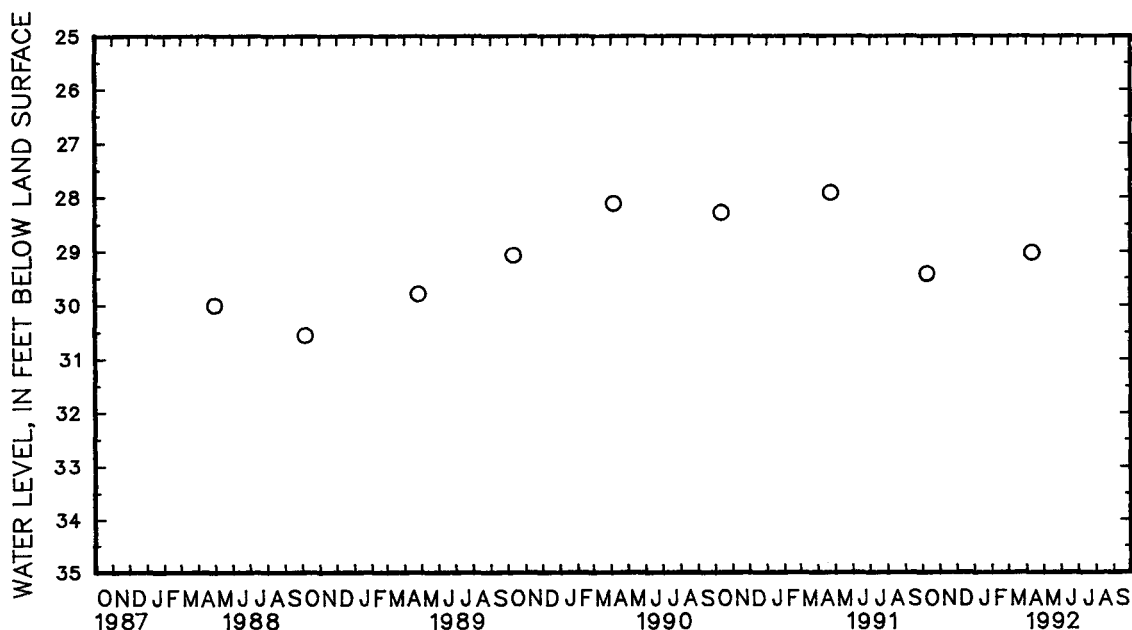
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 52. SITE ID.--393432075593602. PERMIT NUMBER.--CE-81-0440.
LOCATION.--Lat 39°34'32", long 75°59'36", Hydrologic Unit 02060002, nr intersection of
MD Rts. 7 and 267, 1 mi west of Charlestown.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 48 ft; casing diameter 4 in., to 43 ft;
screen diameter 2 in. from 43 to 48 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 70 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 3.18 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly starting April 1988.
PERIOD OF RECORD.--November 1982 to November 1984, April 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.75 ft below land surface, July 5, 1983;
lowest measured, 30.60 ft below land surface, Oct. 6, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	29.45	APR 10	29.04
WATER YEAR 1992	HIGHEST	29.04	APR 10, 1992
	LOWEST	29.45	OCT 8, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

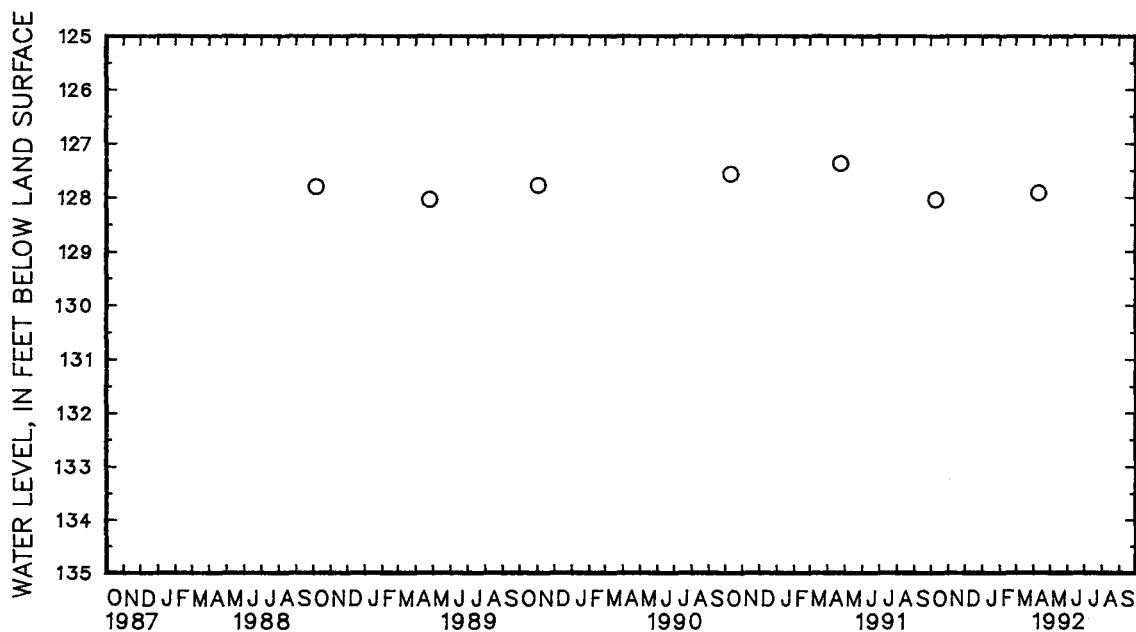
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Cd 53. SITE ID.--393216075564201. PERMIT NUMBER.--CE-81-0463.
 LOCATION.--Lat 39°32'16", long 75°56'42", Hydrologic Unit 02060002, Elk Neck State Forest, 0.5 mi north of Black Hill Lookout Tower.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 350 ft; casing diameter 4 in., to 345 ft; screen diameter 2 in. from 345 to 350 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from July 22, 1983 to Oct. 24, 1984.
 DATUM.--Elevation of land surface is 140 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 2.00 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since October 1988.
 PERIOD OF RECORD.--March 1983 to October 1984, October 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 126.65 ft below land surface, April 6, 1984; lowest measured, 128.07 ft below land surface, April 25, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	128.07	APR 10	127.94
WATER YEAR 1992	HIGHEST 127.94	APR 10, 1992	LOWEST 128.07
		OCT 8, 1991	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE C_e 54. SITE ID.--393433075544901. PERMIT NUMBER.--CE-81-0461.

LOCATION.--Lat 39°34'33", long 75°54'49", Hydrologic Unit 02060002, Elk Neck State Forest near Irishtown Rd.

Owner: U.S. Geological Survey.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 245 ft.; screen diameter 2 in. from 245 to 250 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder July 21, 1983 to Nov. 6, 1984.

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

Measuring point: Top of casing, 2.00 ft above land surface.

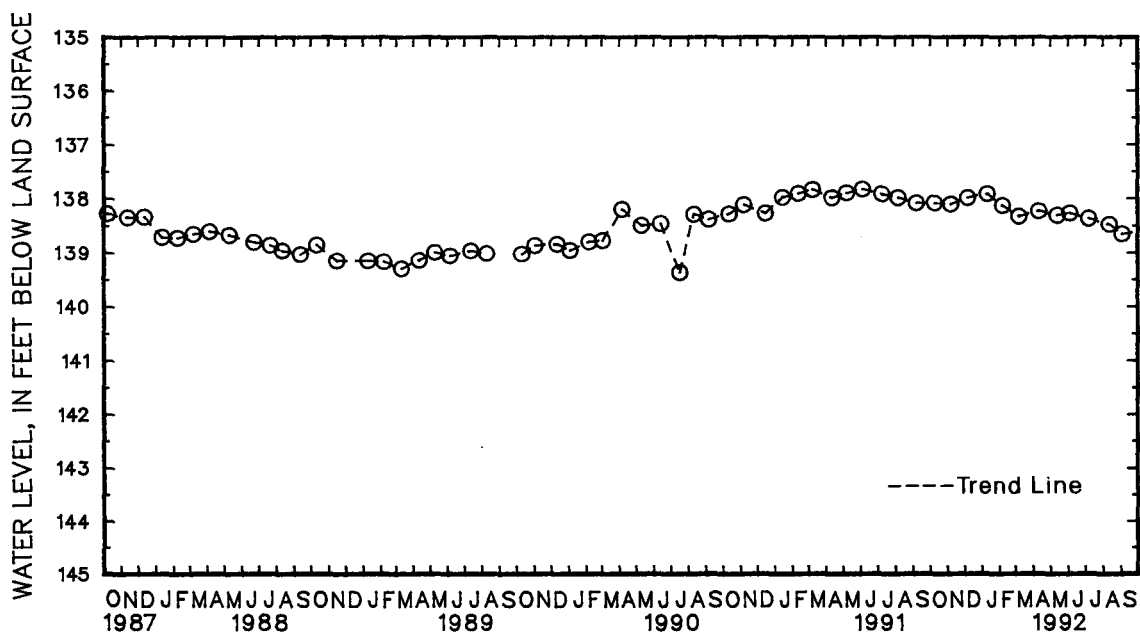
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--March 1983 to November 1984, July 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 136.10 ft below land surface, March 29, 1984, April 6, 1984 and Nov. 6, 1984; lowest measured, 139.41 ft below land surface, July 16, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	138.10	DEC 6	138.00	FEB 6	138.15	APR 10	138.25	JUN 3	138.29	AUG 11	138.50
NOV 6	138.12	JAN 10	137.92	MAR 6	138.35	MAY 12	138.33	JUL 6	138.39	SEP 2	138.68
WATER YEAR 1992		HIGHEST	137.92	JAN 10, 1992		LOWEST	138.68	SEP 2, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

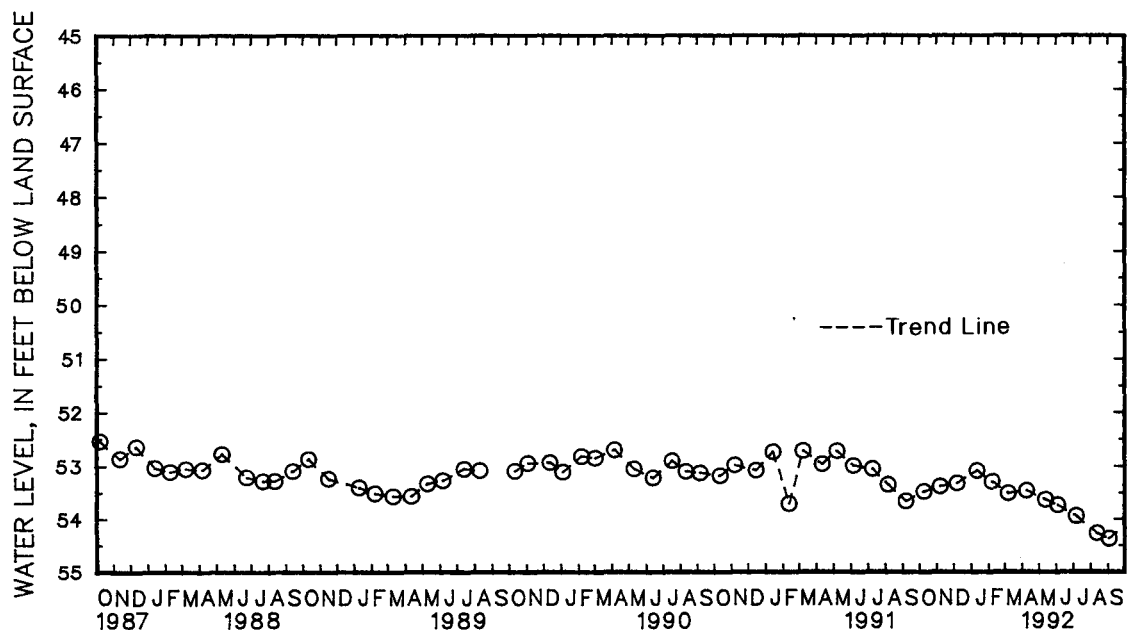
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 55. SITE ID.--393241075500201. PERMIT NUMBER.--CE-81-0465.
 LOCATION.--Lat 39°32'41", long 75°50'02", Hydrologic Unit 02060002, Canal National Wildlife Refuge near Elk Forest Rd.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 375 ft; casing diameter 4 in., to 370 ft; screen diameter 2 in. from 370 to 375 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from July 21, 1983 to Nov. 6, 1984.
 DATUM.--Elevation of land surface is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing 2.40 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--March 1983 to November 1984, July 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.56 ft below land surface, April 17, 1984; lowest measured, 54.38 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	53.51	DEC 6	53.34	FEB 6	53.31	APR 8	53.48	JUN 3	53.75	AUG 11	54.28
NOV 6	53.40	JAN 10	53.10	MAR 6	53.53	MAY 12	53.65	JUL 6	53.96	SEP 2	54.38
WATER YEAR 1992		HIGHEST	53.10	JAN 10, 1992		LOWEST	54.38	SEP 2, 1992			



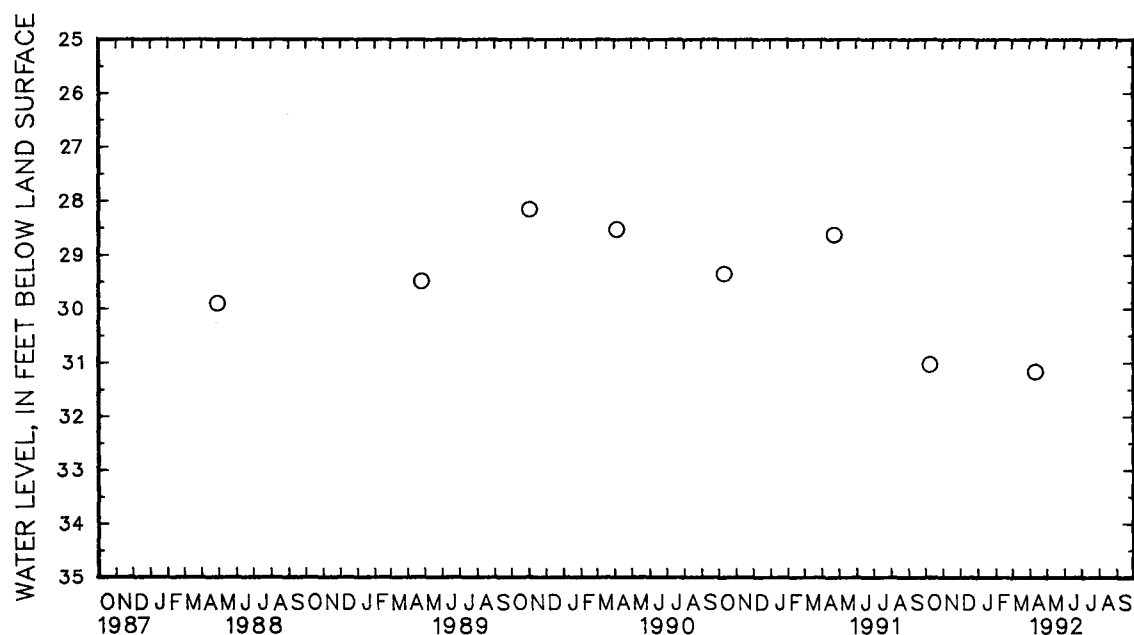
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CECIL COUNTY--Continued

WELL NUMBER.--CE Ce 56. SITE ID.--393026075523101. PERMIT NUMBER.--CE-81-0466.
LOCATION.--Lat 39°30'26", long 75°52'31", Hydrologic Unit 02060002, south of Courthouse Point Rd.
1.2 mi east of Courthouse Point.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 121 ft; casing diameter 4 in., to 116 ft;
screen diameter 2 in. from 116 to 121 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface is 38 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 2.00 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since April 1988.
PERIOD OF RECORD.--April 1983 to September 1984, April 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.16 ft below land surface, Nov. 2, 1989;
lowest measured, 34.48 ft below land surface, Nov. 19, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	31.04	APR 10	31.18
WATER YEAR 1992 HIGHEST 31.04 OCT 8, 1991 LOWEST 31.18 APR 10, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

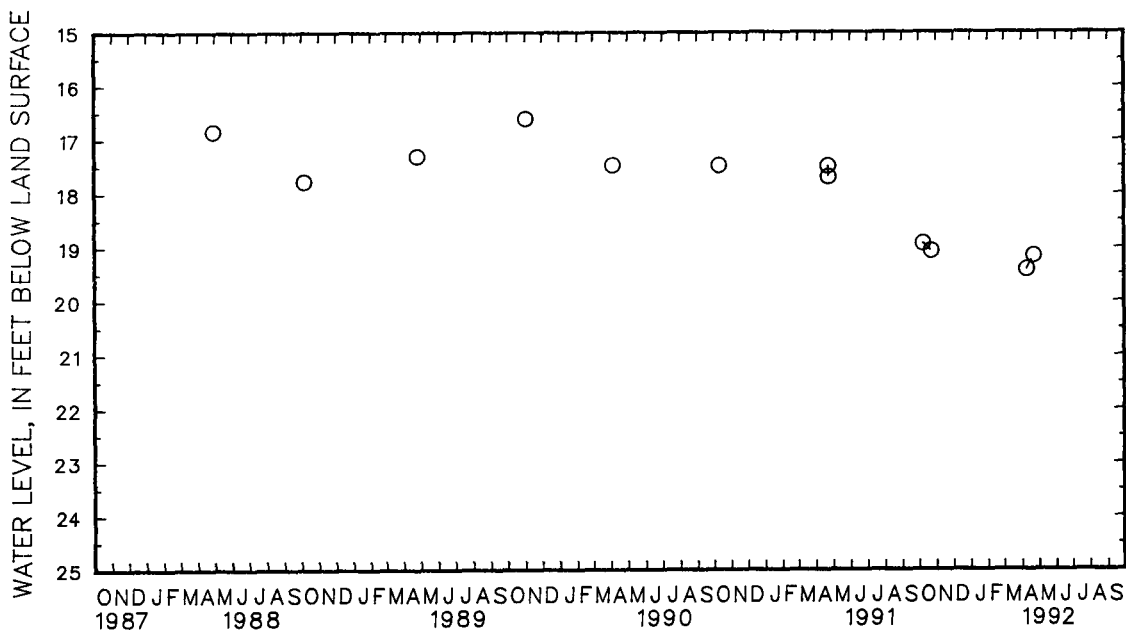
MARYLAND--Continued

CECIL COUNTY--Continued

WELL NUMBER.--CE Dd 81. SITE ID.--392536075593201. PERMIT NUMBER.--CE-81-0469.
 LOCATION.--Lat 39°25'36", long 75°59'32", Hydrologic Unit 02060002, at dredge spoil site, off Pond Neck Road, near West View Shores.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 115 ft; casing diameter 4 in., to 110 ft; screen diameter 2 in. from 110 to 115 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 1.80 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since April 1988.
 PERIOD OF RECORD.--March 1983 to October 1983, April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.25 ft below land surface, July 1, 1983; lowest measured, 19.43 ft below land surface, April 10, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

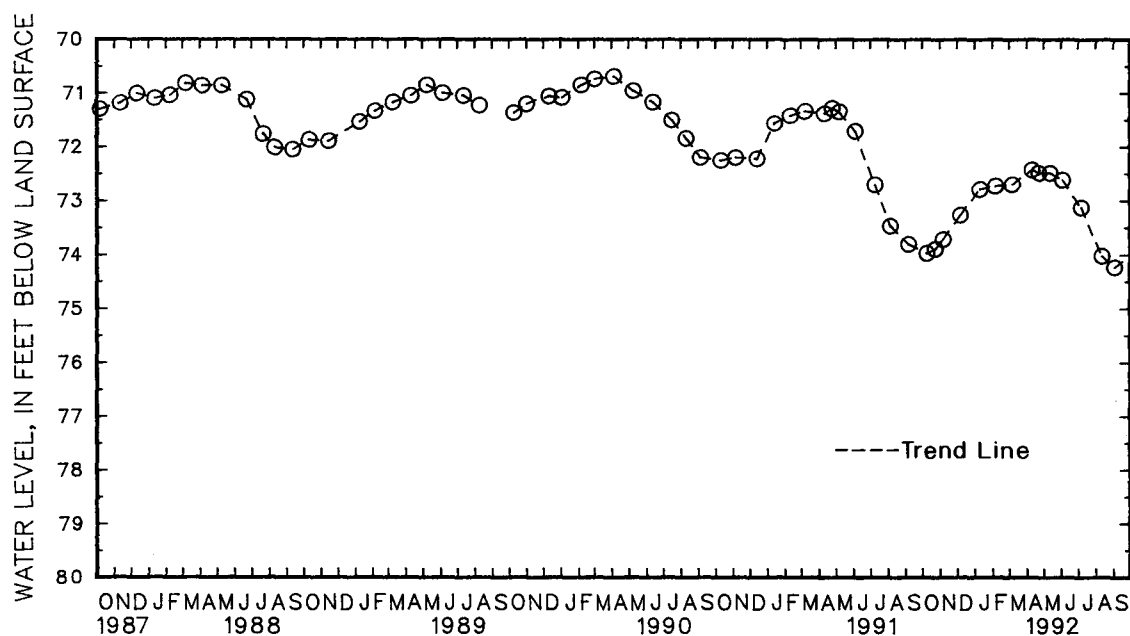
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	18.94	OCT 23	19.08	APR 10	19.43	APR 22	19.17
WATER YEAR 1992		HIGHEST	18.94	OCT 8, 1991	LOWEST	19.43	APR 10, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL			WATER LEVEL			WATER LEVEL			WATER LEVEL			WATER LEVEL		
OCT	8	73.97	DEC	6	73.27	MAR	6	72.70	MAY	12	72.49	AUG	11	74.03
	23	73.90	JAN	10	72.79	APR	10	72.43	JUN	3	72.62	SEP	2	74.25
NOV	6	73.72	FEB	6	72.73		22	72.49	JUL	6	73.13			
WATER YEAR 1992			HIGHEST	72.43	APR 10, 1992				LOWEST	74.25	SEP 2, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY

WELL NUMBER.--CH Bb 17. SITE ID.--383524077111802.

LOCATION.--Lat 38°35'24", long 77°11'18", Hydrologic Unit 02070011, at Farnum Rd.;

U.S. Naval Ordnance Station.

Owner: U.S. Navy.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PFSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 294 ft; casing diameter 16 in., to 230 ft; casing diameter 10 in. to 240 ft; screen diameter 10 in. from 240 to 294 ft.

INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval, May 29, 1988 to current year.

DATUM.--Elevation of land surface is 52 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder shelf, 3.0 ft above land surface.

REMARKS.--Indian Head Project observation well. Missing data due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.55 ft below land surface, April 29, 1992; lowest measured, 121.22 ft below land surface, Dec. 22, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	113.24	112.77	113.80	113.31	113.05	112.56	114.29	113.87	112.95	112.65
2	114.05	113.60	113.74	112.93	113.95	113.36	113.23	112.84	114.43	114.01	113.09	112.59
3	114.09	113.59	114.19	113.59	113.68	113.11	113.20	112.18	114.13	113.18	112.84	112.19
4	113.75	113.20	114.19	113.56	114.37	113.31	112.73	111.80	113.34	112.73	112.66	112.03
5	113.67	113.18	114.20	113.63	114.53	114.08	112.10	111.70	113.37	112.97	112.60	112.00
6	113.73	113.08	114.17	113.66	114.44	113.99	112.63	112.05	113.25	112.79	112.62	111.97
7	114.17	113.44	114.39	113.98	114.64	114.05	112.91	112.32	113.12	112.76	112.05	111.64
8	113.92	113.20	114.92	114.23	114.27	113.59	113.05	112.71	113.05	112.60	112.01	111.56
9	114.08	113.42	115.21	114.59	114.01	113.33	112.97	112.61	113.38	112.81	112.02	111.57
10	114.07	113.39	114.82	113.62	113.99	113.33	112.97	112.61	113.66	113.29	111.75	111.06
11	113.99	113.38	114.13	113.64	113.70	113.33	113.17	112.68	113.88	113.39	112.03	111.18
12	114.00	113.40	114.28	113.94	113.95	113.36	112.91	112.55	113.92	113.39	112.49	111.76
13	114.15	113.41	114.28	113.94	113.70	113.20	112.82	112.21	113.70	113.20	112.98	112.47
14	114.17	113.35	114.26	113.93	113.95	113.19	112.62	111.76	113.90	113.28	112.96	112.24
15	113.35	113.00	114.38	114.02	114.15	113.94	112.84	112.52	113.92	113.25	112.76	112.25
16	114.02	113.09	114.57	114.05	114.45	113.77	113.40	112.24	113.77	113.19	112.93	112.35
17	114.17	113.66	114.57	113.96	114.28	113.67	113.35	112.67	113.90	113.19	112.79	112.20
18	113.98	113.58	113.98	113.17	114.55	113.67	113.22	112.77	113.61	113.01	112.86	112.10
19	114.12	113.56	113.42	112.94	114.96	114.41	113.36	112.98	113.75	113.22	112.81	112.06
20	114.12	113.66	113.87	113.19	114.85	114.26	113.25	112.55	113.95	113.31	112.74	112.17
21	114.05	113.28	114.03	113.45	114.75	114.17	112.95	112.54	113.75	113.24	112.68	112.00
22	113.94	113.38	114.11	113.44	114.92	114.14	113.24	112.77	113.85	113.25	112.00	111.31
23	113.97	113.21	114.15	113.54	114.45	113.70	113.49	112.97	113.44	112.85	111.87	111.44
24	113.90	113.35	114.02	113.36	114.31	113.67	114.19	113.28	113.23	112.82	111.84	111.40
25	114.08	113.45	113.93	113.36	113.98	113.38	114.83	114.13	112.88	112.44	111.84	111.25
26	114.21	113.57	114.19	113.38	114.14	113.47	114.91	114.44	112.81	112.42	111.47	111.09
27	114.04	113.41	114.11	113.41	113.99	113.40	114.74	114.19	112.72	112.48	112.01	111.24
28	114.19	113.45	113.94	113.39	114.00	113.33	114.64	114.23	112.90	112.64	112.48	112.01
29	113.99	113.20	114.03	113.37	113.33	112.78	114.53	114.00	113.38	112.82	112.58	111.99
30	113.51	113.19	114.07	113.43	113.26	112.82	114.26	113.70	---	---	112.25	111.83
31	113.30	112.86	---	---	113.15	112.57	114.07	113.59	---	---	112.71	111.93
MONTH	114.21	112.86	115.21	112.77	114.96	112.57	114.91	111.70	114.43	112.42	113.09	111.06

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY

CH Bb 17--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	112.64	112.10	110.96	110.21	111.00	110.49	114.11	113.38	113.76	112.93	115.22	114.54
2	113.00	112.29	111.03	110.49	111.15	110.54	114.34	113.71	113.54	112.71	114.99	114.41
3	113.06	112.54	110.99	110.46	111.02	110.46	114.03	113.32	113.32	112.73	114.97	114.31
4	112.84	112.41	110.88	110.30	111.16	110.67	114.32	113.46	113.18	112.83	114.71	113.82
5	112.95	112.57	110.58	109.98	110.99	110.42	114.48	113.75	113.50	112.83	114.48	113.82
6	112.82	112.21	110.21	109.73	111.39	110.68	114.25	113.65	113.73	113.09	114.66	114.14
7	112.21	111.78	110.52	109.93	111.96	111.01	114.48	113.54	114.01	113.35	114.66	114.21
8	111.97	111.41	110.37	109.79	112.51	111.58	114.69	114.17	113.99	113.48	114.34	113.46
9	111.94	111.31	110.61	110.02	113.02	112.08	114.70	113.96	113.75	113.27	113.78	113.48
10	111.60	111.03	111.06	110.18	113.14	112.69	114.85	114.34	114.21	113.43	114.01	113.63
11	111.42	110.76	111.02	110.52	113.42	112.78	114.85	114.20	114.25	113.74	113.97	113.25
12	111.04	110.47	110.68	110.15	113.58	113.01	114.85	114.12	114.33	113.81	113.56	113.08
13	110.88	110.02	110.48	109.87	113.72	113.26	114.34	113.80	114.43	113.63	113.33	112.90
14	110.52	109.96	110.47	109.95	113.57	113.11	114.36	113.79	114.06	113.46	113.75	112.92
15	110.93	110.31	110.42	109.80	113.74	113.30	114.11	113.49	113.74	113.34	114.12	113.50
16	110.83	110.36	110.71	110.09	113.61	112.91	114.08	113.49	114.19	113.63	113.86	113.26
17	111.03	110.35	110.97	110.37	113.31	112.92	114.06	113.49	114.20	114.19	113.67	113.25
18	110.85	110.38	110.98	110.47	113.35	112.94	114.18	113.67	114.25	113.96	113.69	113.26
19	110.74	110.24	111.11	110.54	113.31	112.92	114.32	113.77	114.38	114.00	113.97	113.27
20	110.82	110.35	111.23	110.54	113.51	113.00	114.37	113.77	114.27	113.70	114.25	113.52
21	110.71	110.20	111.69	110.97	113.48	113.11	114.36	113.87	114.06	113.47	114.35	113.77
22	110.61	110.08	112.32	111.57	113.77	113.27	114.27	113.79	114.23	113.55	114.56	113.99
23	110.66	110.23	112.05	111.57	113.54	113.29	114.11	113.68	114.34	113.83	114.62	114.09
24	110.49	110.14	111.90	111.49	113.55	113.10	114.14	113.46	114.59	114.00	114.28	113.78
25	110.65	110.16	111.74	111.15	113.61	113.27	113.46	113.14	114.66	114.09	114.29	113.78
26	110.31	109.61	111.15	110.59	113.86	113.33	113.50	113.05	114.53	114.00	114.83	113.99
27	110.20	109.83	111.19	110.59	114.16	113.34	113.46	112.94	114.78	114.15	115.07	114.22
28	110.22	109.74	111.41	110.79	114.26	113.69	113.75	113.10	115.09	114.37	114.51	113.69
29	110.08	109.55	111.56	111.03	114.17	113.48	113.75	113.12	115.12	114.50	114.48	113.73
30	---	---	111.47	110.63	114.07	113.41	113.66	113.03	114.99	114.14	114.27	113.55
31	---	---	110.95	110.34	---	---	113.40	112.74	115.07	114.48	---	---
MONTH	113.06	109.55	112.32	109.73	114.26	110.42	114.85	112.74	115.12	112.71	115.22	112.90

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bc 5. SITE ID.--383524077094401.
 LOCATION.--Lat 38°35'24", long 77°09'44", Hydrologic Unit 02070011, at Benson Rd.; U.S. Naval Ordnance Station.
 Owner: U.S. Navy.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 430 ft; casing diameter 8 in. to unknown depth; screen diameter 8 in, depth unknown.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval, April 28, 1988 to current year.
 DATUM.--Elevation of land surface is 38.2 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder shelf, 2.5 ft above land surface.
 REMARKS.--Indian Head Project observation well. Missing data due to recorder malfunction. Water levels affected by nearby pumping.
 PERIOD OF RECORD.--April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.41 ft below land surface, Jan. 14, 1992; lowest measured, 126.78 ft below land surface, Jan. 11, 1989.

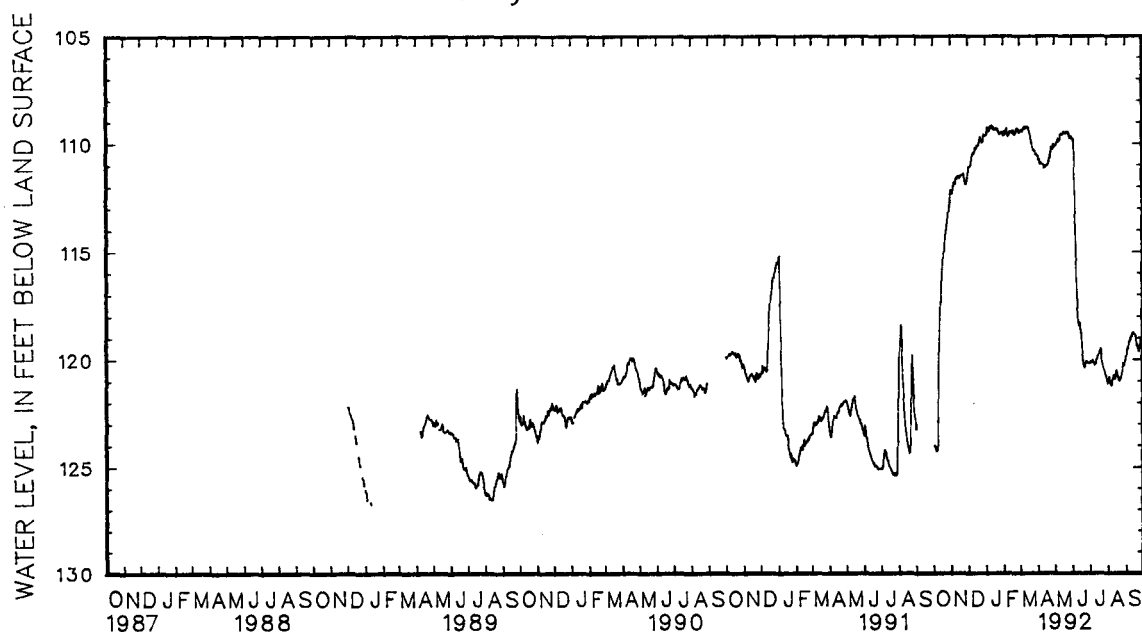
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	112.14	111.67	111.40	110.97	109.62	109.25	109.60	109.29	109.50	109.02
2	124.08	123.59	112.27	111.68	111.29	110.82	109.61	109.29	109.64	109.36	109.44	109.15
3	124.10	123.69	112.32	111.86	111.06	110.35	109.58	108.95	109.48	109.13	109.41	109.01
4	124.13	123.62	112.19	111.73	111.07	110.49	109.34	108.67	109.43	108.92	109.38	108.97
5	124.14	123.62	112.14	111.57	111.07	110.69	109.24	108.78	109.58	109.29	109.46	109.11
6	124.34	123.73	111.93	111.36	110.81	110.48	109.34	108.90	109.53	109.10	109.44	109.06
7	124.35	123.88	111.78	111.35	110.74	110.32	109.45	109.16	109.37	108.88	109.34	108.73
8	124.28	122.90	111.86	111.57	110.58	110.24	109.43	109.05	109.29	108.78	109.25	108.67
9	122.95	121.10	111.88	111.37	110.50	110.06	109.32	108.90	109.58	109.10	109.32	108.91
10	121.16	119.60	111.61	110.96	110.49	110.10	109.20	108.84	109.69	109.42	109.21	108.57
11	119.74	118.48	111.56	111.08	110.41	110.08	109.29	108.93	109.60	109.32	109.27	108.57
12	118.67	117.69	111.64	111.28	110.45	110.09	109.26	108.92	109.57	109.34	109.25	108.93
13	117.93	117.20	111.55	111.17	110.28	109.90	109.17	108.78	109.46	109.06	109.27	109.02
14	117.34	116.46	111.49	111.16	110.18	109.88	109.20	108.41	109.45	109.10	109.20	108.77
15	116.59	116.07	111.53	111.18	110.25	110.05	109.35	109.09	109.43	108.90	109.22	108.76
16	116.34	115.81	111.58	111.16	110.23	109.99	109.36	108.90	109.47	108.89	109.29	108.97
17	115.81	115.37	111.63	111.27	110.09	109.58	109.30	108.89	109.53	109.12	109.25	108.75
18	115.43	115.04	111.50	111.05	110.08	109.72	109.36	108.97	109.50	108.97	109.47	108.99
19	115.04	114.59	111.48	110.99	110.09	109.90	109.37	109.15	109.38	108.91	109.56	108.95
20	114.99	114.43	111.48	111.06	110.07	109.58	109.32	108.92	109.54	108.99	109.71	109.32
21	114.61	113.96	111.44	111.02	109.85	109.44	109.29	108.92	109.59	109.16	109.96	109.37
22	114.34	113.76	111.44	110.89	109.80	109.35	109.36	108.96	109.59	109.19	109.96	109.46
23	114.15	113.58	111.39	110.93	109.69	109.19	109.32	108.61	109.48	109.10	110.18	109.59
24	114.00	113.36	111.41	111.00	109.82	109.40	109.45	108.74	109.46	109.09	110.27	109.91
25	113.80	113.11	111.66	111.27	109.91	109.52	109.54	109.25	109.35	108.96	110.33	109.95
26	113.55	112.93	111.84	111.50	109.96	109.57	109.57	109.25	109.29	108.88	110.30	109.93
27	113.34	112.69	111.89	111.55	109.92	109.57	109.50	109.16	109.29	108.93	110.32	109.89
28	113.12	112.59	111.86	111.43	109.92	109.48	109.53	109.20	109.35	109.04	110.50	110.19
29	112.87	112.28	111.75	111.40	109.55	109.21	109.51	109.14	109.51	108.95	110.53	110.31
30	112.73	112.16	111.66	111.24	109.65	109.31	109.46	109.15	---	---	110.48	110.15
31	112.31	111.80	---	---	109.64	109.29	109.46	109.15	---	---	110.55	110.03
MONTH	124.35	111.80	112.32	110.89	111.40	109.19	109.62	108.41	109.69	108.78	110.55	108.57

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued
CH Bc 5--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	110.56	110.14	110.17	109.57	109.79	109.31	120.26	119.71	121.25	120.82	120.11	119.55
2	110.75	110.32	110.10	109.59	109.77	109.30	120.28	119.82	121.16	120.56	119.92	119.28
3	110.78	110.49	110.10	109.66	109.78	109.27	120.19	119.61	121.00	120.41	119.55	119.19
4	110.73	110.36	110.10	109.65	110.12	109.31	120.26	119.70	120.92	120.41	119.60	119.16
5	110.95	110.57	110.01	109.52	112.06	110.12	120.24	119.62	121.14	120.55	119.53	119.14
6	110.98	110.63	109.95	109.52	113.78	112.06	120.13	119.62	121.27	120.74	119.22	118.79
7	110.89	110.45	109.95	109.51	115.23	113.65	120.19	119.69	121.32	120.89	119.29	118.87
8	110.96	110.45	109.78	109.26	116.32	115.03	120.25	119.81	121.29	120.93	119.21	118.80
9	110.97	110.53	109.87	109.32	117.14	116.09	120.35	119.79	121.06	120.69	119.14	118.68
10	110.98	110.56	109.88	109.44	117.74	116.87	120.37	119.97	120.95	120.51	119.00	118.48
11	110.97	110.56	109.79	109.35	118.30	117.40	120.32	119.90	120.80	120.35	118.94	118.51
12	111.07	110.55	109.58	109.14	118.51	117.90	120.31	119.80	120.96	120.48	118.98	118.49
13	111.16	110.71	109.52	109.00	118.51	117.68	120.08	119.61	121.00	120.50	118.84	118.36
14	111.02	110.52	109.58	109.03	118.39	117.73	120.08	119.68	120.92	120.37	118.79	118.36
15	111.10	110.61	109.58	109.10	118.71	118.10	119.96	119.50	120.66	120.18	118.82	118.42
16	111.07	110.56	109.58	109.05	118.89	118.43	119.90	119.47	120.58	120.09	118.86	118.45
17	111.01	110.48	109.55	109.07	119.37	118.77	119.75	119.30	120.71	120.28	118.89	118.52
18	111.02	110.51	109.46	109.00	119.86	119.34	119.72	119.31	120.81	120.42	118.94	118.54
19	110.98	110.47	109.51	109.11	120.13	119.61	119.60	119.07	120.91	120.48	119.27	118.60
20	110.89	110.43	109.48	109.09	120.37	119.90	119.61	119.10	121.06	120.60	119.47	118.95
21	110.77	110.24	109.53	109.16	120.41	120.07	119.88	119.27	121.09	120.71	119.41	118.91
22	110.60	110.18	109.54	109.20	120.50	120.16	120.19	119.55	121.05	120.70	119.53	118.99
23	110.67	110.27	109.46	109.15	120.44	120.02	120.30	119.81	120.95	120.60	119.74	119.13
24	110.45	110.07	109.49	109.15	120.23	119.91	120.46	119.95	120.94	120.51	119.68	119.08
25	110.37	110.01	109.51	109.15	120.28	119.83	120.55	119.91	120.75	120.29	119.43	118.75
26	110.15	109.72	109.47	109.05	120.19	119.79	120.62	120.15	120.65	119.89	119.35	118.66
27	110.24	109.76	109.62	109.18	120.21	119.69	120.71	120.14	120.26	119.74	119.16	118.59
28	110.28	109.90	109.76	109.25	120.26	119.77	120.85	120.29	120.27	119.62	119.13	118.57
29	110.11	109.68	109.77	109.34	120.24	119.76	120.87	120.33	120.34	119.87	119.15	118.76
30	110.04	109.53	109.68	109.20	120.29	119.75	121.05	120.46	120.36	119.67	119.14	118.66
31	---	---	109.66	109.08	---	---	121.11	120.55	120.14	119.68	---	---
MONTH	111.16	109.53	110.17	109.00	120.50	109.27	121.11	119.07	121.32	119.62	120.11	118.36

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

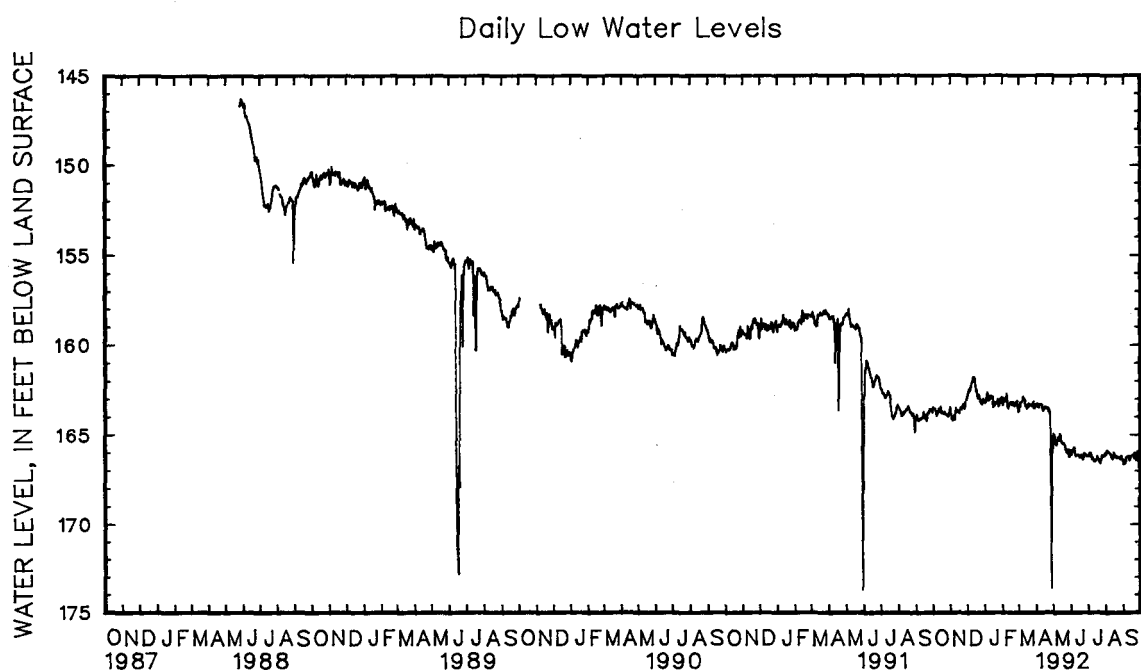
WELL NUMBER.--CH Bc 24. SITE ID.--383633077083001. PERMIT NUMBER.--CH-02-0874.
 LOCATION.--Lat 38°36'33", long 77°08'30", Hydrologic Unit 0207001, at Cedar Lane, Potomac Heights.
 Owner: Potomac Heights Mutual Home Owners Association.
 AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 435 ft; casing diameter 10 in., to 383.5 ft; and 398.5 to 415 ft; screen diameter 10 in. from 383.5 to 398.5 ft and 415 to 435 ft.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval, April 30, 1988 to current year.
 DATUM.--Elevation of land surface is 72 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder shelf, 1.6 ft above land surface.
 REMARKS.--Indian Head Project observation well. Water levels affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--May 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.26 ft below land surface, April 30, 1988; lowest measured, 173.77 ft below land surface, May 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	163.53	163.22	163.53	163.05	162.77	162.32	163.18	162.75	163.30	162.82	163.78	163.06
2	163.55	163.11	163.88	163.21	162.73	162.26	163.26	162.90	163.42	163.06	163.52	163.20
3	163.61	163.21	164.19	163.72	162.50	161.76	163.24	162.58	163.20	162.73	163.48	162.96
4	163.60	163.16	164.23	163.81	162.56	161.85	162.94	162.29	163.01	162.52	163.23	162.81
5	163.61	163.13	164.29	163.79	162.60	162.21	162.69	162.34	163.21	162.77	163.25	162.91
6	163.82	163.24	164.18	163.58	162.39	162.00	162.87	162.48	163.15	162.66	163.24	162.86
7	164.03	163.54	164.00	163.54	162.34	161.88	163.12	162.61	162.94	162.42	163.13	162.53
8	163.90	163.43	164.16	163.76	162.19	161.77	163.14	162.74	162.75	162.29	162.92	162.46
9	163.86	163.37	164.23	163.64	162.10	161.60	163.03	162.59	163.19	162.53	163.11	162.74
10	163.75	163.25	163.83	163.03	162.01	161.55	162.89	162.52	163.48	163.09	163.06	162.46
11	163.64	163.21	163.57	163.03	161.81	161.46	162.98	162.56	163.57	163.21	163.09	162.44
12	163.60	163.22	163.81	163.47	161.85	161.46	162.97	162.61	163.48	163.17	163.24	162.90
13	163.77	163.22	163.80	163.49	161.80	161.49	162.90	162.52	163.38	162.86	163.46	163.07
14	163.76	163.33	163.71	163.42	161.91	161.45	162.90	162.20	163.25	162.89	163.44	162.90
15	163.49	163.26	163.76	163.40	162.28	161.91	163.25	162.88	163.25	162.68	163.41	162.90
16	163.87	163.39	163.80	163.33	162.60	162.09	163.53	162.79	163.22	162.70	163.60	163.23
17	163.86	163.59	163.87	163.44	162.52	161.95	163.47	162.80	163.38	162.96	163.51	162.93
18	163.76	163.47	163.70	163.20	162.81	162.13	163.26	162.84	163.38	162.84	163.49	163.10
19	163.87	163.33	163.55	163.07	163.01	162.66	163.41	163.07	163.23	162.70	163.31	162.85
20	163.90	163.56	163.61	163.23	162.98	162.47	163.35	162.79	163.26	162.77	163.44	162.97
21	163.85	163.35	163.63	163.16	162.82	162.47	163.21	162.77	163.41	162.96	163.37	162.91
22	163.80	163.39	163.60	162.98	163.08	162.63	163.16	162.71	163.44	163.06	163.39	162.82
23	163.88	163.44	163.40	162.90	163.05	162.52	163.08	162.36	163.39	163.02	163.42	162.82
24	163.95	163.49	163.32	162.85	163.15	162.64	163.11	162.36	163.43	163.03	163.44	163.11
25	163.97	163.48	163.39	162.93	163.22	162.80	163.47	163.08	163.26	162.86	163.39	163.06
26	163.95	163.53	163.61	163.06	163.32	162.89	163.46	163.08	163.15	162.79	163.31	162.98
27	163.99	163.54	163.51	162.95	163.32	162.95	163.32	162.81	163.18	162.84	163.22	162.86
28	164.07	163.54	163.20	162.75	163.37	162.97	163.05	162.71	163.34	163.05	163.57	163.18
29	163.89	163.48	163.02	162.66	163.06	162.66	163.04	162.63	163.77	163.03	163.59	163.34
30	163.91	163.44	163.01	162.56	163.21	162.78	162.96	162.62	---	---	163.49	163.11
31	163.69	163.24	---	---	163.19	162.79	162.98	162.66	---	---	163.35	162.95
MONTH	164.07	163.11	164.29	162.56	163.37	161.45	163.53	162.20	163.77	162.29	163.78	162.44

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued
CH Bc 24--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	163.35	162.85	164.95	164.39	166.14	165.62	166.22	165.70	166.15	165.58	166.69	166.15
2	163.35	162.98	164.98	164.52	166.15	165.62	166.25	165.77	166.11	165.51	166.68	166.25
3	163.46	163.14	165.28	164.75	165.95	165.47	166.03	165.49	165.94	165.45	166.45	166.25
4	163.32	162.90	165.54	165.01	165.87	165.41	166.01	165.50	165.89	165.45	166.62	166.25
5	163.48	163.05	165.57	165.12	165.73	165.19	166.06	165.52	165.99	165.49	166.56	166.20
6	163.53	163.18	165.40	164.99	165.72	165.24	166.06	165.52	165.99	165.58	166.29	165.74
7	163.41	162.99	165.36	164.95	165.85	165.32	166.39	165.76	166.00	165.63	166.26	165.77
8	163.35	162.94	165.17	164.60	166.11	165.52	166.41	166.04	166.03	165.66	166.28	165.91
9	163.35	162.97	165.10	164.56	166.20	165.74	166.29	165.82	166.06	165.62	166.28	165.93
10	163.34	162.96	165.30	164.75	166.21	165.80	166.38	165.95	166.23	165.79	166.21	165.78
11	163.39	163.03	165.19	164.77	166.16	165.75	166.52	166.00	166.20	165.82	166.31	165.84
12	163.58	163.10	164.94	164.55	166.14	165.70	166.52	166.11	166.34	165.95	166.45	165.99
13	163.73	163.33	165.04	164.49	166.14	165.72	166.47	166.03	166.40	165.80	166.35	165.85
14	163.66	163.09	165.33	164.63	166.16	165.75	166.52	166.11	166.20	165.75	166.22	165.81
15	163.61	163.17	165.46	164.94	166.19	165.77	166.42	165.96	166.00	165.62	166.20	165.81
16	163.58	163.10	165.50	165.00	166.28	165.75	166.39	165.97	166.10	165.70	166.19	165.79
17	163.48	163.03	165.53	165.05	166.18	165.77	166.22	165.80	166.22	165.79	166.18	165.79
18	163.57	163.13	165.46	165.01	166.26	165.91	166.34	165.91	166.27	165.89	166.14	165.75
19	163.57	163.12	165.55	165.17	166.16	165.77	166.41	166.00	166.22	165.89	166.19	165.74
20	163.59	163.18	165.60	165.20	166.26	165.80	166.51	166.00	166.31	165.93	166.33	165.89
21	163.61	163.20	165.73	165.32	166.28	165.96	166.57	166.15	166.25	165.95	166.05	165.71
22	163.55	163.15	165.82	165.51	166.41	166.05	166.63	166.21	166.32	165.91	166.08	165.69
23	163.77	163.39	165.84	165.46	166.29	165.94	166.36	166.08	166.32	165.97	166.44	165.75
24	163.70	163.42	166.01	165.59	166.04	165.77	166.42	165.97	166.28	165.90	166.44	165.76
25	163.85	163.44	166.02	165.73	166.11	165.71	166.17	165.79	166.34	165.88	166.04	165.41
26	167.74	163.20	165.83	165.53	166.08	165.72	166.15	165.78	166.36	165.93	166.01	165.45
27	173.67	167.74	166.02	165.57	166.17	165.64	166.17	165.68	166.39	165.78	165.95	165.48
28	169.58	166.29	166.26	165.68	166.23	165.77	166.22	165.77	166.21	165.54	166.57	165.42
29	166.29	164.91	166.26	165.86	166.23	165.76	166.19	165.62	166.24	165.81	166.50	166.06
30	165.02	164.48	166.15	165.55	166.20	165.71	166.09	165.61	166.43	165.89	166.44	165.92
31	---	---	165.88	165.39	---	---	166.04	165.43	166.44	165.97	---	---
MONTH	173.67	162.85	166.26	164.39	166.41	165.19	166.63	165.43	166.44	165.45	166.69	165.41



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Be 43. SITE ID.--38381907655501. PERMIT NUMBER.--CH-71-0066.
 LOCATION.--Lat 38°38'19", long 76°55'55", Hydrologic Unit 02070011, at Sun Valley housing
 development, 1.5 mi. northwest of Waldorf.
 Owner: Lennart Larson.
 AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 459 ft; casing diameter 6 in., to 428 ft;
 screen diameter 5 in. from 433 to 459 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from Feb. 10, 1977 to Jan. 27, 1978. Equipped with digital water-level recorder
 --60-minute recorder interval from Feb. 27, 1978 to current year.
 DATUM.--Elevation of land surface is 216.79 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.0 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping.
 PERIOD OF RECORD.--February 1977 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.05 ft above sea level, Feb. 22, 1977;
 lowest measured, 54.42 ft below sea level, July 22, and 23, 1992.

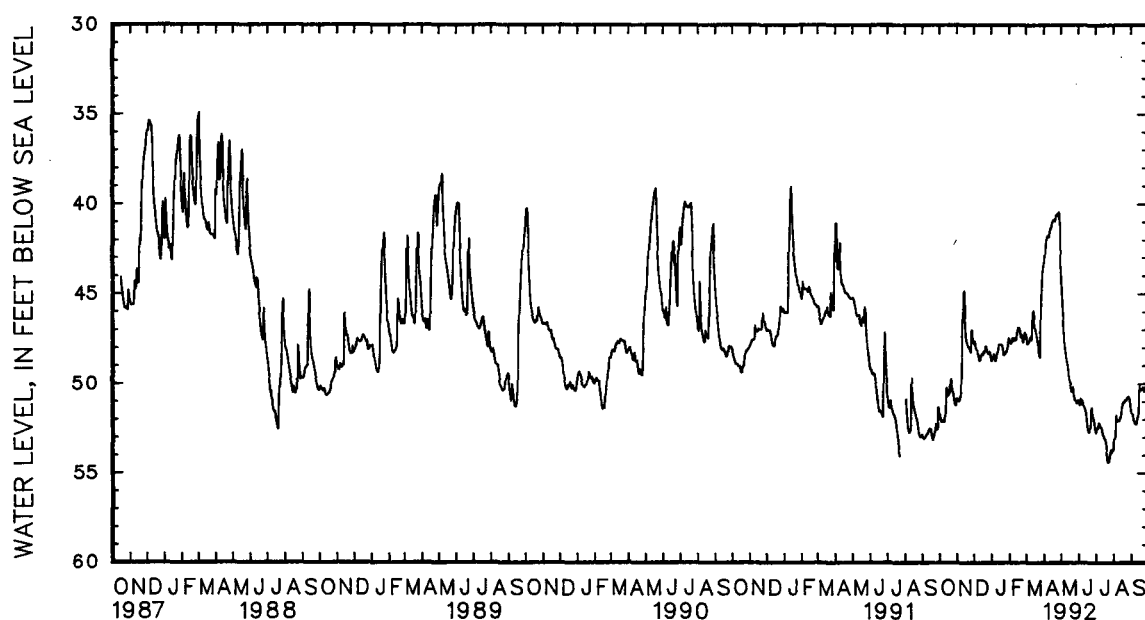
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	51.42	51.69	50.75	50.84	47.48	47.76	48.54	48.72	47.41	47.55	47.21	47.25
2	51.69	51.74	50.74	50.86	47.49	47.66	48.64	48.72	47.55	47.65	47.26	47.52
3	51.74	51.97	50.86	50.91	47.60	47.66	48.54	48.63	47.65	47.76	47.53	47.77
4	51.97	52.13	50.91	50.98	47.65	47.95	48.11	48.54	47.63	47.77	47.36	47.77
5	52.02	52.13	50.91	50.95	47.96	48.04	48.18	48.35	47.66	47.67	47.39	47.66
6	52.01	52.07	50.75	50.90	48.01	48.11	48.36	48.46	47.48	47.66	47.62	47.68
7	52.08	52.10	50.59	50.74	48.10	48.14	48.46	48.70	47.35	47.47	47.39	47.60
8	52.11	52.13	49.47	50.59	48.15	48.35	48.67	48.72	47.38	47.50	47.38	47.42
9	52.10	52.14	47.54	49.37	48.35	48.40	48.43	48.67	47.51	47.59	47.42	47.55
10	51.83	52.10	46.36	47.49	48.41	48.69	48.29	48.42	47.49	47.59	47.28	47.55
11	51.75	51.82	45.62	46.32	48.69	48.71	48.24	48.29	47.44	47.48	46.23	47.26
12	51.12	51.75	44.86	45.59	48.62	48.71	48.08	48.23	47.49	47.57	45.11	46.13
13	49.74	51.02	44.32	44.82	48.46	48.60	47.85	48.07	47.19	47.51	45.35	45.94
14	49.97	50.23	44.09	44.89	48.26	48.45	47.62	47.82	47.12	47.18	45.95	46.18
15	50.24	50.42	44.95	46.20	48.33	48.35	47.75	47.82	46.80	47.11	46.18	46.57
16	50.45	50.65	46.23	46.97	48.35	48.39	47.76	47.83	46.75	46.90	46.58	46.89
17	50.52	50.65	47.00	47.49	48.20	48.38	47.68	47.83	46.90	46.93	46.88	46.92
18	50.51	50.54	47.37	47.63	48.20	48.22	47.73	47.80	46.85	46.89	46.92	47.06
19	49.94	50.50	47.37	47.75	48.22	48.27	47.81	47.83	46.89	47.02	47.02	47.19
20	48.80	49.87	47.75	47.89	48.13	48.27	47.78	47.90	47.02	47.18	47.20	47.45
21	49.10	49.76	47.89	47.96	47.90	48.11	47.88	48.08	47.19	47.40	47.45	47.62
22	49.78	50.05	47.88	47.96	47.90	47.91	48.10	48.39	47.32	47.42	47.63	47.78
23	50.06	50.20	47.92	47.96	47.90	47.92	48.18	48.39	47.28	47.33	47.80	48.28
24	50.21	50.41	47.96	48.14	47.92	48.06	48.18	48.31	47.34	47.66	48.30	48.52
25	50.41	50.48	48.16	48.23	48.07	48.25	48.20	48.33	47.59	47.71	47.40	48.52
26	50.50	50.67	47.16	48.24	48.27	48.32	48.20	48.23	47.38	47.55	45.60	47.29
27	50.68	50.85	46.02	47.08	48.32	48.33	48.09	48.23	47.19	47.37	44.85	45.55
28	50.87	51.09	46.28	47.00	48.26	48.33	47.98	48.08	46.95	47.17	44.22	44.82
29	51.10	51.22	47.02	47.45	48.15	48.23	47.62	47.97	46.94	47.21	43.82	44.20
30	50.99	51.22	47.46	47.70	48.18	48.37	47.49	47.61	---	---	43.49	43.80
31	50.85	50.98	---	---	48.38	48.53	47.40	47.48	---	---	43.31	43.48
MONTH	48.80	52.14	44.09	50.98	47.48	48.71	47.40	48.72	46.75	47.77	43.31	48.52

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued
CH Be 43--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	43.07	43.29	42.85	43.93	50.93	50.94	52.62	52.76	53.04	53.27	51.30	51.60
2	42.93	43.15	43.96	44.57	50.95	51.11	52.52	52.60	53.09	53.11	51.60	51.65
3	42.44	42.91	44.59	45.33	51.12	51.20	52.48	52.54	52.98	53.10	51.65	51.67
4	42.00	42.41	45.35	46.05	50.81	51.20	52.39	52.48	52.38	52.98	51.67	51.76
5	41.89	42.00	46.07	46.53	50.78	50.83	52.21	52.38	51.30	52.38	51.76	52.06
6	41.78	41.89	46.56	47.14	50.83	50.91	52.20	52.21	51.41	51.79	52.02	52.10
7	41.61	41.78	47.17	47.72	50.92	50.94	52.20	52.25	51.79	52.08	52.06	52.20
8	41.61	41.75	47.73	48.03	50.94	51.02	52.25	52.35	52.06	52.10	52.20	52.23
9	41.76	41.81	48.04	48.32	51.02	51.24	52.35	52.45	52.03	52.06	52.23	52.28
10	41.52	41.79	48.33	48.59	51.25	51.28	52.33	52.47	52.02	52.03	52.10	52.28
11	41.37	41.51	48.60	48.79	51.26	51.34	52.33	52.50	51.88	52.09	51.92	52.10
12	41.30	41.35	48.77	48.90	51.34	51.44	52.50	52.69	51.85	51.94	51.89	51.92
13	41.26	41.36	48.90	49.20	51.45	51.54	52.69	52.82	51.81	51.94	51.70	51.89
14	41.04	41.24	49.20	49.58	51.55	51.70	52.82	52.91	51.56	51.81	51.01	51.70
15	40.99	41.04	49.59	49.79	51.72	52.11	52.91	53.03	51.33	51.56	49.70	51.01
16	40.85	40.99	49.79	49.91	52.14	52.50	53.03	53.12	51.16	51.33	49.82	50.12
17	40.84	40.88	49.91	49.96	52.51	52.65	53.11	53.12	51.05	51.16	50.05	50.33
18	40.81	40.85	49.97	50.18	52.65	52.71	53.12	53.29	51.05	51.05	50.33	50.37
19	40.81	40.88	50.20	50.38	52.55	52.71	53.29	53.57	51.03	51.05	50.33	50.37
20	40.89	40.93	50.39	50.46	52.50	52.53	53.57	53.92	50.91	51.03	50.28	50.33
21	40.64	40.91	50.23	50.45	52.39	52.50	53.92	54.30	50.90	50.93	50.21	50.28
22	40.59	40.62	50.15	50.22	51.58	52.39	54.30	54.42	50.91	50.94	50.20	50.21
23	40.60	40.65	50.15	50.38	50.42	51.46	54.37	54.42	50.89	50.91	50.21	50.32
24	40.54	40.65	50.39	50.74	50.70	51.35	54.23	54.37	50.64	50.92	50.32	50.43
25	40.49	40.54	50.75	50.94	51.38	51.70	53.99	54.23	50.65	50.78	50.38	50.43
26	40.49	40.51	50.93	50.94	51.72	51.87	53.71	53.99	50.74	50.78	50.29	50.38
27	40.43	40.51	50.93	50.95	51.87	51.94	53.66	53.71	50.71	50.74	49.20	50.29
28	40.39	40.43	50.96	51.08	51.94	52.17	53.68	53.85	50.60	50.71	48.03	49.20
29	40.39	41.02	51.07	51.08	52.17	52.41	53.81	53.85	50.64	50.81	48.21	49.19
30	41.10	42.80	50.99	51.07	52.42	52.63	53.70	53.81	50.81	51.01	49.19	49.52
31	---	---	50.91	50.99	---	---	53.27	53.70	51.01	51.30	---	---
MONTH	40.39	43.29	42.85	51.08	50.42	52.71	52.20	54.42	50.60	53.27	48.03	52.28

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

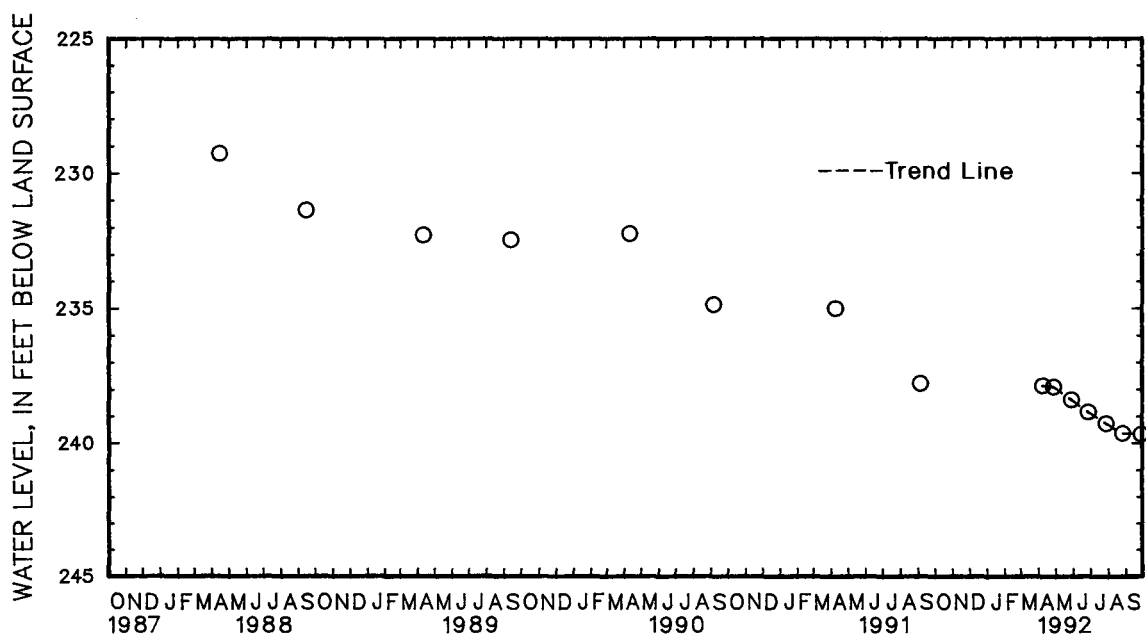
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Be 60. SITE ID.--383706076575604. PERMIT NUMBER.--CH-81-1468.
LOCATION.--Lat 38°37'06", long 76°57'56", Hydrologic Unit 02070011, St. John's pumping station, St. Charles.
Owner: U.S. Geological Survey.
AQUIFER.--Patapsco Formation of Upper Cretaceous age. Aquifer code: 217PPSC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 625 ft; casing diameter 6 in., to 401 ft; casing diameter 4 in. from 401 ft to 610 ft; screen diameter 4 in. from 610 to 625 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel from April 1992 to current year.
DATUM.--Elevation of land surface is 212.80 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 2.2 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--November 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 227.10 ft below land surface, April 10, 1987; lowest measured, 239.74 ft below land surface, Sept. 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	237.93	MAY 28	238.46	JUL 28	239.34	SEP 28	239.74
27	237.98	JUN 26	238.92	AUG 26	239.71		
WATER YEAR 1992		HIGHEST	237.93	APR 8, 1992	LOWEST	239.74	SEP 28, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 101. SITE ID.--383853076532601. PERMIT NUMBER.--CH-01-1882.

LOCATION.--Lat 38°38'53", long 76°53'26", Hydrologic Unit 02070011, at Martha Washington Motel, 1.7 mi. northwest of Waldorf.

Owner: Martha Washington Motel.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 465 ft; casing diameter 6 in., to 423 ft, and from 438 to 449 ft; screen diameter 6 in. from 423 to 438 ft, and 449 to 465 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from Nov. 20, 1976 to Feb. 6, 1978. Equipped with digital water-level recorder--60-minute recorder interval from Feb. 26, 1978 to current year. Recorder removed from May 14, 1991 to November 19, 1991 during construction at the site.

DATUM.--Elevation of land surface is 216.45 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 1.18 ft above land surface.

REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping. Recorder removed May 14, 1991 to Nov. 19, 1991 during building construction.

PERIOD OF RECORD.--November 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.60 ft above sea level, Jan. 16, 1977; lowest measured, 49.05 ft below sea level, July 1, 1986.

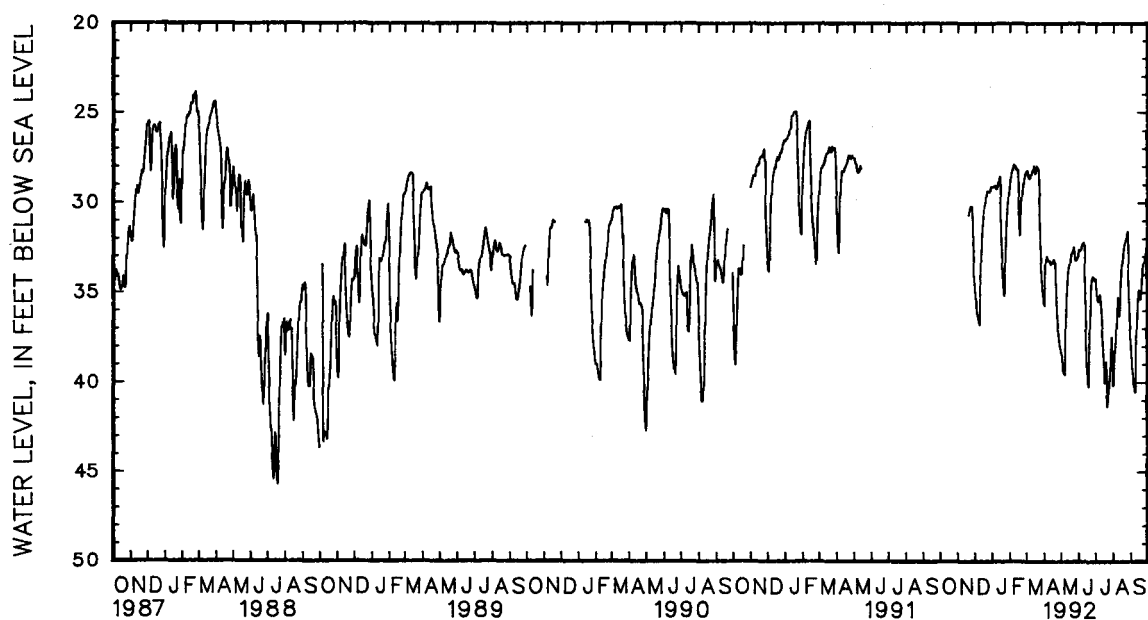
WATER LEVEL, IN FEET BELOW SEA LEVEL SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	34.50	34.96	29.13	29.14	28.67	28.87	28.20	28.29
2	---	---	---	---	34.97	35.35	29.10	29.14	28.53	28.67	28.17	28.22
3	---	---	---	---	35.36	35.49	29.08	29.10	28.37	28.53	28.21	28.35
4	---	---	---	---	35.51	36.11	28.88	29.08	28.15	28.36	28.36	28.55
5	---	---	---	---	36.12	36.29	29.03	29.06	28.18	28.20	28.55	28.63
6	---	---	---	---	36.27	36.40	28.95	29.05	28.01	28.18	28.63	28.66
7	---	---	---	---	36.42	36.57	28.95	29.18	27.87	27.98	28.41	28.62
8	---	---	---	---	36.59	36.74	29.18	29.23	27.83	27.87	28.41	28.44
9	---	---	---	---	36.00	36.81	29.09	29.22	27.86	27.98	28.36	28.44
10	---	---	---	---	34.26	35.96	28.90	29.08	27.87	27.98	28.15	28.35
11	---	---	---	---	33.22	34.22	28.86	28.90	27.86	28.00	28.11	28.23
12	---	---	---	---	32.37	33.20	28.67	28.86	28.00	28.14	28.14	28.23
13	---	---	---	---	31.69	32.36	28.58	28.66	27.93	28.14	27.97	28.13
14	---	---	---	---	31.30	31.67	28.34	28.56	27.92	28.14	27.73	27.95
15	---	---	---	---	30.94	31.29	28.49	28.91	28.15	28.21	27.77	28.23
16	---	---	---	---	30.59	30.94	28.95	31.02	28.21	29.26	28.24	28.38
17	---	---	---	---	30.23	30.57	31.09	32.19	29.33	31.25	28.16	28.36
18	---	---	---	---	30.14	30.23	32.19	33.07	31.32	31.83	28.00	28.18
19	---	---	---	---	30.03	30.14	33.10	33.66	30.33	31.29	27.85	27.98
20	---	---	30.57	30.71	29.67	30.01	33.68	34.20	29.89	30.33	27.95	28.03
21	---	---	30.44	30.57	29.37	29.65	34.25	34.75	29.53	29.86	28.04	28.17
22	---	---	30.26	30.45	29.34	29.38	34.76	35.21	29.26	29.53	28.10	28.18
23	---	---	30.23	30.29	29.30	29.35	32.98	35.05	28.97	29.25	28.12	29.00
24	---	---	30.12	30.22	29.34	29.40	32.06	32.95	28.91	28.96	29.17	31.25
25	---	---	30.17	30.22	29.40	29.43	31.28	32.06	28.67	28.91	31.32	32.52
26	---	---	30.23	30.25	29.37	29.44	30.82	31.27	28.54	28.65	32.55	33.10
27	---	---	30.22	30.95	29.36	29.37	30.27	30.77	28.43	28.55	33.14	33.88
28	---	---	31.05	32.64	29.14	29.35	29.93	30.26	28.14	28.41	33.95	34.38
29	---	---	32.70	33.70	29.01	29.14	29.48	29.93	28.12	28.29	34.39	34.98
30	---	---	33.76	34.47	29.02	29.13	29.19	29.48	---	---	34.99	35.24
31	---	---	---	---	29.13	29.14	28.87	29.19	---	---	35.24	35.63
MONTH	---	---	30.12	34.47	29.01	36.81	28.34	35.21	27.83	31.83	27.73	35.63

GROUND-WATER LEVELS
 MARYLAND--Continued
 CHARLES COUNTY--Continued
 CH Bf 101--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	34.92	35.77	38.24	38.41	32.57	32.62	34.20	34.25	39.31	40.21	37.58	37.93
2	33.52	34.78	38.42	38.49	32.52	32.60	34.25	34.87	38.73	39.31	37.90	38.66
3	33.20	33.51	38.50	38.85	32.60	32.64	34.87	35.23	38.31	38.73	38.66	39.26
4	33.03	33.19	38.85	39.35	32.58	32.64	35.23	35.44	38.06	38.31	39.26	39.53
5	33.00	33.03	39.36	39.45	32.38	32.58	35.44	35.51	37.34	38.06	39.53	40.17
6	33.03	33.14	39.46	39.58	32.31	32.38	35.23	35.45	36.53	37.34	40.17	40.21
7	33.11	33.15	38.50	39.61	32.30	32.31	34.86	35.22	35.92	36.53	40.21	40.46
8	33.11	33.21	36.91	38.34	32.23	32.30	34.86	35.14	35.29	35.92	40.22	40.57
9	33.21	33.26	35.79	36.74	32.16	32.22	35.14	35.46	34.80	35.29	38.20	40.22
10	33.26	33.32	35.13	35.75	32.21	32.33	35.46	35.68	34.62	35.45	37.17	38.20
11	33.18	33.28	34.76	35.12	32.31	32.33	35.68	36.23	35.45	36.34	36.23	37.17
12	33.17	33.39	34.19	34.74	32.32	34.37	36.23	36.83	35.19	35.97	35.55	36.23
13	33.38	33.44	33.87	34.19	34.41	36.49	36.83	37.66	34.52	35.19	35.04	35.55
14	33.25	33.36	33.63	33.87	36.61	38.12	37.66	38.07	34.12	34.52	34.52	35.04
15	33.26	33.35	33.47	33.64	38.13	39.19	38.00	38.84	33.59	34.12	34.52	34.88
16	33.20	33.35	33.28	33.46	39.25	39.51	38.84	40.06	33.23	33.59	34.88	35.22
17	33.13	33.19	33.02	33.28	39.51	40.15	38.90	39.90	32.92	33.23	35.22	35.37
18	33.16	33.24	32.82	33.02	38.98	40.25	38.46	38.90	32.61	32.92	34.97	35.37
19	33.25	33.37	32.80	32.83	37.62	38.88	38.33	38.88	32.37	32.61	34.44	34.97
20	33.14	33.39	32.71	32.80	36.40	37.61	38.82	39.59	32.25	32.37	34.01	34.44
21	32.88	33.42	32.59	32.71	35.82	36.39	39.59	41.37	32.14	32.25	33.51	34.01
22	33.51	35.02	32.43	32.59	34.79	35.79	40.73	41.33	32.05	32.14	33.34	33.51
23	35.06	35.93	32.42	32.47	34.39	34.78	40.22	40.87	31.94	32.05	33.31	33.36
24	36.01	36.45	32.48	32.74	34.20	34.39	39.91	40.22	31.72	31.94	33.17	33.31
25	36.46	37.04	32.75	33.14	34.11	34.20	39.33	39.91	31.59	31.72	32.89	33.17
26	37.05	37.19	33.15	33.22	34.11	34.13	39.13	39.33	31.55	31.60	32.73	32.89
27	37.19	37.47	33.09	33.18	34.12	34.14	38.11	39.13	31.57	32.53	32.48	32.73
28	37.48	37.78	33.08	33.10	34.14	34.21	37.51	38.11	32.53	34.66	32.33	32.48
29	37.79	38.06	33.01	33.08	34.21	34.32	37.36	37.51	34.66	36.01	32.27	32.33
30	38.06	38.22	32.83	33.01	34.22	34.32	37.39	38.24	36.01	36.84	32.18	32.27
31	---	---	32.63	32.81	---	---	38.24	40.21	36.84	37.58	---	---
MONTH	32.88	38.22	32.42	39.61	32.16	40.25	34.20	41.37	31.55	40.21	32.18	40.57

Daily Low Water Levels



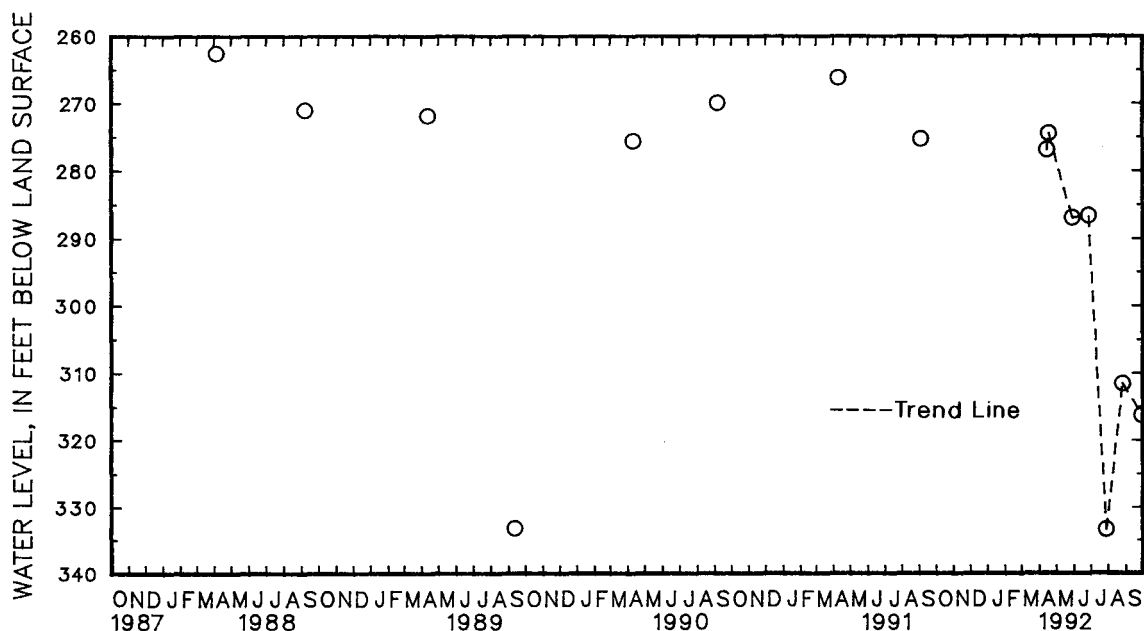
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 133. SITE ID.--383640076545901. PERMIT NUMBER.--CH-70-0069.
LOCATION.--Lat 38°36'40", long 76°54'59", Hydrologic Unit 02070011, at St. Charles, at Copely Rd. pumping station.
Owner: Charles County Department of Public Works.
AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 506 ft; casing diameter 10 in., to 77 ft; casing diameter 6 in. from 77 to 420 ft, casing diameter 4 in. from 420 to 436 ft and from 506 to 510 ft; screen diameter 4 in. from 436 to 506 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel from April 1992 to current year. Twice yearly measurements from April 1974 to April 1992.
DATUM.--Elevation of land surface is 222.92 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 0.35 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--April 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 211.68 ft below land surface, April 26, 1974; lowest measured, 333.47 ft below land surface, July 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 13	277.02	MAY 28	287.19	JUL 28	333.47	SEP 28	316.37
16	274.58	JUN 26	286.84	AUG 26	311.58		
WATER YEAR 1992		HIGHEST	274.58	APR 16, 1992	LOWEST	333.47	JUL 28, 1992



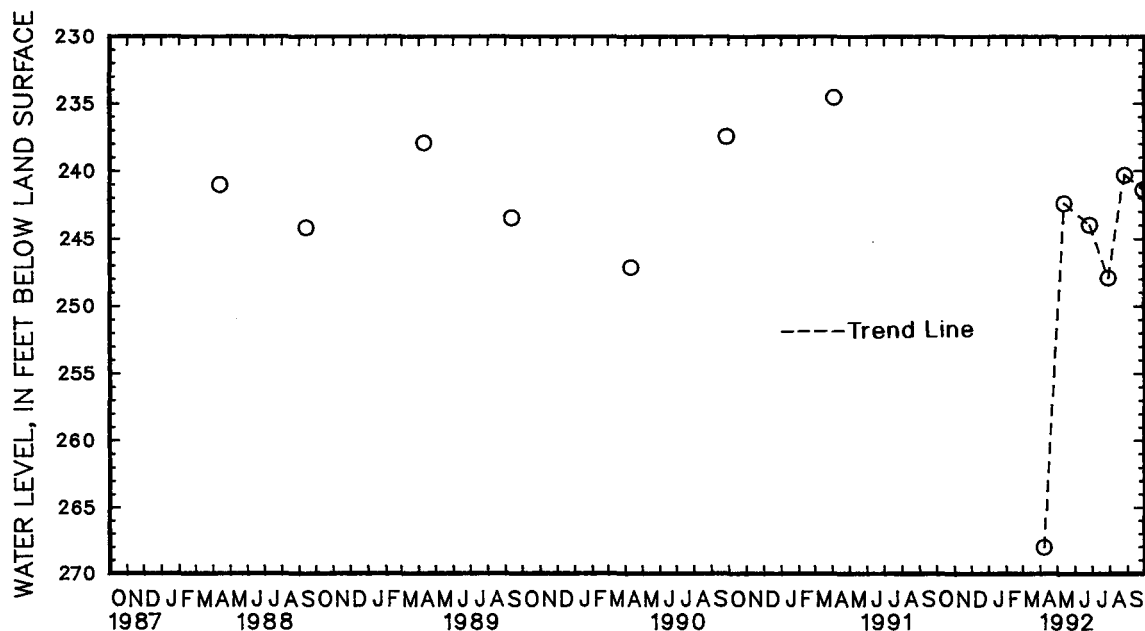
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 134. SITE ID.--383728076531701. PERMIT NUMBER.--CH-70-0067.
LOCATION.--Lat 38°37'28", long 76°53'17", Hydrologic Unit 02070011, at Waldorf in John Hansen Middle School parking lot.
Owner: Charles County Department of Public Works.
AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 546 ft; casing diameter 6 in., to 402 ft; casing diameter 4 in. from 422 to 485 ft; screen diameter 4 in. from 402 to 422 ft and 485 to 546 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel from April 1992 to current year. Monthly measurements from April 1974 to April 1992.
DATUM.--Elevation of land surface is 202.09 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.51 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--April 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 188.87 ft below land surface, April 26, 1974; lowest measured, 272.13 ft below land surface, Sept. 8, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 7	268.05	MAY 13	242.39	JUN 26	243.99	JUL 28	247.98	AUG 26	240.32	SEP 28	241.40
WATER YEAR 1992		HIGHEST	240.32	AUG 26, 1992		LOWEST	268.05	APR 7, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

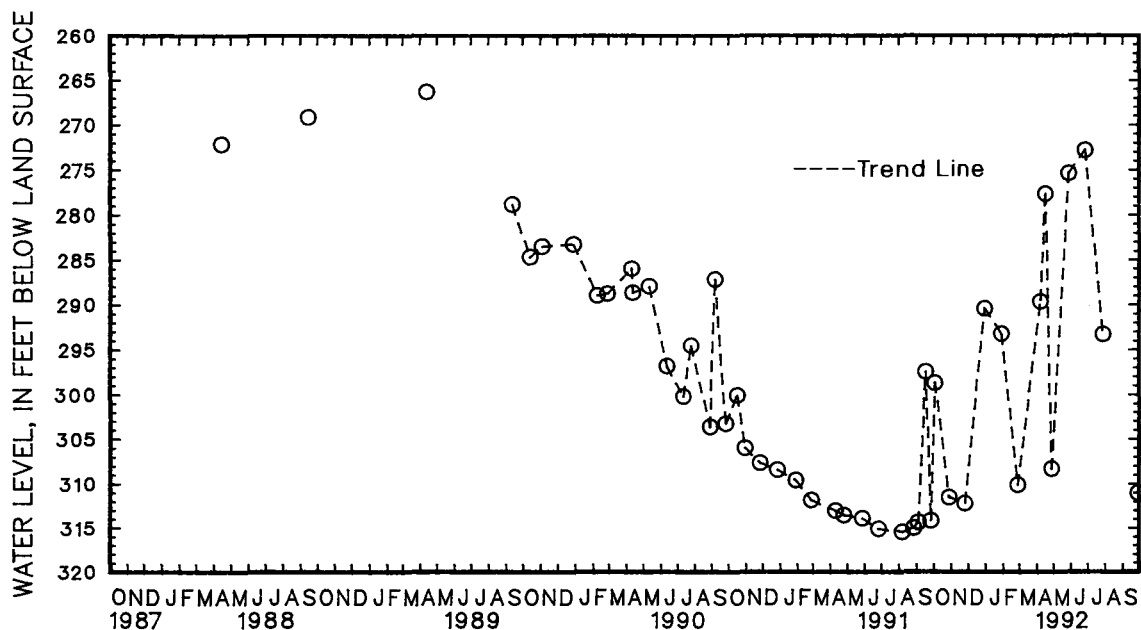
MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 146. SITE ID.--383508076540701. PERMIT NUMBER.--CH-81-0593.
 LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of St. Pauls Dr., Waldorf.
 Owner: U.S. Geological Survey.
 AQUIFER.--La Plata Aquifer of Lower Cretaceous age. Aquifer code: 217LPLT.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,427 ft; casing diameter 6 in., to 1,059 ft; screen diameter 6 in. with multiple screens from 1,059 to 1,417 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 192.80 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.10 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping.
 PERIOD OF RECORD.--April 4, 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 195.70 ft below land surface, April 4, 1985; lowest measured, 315.60 land surface, Aug. 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	298.74	DEC 30	290.44	APR 7	289.66	MAY 28	275.41	SEP 28	311.20
28	311.66	JAN 29	293.29	16	277.68	JUN 26	272.84		
NOV 25	312.33	FEB 27	310.28	27	308.51	JUL 28	293.55		
WATER YEAR 1992		HIGHEST	272.84	JUN 26, 1992	LOWEST	312.33	NOV 25, 1991		



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 151 . SITE ID.--383508076540703 . PERMIT NUMBER.--CH-81-1265.
 LOCATION.--Lat 38°35'08", long 76°54'07", Hydrologic Unit 02070011, 0.3 mi south of St. Pauls Dr., Waldorf.
 Owner: U.S. Geological Survey.
 AQUIFER.--Lower Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC .
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 660 ft; casing diameter 6 in., to 399 ft;
 casing diameter 4 in. from 399 to 645 ft; screen diameter 4 in. from 645 to 660 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel. Equipped with digital water-level
 recorder--60-minute recorder interval from August 18, 1987 to current year.
 DATUM.--Elevation of land surface is 192.80 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.20 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network.
 PERIOD OF RECORD.--August 1987 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.39 ft below sea level, March 27, 1988;
 lowest measured, 53.45 ft below sea level, June 3, 1986.

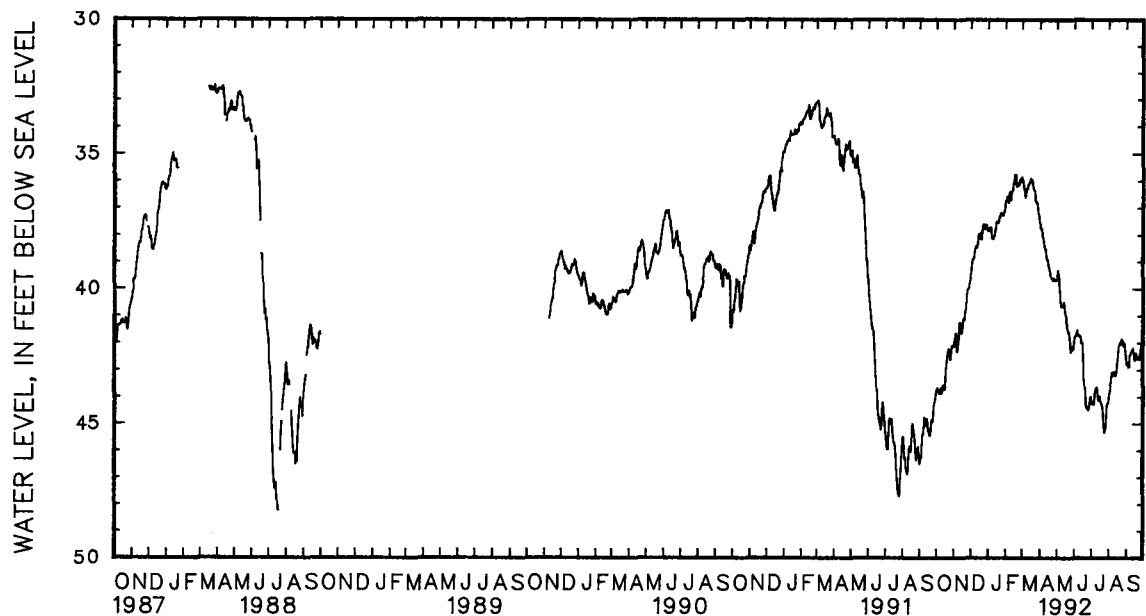
WATER LEVEL, IN FEET BELOW SEA LEVEL SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	43.57	43.71	41.93	42.12	39.30	39.49	37.79	37.84	36.51	36.70	35.79	35.95
2	43.53	43.66	41.80	41.91	39.10	39.30	37.78	37.84	36.52	36.71	35.83	35.99
3	43.67	43.77	41.59	41.84	38.79	39.08	37.69	37.77	36.52	36.57	35.86	36.23
4	43.70	43.75	41.54	41.64	38.78	38.90	37.58	37.72	36.46	36.57	36.14	36.27
5	43.72	43.85	41.65	41.88	38.79	38.91	37.68	37.71	36.54	36.78	36.14	36.43
6	43.74	43.85	41.89	42.32	38.66	38.83	37.70	37.74	36.45	36.79	36.46	36.61
7	43.63	43.76	42.09	42.32	38.62	38.83	37.75	38.09	36.31	36.45	36.28	36.48
8	43.58	43.67	41.90	42.08	38.36	38.63	37.98	38.13	36.31	36.39	36.27	36.28
9	43.68	43.86	41.48	41.89	38.26	38.48	37.83	38.08	36.41	36.68	36.26	36.28
10	43.60	43.86	41.23	41.47	38.26	38.40	38.01	38.14	36.39	36.70	36.02	36.26
11	43.63	43.74	41.18	41.24	38.36	38.41	38.01	38.05	36.25	36.37	35.94	36.11
12	43.56	43.74	41.22	41.34	38.35	38.45	37.83	38.02	36.27	36.36	36.03	36.11
13	43.47	43.56	41.35	41.53	38.24	38.40	37.74	37.82	36.10	36.33	35.97	36.06
14	43.55	43.66	41.52	41.63	37.88	38.23	37.41	37.75	36.02	36.08	35.87	35.99
15	43.64	43.71	41.41	41.61	37.95	37.97	37.45	37.54	35.71	36.04	35.85	35.90
16	43.45	43.64	41.13	41.40	37.95	37.99	37.40	37.50	35.66	35.77	35.91	35.97
17	42.95	43.43	41.08	41.14	37.81	37.98	37.31	37.54	35.75	35.79	35.86	35.96
18	42.73	42.94	40.89	41.07	37.83	37.92	37.30	37.54	35.64	35.75	35.89	35.99
19	42.49	42.71	40.99	41.12	37.92	38.15	37.41	37.53	35.72	36.17	35.81	36.12
20	42.35	42.48	40.82	41.10	37.92	38.15	37.24	37.40	36.03	36.20	36.15	36.24
21	42.22	42.35	40.73	40.81	37.54	37.90	37.23	37.29	35.99	36.07	36.24	36.33
22	42.08	42.22	40.44	40.75	37.62	37.68	37.18	37.33	36.04	36.17	36.11	36.35
23	42.01	42.23	40.09	40.45	37.46	37.62	36.92	37.18	36.10	36.17	36.15	36.49
24	42.24	42.47	39.96	40.08	37.49	37.60	36.94	37.17	35.97	36.11	36.51	36.75
25	42.48	42.60	39.99	40.02	37.61	37.73	37.09	37.21	35.94	36.03	36.76	36.79
26	42.26	42.58	39.94	40.00	37.74	37.77	37.09	37.21	35.86	35.92	36.57	36.77
27	42.10	42.26	39.81	39.96	37.74	37.78	37.06	37.27	35.86	36.01	36.57	36.85
28	42.07	42.10	39.69	39.80	37.63	37.78	36.98	37.15	35.79	36.01	36.85	37.05
29	42.01	42.09	39.62	39.68	37.47	37.61	37.02	37.15	35.74	35.85	37.06	37.21
30	41.98	42.08	39.50	39.61	37.50	37.71	36.64	37.01	---	---	37.22	37.28
31	42.08	42.13	---	---	37.71	37.79	36.52	36.76	---	---	37.28	37.52
MONTH	41.98	43.86	39.50	42.32	37.46	39.49	36.52	38.14	35.64	36.79	35.79	37.52

GROUND-WATER LEVELS
 MARYLAND--Continued
 CHARLES COUNTY--Continued
 CH Bf 151--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	37.52	37.59	39.56	39.61	41.77	41.87	44.22	44.26	43.85	43.91	42.46	42.62
2	37.60	37.75	39.33	39.55	41.75	41.77	44.23	44.26	43.71	43.85	42.62	42.80
3	37.76	37.79	39.29	39.33	41.75	41.77	44.23	44.26	43.53	43.71	42.70	42.80
4	37.75	37.77	39.29	39.46	41.64	41.75	44.22	44.30	43.39	43.53	42.77	42.79
5	37.75	37.88	39.47	40.00	41.51	41.63	43.90	44.20	43.22	43.39	42.78	42.89
6	37.88	38.10	40.01	40.19	41.50	41.54	43.77	43.88	43.08	43.22	42.47	42.89
7	38.07	38.11	40.20	40.50	41.55	41.71	43.71	43.77	43.05	43.10	42.45	42.47
8	38.07	38.27	40.51	40.66	41.71	41.74	43.68	43.70	43.10	43.21	42.36	42.45
9	38.28	38.42	40.66	40.66	41.72	41.74	43.65	43.69	43.07	43.21	42.32	42.36
10	38.42	38.50	40.65	40.66	41.72	41.75	43.41	43.65	42.97	43.07	42.26	42.32
11	38.50	38.54	40.64	40.65	41.71	41.74	43.43	43.75	42.98	43.07	42.21	42.26
12	38.54	38.75	40.52	40.64	41.71	41.81	43.75	43.99	43.04	43.19	42.20	42.26
13	38.76	38.90	40.44	40.52	41.82	42.00	43.99	44.14	43.17	43.22	42.17	42.20
14	38.82	38.90	40.49	40.62	41.93	42.01	43.98	44.14	43.03	43.17	42.13	42.35
15	38.84	39.00	40.63	40.86	41.91	42.01	43.91	43.98	42.75	43.03	42.35	42.56
16	39.02	39.15	40.88	40.97	42.02	42.44	43.96	44.17	42.52	42.75	42.38	42.64
17	39.15	39.24	40.95	41.01	42.46	42.98	44.17	44.21	42.29	42.52	42.27	42.38
18	39.25	39.32	41.02	41.28	42.99	43.44	44.21	44.25	42.13	42.29	42.28	42.38
19	39.28	39.40	41.28	41.39	43.45	43.68	44.25	44.33	42.02	42.13	42.38	42.58
20	39.30	39.59	41.40	41.54	43.69	44.02	44.33	44.41	41.96	42.02	42.47	42.58
21	39.59	39.61	41.55	41.64	44.02	44.32	44.41	44.63	41.97	42.06	42.44	42.51
22	39.56	39.60	41.56	41.62	44.32	44.43	44.63	45.05	41.93	42.05	42.46	42.53
23	39.59	39.70	41.61	41.79	44.35	44.43	45.05	45.23	41.85	41.93	42.48	42.60
24	39.57	39.69	41.78	41.99	44.36	44.42	45.23	45.34	41.83	41.85	42.56	42.61
25	39.58	39.62	42.01	42.35	44.42	44.51	45.10	45.24	41.85	41.90	42.32	42.56
26	39.62	39.67	42.25	42.35	44.33	44.44	44.75	45.10	41.87	41.93	42.19	42.32
27	39.67	39.68	42.15	42.25	44.14	44.32	44.27	44.75	41.93	42.11	42.03	42.19
28	39.68	39.69	42.12	42.16	43.99	44.13	44.25	44.30	42.00	42.12	41.86	42.03
29	39.66	39.70	42.15	42.24	43.96	44.01	44.24	44.28	42.02	42.03	41.85	41.94
30	39.60	39.66	42.05	42.25	44.02	44.20	44.15	44.24	42.03	42.28	41.91	41.96
31	---	---	41.87	42.04	---	---	43.91	44.15	42.28	42.46	---	---
MONTH	37.52	39.70	39.29	42.35	41.50	44.51	43.41	45.34	41.83	43.91	41.85	42.89

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

209

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bf 157. SITE ID.--383637076545803. PERMIT NUMBER.--CH-81-1846.

LOCATION.--Lat 38°36'37", long 76°54'58", Hydrologic Unit 02070011, at St. Charles, at Copely Rd. pumping station.
Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 622 ft; casing diameter 6 in., to 396 ft; casing diameter 4 in. from 396 to 608 ft; screen diameter 4 in. from 608 to 622 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel from April 1992 to current year.

Periodic measurements from November 1986 to April 1992.

DATUM.--Elevation of land surface is 225 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 1.7 ft above land surface.

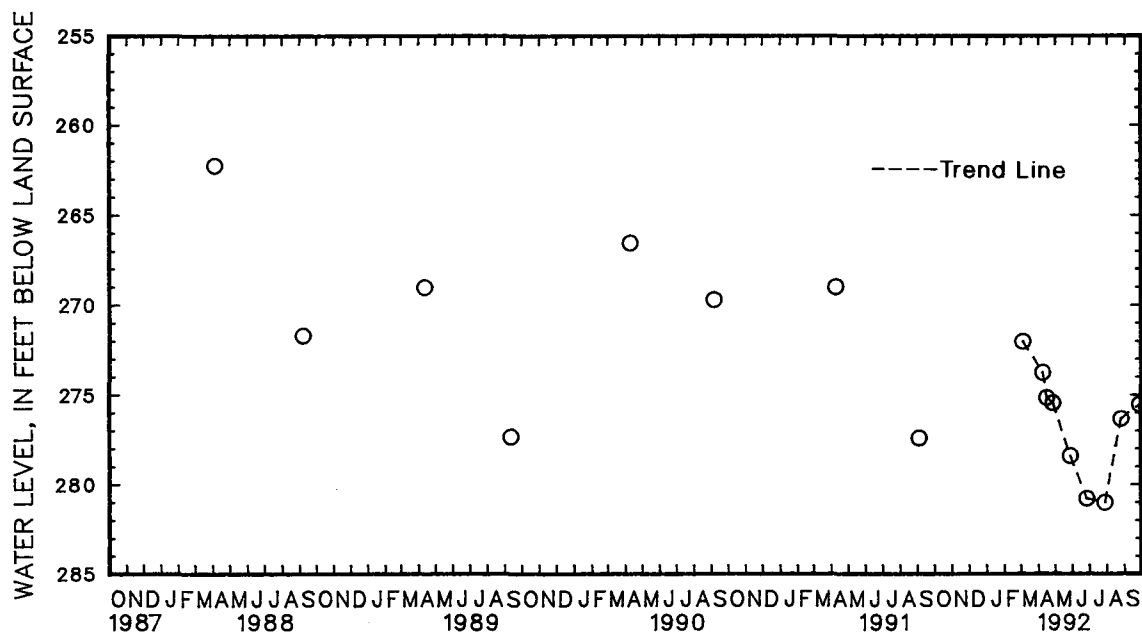
REMARKS.--Maryland Water-Level Network observation well,

PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 218.13 ft below land surface, April 13, 1988;
lowest measured, 281.02 ft below land surface, July 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

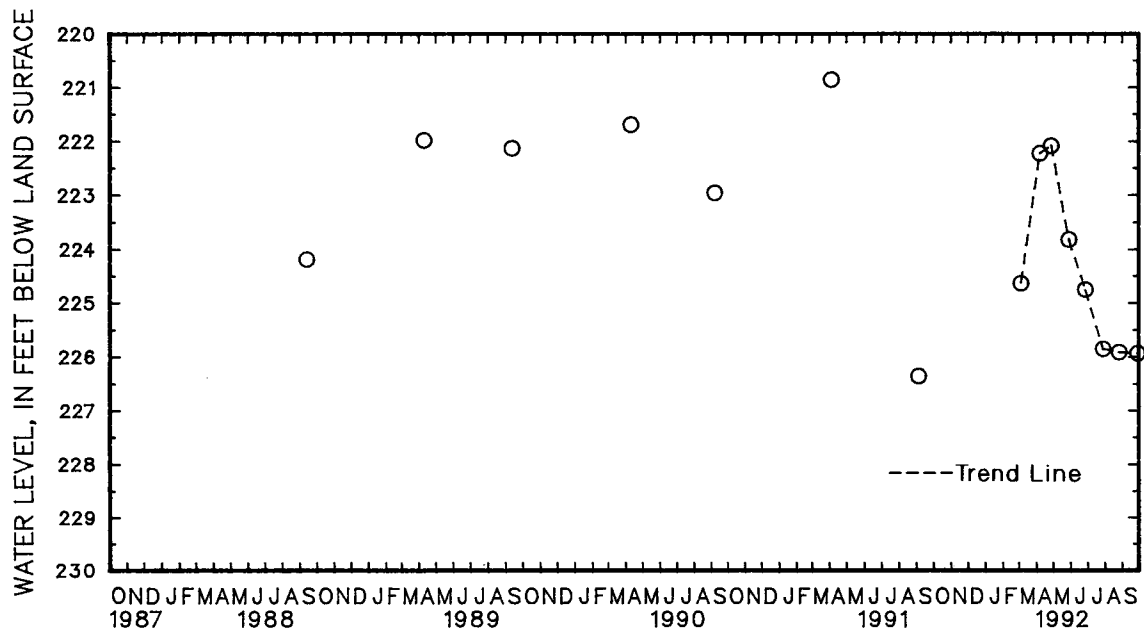
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 4	272.03	APR 16	275.16	MAY 28	278.42	JUL 28	281.02	SEP 28	275.53
APR 8	273.76	27	275.46	JUN 26	280.79	AUG 26	276.34		
WATER YEAR 1992		HIGHEST	272.03	MAR 4, 1992	LOWEST	281.02	JUL 28, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE			WATER LEVEL			DATE			WATER LEVEL			DATE			WATER LEVEL		
MAR	4	224.65	APR	27	222.09	JUN	26	224.79	AUG	26	225.96	SEP	28	225.98			
APR	7	222.23	MAY	28	223.85	JUL	28	225.90									
WATER YEAR 1992			HIGHEST			222.09			APR 27, 1992			LOWEST			225.98 SEP 28, 1992		



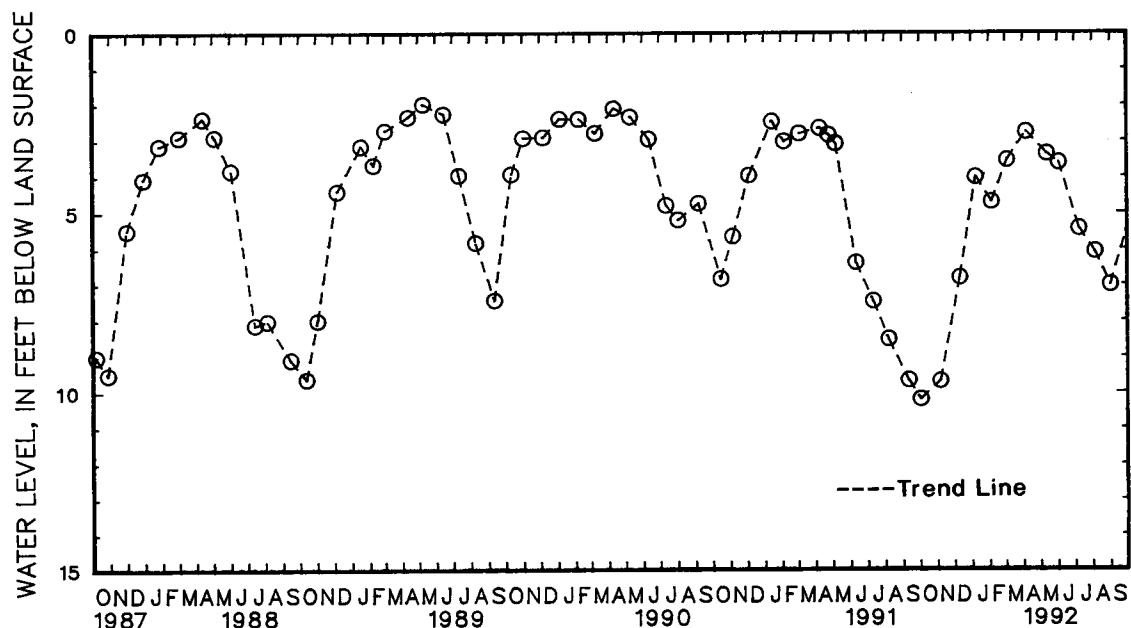
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Bg 12. SITE ID.--383746076482901. PERMIT NUMBER.--CH-81-0600.
LOCATION.--Lat 38°37'46", long 76°48'29", Hydrologic Unit 02070011, Cedarville State Forest, near Forest Rd.
Owner: U.S. Geological Survey.
AQUIFER.--Calvert Formation of Miocene age. Aquifer code: 122CLVR.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 24.5 ft; casing diameter 4 in., to 13.5 ft; perforated casing diameter 2 in. from 13.5 to 18.5 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface is 149.69 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 2.00 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--August 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.99 ft below land surface, May 10, 1989;
lowest measured, 10.26 ft below land surface, Oct. 2, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	10.26	DEC 11	6.83	FEB 5	4.73	APR 7	2.78	JUN 3	3.64	AUG 5	6.14
NOV 6	9.74	JAN 8	4.03	MAR 4	3.56	MAY 13	3.39	JUL 8	5.49	SEP 1	7.07
WATER YEAR 1992		HIGHEST	2.78	APR 7, 1992		LOWEST	10.26	OCT 2, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

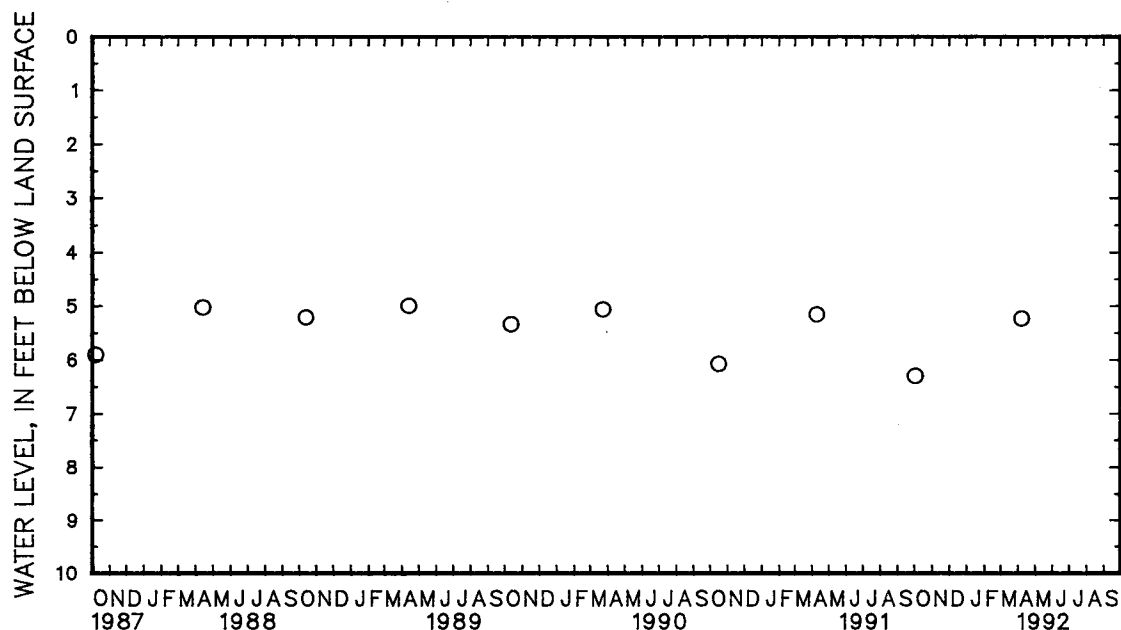
MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Bg 13. SITE ID.--383652076495701. PERMIT NUMBER.--CH-81-0601.
 LOCATION.--Lat 38°36'52", long 76°49'57", Hydrologic Unit 02070011, southside of MD Rt. 382,
 4.1 mi east of Waldorf at Zekiah Swamp.
 Owner: U.S. Geological Survey.
 AQUIFER.--Calvert Formation of Miocene age. Aquifer code: 122CLVR.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 22.6 ft; casing diameter 4 in., to 13.5 ft;
 casing diameter 2 in. from 17.6 to 22.6 ft; screen diameter 2 in. from 12.6 to 17.6.
 INSTRUMENTATION.--Measured twice yearly with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 126.27 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.07 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--August 1983 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft below land surface, Dec. 13, 1984;
 lowest measured, 7.53 ft below land surface, April 23, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	6.34	APR 7	5.25
WATER YEAR 1992 HIGHEST 5.25 APR 7, 1992 LOWEST 6.34 OCT 2, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cb 7. SITE ID.--383422077114601. PERMIT NUMBER.--CH-01-1908.

LOCATION.--Lat 38°34'22", long 77°11'46", Hydrologic Unit 02070011, at Caffee and Greenslade Rds., U.S. Naval Ordnance Station, about 2.5 mi southwest of Indian Head.

Owner: U.S. Navy.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 400 ft; casing diameter 8 in., to 400 ft; screen diameter 6 in. from 154.1 to 167 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder Sept. 21, 1953 to July 8, 1965 and digital water-level recorder--60-minute recorder interval, April 28, 1988 to current year.

DATUM.--Elevation of land surface is 36.0 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of recorder shelf, 1.1 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Indian Head Project observation well. Water levels affected by nearby pumping. Missing data due to recorder malfunction.

PERIOD OF RECORD.--March and April 1952, August 1953 to current year.

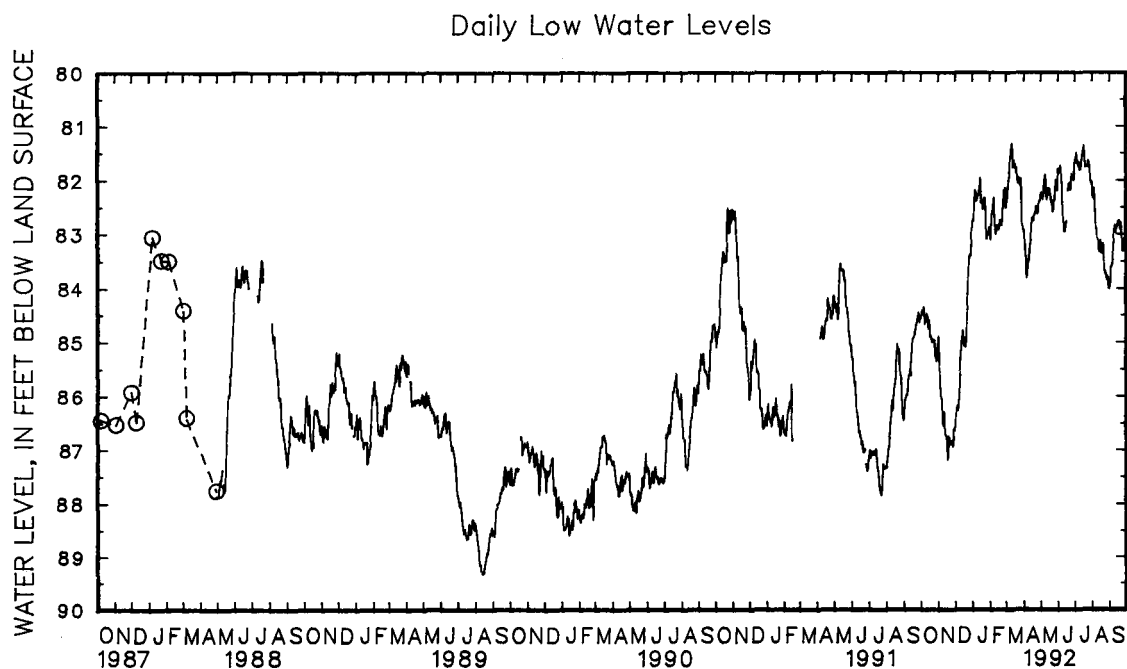
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.35 ft below land surface, April 18, 1952; lowest measured, 89.33 ft below land surface, Aug. 12 and 14, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	84.50	84.37	84.92	84.77	86.54	86.26	82.74	82.58	82.98	82.86	82.52	82.24
2	84.42	84.36	85.21	84.88	86.39	86.23	82.77	82.66	83.12	82.98	82.36	82.29
3	84.49	84.36	85.68	85.21	86.25	85.94	82.75	82.39	83.05	82.75	82.34	82.14
4	84.47	84.27	85.89	85.67	86.20	85.92	82.39	82.18	82.75	82.37	82.17	81.97
5	84.36	84.25	86.05	85.89	86.28	86.20	82.19	82.15	82.63	82.41	82.01	81.90
6	84.40	84.24	86.08	85.98	86.23	86.03	82.20	82.12	82.59	82.43	81.96	81.86
7	84.68	84.40	86.11	86.03	86.07	85.93	82.38	82.12	82.48	82.26	81.87	81.55
8	84.65	84.42	86.42	86.07	85.98	85.64	82.38	82.27	82.33	82.22	81.61	81.47
9	84.61	84.47	86.58	86.42	85.66	85.30	82.34	82.22	82.64	82.24	81.56	81.42
10	84.62	84.40	86.45	86.10	85.35	85.17	82.29	82.14	82.84	82.64	81.45	81.17
11	84.49	84.36	86.33	86.10	85.17	84.96	82.28	82.14	82.96	82.83	81.33	80.98
12	84.53	84.36	86.63	86.33	85.00	84.91	82.21	82.08	83.01	82.93	81.44	81.32
13	84.67	84.44	86.73	86.59	84.91	84.71	82.15	81.96	82.96	82.68	81.77	81.43
14	84.76	84.61	86.78	86.67	84.79	84.62	81.96	81.68	82.85	82.71	81.77	81.63
15	84.61	84.38	86.84	86.75	84.93	84.79	82.09	81.86	82.88	82.68	81.64	81.53
16	84.71	84.38	87.08	86.80	85.08	84.88	82.41	81.95	82.89	82.66	81.72	81.57
17	84.92	84.70	87.22	87.08	85.07	84.78	82.39	82.19	82.93	82.81	81.71	81.54
18	84.90	84.77	87.08	86.75	84.93	84.73	82.38	82.21	82.87	82.69	81.78	81.63
19	84.94	84.76	86.78	86.64	85.10	84.93	82.54	82.38	82.75	82.60	81.78	81.61
20	85.01	84.93	86.84	86.74	85.00	84.67	82.53	82.30	82.79	82.61	81.94	81.78
21	85.01	84.81	86.91	86.78	84.67	84.32	82.34	82.24	82.79	82.67	82.06	81.86
22	84.97	84.84	86.92	86.77	84.41	84.12	82.37	82.28	82.84	82.74	82.05	81.71
23	85.01	84.88	86.92	86.80	84.13	83.64	82.33	82.11	82.76	82.46	81.97	81.71
24	84.99	84.90	86.86	86.75	83.70	83.52	82.51	82.11	82.54	82.41	82.03	81.94
25	85.10	84.93	86.88	86.75	83.53	83.35	82.87	82.51	82.41	82.18	82.10	81.99
26	85.28	85.06	86.97	86.75	83.40	83.31	83.10	82.81	82.20	82.17	81.99	81.84
27	85.24	85.11	86.88	86.61	83.40	83.27	83.10	82.95	82.19	82.03	82.15	81.89
28	85.38	85.11	86.65	86.47	83.40	83.23	82.99	82.92	82.15	82.03	82.65	82.14
29	85.36	85.14	86.62	86.45	83.23	82.93	83.02	82.91	82.52	82.13	82.84	82.64
30	85.17	85.06	86.67	86.52	82.93	82.86	82.97	82.88	---	---	82.88	82.80
31	85.07	84.91	---	---	82.93	82.69	82.89	82.81	---	---	82.94	82.75
MONTH	85.38	84.24	87.22	84.77	86.54	82.69	83.10	81.68	83.12	82.03	82.94	80.98

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued
CH Ch 7--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	82.94	82.84	82.24	82.12	81.83	81.74	81.63	81.45	82.27	81.86	84.04	83.90
2	83.21	82.92	82.25	82.16	81.87	81.76	81.68	81.54	82.34	82.09	83.97	83.61
3	83.43	83.21	82.33	82.19	81.84	81.69	81.54	81.19	82.23	82.08	83.63	83.54
4	83.43	83.34	82.36	82.24	81.80	81.70	81.50	81.20	82.16	82.02	83.62	83.52
5	83.75	83.41	82.28	82.09	81.74	81.55	81.69	81.48	82.36	82.02	83.59	83.47
6	83.84	83.74	82.11	81.92	81.79	81.60	81.65	81.52	82.55	82.29	83.51	83.07
7	83.78	83.54	81.99	81.87	82.06	81.75	81.70	81.50	82.77	82.50	83.18	83.06
8	83.57	83.43	81.91	81.75	82.37	81.99	81.75	81.62	82.93	82.74	83.18	82.93
9	83.50	83.39	82.01	81.78	82.64	82.34	81.69	81.51	82.92	82.81	82.98	82.87
10	83.39	83.22	82.27	81.97	82.72	82.59	81.81	81.66	83.10	82.90	82.89	82.64
11	83.24	83.15	82.37	82.24	82.83	82.63	81.81	81.69	83.14	83.02	82.85	82.66
12	83.17	82.99	82.32	82.14	82.97	82.75	81.81	81.65	83.31	83.12	82.98	82.85
13	83.11	82.91	82.18	82.01	82.98	82.88	81.67	81.51	83.34	83.18	82.96	82.77
14	82.93	82.64	82.16	82.05	82.92	82.74	81.59	81.45	83.23	83.12	82.87	82.78
15	82.73	82.61	82.16	81.99	82.82	82.73	81.47	81.31	83.14	83.01	82.88	82.71
16	82.74	82.56	82.17	82.00	82.78	82.40	81.43	81.30	83.24	83.12	82.78	82.68
17	82.70	82.54	82.27	82.15	---	---	81.36	81.26	83.38	83.22	82.79	82.68
18	82.76	82.61	82.30	82.21	82.20	82.07	81.46	81.31	83.33	83.18	82.76	82.68
19	82.67	82.56	82.41	82.30	82.07	81.95	81.64	81.44	83.22	83.05	82.86	82.67
20	82.63	82.54	82.38	82.27	82.11	81.95	81.77	81.58	83.20	83.04	82.92	82.80
21	82.63	82.43	82.46	82.36	82.07	81.96	81.76	81.66	83.39	83.15	82.80	82.67
22	82.49	82.39	82.60	82.43	82.16	81.97	81.74	81.64	83.60	83.33	82.87	82.69
23	82.58	82.42	82.56	82.35	82.19	81.96	81.73	81.61	83.74	83.56	83.31	82.84
24	82.53	82.43	82.38	82.29	81.96	81.71	81.75	81.60	83.72	83.60	83.33	83.22
25	82.63	82.43	82.38	82.17	81.90	81.76	81.65	81.48	83.76	83.62	83.27	82.91
26	82.61	82.29	82.17	81.90	81.90	81.74	81.67	81.45	83.83	83.68	83.16	82.96
27	82.40	82.23	82.00	81.84	81.97	81.76	81.74	81.57	83.86	83.74	83.11	83.00
28	82.41	82.34	82.12	81.95	82.01	81.90	82.03	81.71	83.81	83.59	83.17	83.03
29	82.40	82.26	82.19	82.04	82.00	81.80	82.03	81.91	83.88	83.63	83.37	83.08
30	82.30	82.13	82.19	81.79	81.86	81.59	82.07	81.95	84.04	83.88	83.53	83.34
31	---	---	81.80	81.62	---	---	82.04	81.81	84.01	83.90	---	---
MONTH	83.84	82.13	82.60	81.62	82.98	81.55	82.07	81.19	84.04	81.86	84.04	82.64



GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cc 37. SITE ID.--383236076563901. PERMIT NUMBER.--CH-73-0219.

LOCATION.--Lat 38°32'36", long 76°56'39", Hydrologic Unit 02070011, at LaPlata Water Treatment Plant, 2.0 mi. northeast of La Plata.

Owner: Town of La Plata.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1340 ft; casing diameter 6 in., to 300 ft; casing diameter 4 in. from 300 to 1,174 ft, 1,184 to 1,250 ft, and 1,260 to 1,330 ft; screen diameter 4 in. from 1,174 to 1,184 ft, 1,250 to 1,260 ft, and 1,330 to 1,340 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from Nov. 23, 1973 to Dec. 10, 1975. Equipped with digital water-level recorder --15-minute recorder interval from July 12, 1976 to current year.

DATUM.--Elevation of land surface is 185.37 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 3.20 ft above land surface.

REMARKS.--Southern Maryland Observation Well Network. Water levels affected by nearby pumping.

PERIOD OF RECORD.--November 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.44 ft below sea level, Sept. 8, 1976; lowest measured, 108.52 ft below sea level, Oct. 6, 1991.

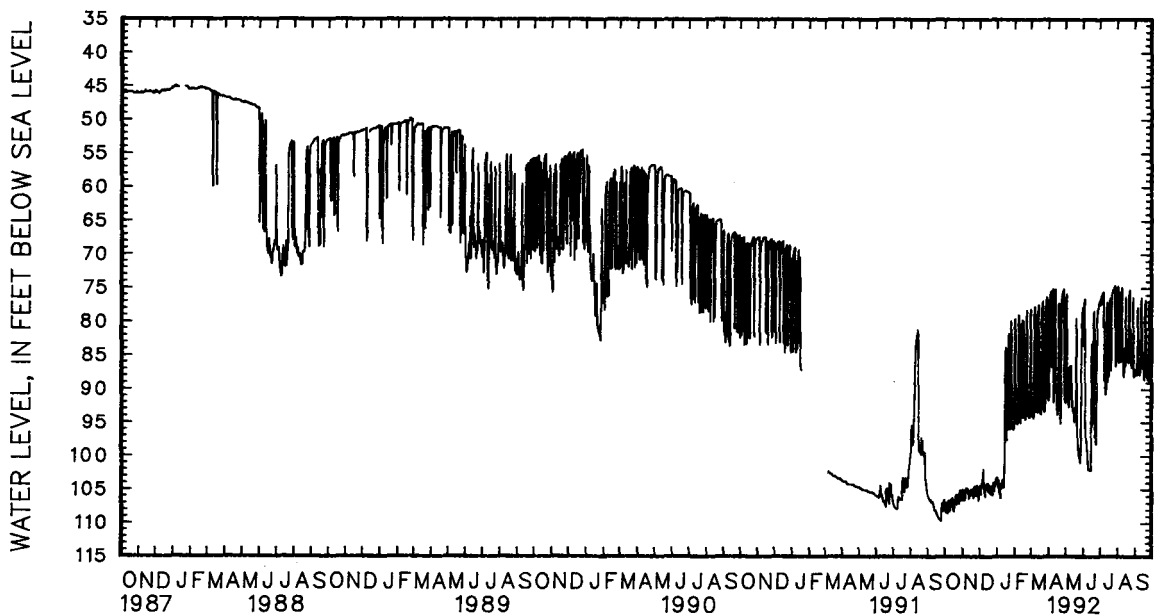
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	106.61	107.75	93.84	106.56	88.76	104.74	86.94	103.20	79.49	81.07	77.48	78.13
2	107.75	108.25	88.98	105.01	88.06	104.47	86.70	103.25	78.86	79.49	77.35	93.13
3	96.16	108.42	89.18	105.45	93.47	105.66	93.63	104.51	78.69	94.68	78.07	93.79
4	90.97	106.97	90.34	106.54	88.58	104.66	87.26	103.65	79.29	94.73	78.40	94.05
5	106.97	108.01	94.67	106.43	87.95	104.21	103.66	104.95	79.46	95.13	78.49	94.01
6	96.38	108.52	89.53	105.35	87.76	104.00	104.95	105.77	79.62	95.25	78.55	94.33
7	91.30	107.10	88.79	105.03	87.54	103.21	93.57	106.27	79.55	95.12	77.69	79.45
8	90.41	106.66	88.60	104.81	86.22	101.94	89.03	104.70	78.95	80.45	77.16	77.68
9	106.70	107.93	88.23	104.78	86.95	104.09	87.77	104.07	78.54	78.94	77.04	92.98
10	96.81	108.25	90.77	105.49	104.09	105.36	90.44	104.72	78.40	94.42	77.70	93.38
11	91.07	106.80	88.70	104.98	94.06	106.06	87.41	103.62	79.05	94.92	77.84	93.39
12	90.08	106.53	94.78	106.34	88.89	104.64	86.96	103.56	79.39	95.08	77.53	78.84
13	93.83	107.11	89.82	105.45	87.89	104.31	91.84	104.73	78.57	80.34	77.34	93.42
14	90.19	106.34	89.04	105.33	90.92	104.88	86.92	102.26	78.35	94.25	77.43	78.74
15	106.35	107.59	92.77	105.83	88.14	104.12	83.77	86.86	78.16	79.72	77.06	77.43
16	96.89	108.01	89.02	105.05	87.57	104.06	82.47	83.77	77.95	94.22	77.00	92.91
17	91.85	108.25	88.61	104.98	93.15	105.32	81.97	97.09	78.23	79.81	77.67	93.10
18	94.84	107.25	91.30	105.47	88.41	104.56	81.82	97.57	77.93	93.71	77.92	93.49
19	90.39	106.43	88.77	105.06	87.86	104.39	81.43	84.07	78.44	94.03	77.88	93.69
20	89.75	105.88	93.57	106.20	93.42	105.63	80.95	95.99	78.76	94.51	77.43	78.95
21	89.34	105.75	88.98	105.03	88.28	104.62	80.45	81.69	78.95	94.52	76.91	77.43
22	97.44	107.19	88.74	104.70	93.29	105.71	80.22	95.82	78.25	79.91	76.42	76.89
23	90.35	106.18	88.09	104.53	88.47	104.53	80.47	95.83	77.69	78.25	76.40	92.42
24	89.74	105.85	95.04	105.92	93.41	105.85	80.43	95.98	77.60	93.47	77.32	93.13
25	89.61	105.74	88.96	104.82	88.54	104.36	79.82	81.46	78.27	93.99	77.64	93.38
26	95.67	107.06	88.38	104.60	87.84	103.97	79.35	79.82	78.31	93.97	77.69	93.04
27	89.71	105.73	87.97	104.41	87.38	104.03	79.17	94.59	78.55	94.25	76.83	78.26
28	89.18	105.36	104.41	105.83	93.57	105.30	79.69	95.58	78.62	94.27	76.35	76.83
29	88.84	105.06	93.75	106.57	88.16	104.05	80.06	95.97	78.13	79.42	75.96	76.35
30	96.99	106.53	89.47	105.31	87.49	103.79	80.24	96.03	---	---	75.87	91.40
31	89.55	105.72	---	---	87.29	103.55	80.17	95.83	---	---	76.07	77.08
MONTH	88.84	108.52	87.97	106.57	86.22	106.06	79.17	106.27	77.60	95.25	75.87	94.33

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued
CH Ce 37--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	75.87	91.72	76.32	92.03	77.27	77.82	76.48	76.85	74.74	74.94	76.50	87.13
2	76.43	90.91	75.84	77.33	77.02	83.51	76.38	77.53	74.54	74.74	76.48	87.94
3	75.91	77.15	75.43	75.83	76.63	77.02	76.11	76.38	74.47	85.04	76.62	87.43
4	75.55	75.91	75.35	91.36	76.29	76.62	75.95	76.10	74.87	86.05	76.65	87.18
5	75.43	75.55	76.21	91.38	76.16	95.19	75.74	75.95	74.93	75.60	76.72	87.87
6	75.21	75.43	76.54	91.90	81.00	97.42	75.59	75.74	74.83	83.11	76.35	77.88
7	75.12	86.75	76.86	92.68	82.16	98.20	75.54	75.59	74.79	85.90	76.16	87.55
8	75.08	75.34	76.79	86.67	88.72	99.08	75.43	80.82	74.90	75.94	76.64	86.75
9	74.88	75.08	76.49	88.35	86.32	100.40	75.35	88.43	74.63	74.90	76.51	87.24
10	74.84	92.00	76.49	86.57	100.41	101.59	77.23	89.91	74.59	84.96	76.64	87.84
11	75.59	77.46	76.73	86.53	89.90	102.04	78.07	90.76	74.87	84.15	76.75	87.49
12	75.22	75.56	76.80	91.50	87.21	102.09	78.92	89.96	74.88	87.94	76.44	77.32
13	75.02	75.22	78.29	92.39	87.19	102.13	77.13	78.92	76.69	88.19	76.12	76.44
14	74.93	90.60	79.14	93.31	87.11	102.17	76.48	77.13	75.90	84.92	76.03	86.81
15	75.55	90.44	79.77	92.94	83.35	102.19	76.34	88.92	75.53	86.54	76.42	86.50
16	75.50	93.13	80.11	93.70	80.96	83.30	76.74	78.31	75.32	76.32	76.44	86.76
17	76.74	93.82	80.26	94.90	80.00	95.52	76.53	88.09	75.13	83.58	76.48	86.99
18	76.14	91.89	79.04	94.36	80.06	95.17	76.48	77.48	75.08	85.77	76.59	88.58
19	75.88	77.24	78.40	94.53	79.18	82.92	76.01	76.48	75.24	82.77	76.74	78.66
20	75.60	88.15	77.74	79.47	78.40	79.16	75.80	86.84	75.12	85.82	76.39	76.74
21	75.99	91.28	77.48	94.17	77.86	78.39	76.00	87.18	75.44	86.06	76.28	87.36
22	76.06	94.50	80.30	97.79	77.58	94.16	75.63	76.00	75.32	76.06	76.68	87.55
23	77.52	95.14	82.49	98.71	85.68	97.90	75.30	75.63	75.11	75.32	76.91	88.24
24	76.16	77.51	86.41	99.96	83.06	98.29	75.10	75.30	75.06	83.09	77.15	88.57
25	75.68	76.15	84.04	100.09	81.32	96.87	74.91	75.10	75.14	84.96	77.95	88.68
26	75.35	75.65	84.81	100.41	79.05	81.33	74.69	74.91	75.34	86.66	76.90	77.99
27	75.15	75.35	86.53	101.02	78.13	79.05	74.54	74.69	75.70	86.82	76.52	76.90
28	75.01	75.15	82.27	98.45	77.55	78.12	74.51	84.08	75.80	86.50	76.40	85.46
29	74.99	90.81	79.96	83.08	77.13	77.55	74.81	86.58	75.65	76.40	76.38	86.50
30	75.82	91.74	78.67	79.96	76.79	77.12	75.32	85.86	75.39	87.06	76.61	88.08
31	---	---	77.82	78.65	---	---	74.94	75.83	76.56	88.16	---	---
MONTH	74.84	95.14	75.35	101.02	76.16	102.19	74.51	90.76	74.47	88.19	76.03	88.68

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

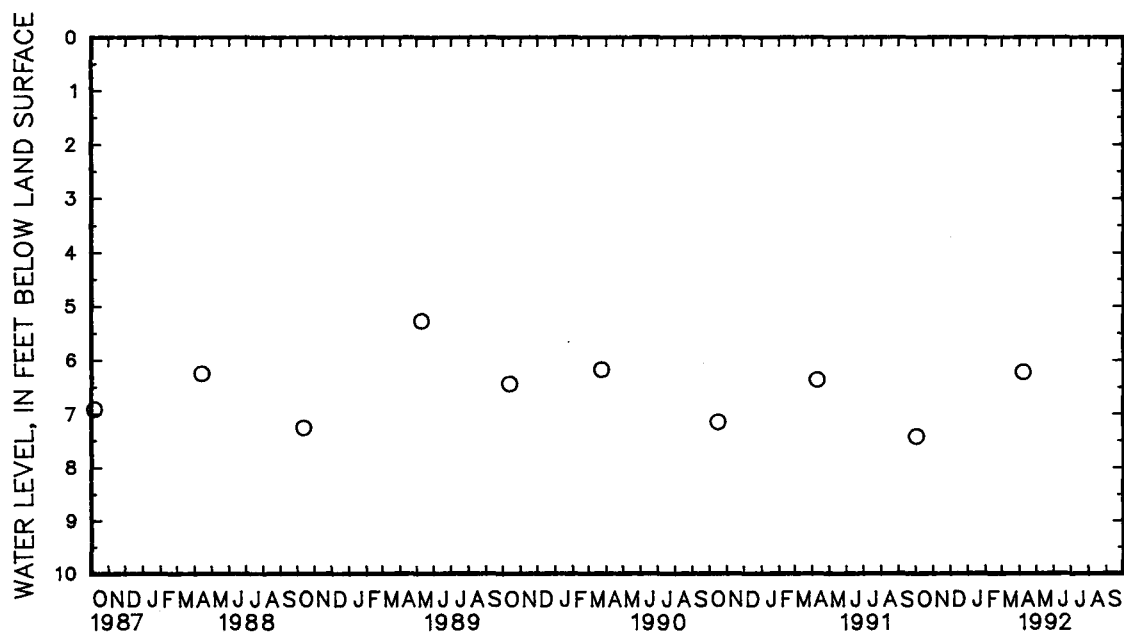
MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Cf 33. SITE ID.--383340076511601. PERMIT NUMBER.--CH-81-0602.
 LOCATION.--Lat 38°33'40", long 76°51'16", Hydrologic Unit 02070011, north side of MD Rt. 5,
 5.5 mi southeast of Waldorf at Zekiah Swamp.
 Owner: U.S. Geological Survey.
 AQUIFER.--Alluvium of Quaternary. Aquifer code: 110ALVM.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 22.2 ft; casing diameter 4 in., to 14.7 ft;
 casing diameter 2 in. from 19.7 to 22.2 ft; screen diameter 2 in. from 14.7 to 19.7 ft.
 INSTRUMENTATION.--Measured twice yearly with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 89.88 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.51 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--August 1983 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land surface, Dec. 29, 1983;
 lowest measured, 8.13 ft below land surface, April 23, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	7.46	APR 7	6.23
WATER YEAR 1992 HIGHEST 6.23 APR 7, 1992 LOWEST 7.46 OCT 2, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Dd 33. SITE ID.--382607077002601. PERMIT NUMBER.--CH-02-6769.

LOCATION.--Lat 38°26'07", long 77°00'26", Hydrologic Unit 02070011, 1.8 mi southwest of Faulkner off Popes Creek Rd.

Owner: Jesuit Order (Loyola Retreat House).

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PFSC.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 694 ft; casing diameter 6 in., to 564 ft; casing diameter 4 in. from 532 to 688 ft; screen diameter 4 in. from 687 to 694 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 99.8 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 1.0 ft above land surface.

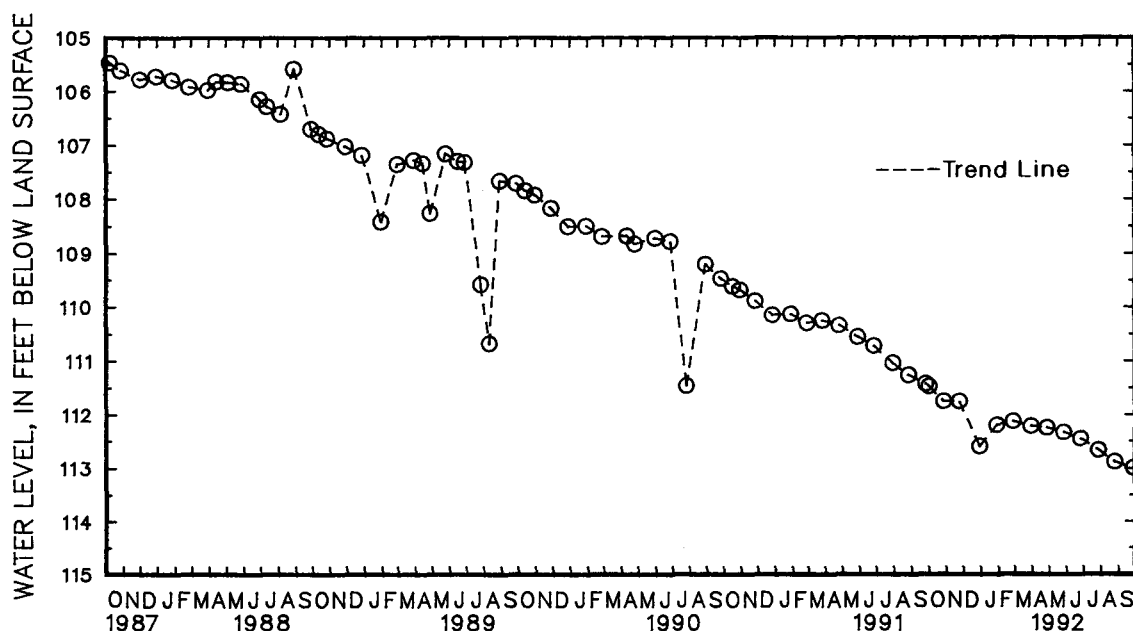
REMARKS.--Maryland Water-Level Network observation well. Water level reported 104 ft below land surface datum, June 27, 1957. Water levels maybe affected by nearby pumping.

PERIOD OF RECORD.--March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.28 ft below land surface, March 14, 1962; lowest measured, 113.03 ft below land surface, Sept. 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	111.50	DEC 30	112.63	MAR 30	112.24	JUN 26	112.48	SEP 28	113.03
28	111.79	JAN 29	112.22	APR 27	112.27	JUL 28	112.70		
NOV 25	111.79	FEB 27	112.15	MAY 27	112.36	AUG 26	112.92		
WATER YEAR 1992		HIGHEST	111.50	OCT 2, 1991		LOWEST	113.03	SEP 28, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

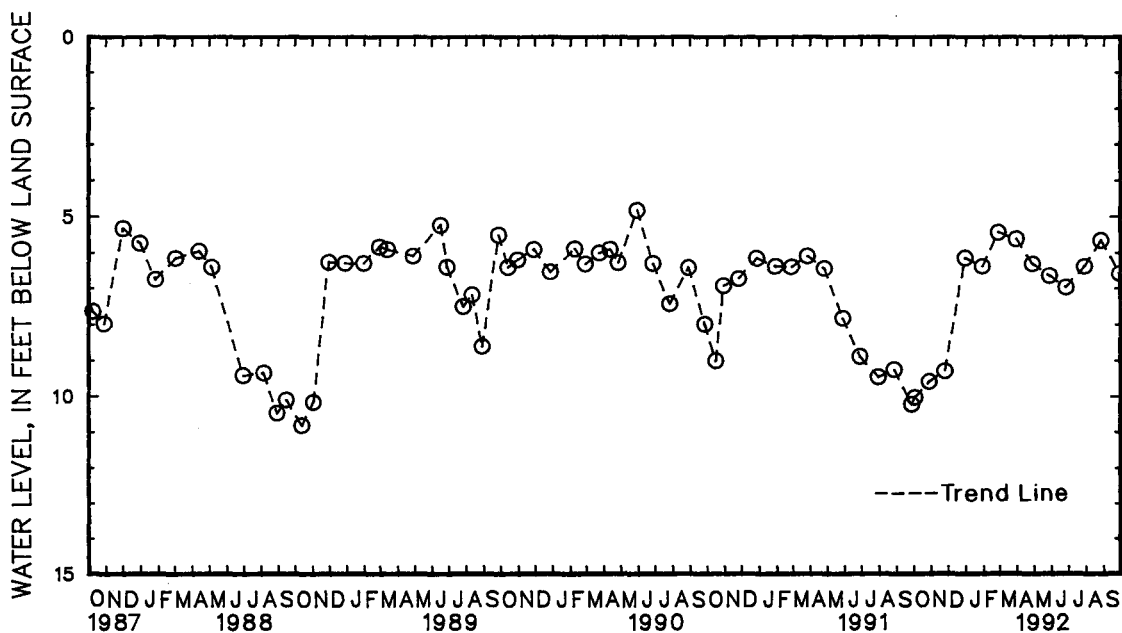
MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH De 45. SITE ID.--382927076552301. PERMIT NUMBER.--CH-81-0604.
LOCATION.--Lat 38°29'27", long 76°55'23", Hydrologic Unit 02070011, north side of MD Rt. 6,
4.1 mi southeast of La Plata.
Owner: U.S. Geological Survey.
AQUIFER.--Alluvium of Pleistocene age and Nanjemoy Formation of Eocene age. Aquifer codes: 112ALVM, 124NNJM.
WELL CHARACTERISTICS.--Drilled, observation, water-table well; depth 25.5 ft; casing diameter 4 in., to 15.5 ft,
screen diameter 2 in. from 15.5 to 20.5 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 44.77 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.35 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--August 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.83 ft below land surface datum, May 30, 1990;
lowest measured, 10.87 ft below land surface datum, Oct. 12, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	10.08	DEC 30	6.15	MAR 30	5.63	JUN 26	7.00	SEP 28	6.61
28	9.63	JAN 29	6.39	APR 27	6.33	JUL 28	6.40		
NOV 25	9.33	FEB 27	5.44	MAY 28	6.67	AUG 26	5.67		
WATER YEAR 1992		HIGHEST	5.44	FEB 27, 1992		LOWEST	10.08	OCT 2, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 16. SITE ID.--382103076560201.

LOCATION.--Lat 38°21'03", long 76°56'02", Hydrologic Unit 02070010, near Wayside.

Owner: Harry Ferris.

AQUIFER.--Park Hall Formation of Upper Pliocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Dug, unused, water-table well, depth 23 ft; casing diameter 42 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder from March 29, 1966 to Oct. 11, 1967.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.80 ft above land surface.

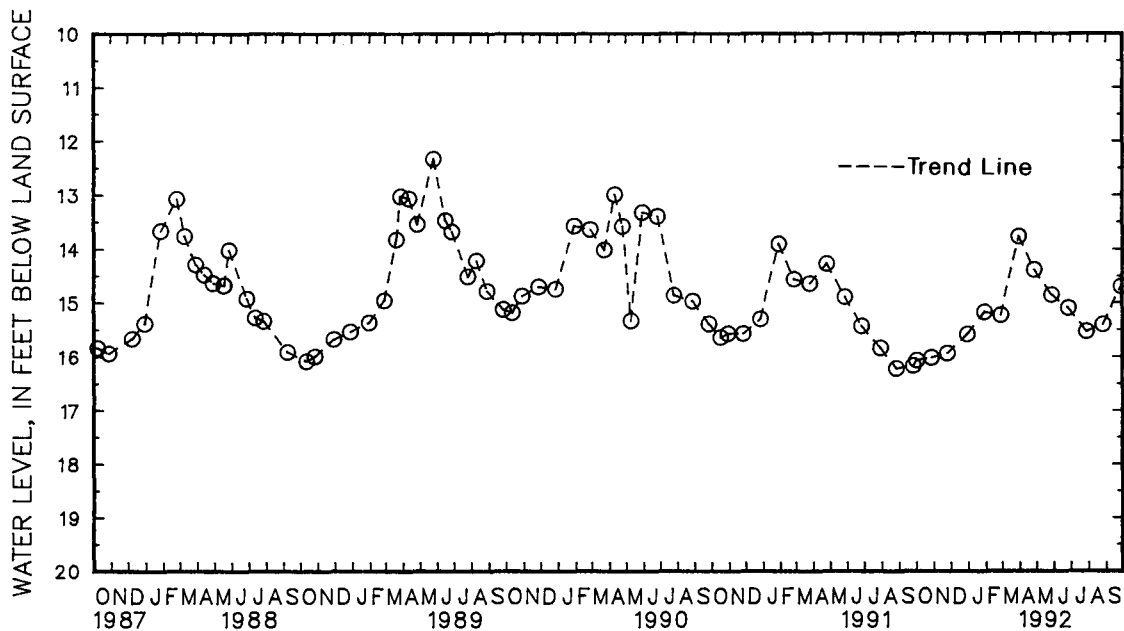
REMARKS.--Maryland Water-Level Network observation well and Maryland Water Quality Network observation well.

PERIOD OF RECORD.--May 1946, 1947, March 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.60 ft below land surface, March 30, 1984; lowest measured, 20.65 ft below land surface, Dec. 20, 1949.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	16.08	DEC 30	15.59	MAR 30	13.77	JUN 26	15.10	SEP 28	14.70
28	16.03	JAN 29	15.19	APR 27	14.39	JUL 28	15.54		
NOV 25	15.95	FEB 27	15.24	MAY 28	14.86	AUG 26	15.41		
WATER YEAR 1992		HIGHEST	13.77	MAR 30, 1992		LOWEST	16.08	OCT 2, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

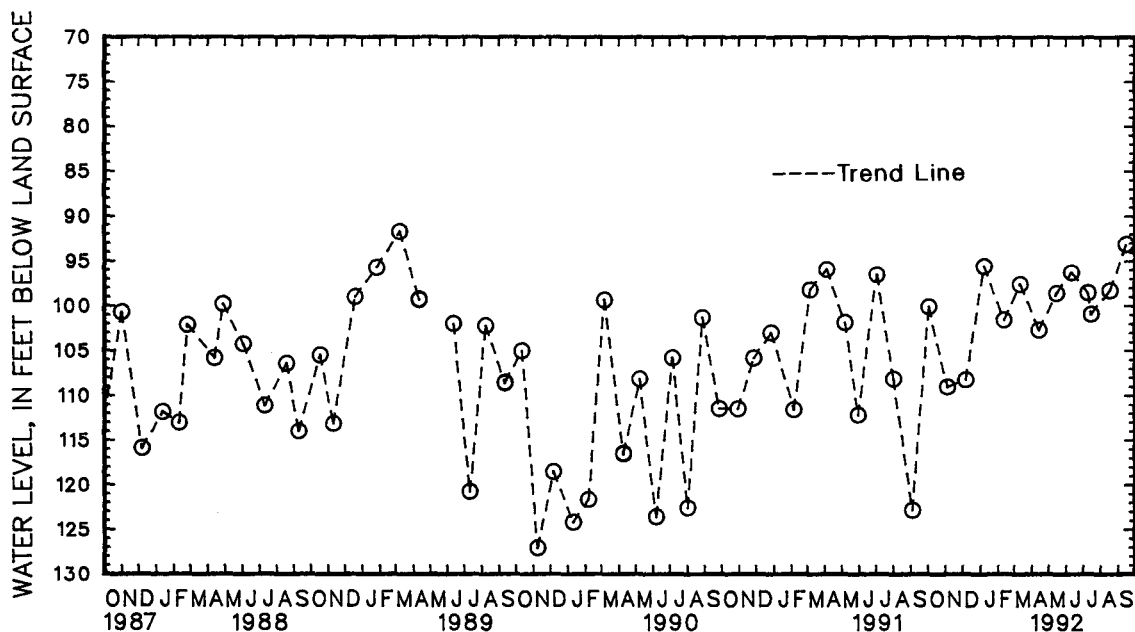
GROUND-WATER LEVELS
MARYLAND--Continued
CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 70. SITE ID.--382154076574801. PERMIT NUMBER.--CH-67-0081.
LOCATION.--Lat 38°21'54", long 76°57'48", Hydrologic Unit 02070011, at the Morgantown Power Plant,
1.5 mi. north of Morgantown.
Owner: Potomac Edison Power Co.
AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1132 ft; casing diameter 2 in., to 1090 ft,
1100 to 1105 ft, and 1115 to 1132 ft; screen diameter 2 in. from 1090 to 1100 ft, and 1105 to 1115 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-
level recorder from May 12, 1982 to Jan. 6, 1983. Equipped with digital water-level recorder--15 and 30-minute
recorder intervals from June 1, 1978 to October 1986. Equipped with electronic water level recorder--15-minute
recorder interval from October 1986 to current year.
DATUM.--Elevation of land surface is 22.83 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 3.43 ft above land surface.
REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping.
PERIOD OF RECORD.--October 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.57 ft below land surface, April 14, 1981;
lowest measured, 127.05 ft below sea level, Nov. 8, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	100.09	JAN 7	95.56	APR 14	102.68	JUL 10	98.51	SEP 15	93.10
NOV 4	109.01	FEB 11	101.56	MAY 15	98.56	15	100.92		
DEC 6	108.24	MAR 12	97.57	JUN 10	96.27	AUG 18	98.27		

WATER YEAR 1992 HIGHEST 93.10 SEP 15, 1992 LOWEST 109.01 NOV 4, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

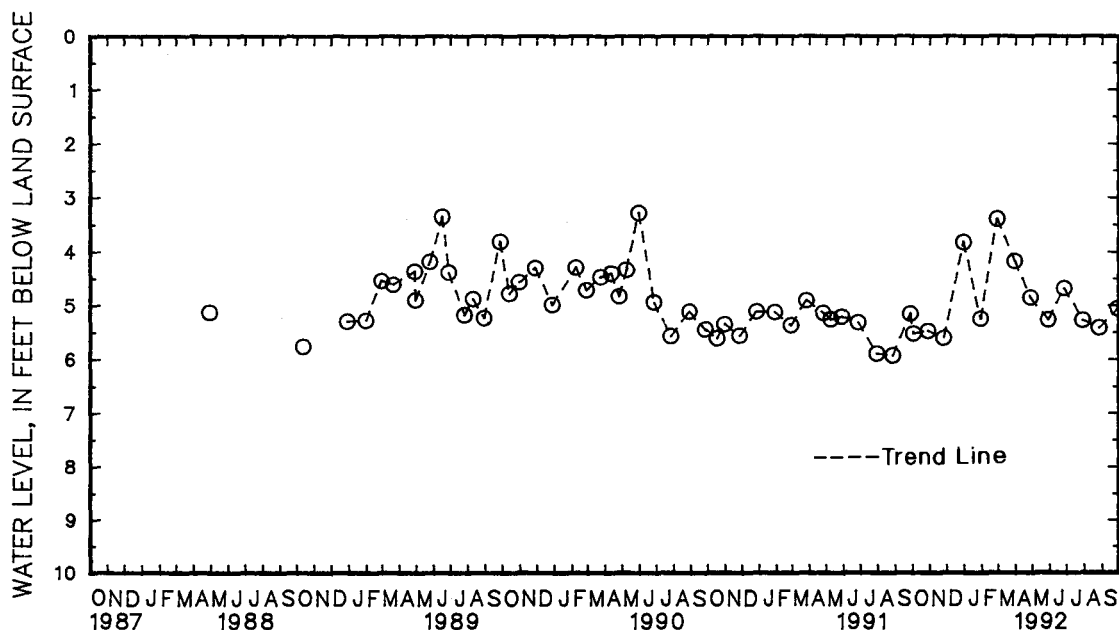
MARYLAND--Continued

CHARLES COUNTY--Continued

WELL NUMBER.--CH Ee 90. SITE ID.--382456076562201. PERMIT NUMBER.--CH-81-0606.
 LOCATION.--Lat 38°24'56", long 76°56'22", Hydrologic Unit 02070011, at Allens Fresh.
 Owner: U.S. Geological Survey.
 AQUIFER.--Nanjemoy Formation of Eocene age. Aquifer code: 124NNJM.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 21 ft; casing diameter 4 in., to 11 ft; casing diameter 2 in from 16 to 21 ft;
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 6.81 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.44 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--August 1983 to January 1985, April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.29 ft below land surface, May 30, 1990;
 lowest measured, 7.58 ft below land surface, April 23, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	5.56	DEC 30	3.83	MAR 30	4.19	JUN 26	4.70	SEP 28	5.08
28	5.51	JAN 29	5.28	APR 27	4.88	JUL 28	5.31		
NOV 25	5.64	FEB 27	3.40	MAY 28	5.30	AUG 26	5.45		
WATER YEAR 1992		HIGHEST	3.40	FEB 27, 1992	LOWEST	5.64	NOV 25, 1991		



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY

WELL NUMBER.--DO Bg 59. SITE ID.--383708075503801. PERMIT NUMBER.--DO-73-0612.

LOCATION.--Lat 38°37'08" long 75°50'38", Hydrologic Unit 02060008, at Hurlock Sewage Treatment Plant.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 537 ft; casing diameter 6 in., to 65 ft; casing diameter 2 in. from 65 to 527 ft; screen diameter 2 in. from 527 to 537 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 0.60 ft above land surface.

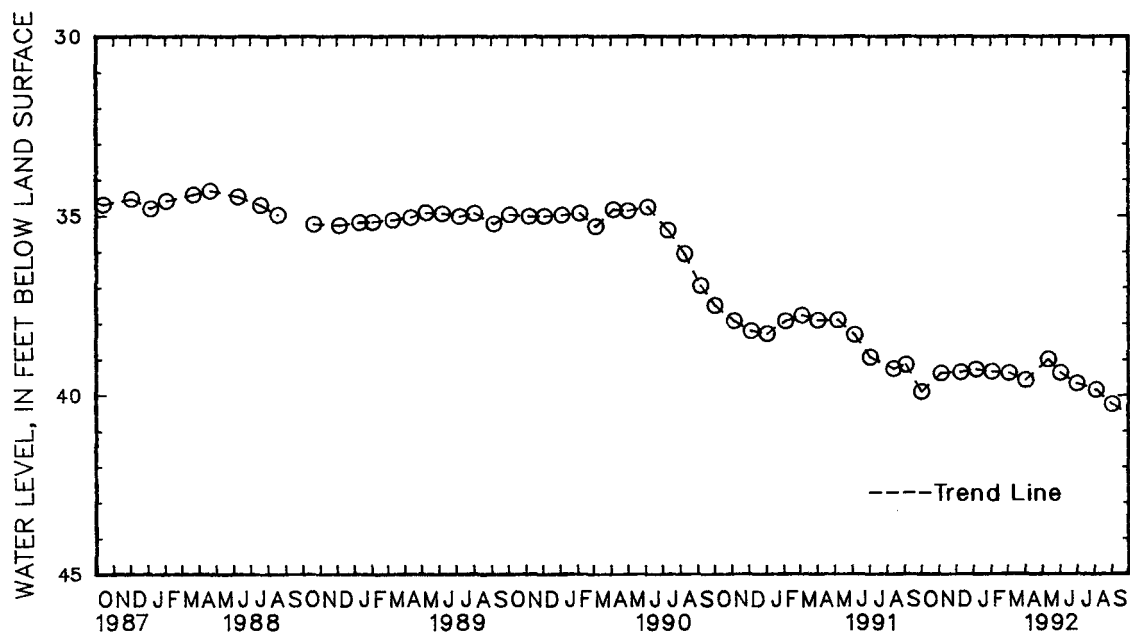
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.79 ft below land surface, Aug. 2, 1978; lowest measured, 40.25 ft below land surface, Sept. 1, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	39.90	DEC 10	39.36	FEB 3	39.34	APR 2	39.58	JUN 2	39.38	AUG 4	39.85
NOV 5	39.39	JAN 6	39.28	MAR 4	39.38	MAY 12	39.00	JUL 1	39.68	SEP 1	40.25
WATER YEAR 1992		HIGHEST	39.00	MAY 12, 1992		LOWEST	40.25	SEP 1, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Cd 1. SITE ID.--383151076080801.

LOCATION.--Lat 38°31'51", long 76°08'08", Hydrologic Unit 02060005, near Christs Rock.

Owner: Harold E. Fee.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 390 ft; casing diameter 2 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.50 ft above land surface.

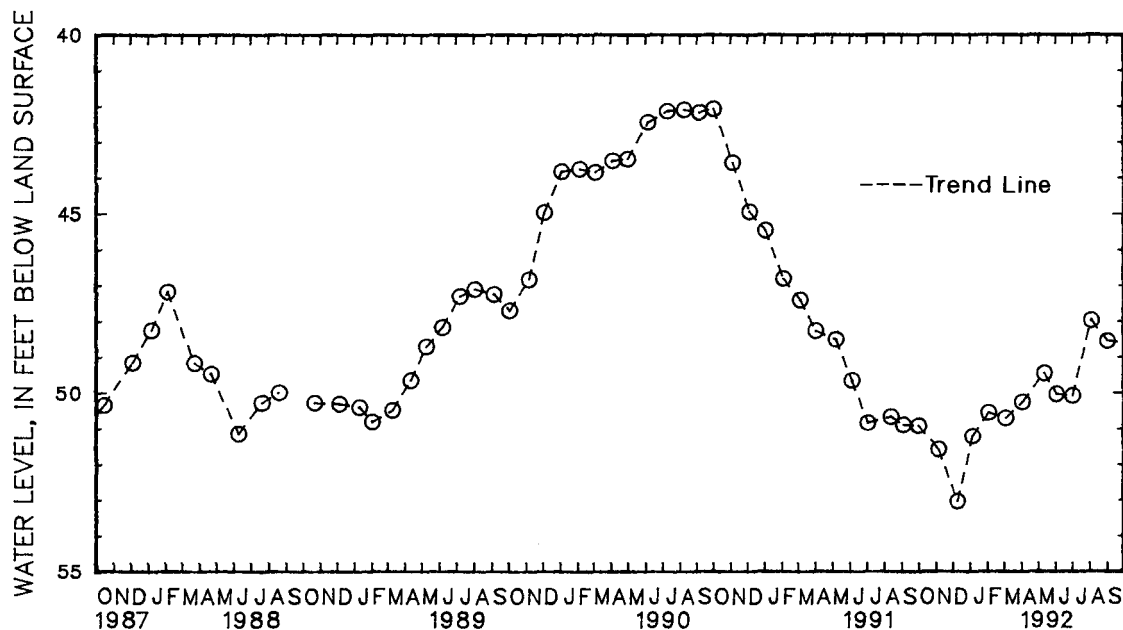
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.07 ft below land surface, Oct. 2, 1990;
lowest measured, 80.32 ft below land surface, Oct. 16, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	50.92	DEC 10	53.04	FEB 3	50.55	APR 2	50.25	JUN 2	50.03	AUG 4	47.97
NOV 5	51.59	JAN 6	51.21	MAR 4	50.70	MAY 12	49.45	JUL 1	50.07	SEP 1	48.55
WATER YEAR 1992		HIGHEST	47.97	AUG 4, 1992		LOWEST	53.04	DEC 10, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Ce 5. SITE ID.--383340076041601.

LOCATION.--Lat 38°33'40", long 76°04'16", Hydrologic Unit 02060005, at Cambridge Pumping Station.

Owner: Municipal Utilities Commission.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 405 ft; casing diameter 12 in., to 385 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 4.00 ft above land surface.

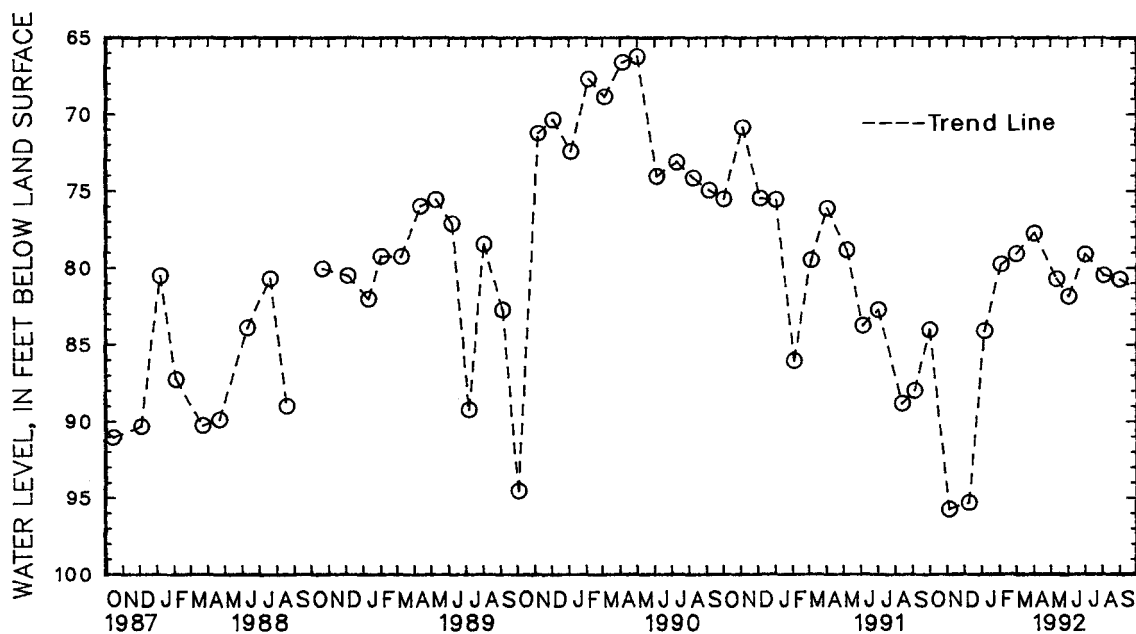
PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 66.23 ft below land surface, May 1, 1990;
lowest measured, 115.06 ft below land surface, Aug. 29, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	84.03	DEC 10	95.30	FEB 3	79.74	APR 2	77.73	JUN 2	81.85	AUG 4	80.43
NOV 5	95.75	JAN 6	84.07	MAR 1	79.09	MAY 12	80.74	JUL 1	79.09	SEP 1	80.75

WATER YEAR 1992 HIGHEST 77.73 APR 2, 1992 LOWEST 95.75 NOV 5, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.41 ft below land surface, March 1, 1960;
lowest measured, 41.12 ft below land surface, Aug. 7, 1959.

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Ce 78. SITE ID.--383243076042301. PERMIT NUMBER.--DO-66-0026.

LOCATION.--Lat 38°32'43", Long 76°04'23", Hydrologic Unit 02060005, at Stone Boundary Rd., Cambridge.

Owner: City of Cambridge.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 517 ft; casing diameter 12 in.; screen diameter 12 in. from 360.3 to 363.7 ft, 368 to 380 ft, 385 to 400 ft, 405 to 420 ft, 425 to 440 ft, 445 to 460 ft, 465 to 480 ft, and 485 to 500 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.10 ft above land surface.

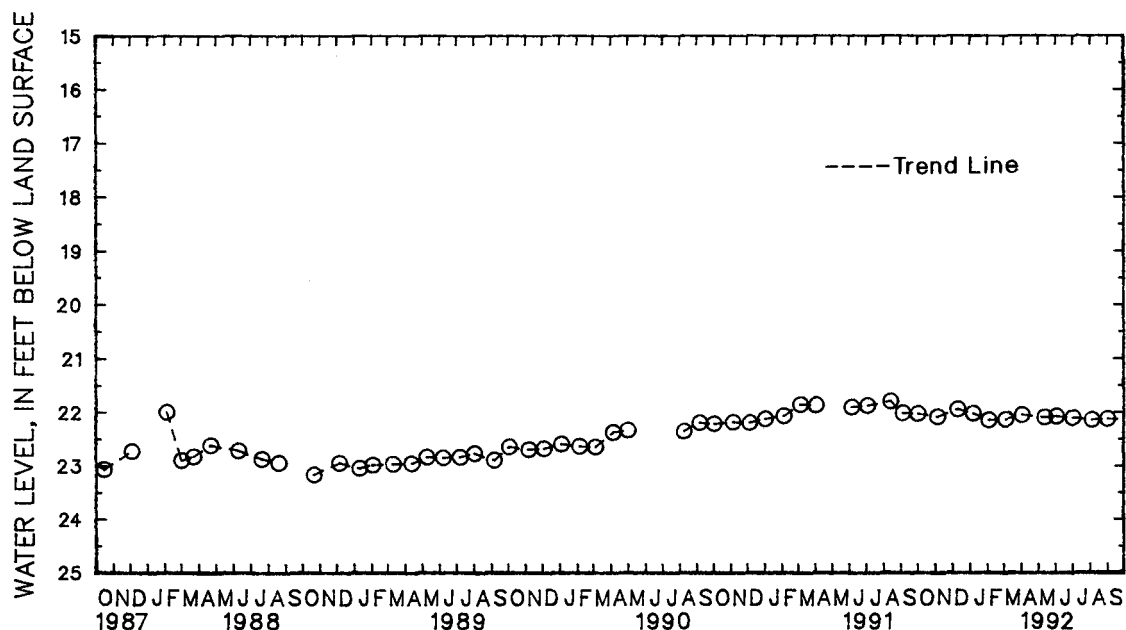
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.80 ft below land surface, August 13, 1991; lowest measured, 26.39 ft below land surface, Oct. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	22.03	DEC 10	21.95	FEB 3	22.15	APR 2	22.06	JUN 2	22.08	AUG 4	22.15
NOV 5	22.09	JAN 6	22.03	MAR 4	22.14	MAY 12	22.10	JUL 1	22.11	SEP 1	22.13
WATER YEAR 1992		HIGHEST	21.95	DEC 10, 1991		LOWEST	22.15	FEB 3, 1992		AUG 4, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Ce 88. SITE ID.--383401076032001. PERMIT NUMBER.--DO-73-1369.

LOCATION.--Lat 38°34'01", long 76°03'20", Hydrologic Unit 02060005, at Eastern Shore State Hospital, Cambridge.

Owner: U.S. Geological Survey.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1427.4 ft; casing diameter 12 in., to 103 ft; casing diameter 4 in., to 1427.4 ft; perforated casing diameter 4 in. from 1417.4 to 1427.4 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 4.4 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 1.18 ft above land surface.

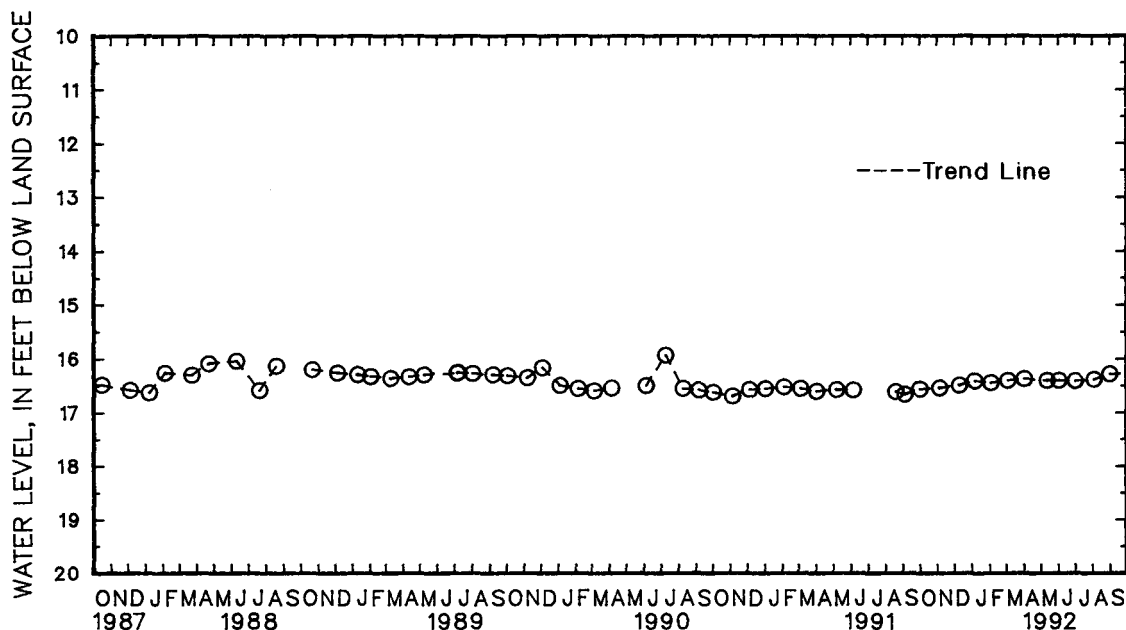
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.51 ft below land surface, July 20, 1983; lowest measured, 22.22 ft below land surface, Nov. 13, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	16.57	DEC 10	16.50	FEB 3	16.45	APR 2	16.38	JUN 2	16.41	AUG 4	16.39
NOV 5	16.55	JAN 6	16.42	MAR 4	16.41	MAY 12	16.41	JUL 1	16.42	SEP 1	16.29
WATER YEAR 1992		HIGHEST	16.29	SEP 1, 1992	LOWEST	16.57	OCT 1, 1991				

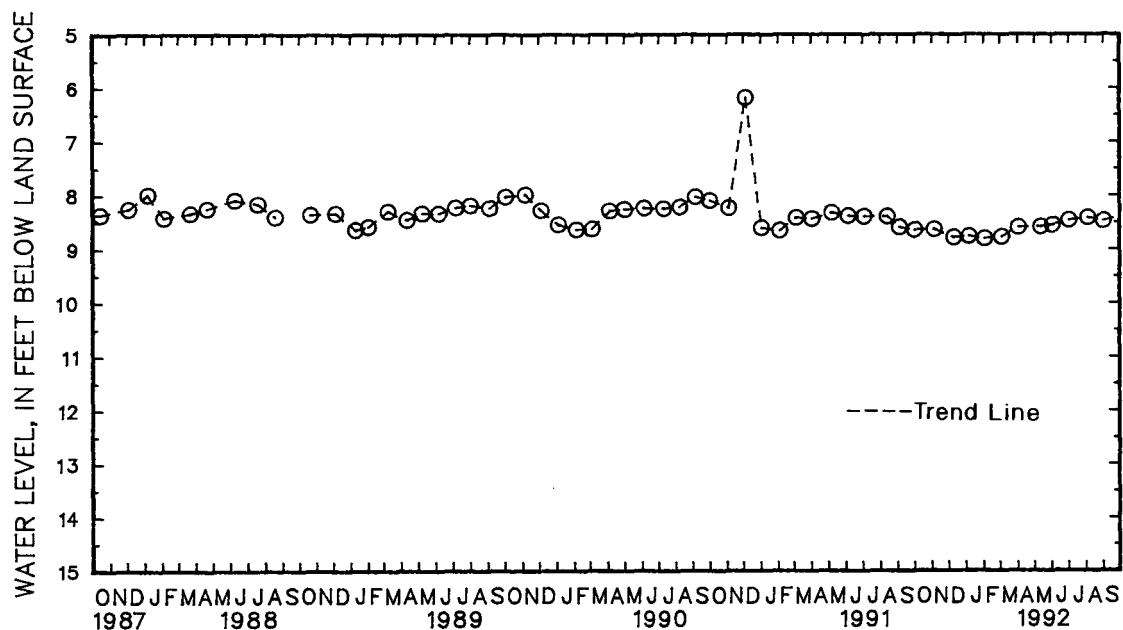


5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--DO Db 17. SITE ID.--382800076180701.
LOCATION.--Lat 38°28'00", long 76°18'07", Hydrologic Unit 02060005, near MD Rt. 16, Taylors Island.
Owner: U.S. Geological Survey.
AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 320 ft; casing diameter 6 in., to 55 ft;
casing diameter 2 in. from 55 to 270 ft; screen diameter 2 in. from 270 to 280 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 2.20 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.18 ft below land surface, Dec. 5, 1990;
lowest measured, 9.10 ft below land surface, Nov. 19, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 1	8.65	DEC 10	8.79	FEB 3	8.81	APR 2	8.60	JUN 2	8.56	AUG 4	8.42				
NOV 5	8.64	JAN 6	8.77	MAR 4	8.78	MAY 12	8.59	JUL 1	8.47	SEP 1	8.48				
WATER YEAR 1992		HIGHEST		8.42		AUG 4, 1992		LOWEST		8.81		FEB 3, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

DORCHESTER COUNTY--Continued

WELL NUMBER.--DO Db 18. SITE ID.--382807076175801. PERMIT NUMBER.--DO-81-1314.

LOCATION.-- Lat 38°28'07", long 76°17'58", Hydrologic Unit 02060005, Taylors Island.

Owner: Eleanor Polley.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, depth 540 ft; casing diameter 4 in., to 140 ft; casing diameter 2 in. from 140 to 540 ft; screen diameter 2 in. from 520 to 540 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 2 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.50 ft above land surface.

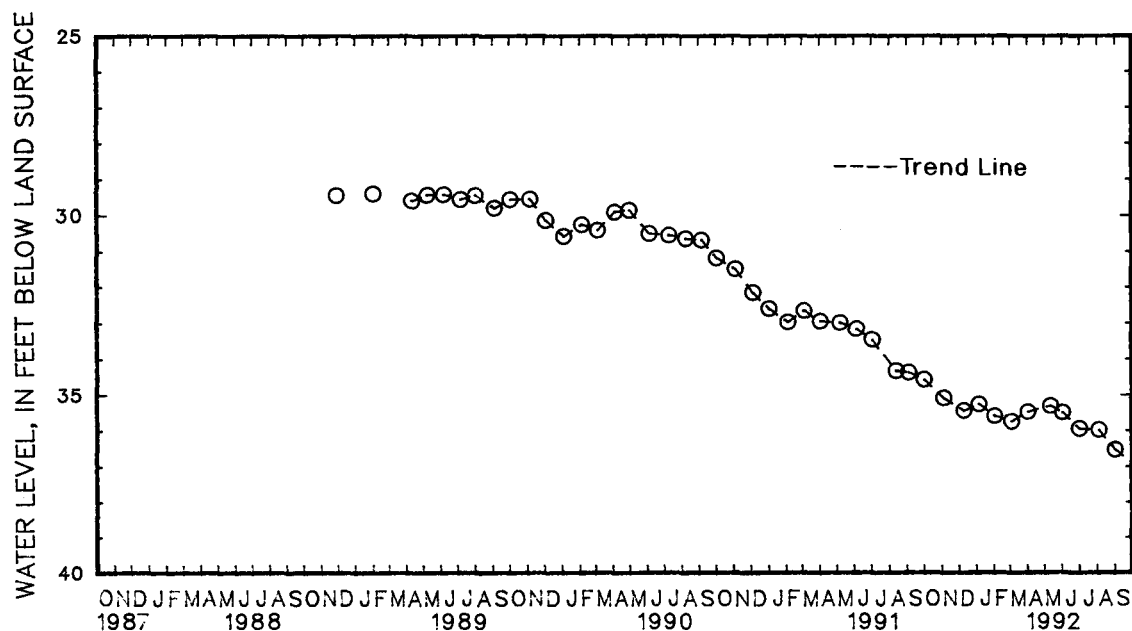
REMARKS.--Maryland Water-Level Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.44 ft below land surface, Feb. 2, 1989; lowest measured, 36.59 ft below land surface, Sept. 1, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	34.63	DEC 10	35.50	FEB 3	35.65	APR 2	35.52	JUN 2	35.54	AUG 4	36.03
NOV 5	35.14	JAN 6	35.31	MAR 4	35.80	MAY 12	35.35	JUL 1	36.00	SEP 1	36.59
WATER YEAR 1992		HIGHEST	34.63	OCT 1, 1991	LOWEST	36.59	SEP 1, 1992				

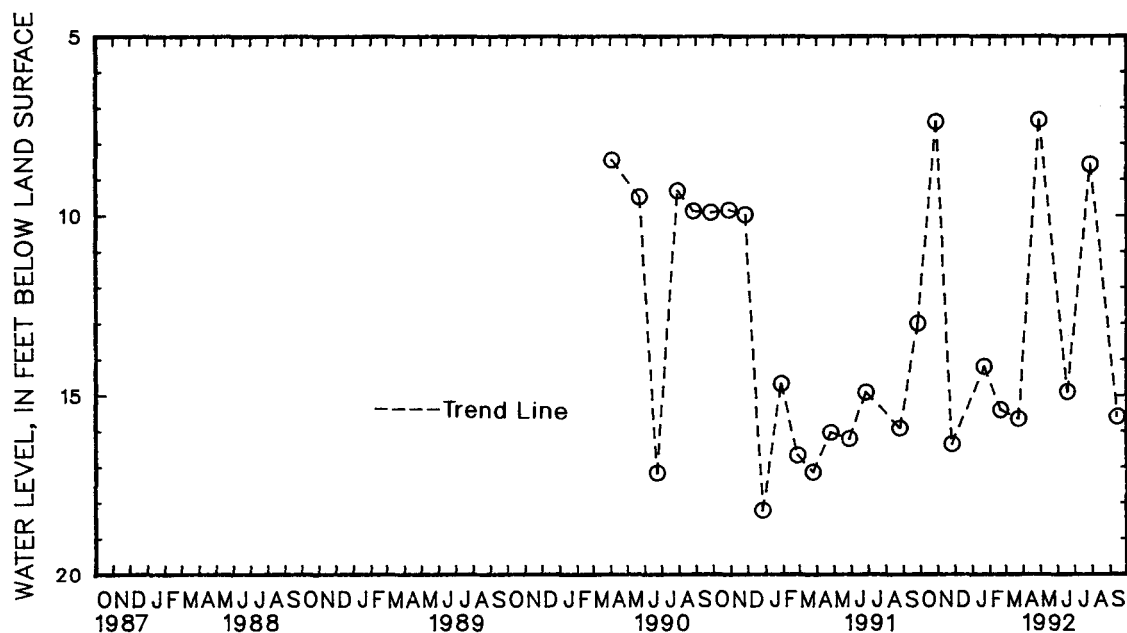


5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

DORCHESTER COUNTY--Continued

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	7.39	JAN 22	14.20	MAR 24	15.66	JUN 18	14.91	SEP 14	15.60		
NOV 26	16.37	FEB 20	15.41	APR 29	7.34	JUL 29	8.58				
WATER YEAR 1992		HIGHEST		7.34 APR 29, 1992		LOWEST		16.37 NOV 26, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

FREDERICK COUNTY

WELL NUMBER.--FR Af 27. SITE ID.--394200077190701. PERMIT NUMBER.--FR-73-7155.

LOCATION.--Lat 39°42'00", long 77°19'07", Hydrologic Unit 02070009, 0.3 mi southwest of U.S. Rt. 15 and MD Rt. 140, Emmitsburg.

Owner: City of Emmitsburg.

AQUIFER.--Gettysburg Shale of Upper Triassic age. Aquifer code: 231GBRG.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 365 ft; casing diameter 6 in., to 39 ft; open hole.

DATUM.--Elevation of land surface is 390 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.81 ft above land surface.

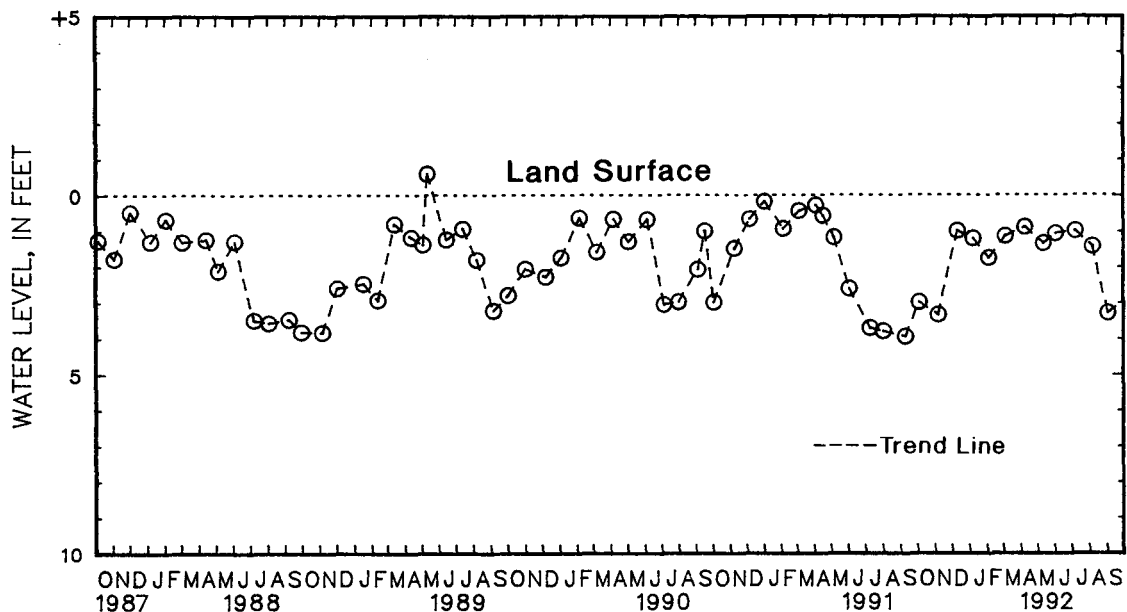
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--April 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.62 ft above land surface, May 23, 1983; lowest measured, 5.43 ft below land surface, June 2, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	2.99	DEC 10	.99	FEB 4	1.75	APR 8	.88	JUN 2	1.06	AUG 6	1.42
NOV 6	3.34	JAN 7	1.20	MAR 4	1.14	MAY 11	1.34	JUL 7	.97	SEP 2	3.29
WATER YEAR 1992		HIGHEST	.88	APR 8, 1992		LOWEST	3.34	NOV 6, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

FREDERICK COUNTY--Continued

WELL NUMBER.--FR Bd 96. SITE ID.--393733077274801.

LOCATION.--Lat 39°37'33", long 77°27'48", Hydrologic Unit 02070009, 0.4 mi west of Hunting Creek Lake, Cunningham Falls State Park.

Owner: Cunningham Falls State Park.

AQUIFER.--Catoctin Metabasalt of Precambrian age. Aquifer code: 400CTCN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 189 ft; casing diameter 6 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder April 5, 1982 to Feb. 21, 1984.

DATUM.--Elevation of land surface is 1,150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing at land surface.

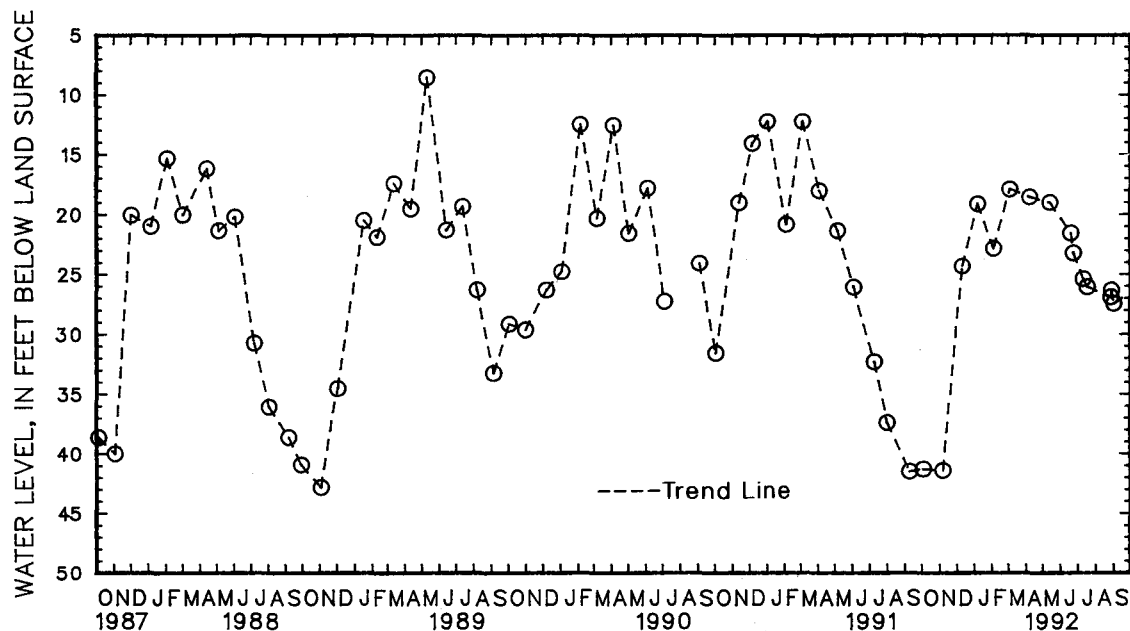
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--April 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.54 ft below land surface, May 11, 1989; lowest measured, 46.46 ft below land surface, Nov. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	41.30	JAN 7	19.12	APR 8	18.52	JUN 23	23.21	AUG 27	26.93
NOV 6	41.43	FEB 4	22.85	MAY 14	19.00	JUL 10	25.40	28	26.36
DEC 10	24.31	MAR 4	17.90	JUN 19	21.55	17	26.08	SEP 1	27.48
WATER YEAR 1992		HIGHEST	17.90	MAR 4, 1992	LOWEST	41.43	NOV 6, 1991		



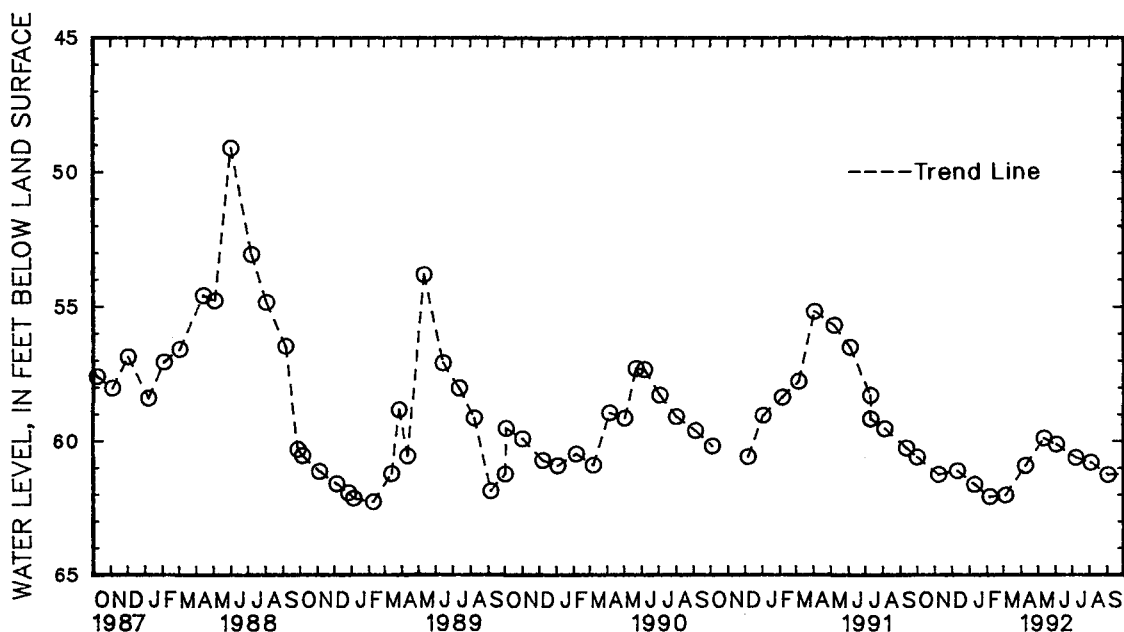
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
FREDERICK COUNTY--Continued

WELL NUMBER.--FR Df 35. SITE ID.--392517077190401. PERMIT NUMBER.--FR-73-0852.
LOCATION.--Lat 39°25'17", long 77°19'04", Hydrologic Unit 02070009, north of Eaglehead Drive, near Lake Linganore.
Owner: Lake Linganore Association.
AQUIFER.--Sams Creek Metabasalt of Paleozoic age. Aquifer code: 300SMCK.
WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 302 ft, casing diameter 6 in., to 26 ft, open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 570 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 1.00 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--May 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.20 ft below land surface, April 2, 1984;
lowest measured, 62.27 ft below land surface, Feb. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	60.60	DEC 11	61.11	FEB 6	62.08	APR 9	60.92	JUN 3	60.12	AUG 4	60.80
NOV 8	61.25	JAN 10	61.62	MAR 5	62.02	MAY 12	59.89	JUL 8	60.62	SEP 3	61.26
WATER YEAR 1992		HIGHEST	59.89	MAY 12, 1992		LOWEST	62.08	FEB 6, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
FREDERICK COUNTY--Continued

WELL NUMBER.--FR Eh 11. SITE ID.--392257077095601. PERMIT NUMBER.--FR-81-0088.

LOCATION.--Lat 39°22'57", long 77°09'56", Hydrologic Unit 02070009. 0.5 mi west of Mount Airy.

Owner: Town of Mount Airy.

AQUIFER.--Marburg Formation of Paleozoic age. Aquifer code: 300MRBG.

WELL CHARACTERISTICS.--Drilled, unused, water table well, depth 103 ft; casing diameter 6 in., to 24 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.-- Elevation of land surface is 650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.85 ft above land surface.

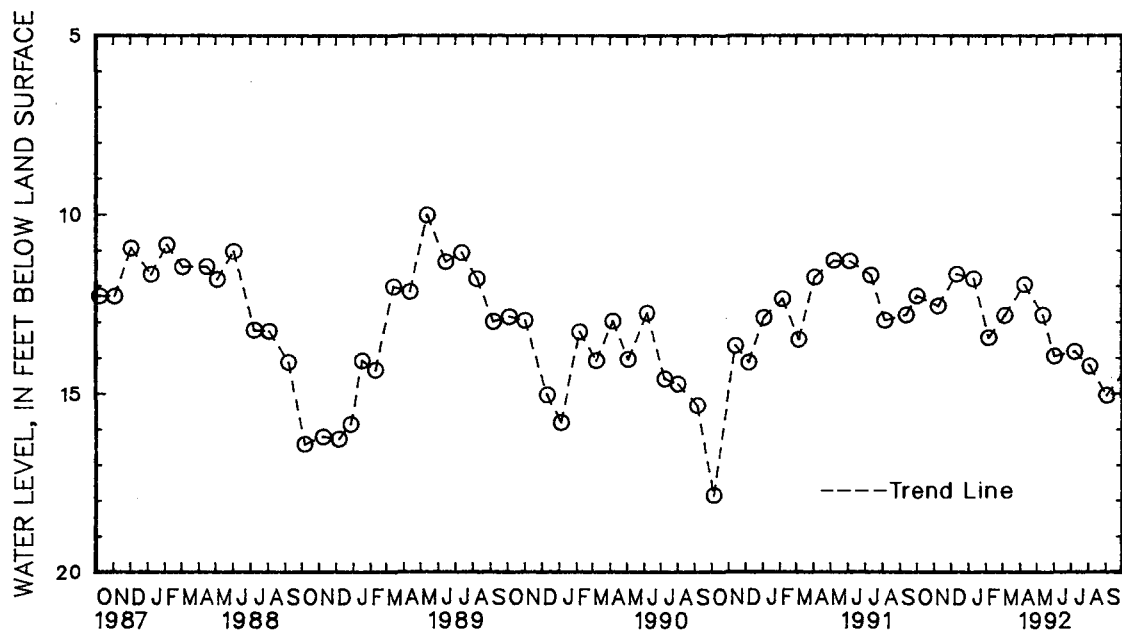
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.-- November 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.35 ft below land surface, March 23, 1983;
lowest measured, 17.91 ft below land surface, Oct. 10, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	12.27	DEC 11	11.66	FEB 6	13.43	APR 9	11.95	JUN 2	13.96	AUG 4	14.23
NOV 8	12.55	JAN 10	11.79	MAR 5	12.81	MAY 12	12.80	JUL 8	13.83	SEP 3	15.05
WATER YEAR 1992		HIGHEST	11.66	DEC 11, 1991		LOWEST	15.05	SEP 3, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY

WELL NUMBER.--GA Ag 1. SITE ID.--394017078581701.

LOCATION.--Lat 39°40'17", long 78°58'17", Hydrologic Unit 02070002, in the Savage River Valley, 2.5 mi northwest of Frostburg.

Owner: Town of Frostburg.

AQUIFER.--Pocono Formation of Lower Mississippian age. Aquifer code: 337POCN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 30 ft; casing diameter 8 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing at land surface.

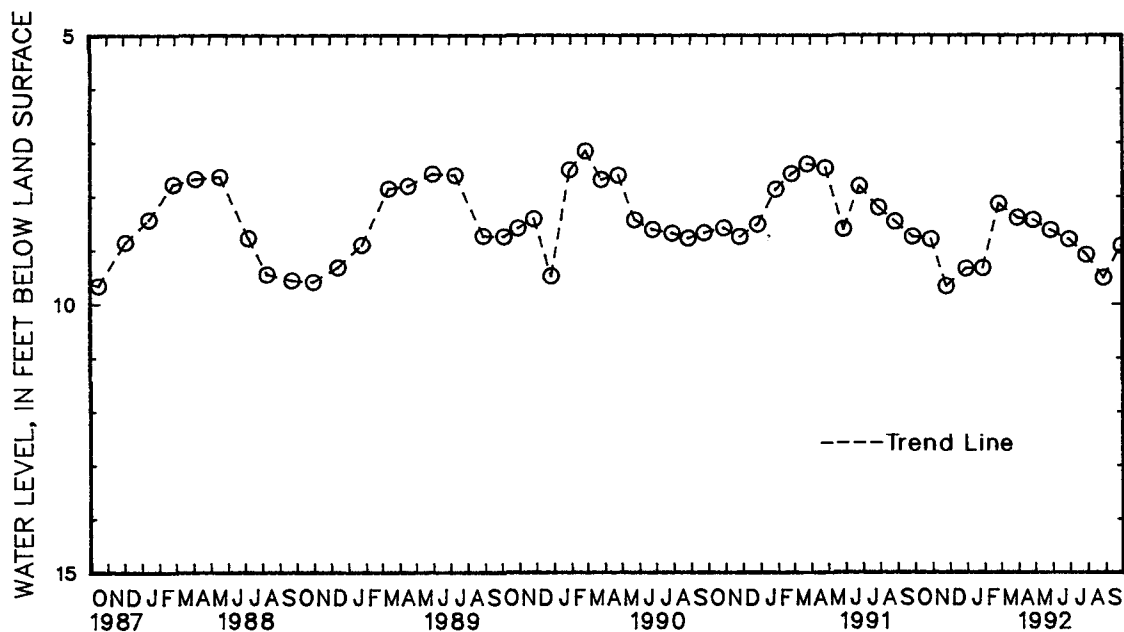
REMARKS.--Maryland Water-Level Network observation well. Water level measured, 11.75 ft below land surface, March 26, 1984; water levels affected by nearby pumping.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.71 ft below land surface, Jan. 14, 1950; lowest measured, 14.59 ft below land surface, Jan. 28, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.80	DEC 30	9.35	FEB 26	8.14	APR 27	8.44	JUN 29	8.80	AUG 28	9.52
NOV 25	9.68	JAN 29	9.34	MAR 30	8.40	MAY 28	8.63	JUL 29	9.09	SEP 28	8.92
WATER YEAR 1992		HIGHEST	8.14	FEB 26, 1992		LOWEST	9.68	NOV 25, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

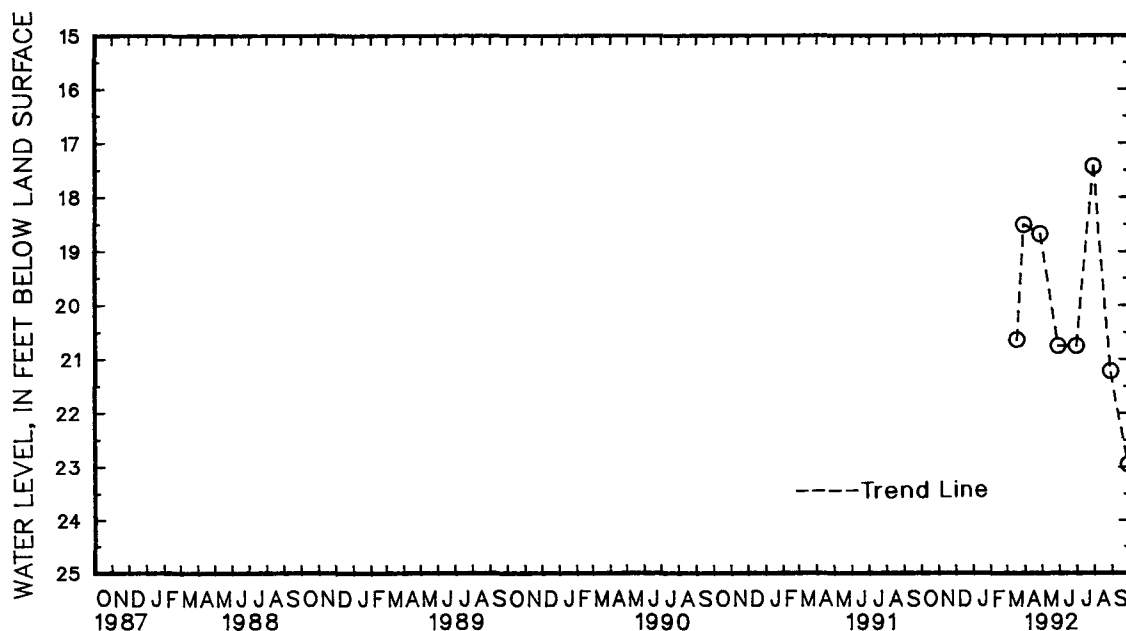
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Cb 79. SITE ID.--393121079200401. PERMIT NUMBER.--GA-88-0248.
 LOCATION.--Lat 39°31'21", long 79°20'04", Hydrologic Unit 05020006, 0.5 mi south of McHenry.
 Owner: Suncove Association.
 AQUIFER.--Mauch Chunk Formation of Upper Mississippian age. Aquifer code: 331MCKK.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 370 ft; casing diameter 6 in., to 82 ft;
 open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel from March 1992 to current year.
 DATUM.--Elevation of land surface is 2,485 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.2 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--March 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.43 ft below land surface, July 29, 1992;
 lowest measured, 22.99 ft below land surface, Sept. 28, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17	20.68	APR 27	18.68	JUN 29	20.79	AUG 28	21.26
30	18.51	MAY 28	20.79	JUL 29	17.43	SEP 28	22.99
WATER YEAR 1992		HIGHEST	17.43	JUL 29, 1992	LOWEST	22.99	SEP 28, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

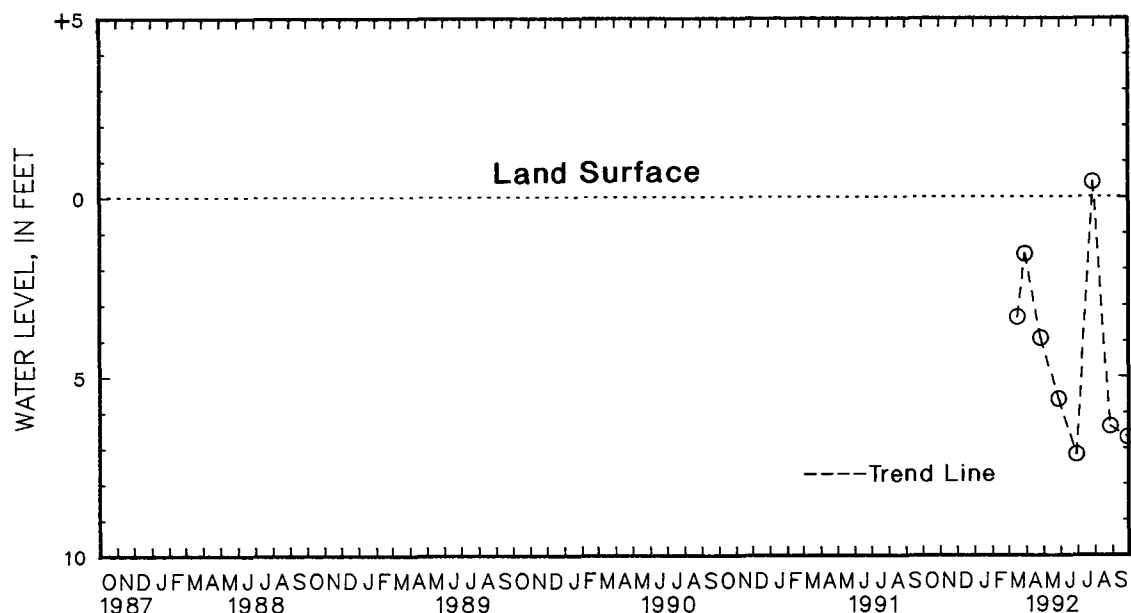
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Eb 78. SITE ID.--392439079231801. PERMIT NUMBER.--GA-88-0611.
 LOCATION.--Lat 39°24'39", long 79°23'18", Hydrologic Unit 05020006, at Southern Pines, nr Bradford Rd.
 and Southern Pines Drive, Mountain Lake Park.
 Owner: Jonathan Kessler.
 AQUIFER.--Jennings Formation of Upper Devonian age. Aquifer code: 341JNGS.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 307 ft; casing diameter 6 in., to 41 ft;
 open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 2,500 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing 1.0 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--March 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.43 ft above land surface, July 29, 1992;
 lowest measured, 7.18 ft below land surface, June 29, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 17	3.35	APR 27	3.94	JUN 29	7.18	AUG 28	6.40
30	1.59	MAY 28	5.64	JUL 29	+ .43	SEP 28	6.70
WATER YEAR 1992		HIGHEST	+ .43	JUL 29, 1992	LOWEST	7.18	JUN 29, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

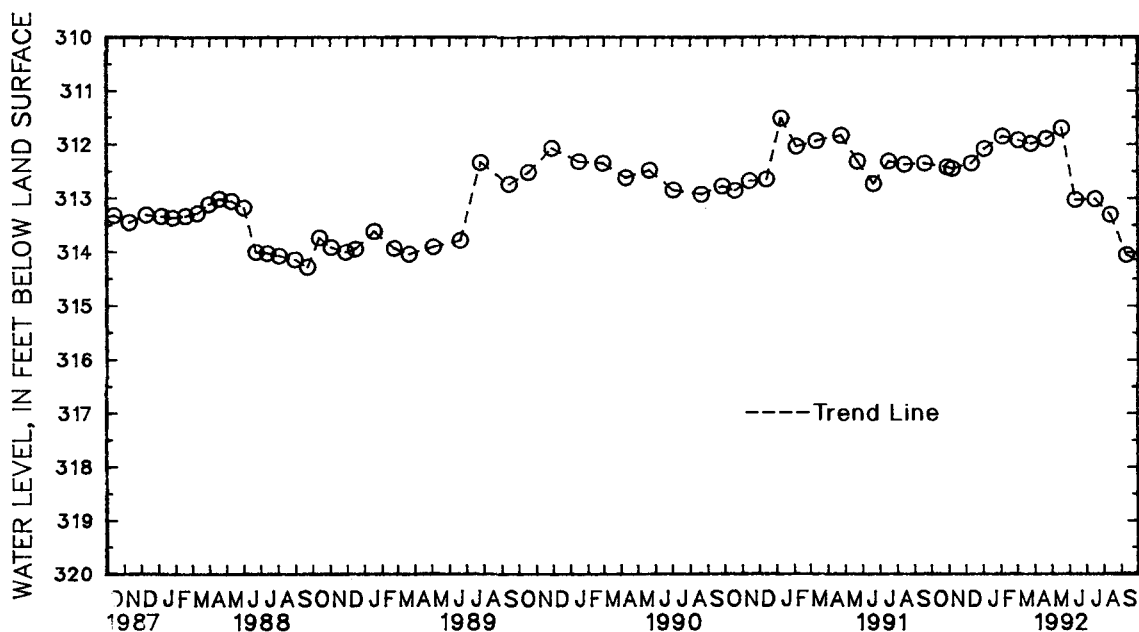
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 28. SITE ID.--391512079270901. PERMIT NUMBER.--GA-73-1697.
 LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Rd., 0.6 mi west from the intersection with Kempton Rd., 2.6 mi west of Wilson.
 Owner: Mettiki Coal Co.
 AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 341 ft; casing diameter 6 in., to 317 ft; open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 1.5 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.
 PERIOD OF RECORD.--June 1978 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 100.60 ft below land surface, Dec. 14, 1978; lowest measured, 332.43 ft below land surface, May 16, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	312.42	JAN 3	312.08	MAR 25	311.99	JUN 11	313.03	SEP 10	314.06
NOV 7	312.45	FEB 4	311.85	APR 21	311.90	JUL 16	313.02		
DEC 11	312.35	MAR 3	311.92	MAY 18	311.70	AUG 12	313.31		
WATER YEAR 1992		HIGHEST	311.70	MAY 18, 1992		LOWEST	314.06	SEP 10, 1992	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 29. SITE ID.--391512079270902. PERMIT NUMBER.--GA-73-1698.

LOCATION.--Lat 39°15'12", long 79°27'09", Hydrologic Unit 02070002, on south side of Red Oak Rd., 0.9 mi west from intersection with Kempton Rd., 2.6 mi west of Wilson.

Owner: Mettiki Coal Co.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 226 ft; casing diameter 6 in., to 203 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 2.0 ft above land surface.

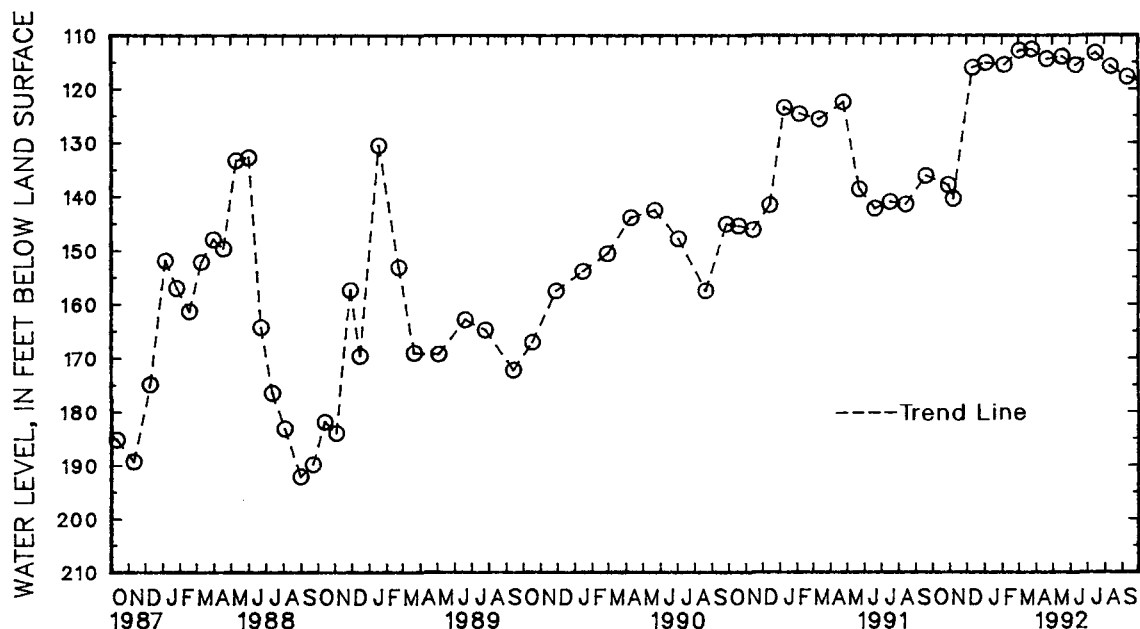
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.59 ft below land surface, March 25, 1992; lowest water level measured, dry on Nov. 17 and 18, 1982, Dec. 28, 1982 and Feb. 18, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	137.87	JAN 3	115.11	MAR 25	112.59	JUN 11	115.53	SEP 10	117.78
NOV 7	140.45	FEB 4	115.48	APR 21	114.40	JUL 16	113.28		
DEC 11	115.98	MAR 3	112.81	MAY 18	113.92	AUG 12	115.80		
WATER YEAR 1992		HIGHEST	112.59	MAR 25, 1992	LOWEST	140.45	NOV 7, 1991		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 31. SITE ID.--391539079254601. PERMIT NUMBER.--GA-73-2142.

LOCATION.--Lat 39°15'37", long 79°25'45", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Rd., 1.7 mi west of Wilson.

Owner: U.S. Geological Survey.

AQUIFER.--Allegheny Formation of Middle Pennsylvanian age. Aquifer code: 324ALGN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 606 ft; casing diameter 8 in., to 25.5 ft; casing diameter 4 in., to 470 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval.

DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 2.6 ft above land surface.

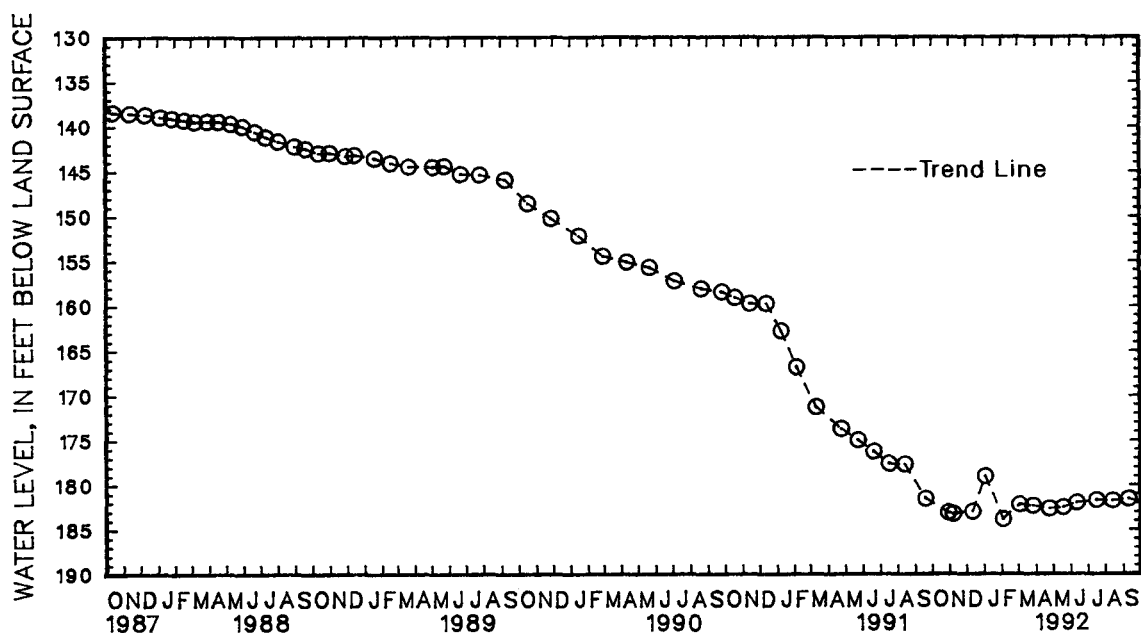
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.

PERIOD OF RECORD.--August 1980 to to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.31 ft below land surface, April 8, 1980; lowest measured, 183.86 ft below land surface, Feb. 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	183.03	JAN 3	179.03	MAR 26	182.34	JUN 11	182.02	SEP 10	181.58
NOV 7	183.19	FEB 4	183.86	APR 24	182.66	JUL 16	181.71		
DEC 11	182.99	MAR 3	182.22	MAY 18	182.52	AUG 13	181.76		
WATER YEAR 1992		HIGHEST	179.03	JAN 3, 1992	LOWEST	183.86	FEB 4, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 32. SITE ID.--391539079254602. PERMIT NUMBER.--GA-73-2143.

LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Rd., 1.7 mi west of Wilson.

Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 473 ft; casing diameter 4 in., to 430 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from July 21, 1980 to April 8, 1981.

DATUM.--Elevation of land surface is 2,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.15 ft above land surface.

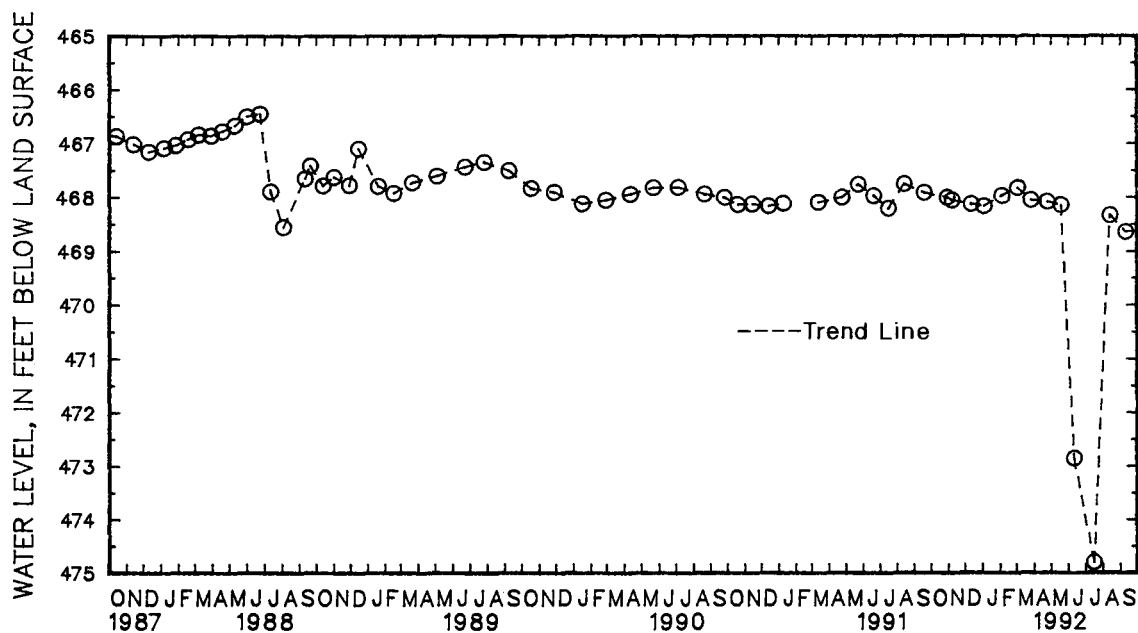
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.

PERIOD OF RECORD.--February 1980 to to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.55 ft below land surface, Feb. 27, 1980; lowest measured, 474.80 ft below land surface, July 16, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	468.02	JAN 3	468.17	MAR 26	468.06	JUN 11	472.86	SEP 10	468.64
NOV 7	468.07	FEB 4	467.98	APR 24	468.09	JUL 16	474.80		
DEC 11	468.13	MAR 3	467.83	MAY 18	468.15	AUG 13	468.33		
WATER YEAR 1992		HIGHEST	467.83	MAR 3, 1992	LOWEST	474.80	JUL 16, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

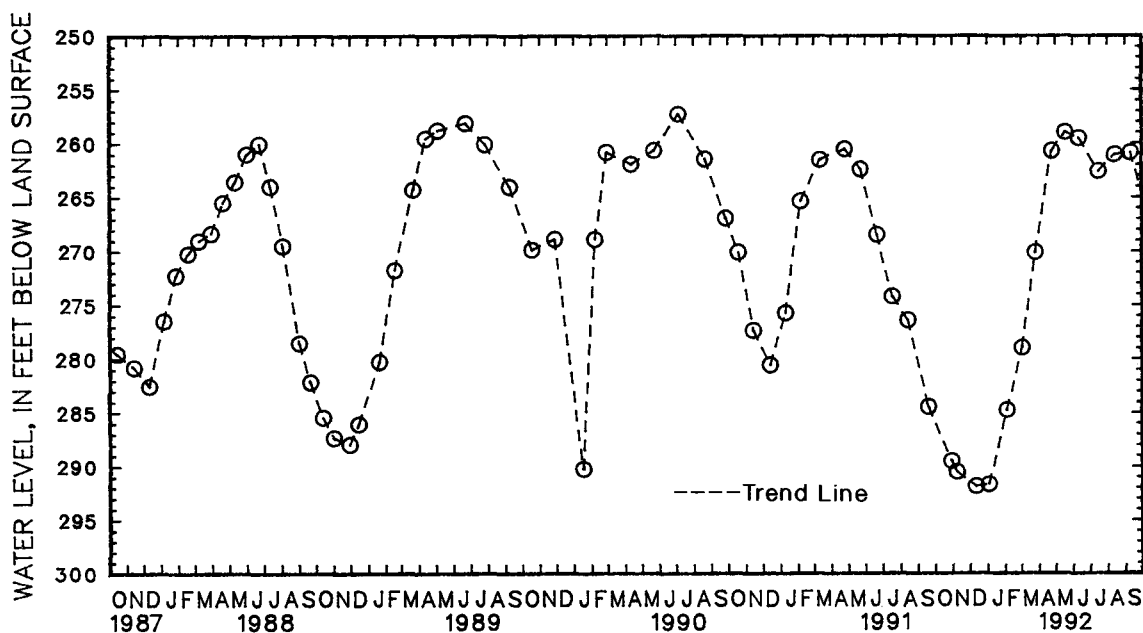
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 33. SITE ID.--391539079254603. PERMIT NUMBER.--GA-73-2144.
 LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt,
 450 ft west of Table Rock Rd., 1.7 mi west of Wilson.
 Owner: U.S. Geological Survey.
 AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 391 ft; casing diameter 8 in., to 23 ft;
 casing diameter 4 in., to 318 ft; open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 recorder--60-minute recorder interval from July 21, 1980 to Oct. 14, 1982.
 DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder shelf, 3.9 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining
 operations.
 PERIOD OF RECORD.--February 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.31 ft below land surface, Feb. 27, 1978;
 lowest measured, 291.88 ft below land surface, Dec. 11, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	289.54	JAN 3	291.72	MAR 26	270.08	JUN 11	259.52	SEP 10	260.86
NOV 7	290.54	FEB 4	284.75	APR 24	260.71	JUL 16	262.59		
DEC 11	291.88	MAR 2	278.95	MAY 18	258.92	AUG 13	261.05		
WATER YEAR 1992		HIGHEST	258.92	MAY 18, 1992		LOWEST	291.88	DEC 11, 1991	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

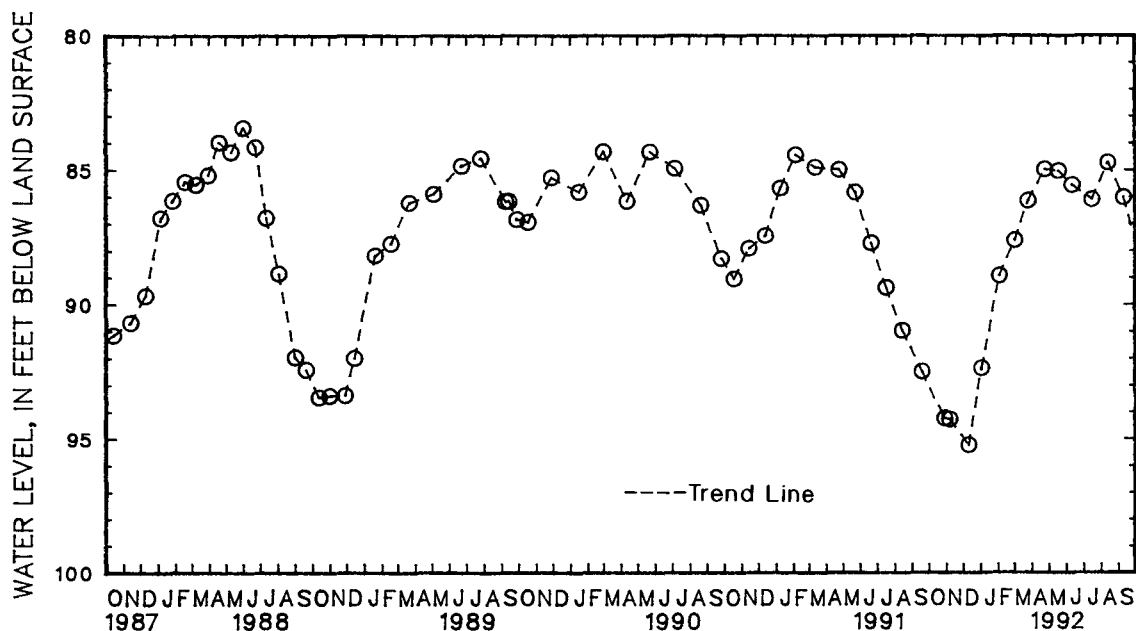
GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 34. SITE ID.--391539079254604. PERMIT NUMBER.--GA-73-2145.
 LOCATION.--Lat 39°15'39", long 79°25'46", Hydrologic Unit 02070002, on north side of coal conveyor belt, 450 ft west of Table Rock Rd., 1.7 mi west of Wilson.
 Owner: U.S. Geological Survey.
 AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 115 ft; casing diameter 8 in., to 23.5 ft; casing diameter 4 in., to 96 ft; open hole.
 INSTRUMENTATION.--Equipped with digital water-level recorder--60-minute recorder interval, from July 21, 1980 to Oct 19, 1990.
 DATUM.--Elevation of land surface is 2,620 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of recorder shelf, 3.3 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well.
 PERIOD OF RECORD.--July 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.05 ft below land surface, Feb. 26, 1980; lowest measured, 95.25 ft below land surface, Dec. 11, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	94.25	JAN 3	92.37	MAR 26	86.14	JUN 11	85.56	SEP 10	86.02
NOV 7	94.29	FEB 4	88.93	APR 24	84.98	JUL 16	86.10		
DEC 11	95.25	MAR 2	87.61	MAY 18	85.04	AUG 13	84.73		

WATER YEAR 1992 HIGHEST 84.73 AUG 13, 1992 LOWEST 95.25 DEC 11, 1991



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fa 38. SITE ID.--391501079260001. PERMIT NUMBER.--GA-73-2125.

LOCATION.--Lat 39°15'01", long 79°26'00", Hydrologic Unit 02070002, at intersection of Kempton Rd. and Dobin Rd., 3.6 mi south of Table Rock.

Owner: Curtis Glotfelty.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, domestic, water-table well, depth 118 ft, casing diameter 6 in., to 39 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 2,680 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.0 ft above land surface.

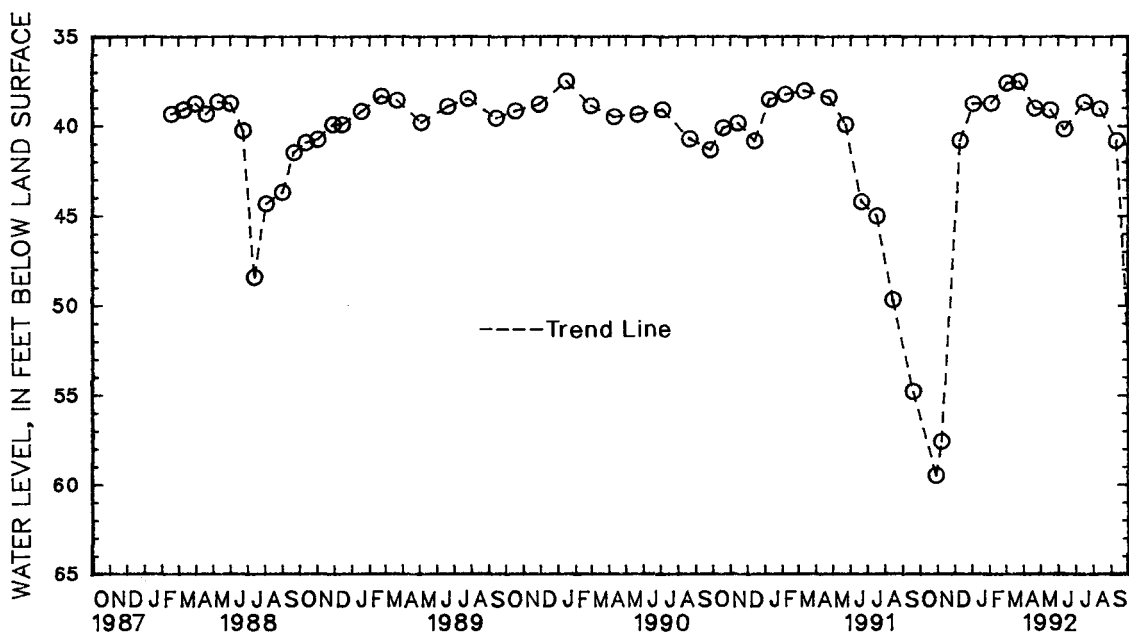
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by nearby mining operations.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.48 ft below land surface, Jan. 16, 1990;
lowest measured, 59.72 ft below land surface, Oct. 14, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	59.48	JAN 3	38.75	MAR 25	37.49	JUN 11	40.18	SEP 10	40.82		
NOV 7	57.58	FEB 4	38.75	APR 21	39.00	JUL 16	38.66				
DEC 11	40.81	MAR 3	37.58	MAY 18	39.11	AUG 12	39.03				
WATER YEAR 1992		HIGHEST	37.49	MAR 25, 1992		LOWEST	59.48	OCT 29, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

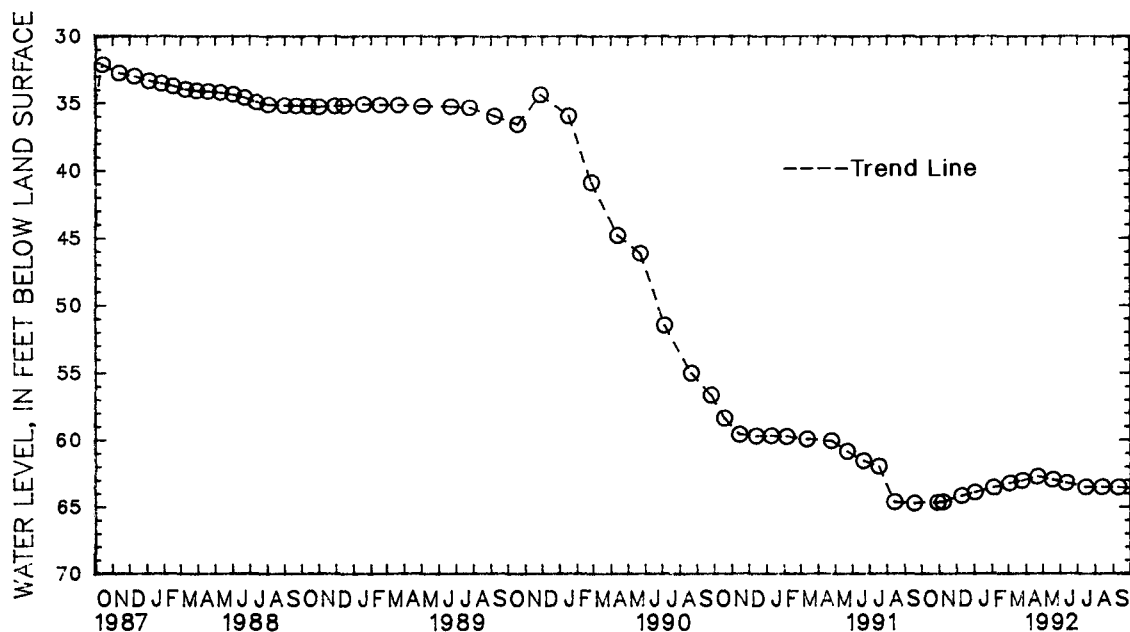
GROUND-WATER LEVELS
MARYLAND--Continued
GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 24. SITE ID.--391530079244403. PERMIT NUMBER.--GA-73-2177.
LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Rd., 500 ft west of the intersection with Wilson-Coronna Rd., 0.4 mi northwest of Wilson.
Owner: U.S. Geological Survey.
AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 400 ft; casing diameter 4 in., to 340 ft; open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval, from May 15, 1980 to Oct. 19, 1990.
DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 3.0 ft above land surface.
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.
PERIOD OF RECORD.--May 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.08 ft below land surface, Jan. 12, 1981; lowest measured, 92.29 ft below land surface, Apr. 28, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	64.67	JAN 2	63.93	MAR 25	63.04	JUN 11	63.21	SEP 10	63.54
NOV 7	64.64	FEB 4	63.55	APR 21	62.73	JUL 16	63.52		
DEC 10	64.18	MAR 3	63.22	MAY 18	62.97	AUG 13	63.52		

WATER YEAR 1992 HIGHEST 62.73 APR 21, 1992 LOWEST 64.67 OCT 29, 1991



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 25, SITE ID.--391530079244404, PERMIT NUMBER.--GA-73-2182.

LOCATION.--Lat 39°15'30", long 79°24'44", Hydrologic Unit 02070002, south side of Wilson Rd., 500 ft west of the intersection with Wilson-Coronna Rd., 0.4 mi northwest of Wilson.

Owner: U.S. Geological Survey.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 180 ft; casing diameter 4 in., to 120 ft; open hole

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from June 4, 1980 to Oct. 1990.

DATUM.--Elevation of land surface is 2,530 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.0 ft above land surface.

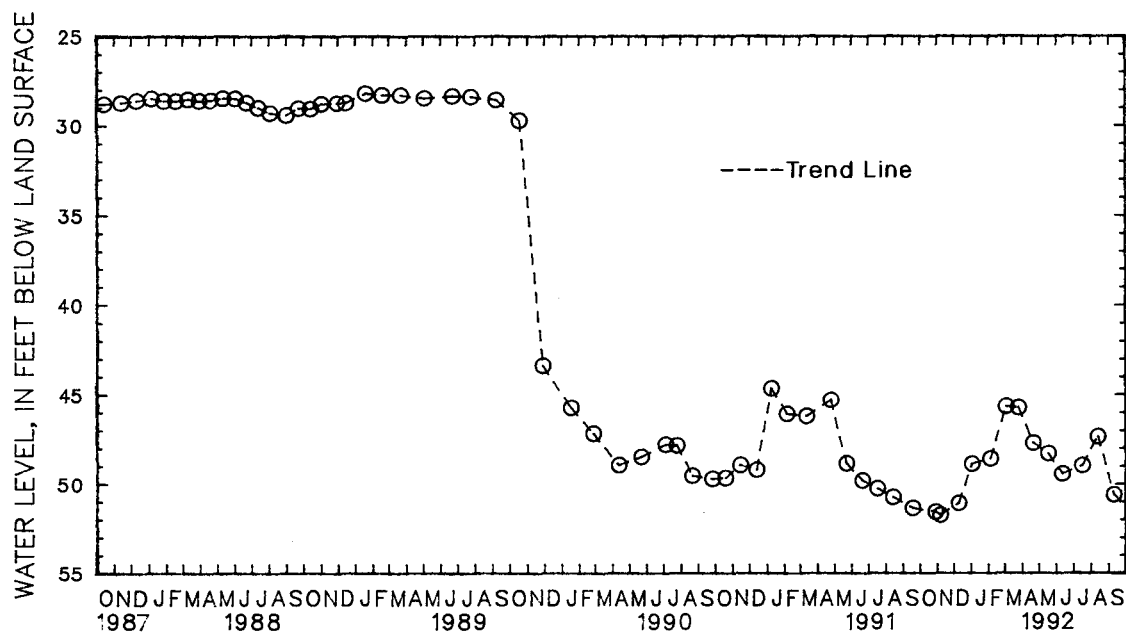
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.

PERIOD OF RECORD.--June 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.89 ft below land surface, May 11, 1981; lowest measured, 54.18 ft below land surface, May 14, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	51.59	JAN 2	48.88	MAR 25	45.73	JUN 11	49.42	SEP 10	50.61
NOV 7	51.75	FEB 4	48.58	APR 21	47.71	JUL 16	48.98		
DEC 10	51.09	MAR 3	45.66	MAY 18	48.29	AUG 13	47.36		
WATER YEAR 1992		HIGHEST	45.66	MAR 3, 1992	LOWEST	51.75	NOV 7, 1991		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

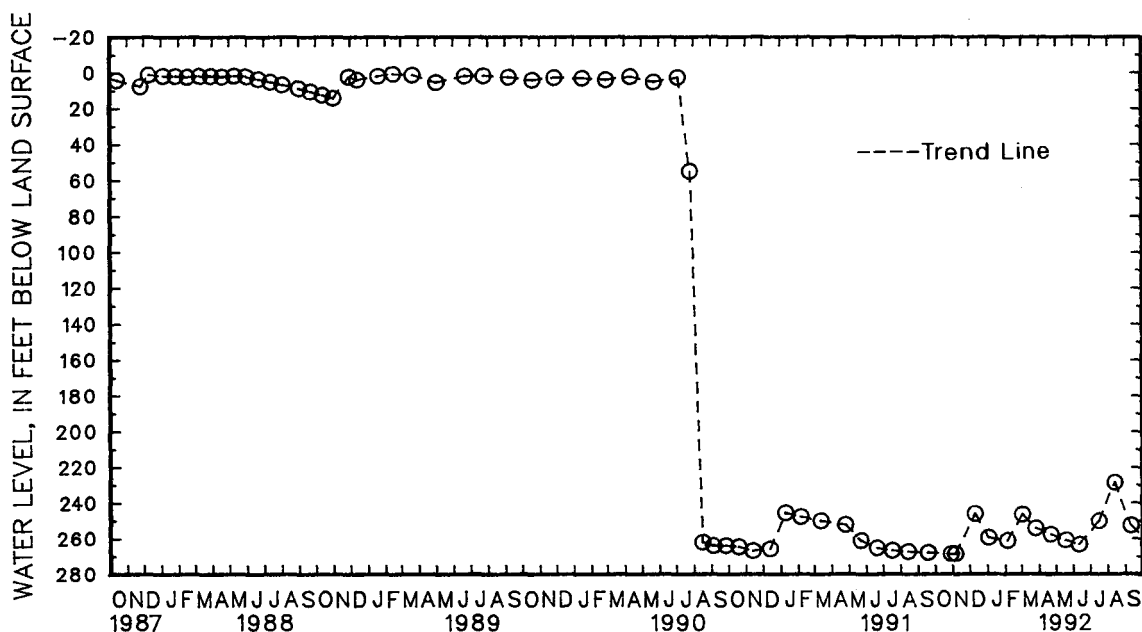
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 27. SITE ID.--39153007924404. PERMIT NUMBER.--GA-73-2182.
LOCATION.--Lat 39°15'13", long 79°24'44", Hydrologic Unit 02070002, 0.6 mi west of Wilson.
Owner: U.S. Geological Survey.
AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 656 ft; casing diameter 4 in., to 117 ft;
open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
water-level recorder--60-minute recorder interval from June 11, 1980 to July 26, 1990.
DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 3.0 ft above land surface datum.
REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well.
PERIOD OF RECORD.--June 1980 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land surface, March 6, 1989;
lowest measured, 268.43 ft below land surface, Nov. 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	268.30	JAN 2	259.02	MAR 25	254.15	JUN 11	263.33	SEP 10	252.54		
NOV 6	268.43	FEB 4	261.08	APR 21	257.55	JUL 16	250.01				
DEC 10	246.01	MAR 2	246.33	MAY 18	260.81	AUG 13	228.54				
WATER YEAR 1992		HIGHEST	228.54	AUG 13, 1992		LOWEST	268.43	NOV 6, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

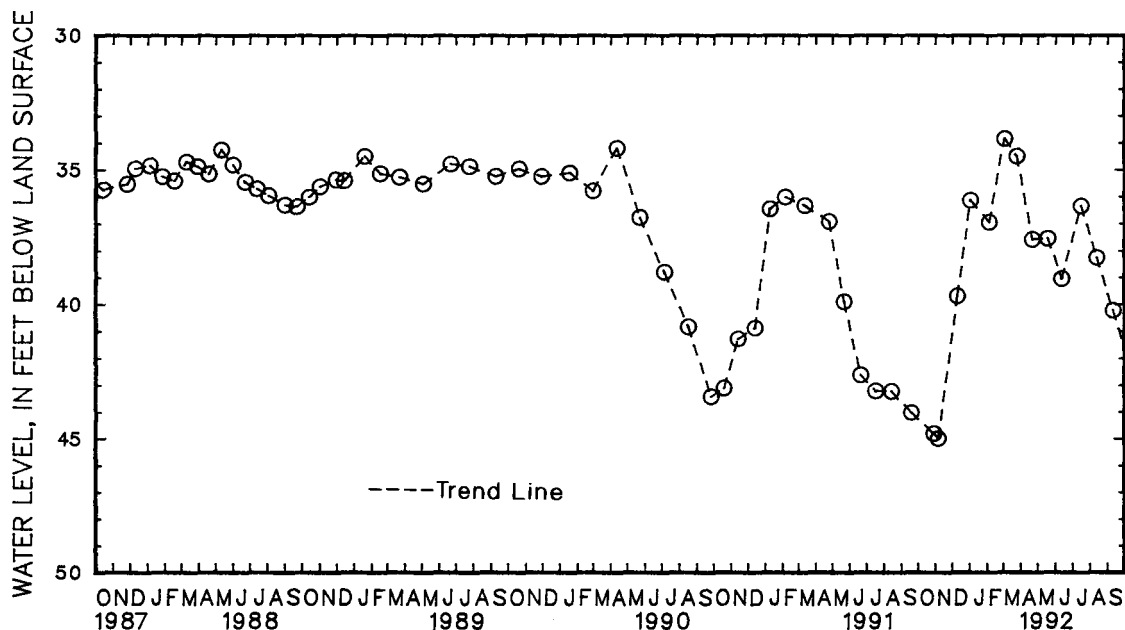
GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 30. SITE ID.--391513079243605. PERMIT NUMBER.--GA-73-2185.
 LOCATION.--Lat 39°15'13", long 79°24'36", Hydrologic Unit 02070002, 0.6 mi west of Wilson.
 Owner: U.S. Geological Survey.
 AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 85 ft; casing diameter 4 in., to 82 ft; open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval.
 DATUM.--Elevation of land surface is 2,760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of shelter floor, 2.0 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.
 PERIOD OF RECORD.--June 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.58 ft below land surface, April 16, 1981; lowest measured, 45.00 ft below land surface, Nov. 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	44.82	JAN 2	36.13	MAR 25	34.50	JUN 11	39.07	SEP 10	40.24
NOV 6	45.00	FEB 4	36.94	APR 21	37.59	JUL 16	36.35		
DEC 10	39.69	MAR 3	33.85	MAY 18	37.54	AUG 13	38.28		

WATER YEAR 1992 HIGHEST 33.85 MAR 3, 1992 LOWEST 45.00 NOV 6, 1991

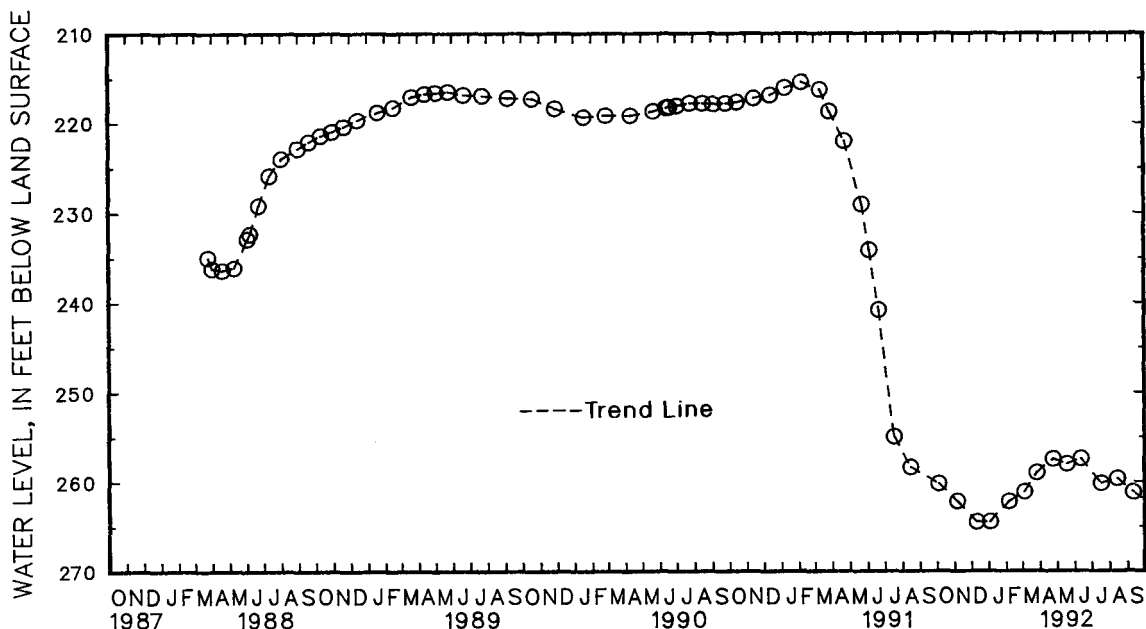


5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GARRETT COUNTY--Continued

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	260.23	JAN 3	264.48	MAR 26	259.00	JUN 12	257.43	SEP 10	261.18
NOV 6	262.21	FEB 5	262.20	APR 24	257.45	JUL 17	260.19		
DEC 10	264.49	MAR 4	261.14	MAY 18	258.02	AUG 14	259.67		
WATER YEAR 1992		HIGHEST	257.43	JUN 12, 1992		LOWEST	264.49	DEC 10, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

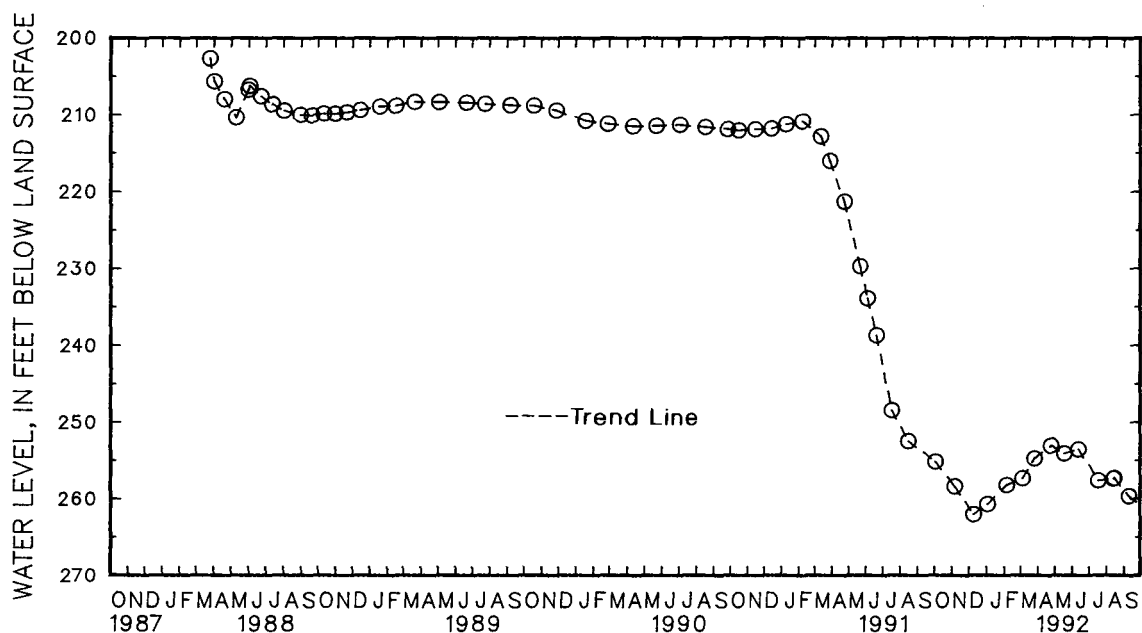
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 34. SITE ID.--391602079240304. PERMIT NUMBER.--GA-81-1331.
 LOCATION.--Lat 39°16'02", long 79°24'03", Hydrologic Unit 02070002, east side of Wilson-Coronna Rd., 500 ft northeast of intersection with Fairview Road, 1.0 mile north of Wilson.
 Owner: Mettiki Coal Corp.
 AQUIFER.-- Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 390 ft; casing diameter 6 in., to 390 ft; perforated casing from 370 to 390 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval.
 DATUM.--Elevation of land surface is 2,677 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 3.2 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.
 PERIOD OF RECORD.--February 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 202.64 ft below land surface, March 25, 1989; lowest measured, 262.05 ft below land surface, Dec. 10, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	255.21	JAN 3	260.70	MAR 26	254.74	JUN 12	253.55	AUG 14	257.30
NOV 6	258.40	FEB 5	258.26	APR 24	253.06	JUL 17	257.63	SEP 10	259.65
DEC 10	262.05	MAR 4	257.33	MAY 18	254.10	AUG 13	257.36		
WATER YEAR 1992		HIGHEST	253.06	APR 24, 1992	LOWEST	262.05	DEC 10, 1991		



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Fb 39. SITE ID.--391715079223105. PERMIT NUMBER.--GA-81-1344.

LOCATION.--Lat 39°17'15", long 79°22'31", Hydrologic Unit 02070002, east side of Wilson-Coronna Rd., 0.6 mi. southwest of intersection with U.S. Route 50, 0.6 mi. southwest of Ft. Pendleton.

Owner: Mettiki Coal Corp.

AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 97 ft; casing diameter 6 in., to 42 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.2 ft above land surface.

REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by coal mining operations.

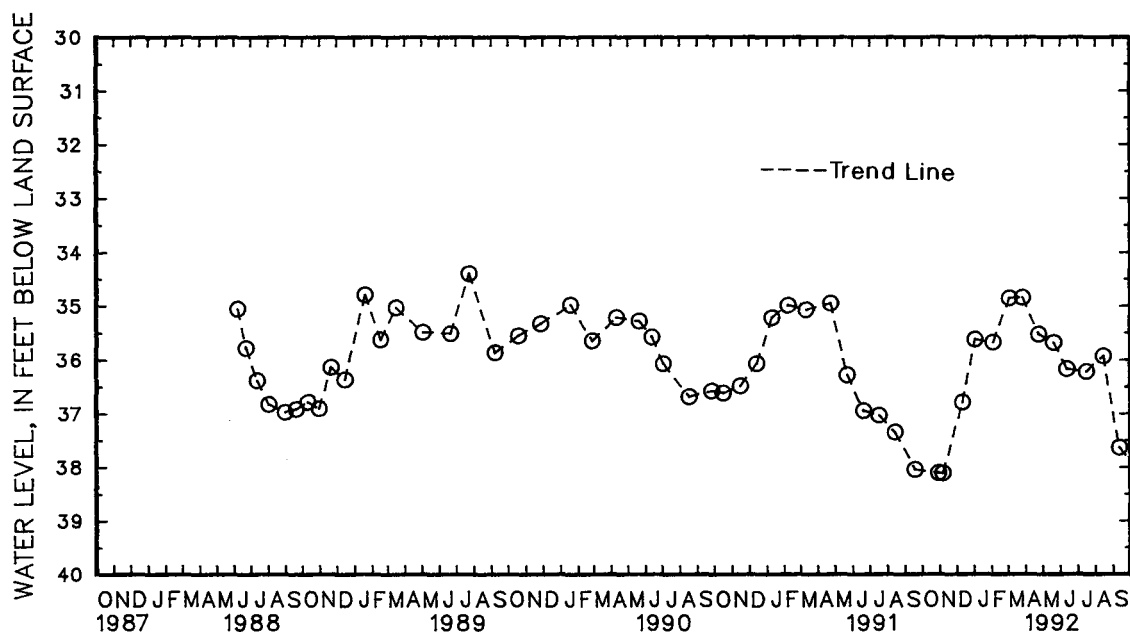
PERIOD OF RECORD.--June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.40 ft below land surface, July 24, 1989;
lowest measured, 38.12 ft below land surface, Nov. 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	38.11	JAN 2	35.62	MAR 26	34.84	JUN 12	36.17	SEP 11	37.64
NOV 6	38.12	FEB 3	35.68	APR 24	35.52	JUL 16	36.23		
DEC 10	36.79	MAR 3	34.85	MAY 20	35.68	AUG 14	35.93		

WATER YEAR 1992	HIGHEST	34.84	MAR 26, 1992	LOWEST	38.12	NOV 6, 1991
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5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

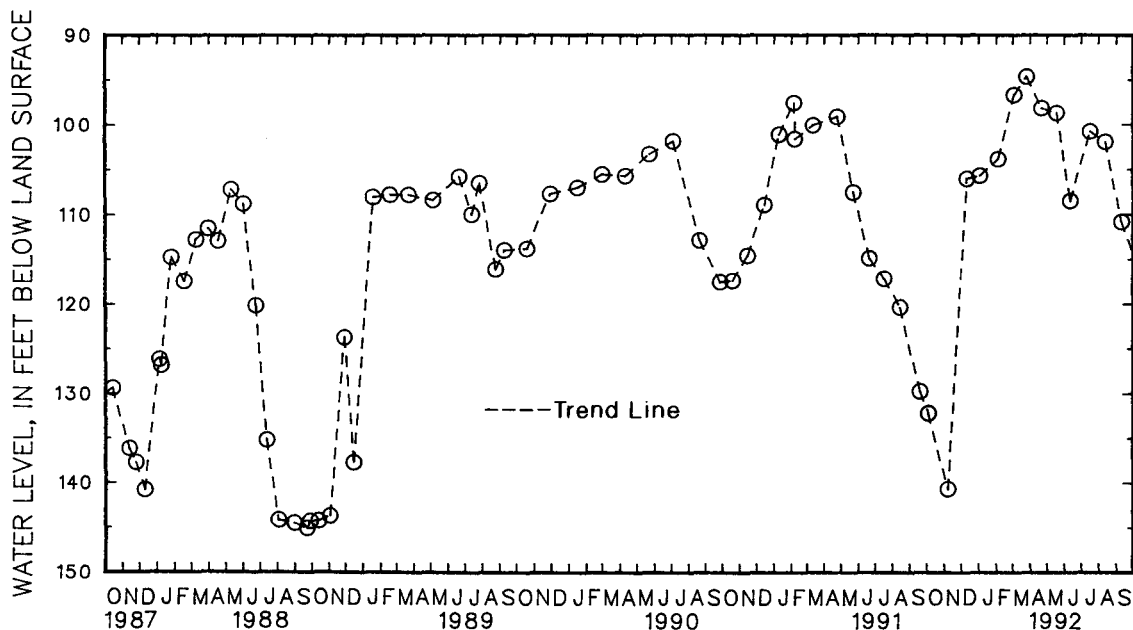
MARYLAND--Continued

GARRETT COUNTY--Continued

WELL NUMBER.--GA Ga 16. SITE ID.--391420079264901. PERMIT NUMBER.--GA-81-0953.
 LOCATION.--Lat 39°14'20", long 79°26'49", Hydrologic Unit 02070002, east of Kempton Rd.,
 100 ft north of Laurel Run, 2.8 mi southwest of Wilson.
 Owner: Mettiki Coal Co.
 AQUIFER.--Conemaugh Formation of Upper Pennsylvanian age. Aquifer code: 321CNMG.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 147 ft; casing diameter 6 in., to 110 ft,
 open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--60-minute recorder interval.
 DATUM.--Elevation of land surface is 2,690 ft above National Geodetic Vertical Datum of 1929,
 from topographic map.
 Measuring Point: Top of shelter floor, 3.2 ft above land surface.
 REMARKS.--Hydrologic Effects of Mining, Phase III Project observation well. Water levels affected by
 coal mining operations.
 PERIOD OF RECORD.--November 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 93.07 ft below land surface, Jan. 6, 1987;
 lowest measured, 145.05 ft below land surface, Sept. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	132.21	JAN 3	105.69	MAR 25	94.65	JUN 11	108.53	SEP 10	110.87
NOV 7	140.67	FEB 4	103.84	APR 21	98.16	JUL 16	100.80		
DEC 11	106.08	MAR 3	96.66	MAY 18	98.70	AUG 12	101.95		
WATER YEAR 1992		HIGHEST 94.65 MAR 25, 1992		LOWEST 140.67 NOV 7, 1991					



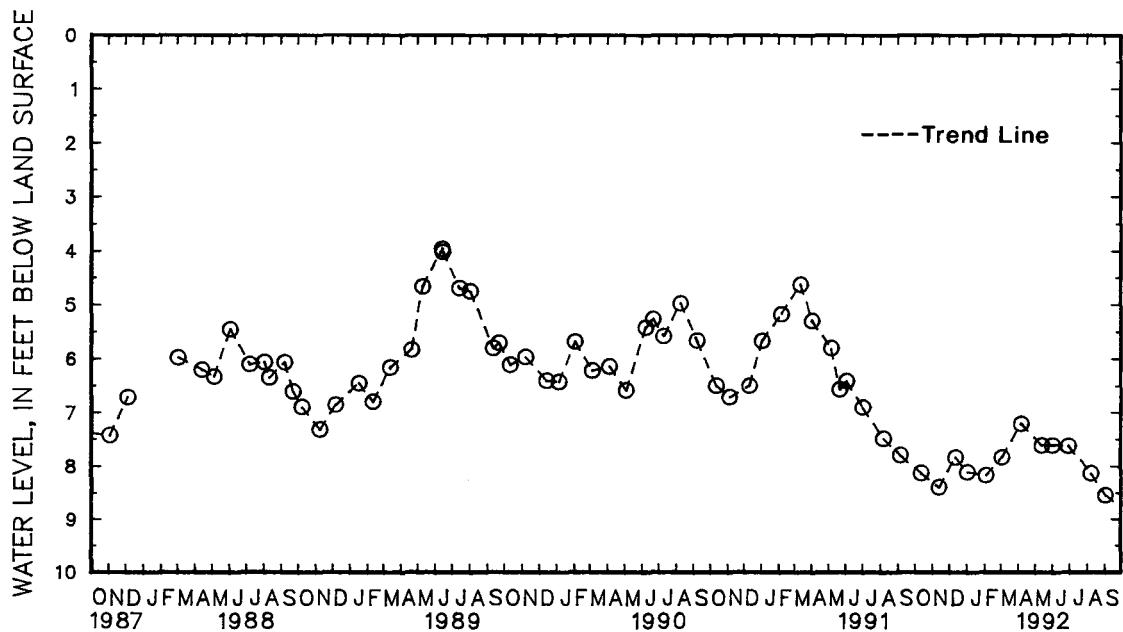
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued

WELL NUMBER.--HA Ca 23. SITE ID.--393158076302601.
LOCATION.--Lat 39°31'58", long 76°30'26", Hydrologic Unit 02060003, at Gunpowder State Park, Hess.
Owner: U.S. Geological Survey.
AQUIFER.--Loch Raven Schist of Paleozoic age. Aquifer code: 300LCRV.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 200 ft; casing diameter 6 in., to 24 ft; open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
Equipped with graphic water-level recorder from July 10, 1974 to Sept. 13, 1976.
DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 1.60 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--July 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.59 ft below land surface, Sept. 27, 1975; lowest measured, 9.03 ft below land surface, Dec. 15, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	8.16	DEC 12	7.85	FEB 4	8.18	APR 6	7.22	JUN 1	7.63	AUG 7	8.16
NOV 12	8.42	JAN 2	8.13	MAR 3	7.85	MAY 13	7.63	JUN 29	7.63	SEP 2	8.57
WATER YEAR 1992		HIGHEST	7.22	APR 6, 1992		LOWEST	8.57	SEP 2, 1992			



GROUND-WATER LEVELS

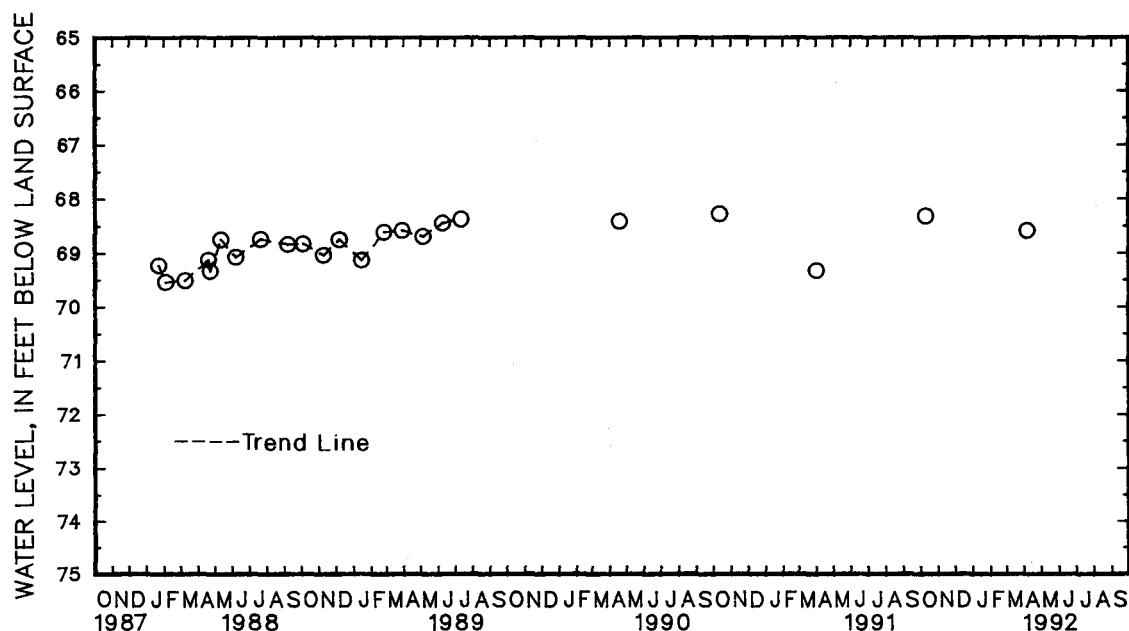
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Dd 89. SITE ID.--392529076180901. PERMIT NUMBER.--HA-81-4130.
LOCATION.--Lat 39°25'29", long 76°18'09", Hydrologic Unit 02060003, at Edgewood Elementary School
on Cedar Drive, Edgewood.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 271PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 140 ft; casing diameter 4 in., to 120 ft;
screen diameter 4 in. from 120 to 140 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Equipped with digital
water-level recorder--15-minute recorder interval from Jan. 1, 1988 to July 11, 1989.
DATUM.--Elevation of land surface is 99.05 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 1.80 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.29 ft below land surface, Oct. 12, 1990;
lowest measured, 69.58 ft below land surface, Feb. 3, 1988

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	68.33	APR 6	68.60
WATER YEAR 1992	HIGHEST	68.33	OCT 10, 1991
LOWEST	68.60	APR 6, 1992	



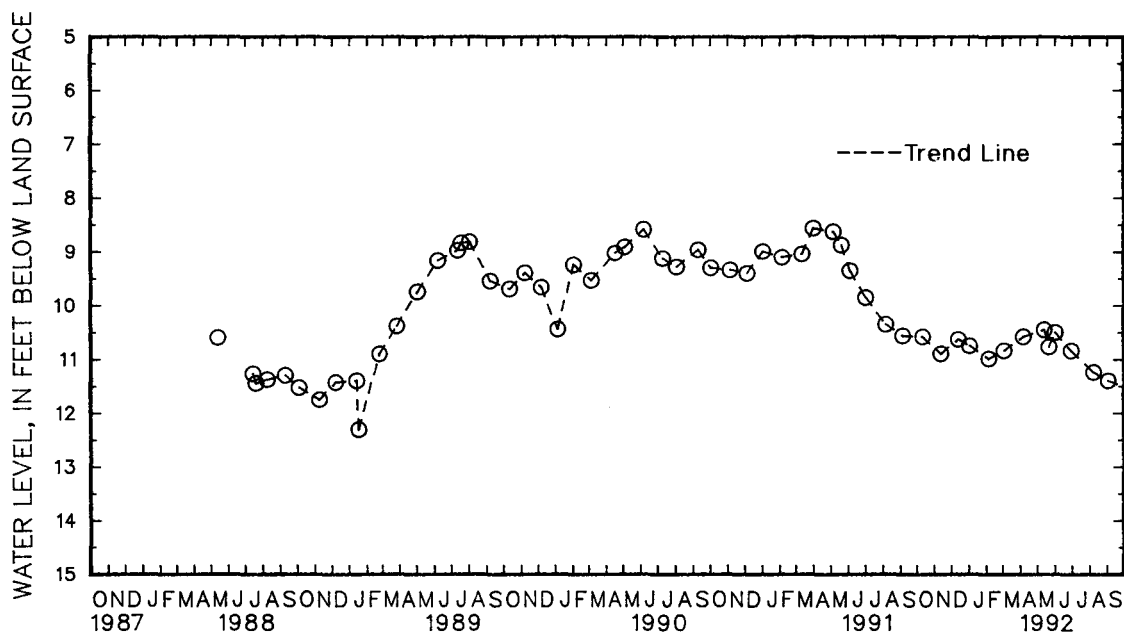
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

HARFORD COUNTY--Continued

WATER LEVEL, IN FEET BELOW LAND SURFACE. WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	10.58	JAN 2	10.75	APR 6	10.58	JUN 1	10.50	SEP 2	11.40
NOV 12	10.90	FEB 5	10.99	MAY 13	10.45	29	10.84		
DEC 13	10.63	MAR 3	10.84	21	10.77	AUG 7	11.24		
WATER YEAR 1992		HIGHEST	10.45	MAY 13, 1992		LOWEST	11.40	SEP 2, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

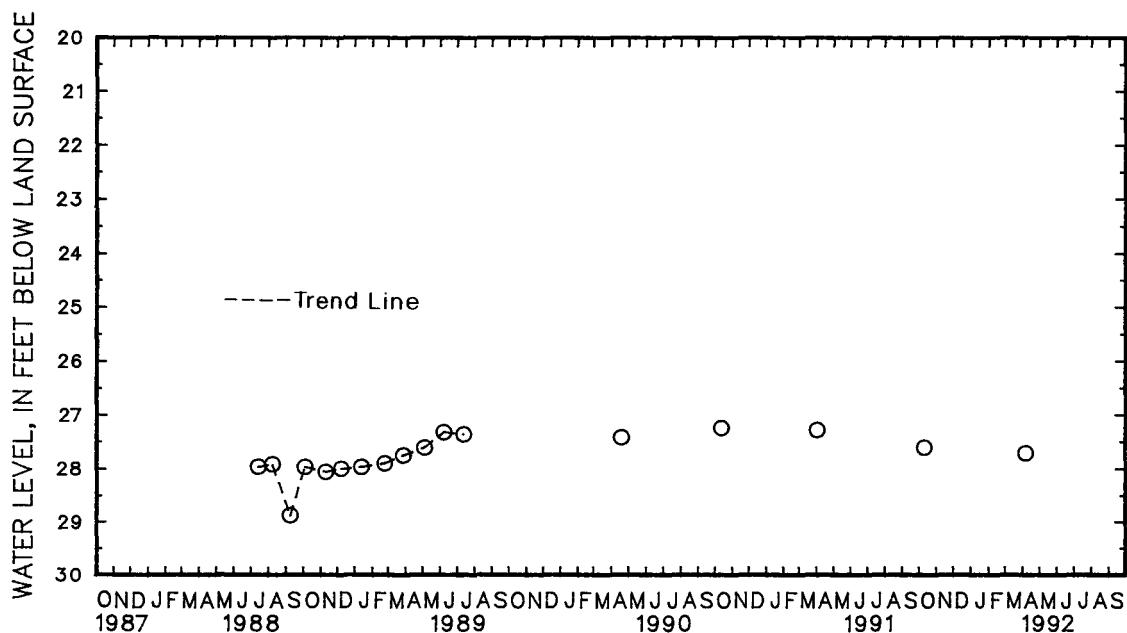
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Dd 106. SITE ID.--392557076161601. PERMIT NUMBER.--HA-81-4522.
 LOCATION.--Lat 39°25'57", long 76°16'16", Hydrologic Unit 02060003, .1 mi southeast from intersection with Freys and Willoughby Beach Rds, behind Willoughby Beach Swim Club, Edgewood.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 210 ft; casing diameter 4 in., to 190 ft, and 200 to 210 ft; screen diameter 4 in. from 190 to 200 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from May 1988 to July 1989.
 DATUM.--Elevation of land surface is 33.89 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.95 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--July 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.25 ft below land surface, Oct. 12, 1990; lowest measured, 28.90 ft below land surface, Sept. 8, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	27.62	APR 6	27.73
WATER YEAR 1992 HIGHEST 27.62 OCT 10, 1991 LOWEST 27.73 APR 6, 1992			



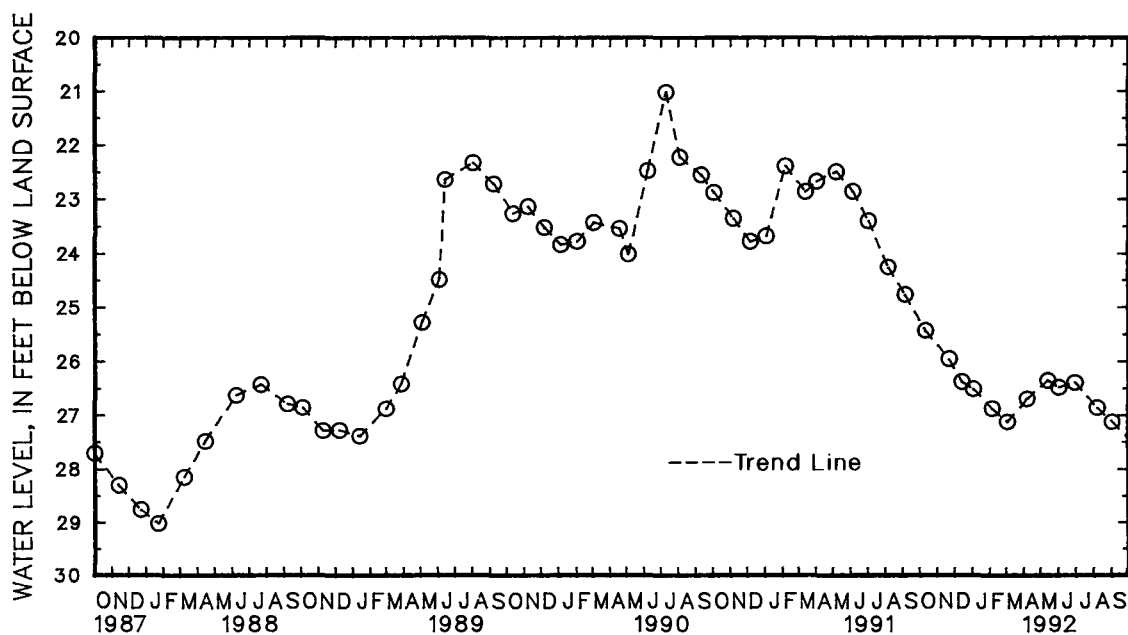
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued

WELL NUMBER.--HA De 66. SITE ID.--392921076100401. PERMIT NUMBER.--HA-69-0394.
LOCATION.--Lat 39°29'21", long 76°10'04", Hydrologic Unit 02060003, at Short Lane, near Aberdeen.
Owner: Harford County Metropolitan Commission.
AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 135 ft; casing diameter 4 in., to 45 ft; screen diameter 4 in. from 45 to 66 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from Dec. 12, 1986 to July 11, 1989.
DATUM.--Elevation of land surface is 67.75 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 1.61 ft above land surface.
PERIOD OF RECORD.--October 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.31 ft below land surface, July 28, 1975; lowest measured, 29.07 ft below land surface, Jan. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	25.47	DEC 13	26.42	FEB 5	26.91	APR 6	26.72	JUN 1	26.50	AUG 7	26.89
NOV 21	26.00	JAN 2	26.55	MAR 3	27.16	MAY 13	26.37	JUN 29	26.41	SEP 2	27.16
WATER YEAR 1992		HIGHEST	25.47	OCT 11, 1991		LOWEST	27.16	MAR 3, 1992		SEP 2, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

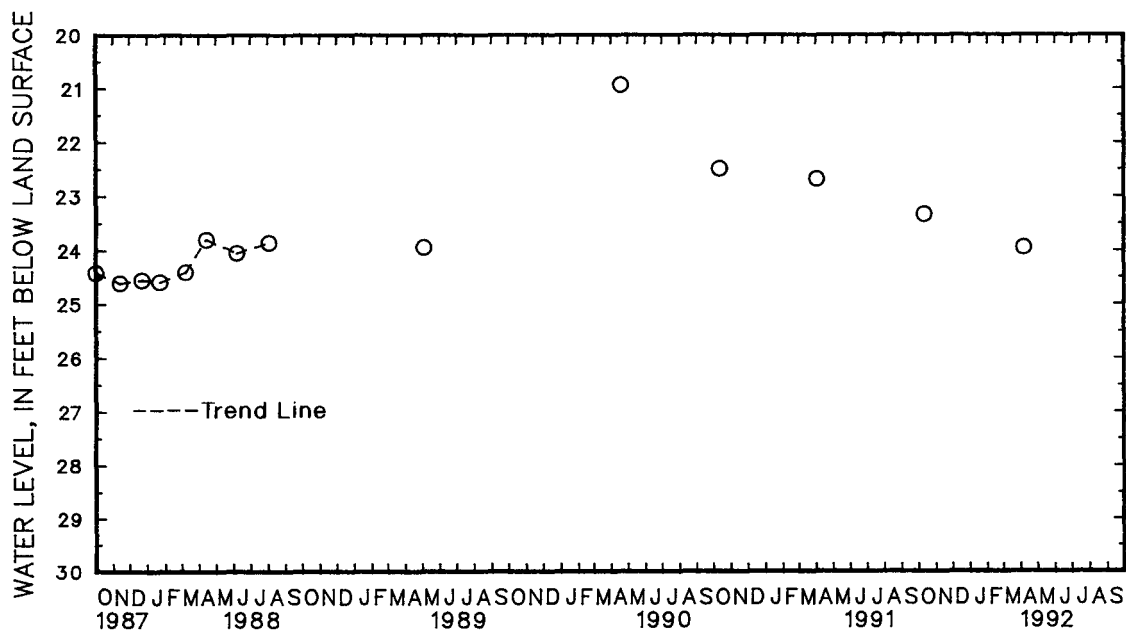
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 151. SITE ID.--392628076133101. PERMIT NUMBER.--HA-81-0952.
 LOCATION.--Lat 39°26'28", long 76°13'31", Hydrologic Unit 02060003, 2.1 mi. south of Perryman,
 0.5 mi. west of Chelsea Rd.
 Owner: Baltimore Gas & Electric.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 4 in., to 168 ft;
 screen diameter 4 in. from 168 to 178 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from March 1, 1987 to July 11, 1989.
 DATUM.--Elevation of land surface is 31.74 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.45 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--August 1986, March 1987 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.94 ft below land surface, April 18, 1990;
 lowest measured, 25.00 ft below land surface, Aug. 13, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER LEVEL YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	23.37	APR 6	23.99
WATER YEAR 1992 HIGHEST 23.37 OCT 10, 1991 LOWEST 23.99 APR 6, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

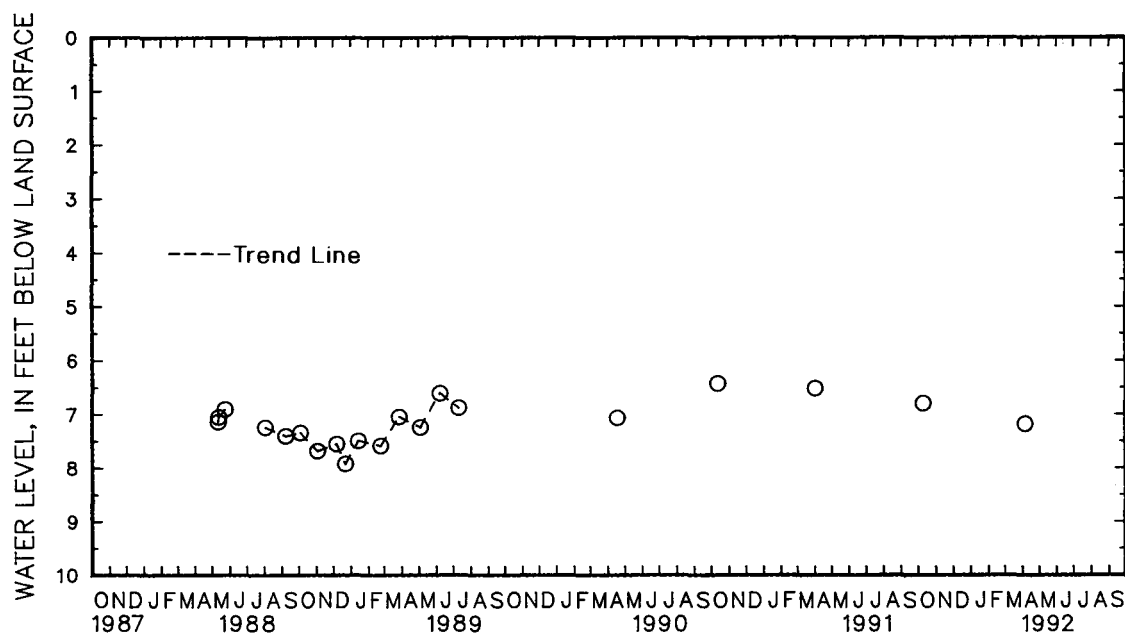
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 181. SITE ID.--392606076145801. PERMIT NUMBER.--HA-81-4134.
 LOCATION.--Lat 39°26'06", long 76°14'58", Hydrologic Unit 02060003, northeast end of Kennard Ave.,
 at Willoughby Beach, Crestwood.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 290 ft; casing diameter 4 in., to 264 ft
 and 269 to 275 ft and 260 to 290 ft; screen diameter 4 in. from 264 to 269 ft and 275 to 280 ft.
 INSTRUMENTATION.--Equipped with digital water-level recorder--15-minute recorder interval from May 24, 1988
 to July 11, 1989. Measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 12.22 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.10 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.43 ft below land surface, Oct. 12 1990;
 lowest measured, 7.93 ft below land surface, Dec. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER LEVEL YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	6.80	APR 6	7.19
WATER YEAR 1992	HIGHEST	6.80	OCT 10, 1991
	LOWEST	7.19	APR 6, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND WATER LEVELS

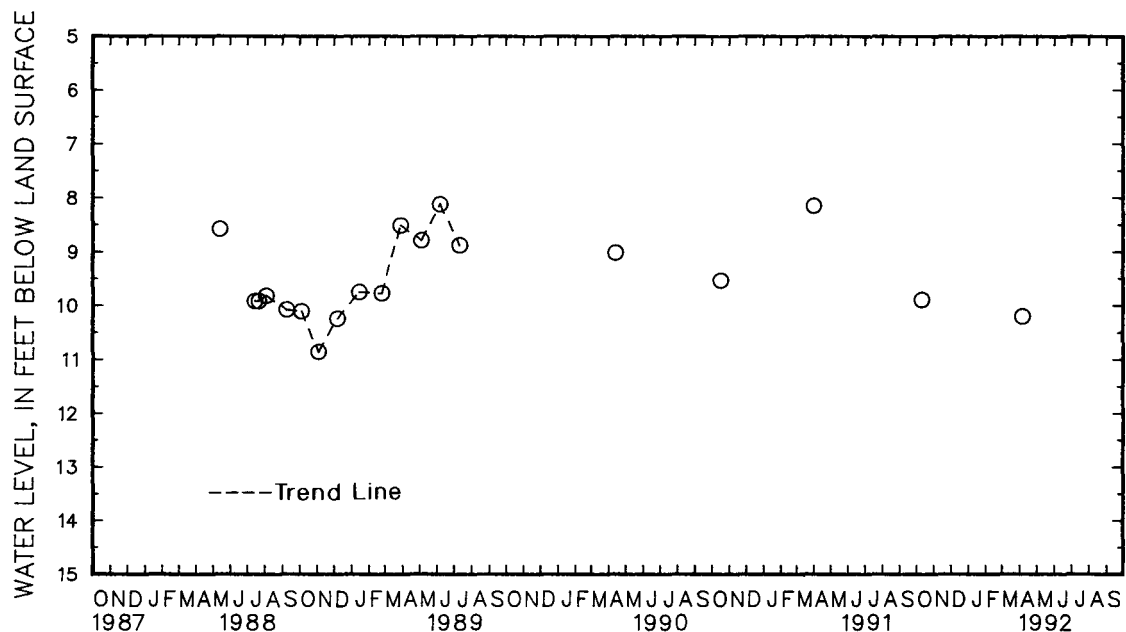
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 182. SITE ID.--392606076145802. PERMIT NUMBER.--HA-81-4135.
 LOCATION.--Lat 39°26'06", long 76°14'58", Hydrologic Unit 02060003, northeast end of Kennard Ave.,
 at Willoughby Beach, Crestwood.
 Owner: U.S. Geological Survey.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 40 ft; casing diameter 4 in., to 30 ft;
 screen diameter 4 in. from 30 to 40 ft.
 INSTRUMENTATION.--Equipped with digital water-level recorder--15-minute recorder interval from July 21, 1988
 to July 11, 1989. Measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 12.29 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.52 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to July 1989.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.12 ft below land surface, June 7, 1989;
 lowest measured, 10.87 ft below land surface, Nov. 3, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

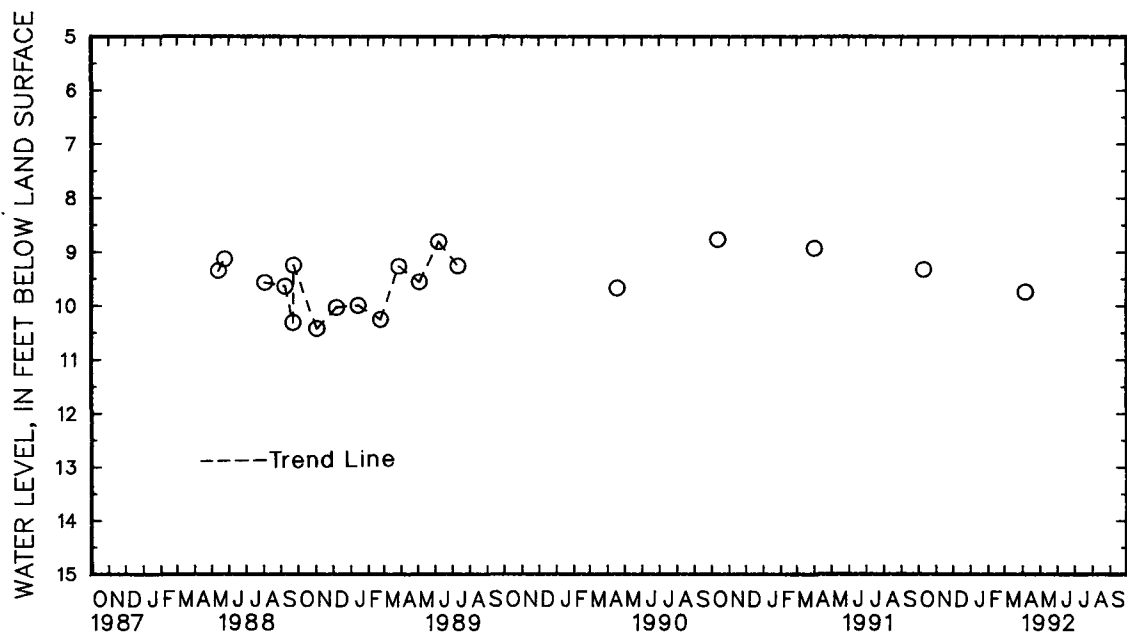
DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	9.90	APR 6	10.21
WATER YEAR 1992	HIGHEST	9.90	OCT 10, 1991
	LOWEST	10.21	APR 6, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL			
OCT 10	9.33	APR 6	9.75			
WATER YEAR 1992	HIGHEST	9.33	OCT 10, 1991	LOWEST	9.75	APR 6, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA De 195. SITE ID.--392914076110301. PERMIT NUMBER.--HA-81-4142.

LOCATION.--Lat 39°29'14", long 76°11'03", Hydrologic Unit 02060003, .2 mi east on Cranberry Run Dr., near Perryman.

Owner: U.S. Geological Survey.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TBLT.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 45 ft; casing diameter 4 in., to 35 ft; and 45 to 55 ft; screen diameter 4 in. from 35 to 45 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from May 1988 to July 1989.

DATUM.--Elevation of land surface is 52.70 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 1.38 ft above land surface.

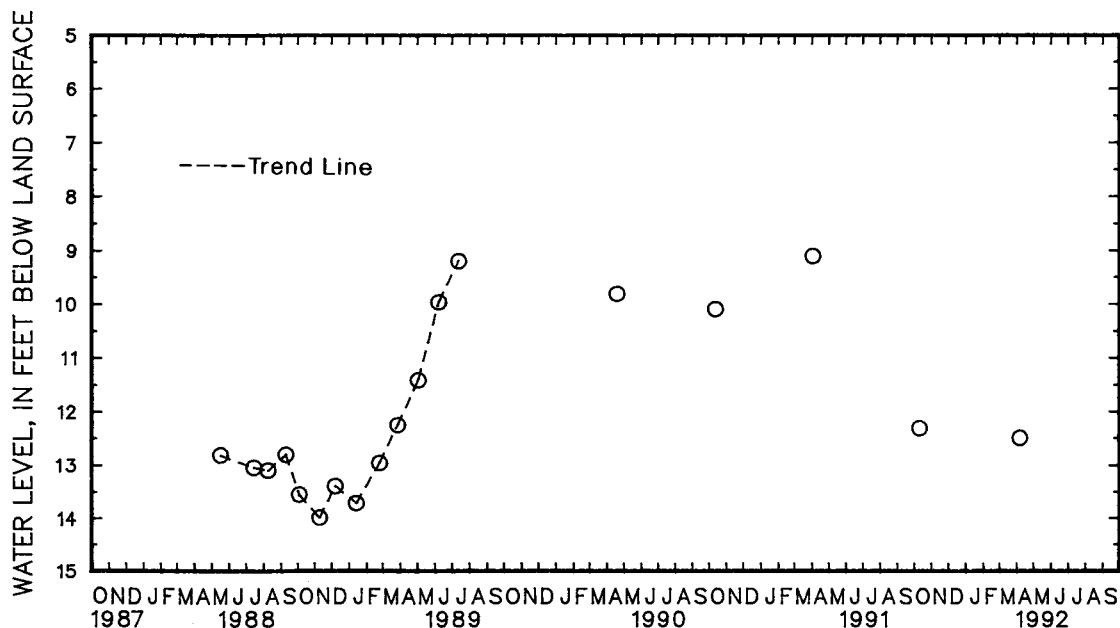
REMARKS.--Maryland Water-Level Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.11 ft below land surface, April 2, 1991; lowest measured, 14.01 ft below land surface, Nov. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	12.35	APR 6	12.53
WATER YEAR 1992 HIGHEST 12.35 OCT 10, 1991 LOWEST 12.53 APR 6, 1992			



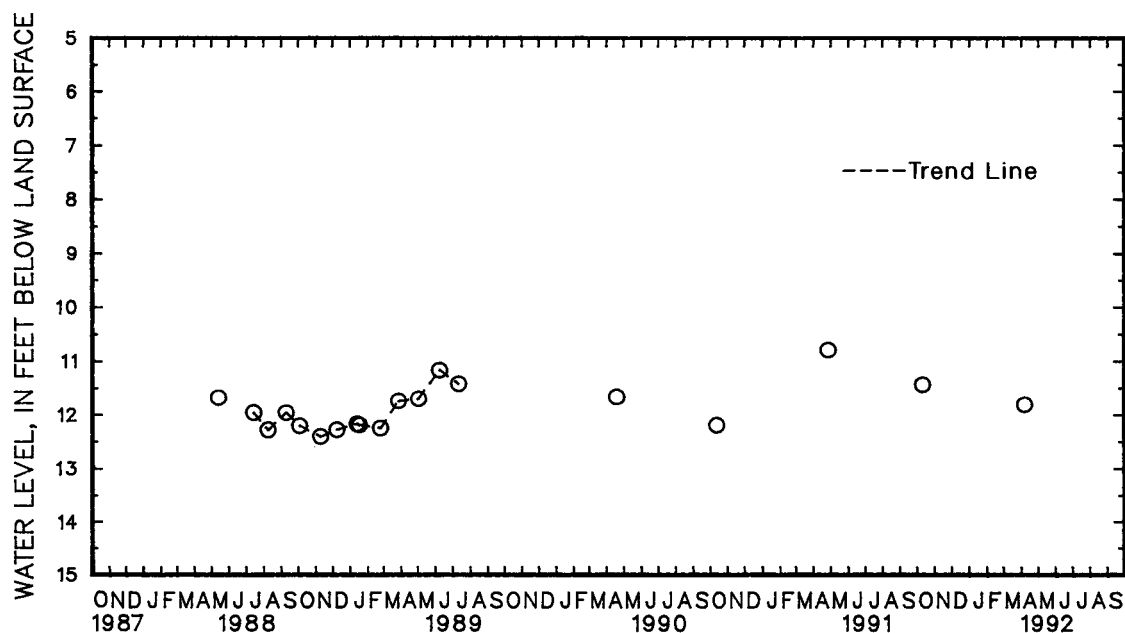
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued

WELL NUMBER.--HA De 197. SITE ID.--392819076130901. PERMIT NUMBER.--HA-81-4140.
LOCATION.--Lat 39°28'19", long 76°13'09", Hydrologic Unit 02060003, northwest end of Fords Lane, Perryman.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 95 ft; casing diameter 4 in., to 75 ft; and 85 to 95 ft; screen diameter 4 in. from 75 to 85 ft.
INSTRUMENTATION.--Equipped with digital water-level recorder--15-minute recorder interval from Jan. 17, 1989 to July 11, 1989. Measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 19.08 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.78 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--May 1988 to July 1989.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.80 ft below land surface, April 26, 1991; lowest measured, 12.44 ft below land surface, Nov. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	11.46	APR 6	11.84
WATER YEAR 1992 HIGHEST 11.46 OCT 10, 1991 LOWEST 11.84 APR 6, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND WATER LEVELS

MARYLAND--Continued

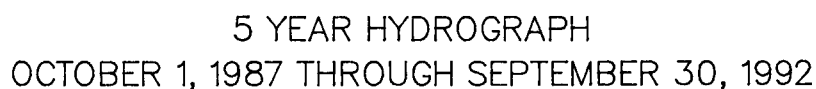
HARFORD COUNTY--Continued

WELL NUMBER.--HA De 198. SITE ID.--392819076130902. PERMIT NUMBER.--HA-81-4141.
 LOCATION.--Lat 39°28'19", long 76°13'09", Hydrologic Unit 02060003, northwest end of Fords Lane, Perryman.
 Owner: U.S. Geological Survey.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 4 in., to 9 ft; screen diameter 4 in. from 9 to 19 ft.
 INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from July 1988 to July 1989.
 DATUM.--Elevation of land surface is 18.92 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 1.50 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to August 1989, July 1991 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.61 ft above sea level, April 18, 1990; lowest measured, 9.05 ft above sea level, Sept. 25, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.80	9.78	9.50	9.49	9.35	9.29	9.79	9.78	9.64	9.57	10.12	10.08
2	9.78	9.74	9.49	9.48	9.72	9.29	9.80	9.79	9.57	9.56	10.11	10.09
3	9.74	9.70	9.48	9.45	9.80	9.72	9.80	9.80	9.56	9.55	10.09	10.08
4	9.70	9.66	9.45	9.42	9.80	9.69	9.80	9.77	9.59	9.55	10.08	10.08
5	9.66	9.65	9.42	9.39	9.73	9.70	9.77	9.74	9.56	9.52	10.08	10.08
6	9.65	9.64	9.39	9.38	9.76	9.73	9.74	9.71	9.52	9.52	10.08	10.07
7	9.64	9.63	9.38	9.36	9.75	9.73	9.71	9.65	9.53	9.52	10.46	10.07
8	9.63	9.59	9.35	9.31	9.74	9.72	9.65	9.63	9.53	9.50	10.49	10.46
9	9.59	9.58	9.31	9.29	9.79	9.72	9.66	9.63	9.50	9.43	10.49	10.49
10	9.58	9.58	9.29	9.29	9.86	9.79	9.66	9.62	9.42	9.41	10.66	10.49
11	9.58	9.57	9.29	9.28	9.89	9.86	9.62	9.56	9.45	9.42	10.80	10.67
12	9.57	9.55	9.28	9.24	9.90	9.89	9.56	9.55	9.43	9.39	10.68	10.66
13	9.55	9.53	9.24	9.24	9.92	9.90	9.58	9.56	9.43	9.39	10.66	10.60
14	9.53	9.52	9.24	9.22	9.96	9.92	9.65	9.58	9.43	9.38	10.60	10.60
15	9.52	9.52	9.22	9.22	9.93	9.92	9.73	9.63	9.89	9.38	10.60	10.53
16	9.52	9.50	9.22	9.20	9.92	9.89	9.76	9.70	9.88	9.67	10.52	10.47
17	9.82	9.50	9.19	9.18	9.92	9.89	9.75	9.70	9.78	9.72	10.54	10.48
18	9.82	9.77	9.18	9.18	9.90	9.81	9.71	9.64	9.96	9.78	10.50	10.44
19	9.81	9.78	9.18	9.17	9.81	9.78	9.63	9.62	10.03	9.94	10.70	10.50
20	9.78	9.76	9.17	9.17	9.81	9.78	9.66	9.62	10.03	10.02	10.79	10.70
21	9.76	9.72	9.16	9.15	9.83	9.80	9.62	9.57	10.03	10.00	10.78	10.75
22	9.72	9.66	9.77	9.15	9.79	9.78	9.57	9.55	10.02	10.00	10.83	10.75
23	9.66	9.62	9.62	9.46	9.78	9.78	9.65	9.55	10.02	10.00	10.85	10.81
24	9.62	9.60	9.53	9.48	9.78	9.70	9.66	9.61	10.00	9.96	10.83	10.79
25	9.60	9.59	9.52	9.50	9.70	9.64	9.70	9.62	10.04	9.96	10.80	10.79
26	9.59	9.57	9.50	9.44	9.64	9.62	9.70	9.65	10.23	10.05	11.20	10.80
27	9.56	9.55	9.44	9.41	9.63	9.60	9.67	9.65	10.23	10.19	11.20	11.05
28	9.55	9.51	9.41	9.39	9.61	9.60	9.67	9.67	10.24	10.19	11.09	11.06
29	9.51	9.51	9.39	9.33	9.79	9.61	9.67	9.66	10.24	10.08	11.06	11.03
30	9.51	9.51	9.33	9.30	9.79	9.75	9.68	9.66	---	---	11.08	11.04
31	9.51	9.50	---	---	9.78	9.75	9.68	9.64	---	---	11.08	11.02
MONTH	9.82	9.50	9.77	9.15	9.96	9.29	9.80	9.55	10.24	9.38	11.20	10.07

Daily Low Water Levels



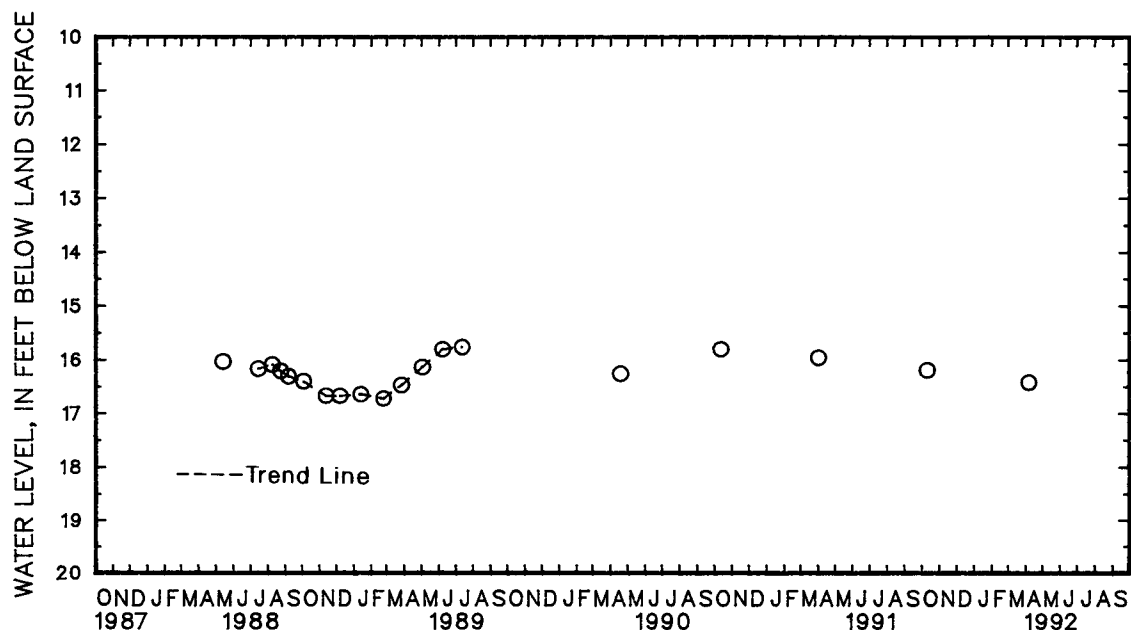
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ec 46. SITE ID.--392408076210101. PERMIT NUMBER.--HA-81-4124.
LOCATION.--Lat 39°24'33", long 76°20'33", Hydrologic Unit 02060003, at end of Kearney Dr. in boat
launch park, nr Joppatowne.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation well, depth 85 ft; diameter of casing 4 in., to 65 ft,
and 75 to 85 ft; screen diameter 4 in. from 65 to 75 ft.
INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel. Measured monthly from
May 1988 to July 1989.
DATUM.--Elevation of land surface is 23.16 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing, 2.17 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--May 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.78 ft below land surface, July 12, 1989;
lowest measured, 16.76 ft below land surface, Feb. 23, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL			
OCT 10	16.22	APR 6	16.45			
WATER YEAR 1991	HIGHEST	16.22	OCT 10, 1991	LOWEST	16.45	APR 6, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 24. SITE ID.--392343076161901.

LOCATION.--Lat 39°23'43", long 76°16'19", Hydrologic Unit 02060003, at Bush River Rd. and 29th St., about 2 mi southeast of Edgewood.

Owner: U.S. Army.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 149 ft; casing diameter 18 in., to 73 ft; casing diameter 10 in. from 65 to 120 ft; screen diameter 10 in. from 120 to 135 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with graphic water-level recorder from Jan. 24, 1950, to June 6, 1961.

DATUM.--Elevation of land surface is 12.8 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 1.15 ft above land surface.

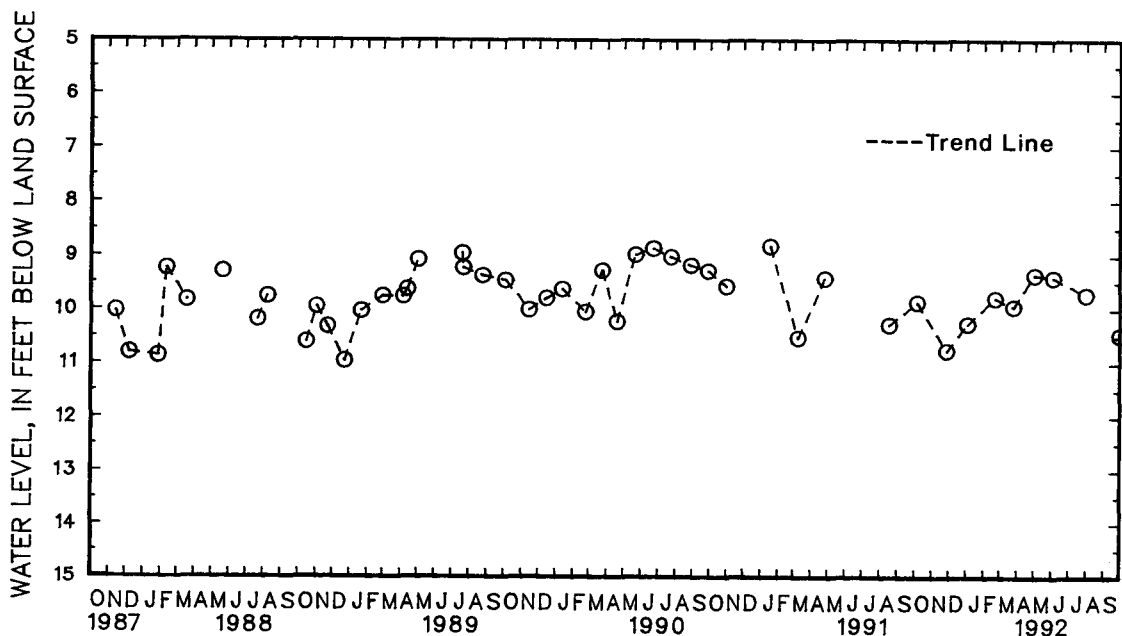
REMARKS.--Maryland Water-Level Network observation well. Water level measured, 8.24 ft below land surface, April 13, 1944.

PERIOD OF RECORD.-- September 1949, January 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.41 ft below land surface, Sept. 17, 1984; lowest measured, 42.55 ft below land surface, June 26, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	9.88	JAN 2	10.29	MAR 24	9.96	JUN 3	9.41	SEP 29	10.50
NOV 26	10.79	FEB 20	9.80	MAY 1	9.36	JUL 30	9.74		
WATER YEAR 1992		HIGHEST	9.36	MAY 1, 1992		LOWEST	10.79	NOV 26, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

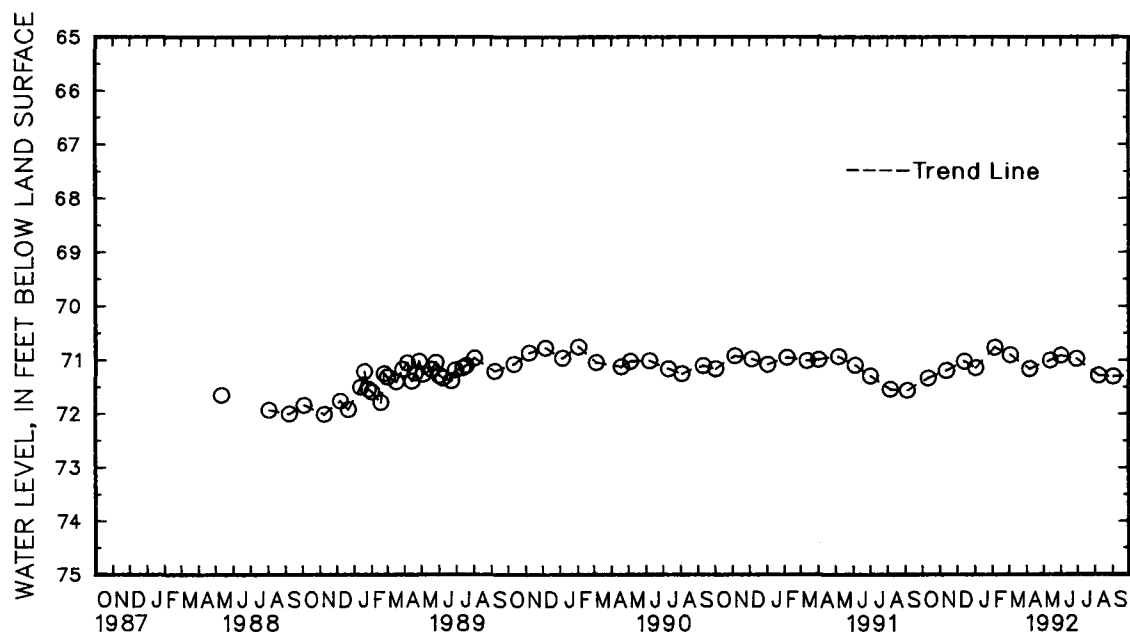
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 47. SITE ID.--392455076192101. PERMIT NUMBER.--HA-81-4128.
 LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of intersection of MD Rt. 152 and Trimble Rd., Edgewood Park.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 210 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in. from 190 to 200 ft.
 INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 91.50 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.36 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.76 ft below land surface, Feb. 2, 1990;
 lowest measured, 72.02 ft below land surface, Nov. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	71.34	DEC 13	71.03	FEB 5	70.77	APR 6	71.17	JUN 1	70.92	AUG 7	71.29
NOV 12	71.20	JAN 2	71.15	MAR 3	70.91	MAY 13	71.01	JUN 29	70.98	SEP 2	71.31
WATER YEAR 1992		HIGHEST	70.77	FEB 5, 1992		LOWEST	71.34	OCT 11, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

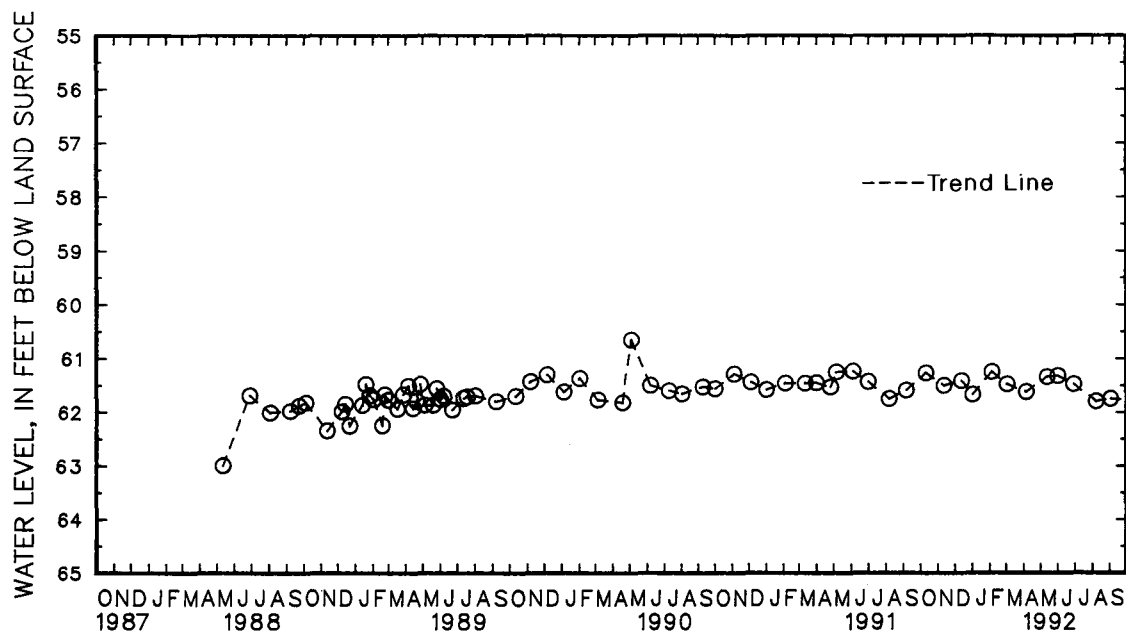
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 48. SITE ID.--392455076192102. PERMIT NUMBER.--HA-81-4178.
 LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of intersection of MD Rt. 152 and Trimble Rd., Edgewood Park.
 Owner: U.S. Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 133 ft; casing diameter 4 in., to 118 ft; screen diameter 4 in. from 118 to 128 ft.
 INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 91.20 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of PVC casing, 2.58 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.65 ft below land surface, May 4, 1990; lowest measured, 63.00 ft below land surface, May 12, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	61.27	DEC 13	61.41	FEB 5	61.25	APR 6	61.62	JUN 1	61.32	AUG 7	61.80
NOV 12	61.50	JAN 2	61.66	MAR 3	61.48	MAY 13	61.34	JUN 29	61.47	SEP 2	61.75
WATER YEAR 1992		HIGHEST	61.25	FEB 5, 1992	LOWEST	61.80	AUG 7, 1992				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

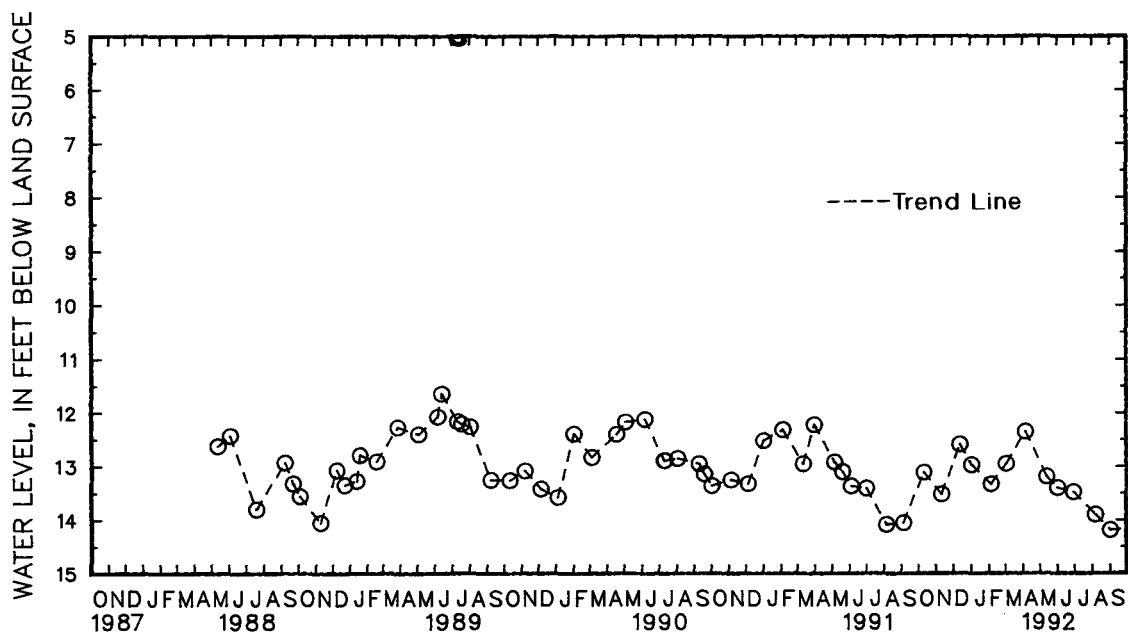
MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 49. SITE ID.--392455076192103. PERMIT NUMBER.--HA-81-4129.
 LOCATION.--Lat 39°24'55", long 76°19'21", Hydrologic Unit 02060003, 0.2 mi east of the intersection of MD Rt. 152 and Trimble Rd., Edgewood Park.
 Owner: U.S. Geological Survey.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 28 ft; casing diameter 4 in., to 13 ft; casing diameter 4 in. from 23 to 28 ft; screen diameter 4 in. from 13 to 23 ft.
 INSTRUMENTATION.--Monthly measurement with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--15-minute recorder interval from June 3, 1988 to July 11, 1989.
 DATUM.--Elevation of land surface is 91.89 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder shelf, 2.19 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--May 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.64 ft below land surface, June 13, 1989; lowest measured, 14.19 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	13.11	DEC 13	12.59	FEB 5	13.33	APR 6	12.35	JUN 1	13.40	AUG 7	13.90
NOV 12	13.52	JAN 2	12.97	MAR 3	12.95	MAY 13	13.18	JUN 29	13.48	SEP 2	14.19
WATER YEAR 1992		HIGHEST	12.35	APR 6, 1992		LOWEST	14.19	SEP 2, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--CONTINUED

WELL NUMBER.--HA Ed 52. SITE ID.--392405076183701. PERMIT NUMBER.--HA-81-4077.
 LOCATION.--Lat 39°24'05", long 76°18'37", Hydrologic Unit 02060003, at Edgewood Arsenal.
 Owner: U.S. Army.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 21 ft; casing diameter 4 in., to 16 ft;
 screen diameter 4 in. from 16 to 21 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--15-minute recorder interval from April 6, 1988 to current year.
 DATUM.--Elevation of land surface is 11.9 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.73 ft above land surface.
 REMARKS.--Canal Creek Hydrologic Assessment Project observation well CC-44A.
 PERIOD OF RECORD.--April 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.87 ft above sea level, June 9, 1989;
 lowest measured, 8.16 ft above sea level, Sept. 24, and 25, 1992.

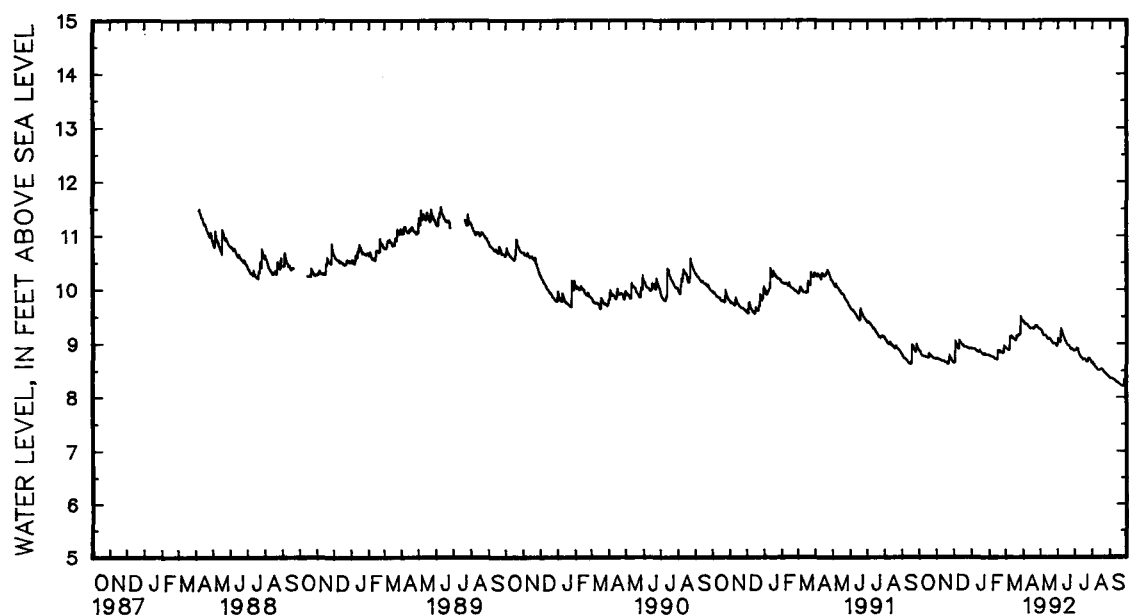
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.84	8.83	8.75	8.69	8.62	8.60	8.88	8.87	8.75	8.74	8.90	8.89
2	8.83	8.81	8.72	8.69	9.02	8.61	8.88	8.87	8.74	8.74	8.89	8.88
3	8.81	8.81	8.69	8.68	9.11	9.02	8.87	8.87	8.74	8.73	8.88	8.87
4	8.81	8.76	8.68	8.67	9.11	9.00	8.88	8.87	8.73	8.73	8.87	8.86
5	8.78	8.74	8.67	8.66	9.00	8.95	8.88	8.87	8.73	8.72	8.86	8.85
6	8.76	8.73	8.66	8.66	8.95	8.91	8.87	8.86	8.72	8.72	8.85	8.85
7	8.73	8.73	8.66	8.66	8.91	8.89	8.86	8.84	8.72	8.72	9.24	8.85
8	8.73	8.73	8.66	8.65	8.89	8.87	8.84	8.83	8.72	8.72	9.18	9.11
9	8.73	8.72	8.65	8.64	9.02	8.86	8.84	8.83	8.72	8.70	9.11	9.08
10	8.73	8.72	8.66	8.64	9.16	9.03	8.84	8.83	8.70	8.69	9.11	9.08
11	8.73	8.72	8.67	8.64	9.07	9.02	8.83	8.81	8.69	8.68	9.13	9.11
12	8.72	8.72	8.64	8.64	9.02	8.99	8.81	8.81	8.68	8.68	9.12	9.10
13	8.72	8.71	8.64	8.64	8.99	8.98	8.81	8.81	8.68	8.68	9.10	9.08
14	8.71	8.71	8.64	8.63	8.98	8.96	8.89	8.81	8.68	8.67	9.08	9.07
15	8.72	8.71	8.63	8.62	8.96	8.95	8.85	8.84	8.84	8.67	9.07	9.06
16	8.71	8.70	8.62	8.61	8.95	8.94	8.84	8.82	8.87	8.84	9.06	9.05
17	8.80	8.70	8.61	8.61	8.94	8.94	8.82	8.81	8.84	8.81	9.05	9.05
18	8.80	8.78	8.61	8.61	8.94	8.91	8.81	8.79	8.84	8.80	9.06	9.03
19	8.78	8.76	8.61	8.60	8.91	8.90	8.79	8.77	8.84	8.84	9.13	9.06
20	8.76	8.75	8.60	8.59	8.90	8.90	8.77	8.77	8.84	8.83	9.13	9.12
21	8.75	8.74	8.59	8.58	8.91	8.90	8.77	8.77	8.83	8.82	9.12	9.11
22	8.74	8.72	8.83	8.58	8.90	8.90	8.77	8.76	8.82	8.81	9.14	9.11
23	8.72	8.72	8.83	8.75	8.90	8.90	8.78	8.76	8.81	8.80	9.15	9.14
24	8.72	8.71	8.75	8.71	8.90	8.89	8.79	8.78	8.80	8.79	9.15	9.14
25	8.71	8.70	8.71	8.69	8.89	8.88	8.78	8.77	8.80	8.79	9.15	9.15
26	8.70	8.69	8.69	8.66	8.88	8.88	8.78	8.76	8.96	8.80	9.63	9.15
27	8.69	8.69	8.66	8.64	8.88	8.87	8.77	8.76	8.95	8.93	9.66	9.49
28	8.69	8.68	8.64	8.63	8.87	8.87	8.77	8.76	8.93	8.92	9.49	9.44
29	8.68	8.68	8.63	8.61	8.90	8.87	8.76	8.76	8.92	8.90	9.44	9.41
30	8.68	8.68	8.61	8.60	8.90	8.88	8.76	8.76	---	---	9.41	9.41
31	8.69	8.68	---	---	8.88	8.88	8.76	8.75	---	---	9.41	9.39
MONTH	8.84	8.68	8.83	8.58	9.16	8.60	8.89	8.75	8.96	8.67	9.66	8.85

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--CONTINUED
HA Ed 52--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.39	9.39	9.25	9.23	9.11	9.06	8.87	8.84	8.65	8.61	8.33	8.32
2	9.39	9.37	9.23	9.23	9.06	9.03	8.87	8.84	8.61	8.58	8.32	8.31
3	9.37	9.35	9.23	9.20	9.03	9.01	8.90	8.85	8.59	8.58	8.33	8.31
4	9.36	9.35	9.20	9.18	9.01	8.99	8.90	8.88	8.58	8.57	8.33	8.31
5	9.36	9.34	9.18	9.14	9.42	9.00	8.88	8.85	8.57	8.55	8.31	8.30
6	9.34	9.34	9.14	9.12	9.35	9.26	8.87	8.86	8.55	8.53	8.31	8.30
7	9.35	9.34	9.12	9.12	9.26	9.22	8.86	8.80	8.54	8.52	8.31	8.30
8	9.35	9.33	9.14	9.12	9.22	9.19	8.80	8.77	8.52	8.52	8.30	8.29
9	9.33	9.30	9.14	9.13	9.19	9.14	8.78	8.75	8.52	8.50	8.29	8.28
10	9.30	9.29	9.13	9.12	9.14	9.11	8.75	8.73	8.50	8.48	8.28	8.27
11	9.29	9.28	9.12	9.10	9.11	9.09	8.74	8.71	8.48	8.47	8.28	8.26
12	9.28	9.26	9.10	9.08	9.09	9.06	8.72	8.71	8.48	8.46	8.26	8.25
13	9.26	9.26	9.09	9.07	9.06	9.03	8.72	8.69	8.47	8.46	8.25	8.24
14	9.27	9.26	9.07	9.05	9.04	9.02	8.70	8.68	8.47	8.46	8.25	8.24
15	9.27	9.26	9.07	9.05	9.02	8.98	8.68	8.66	8.48	8.47	8.24	8.23
16	9.28	9.26	9.07	9.07	8.98	8.96	8.70	8.68	8.48	8.48	8.23	8.22
17	9.28	9.27	9.07	9.06	8.97	8.95	8.69	8.68	8.52	8.48	8.22	8.21
18	9.27	9.25	9.06	9.05	8.95	8.93	8.69	8.68	8.52	8.49	8.21	8.20
19	9.27	9.25	9.05	9.03	8.97	8.93	8.69	8.66	8.49	8.47	8.20	8.19
20	9.28	9.27	9.03	9.02	8.96	8.93	8.67	8.64	8.47	8.46	8.19	8.18
21	9.30	9.28	9.02	9.01	8.93	8.91	8.65	8.63	8.46	8.45	8.18	8.17
22	9.34	9.31	9.01	8.98	8.91	8.89	8.64	8.62	8.45	8.43	8.19	8.17
23	9.33	9.31	8.99	8.97	8.90	8.86	8.69	8.62	8.44	8.42	8.19	8.17
24	9.33	9.31	8.97	8.96	8.87	8.86	8.69	8.67	8.42	8.41	8.17	8.16
25	9.32	9.30	8.97	8.97	8.87	8.85	8.71	8.69	8.42	8.40	8.22	8.16
26	9.30	9.28	8.99	8.97	8.87	8.86	8.70	8.69	8.40	8.39	8.31	8.22
27	9.28	9.27	8.98	8.96	8.87	8.85	8.70	8.68	8.39	8.37	8.31	8.30
28	9.27	9.25	8.96	8.94	8.86	8.84	8.68	8.65	8.41	8.36	8.31	8.29
29	9.25	9.25	8.94	8.92	8.85	8.83	8.65	8.63	8.39	8.36	---	---
30	9.26	9.25	8.99	8.92	8.85	8.83	8.63	8.60	8.36	8.34	---	---
31	---	---	9.17	8.99	---	---	8.65	8.60	8.35	8.33	---	---
MONTH	9.39	9.25	9.25	8.92	9.42	8.83	8.90	8.60	8.65	8.33	8.33	8.16

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 59. SITE ID.--392035076172203. PERMIT NUMBER.--HA-81-2985.
 LOCATION.--Lat 39°20'35", long 76°17'22", Hydrologic Unit 02060003, at Edgewood Arsenal.
 Owner: U.S. Army.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 72 ft; casing diameter 4 in., to 67 ft; screen diameter 4 in. from 67 to 72 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from July 6, 1987 to current year.

DATUM.--Elevation of land surface is 8.3 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.61 ft above land surface.

REMARKS.--Canal Creek Hydrologic Assessment Project observation well CC-1C.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.21 ft above sea level, June 9, 1989; lowest measured, 5.39 ft above sea level, Sept. 4, 1987; Nov. 15, and 16, 1987.

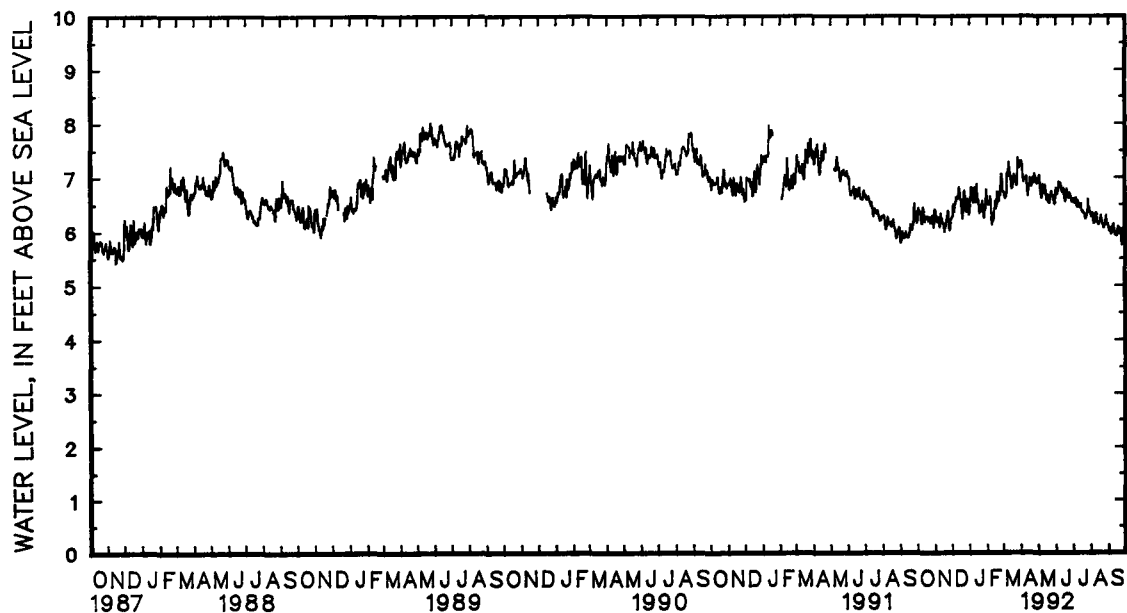
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.36	6.19	6.46	6.38	6.34	6.24	6.42	6.32	6.75	6.55	6.83	6.71
2	6.40	6.35	6.51	6.36	6.43	6.25	6.58	6.43	6.55	6.48	6.79	6.70
3	6.46	6.40	6.36	6.26	6.84	6.44	6.78	6.59	6.50	6.47	6.74	6.63
4	6.40	6.32	6.26	6.18	6.81	6.48	6.97	6.79	6.76	6.49	6.63	6.59
5	6.43	6.33	6.20	6.15	6.48	6.34	6.86	6.80	6.68	6.51	6.68	6.61
6	6.48	6.34	6.25	6.19	6.59	6.48	6.82	6.76	6.62	6.50	6.69	6.65
7	6.34	6.21	6.28	6.23	6.64	6.48	6.76	6.60	6.75	6.62	7.15	6.70
8	6.20	6.12	6.23	6.09	6.61	6.53	6.60	6.51	6.70	6.55	7.18	7.08
9	6.20	6.11	6.14	6.05	6.74	6.61	6.80	6.58	6.55	6.17	7.07	7.00
10	6.42	6.20	6.41	6.14	6.72	6.58	6.85	6.79	6.25	6.09	7.44	7.05
11	6.55	6.42	6.45	6.30	6.63	6.58	6.79	6.58	6.46	6.25	7.59	7.27
12	6.50	6.37	6.30	6.21	6.72	6.59	6.65	6.51	6.38	6.17	7.27	7.17
13	6.37	6.20	6.23	6.21	6.85	6.73	6.86	6.65	6.57	6.21	7.17	7.03
14	6.24	6.14	6.23	6.12	7.04	6.80	7.24	6.86	6.58	6.39	7.08	7.01
15	6.40	6.24	6.25	6.12	6.80	6.70	6.85	6.64	6.77	6.39	7.05	6.90
16	6.39	6.23	6.26	6.10	6.72	6.56	6.83	6.55	6.79	6.54	6.90	6.77
17	6.39	6.23	6.09	5.96	6.78	6.56	6.74	6.55	6.54	6.40	7.03	6.84
18	6.32	6.23	6.06	5.97	6.73	6.43	6.64	6.39	6.71	6.47	6.98	6.80
19	6.40	6.25	6.09	6.05	6.42	6.21	6.42	6.31	6.84	6.71	7.24	6.99
20	6.25	6.16	6.20	6.09	6.46	6.21	6.61	6.42	6.79	6.61	7.09	7.04
21	6.25	6.17	6.23	6.19	6.67	6.46	6.56	6.45	6.65	6.54	7.04	6.93
22	6.26	6.23	6.42	6.19	6.72	6.61	6.45	6.35	6.70	6.53	7.28	6.94
23	6.23	6.16	6.39	6.30	6.90	6.73	7.00	6.43	6.75	6.70	7.27	7.00
24	6.18	6.12	6.49	6.36	6.87	6.63	6.97	6.54	6.74	6.65	6.99	6.84
25	6.22	6.17	6.36	6.19	6.63	6.41	6.54	6.39	6.92	6.65	6.94	6.83
26	6.26	6.22	6.19	6.02	6.43	6.35	6.52	6.23	7.13	6.93	7.51	6.94
27	6.34	6.26	6.07	5.99	6.44	6.34	6.37	6.22	7.07	7.05	7.51	7.36
28	6.34	6.12	6.20	6.08	6.58	6.34	6.40	6.37	7.29	7.03	7.36	7.25
29	6.12	6.04	6.23	6.20	6.88	6.58	6.51	6.40	7.30	6.72	7.25	7.17
30	6.43	6.11	6.27	6.21	6.87	6.40	6.75	6.51	---	---	7.36	7.18
31	6.44	6.38	---	---	6.40	6.28	6.81	6.75	---	---	7.38	7.28
MONTH	6.55	6.04	6.51	5.96	7.04	6.21	7.24	6.22	7.30	6.09	7.59	6.59

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Ed 59--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.38	7.28	6.97	6.89	6.85	6.79	6.69	6.58	6.43	6.29	6.11	6.03
2	7.35	7.30	7.17	6.94	6.78	6.72	6.62	6.52	6.31	6.25	6.04	5.98
3	7.29	7.25	7.15	7.03	6.73	6.67	6.60	6.50	6.38	6.31	6.16	6.03
4	7.29	7.22	7.03	6.90	6.77	6.71	6.61	6.57	6.41	6.32	6.11	6.00
5	7.22	6.97	6.91	6.72	6.98	6.76	6.67	6.58	6.32	6.18	6.00	5.92
6	6.97	6.90	6.72	6.61	6.98	6.90	6.69	6.60	6.18	6.12	5.99	5.92
7	7.12	6.96	6.70	6.60	6.90	6.85	6.59	6.45	6.15	6.12	6.06	5.99
8	7.14	6.97	6.91	6.70	6.92	6.88	6.55	6.42	6.25	6.15	6.14	6.05
9	7.01	6.94	6.90	6.86	6.92	6.88	6.62	6.55	6.34	6.25	6.12	6.09
10	7.01	6.96	6.87	6.77	6.89	6.82	6.57	6.51	6.34	6.31	6.19	6.11
11	7.06	7.01	6.77	6.68	6.81	6.74	6.55	6.45	6.37	6.31	6.16	6.00
12	7.04	6.78	6.83	6.69	6.75	6.70	6.50	6.42	6.31	6.14	6.00	5.91
13	6.78	6.64	6.95	6.84	6.80	6.74	6.56	6.46	6.17	6.12	5.94	5.89
14	6.90	6.73	6.92	6.74	6.82	6.78	6.52	6.45	6.19	6.10	5.93	5.90
15	6.89	6.81	6.74	6.62	6.80	6.66	6.60	6.49	6.16	6.10	5.94	5.89
16	6.98	6.82	6.62	6.56	6.66	6.56	6.49	6.34	6.18	6.15	6.01	5.93
17	7.09	6.98	6.65	6.55	6.59	6.53	6.44	6.34	6.23	6.16	6.07	6.01
18	6.99	6.84	6.73	6.65	6.74	6.58	6.42	6.35	6.30	6.22	6.16	6.06
19	6.85	6.81	6.66	6.51	6.92	6.74	6.35	6.31	6.31	6.27	6.17	6.01
20	6.92	6.83	6.53	6.50	6.91	6.77	6.34	6.31	6.27	6.19	6.01	5.93
21	7.05	6.92	6.59	6.50	6.77	6.66	6.34	6.29	6.19	6.10	6.02	5.93
22	7.05	6.98	6.69	6.60	6.66	6.62	6.29	6.21	6.12	6.09	6.16	6.02
23	6.98	6.89	6.79	6.69	6.68	6.60	6.39	6.21	6.10	6.04	6.12	5.81
24	7.19	6.95	6.84	6.72	6.80	6.68	6.33	6.25	6.09	6.04	5.81	5.71
25	7.17	7.06	6.71	6.63	6.77	6.69	6.37	6.27	6.17	6.09	6.01	5.72
26	7.06	7.00	6.69	6.63	6.69	6.65	6.58	6.37	6.21	6.16	6.07	5.99
27	7.01	6.98	6.71	6.65	6.72	6.62	6.60	6.57	6.28	6.20	6.14	6.03
28	6.98	6.89	6.65	6.54	6.62	6.54	6.56	6.43	6.49	6.27	6.12	6.07
29	6.95	6.87	6.54	6.48	6.57	6.52	6.44	6.41	6.35	6.12	6.15	6.00
30	7.02	6.94	6.64	6.49	6.60	6.54	6.42	6.33	6.17	6.09	6.04	5.99
31	---	---	6.84	6.64	---	---	6.51	6.34	6.18	6.11	---	---
MONTH	7.38	6.64	7.17	6.48	6.98	6.52	6.69	6.21	6.49	6.04	6.19	5.71

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 60. SITE ID.--392035076172204. PERMIT NUMBER.--HA-81-2986.
 LOCATION.--Lat 39°20'35", long 76°17'22", Hydrologic Unit 02060003, at Edgewood Arsenal.
 Owner: U.S. Army.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 154 ft; casing diameter 4 in., to 149 ft; screen diameter 4 in. from 149 to 154 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--15-minute recorder interval from July 14, 1987 to current year.
 DATUM.--Elevation of land surface is 8.3 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.78 ft above land surface.
 REMARKS.--Canal Creek Hydrologic Assessment Project observation well CC-1D.
 PERIOD OF RECORD.--July 1987 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.54 ft above sea level, May 29, 1990; lowest measured, 5.89 ft above sea level, Sept. 28, 1987.

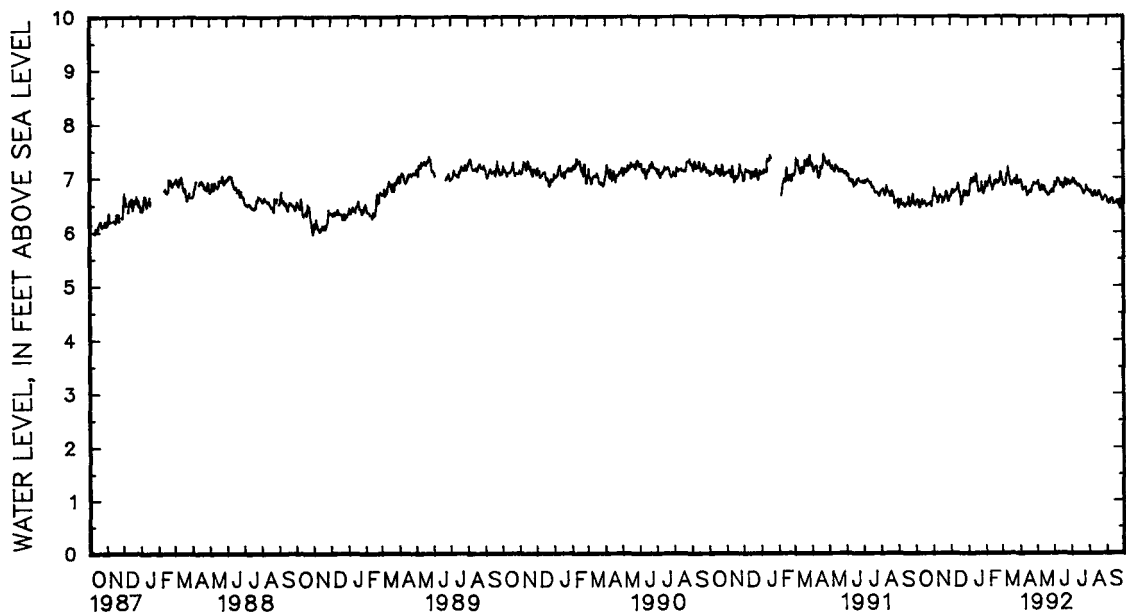
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.53	6.47	6.79	6.67	6.71	6.64	6.69	6.65	6.95	6.88	6.96	6.93
2	6.57	6.53	6.85	6.79	6.75	6.68	6.75	6.69	6.87	6.82	6.94	6.89
3	6.60	6.57	6.83	6.74	6.89	6.75	6.85	6.75	6.83	6.82	6.89	6.84
4	6.58	6.53	6.74	6.67	6.89	6.76	6.96	6.85	6.97	6.83	6.85	6.83
5	6.58	6.53	6.67	6.63	6.76	6.70	6.98	6.92	6.95	6.91	6.88	6.84
6	6.62	6.56	6.64	6.62	6.74	6.70	7.00	6.97	6.94	6.90	6.88	6.86
7	6.56	6.47	6.65	6.62	6.75	6.70	6.99	6.94	7.02	6.94	7.04	6.88
8	6.47	6.42	6.63	6.56	6.74	6.72	6.94	6.90	7.05	7.02	7.05	7.04
9	6.44	6.42	6.56	6.52	6.85	6.74	6.99	6.90	7.05	6.91	7.04	7.02
10	6.53	6.44	6.63	6.52	6.85	6.75	7.02	6.99	6.90	6.85	7.21	7.02
11	6.61	6.53	6.70	6.64	6.78	6.75	7.02	6.95	6.89	6.86	7.28	7.19
12	6.61	6.57	6.68	6.66	6.81	6.77	6.96	6.92	6.86	6.75	7.19	7.13
13	6.57	6.51	6.66	6.66	6.88	6.81	7.06	6.96	6.87	6.75	7.13	7.02
14	6.51	6.48	6.66	6.62	6.97	6.88	7.23	7.06	6.89	6.84	7.02	6.99
15	6.61	6.50	6.66	6.62	6.90	6.83	7.12	7.04	7.00	6.84	6.99	6.91
16	6.61	6.54	6.67	6.61	6.83	6.71	7.06	6.91	7.02	6.92	6.91	6.85
17	6.63	6.54	6.61	6.51	6.75	6.70	6.93	6.88	6.92	6.87	6.91	6.85
18	6.56	6.50	6.53	6.51	6.74	6.62	6.88	6.76	6.94	6.87	6.91	6.84
19	6.56	6.50	6.57	6.53	6.62	6.48	6.76	6.72	7.01	6.94	6.99	6.91
20	6.50	6.45	6.63	6.57	6.52	6.48	6.78	6.72	7.00	6.93	6.95	6.92
21	6.48	6.45	6.65	6.62	6.64	6.52	6.78	6.76	6.94	6.89	6.92	6.90
22	6.52	6.48	6.77	6.63	6.68	6.62	6.76	6.74	6.91	6.88	7.04	6.90
23	6.51	6.49	6.74	6.72	6.79	6.68	7.01	6.75	6.93	6.91	7.04	6.96
24	6.50	6.48	6.78	6.72	6.79	6.74	7.01	6.91	6.93	6.91	6.96	6.87
25	6.51	6.49	6.73	6.67	6.74	6.69	6.91	6.84	7.04	6.91	6.90	6.87
26	6.53	6.50	6.67	6.57	6.69	6.67	6.84	6.70	7.10	7.04	7.14	6.90
27	6.57	6.53	6.57	6.54	6.69	6.66	6.71	6.68	7.10	7.09	7.13	7.03
28	6.57	6.49	6.60	6.54	6.73	6.66	6.73	6.71	7.19	7.09	7.03	6.95
29	6.48	6.45	6.63	6.60	6.87	6.73	6.79	6.73	7.20	6.97	6.95	6.88
30	6.63	6.47	6.65	6.62	6.87	6.71	6.91	6.79	---	---	6.91	6.88
31	6.67	6.63	---	---	6.71	6.65	6.96	6.91	---	---	6.94	6.91
MONTH	6.67	6.42	6.85	6.51	6.97	6.48	7.23	6.65	7.20	6.75	7.28	6.83

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Ed 60--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.97	6.91	6.93	6.89	6.92	6.90	6.99	6.92	6.83	6.74	6.62	6.55
2	6.97	6.95	6.99	6.91	6.90	6.85	6.98	6.91	6.74	6.71	6.55	6.52
3	6.95	6.91	6.99	6.93	6.85	6.82	6.98	6.90	6.74	6.71	6.62	6.53
4	6.91	6.90	6.93	6.86	6.87	6.84	6.98	6.97	6.77	6.74	6.61	6.56
5	6.90	6.80	6.86	6.78	7.01	6.87	6.99	6.97	6.76	6.69	6.56	6.50
6	6.80	6.75	6.78	6.74	7.00	6.97	6.99	6.97	6.69	6.65	6.55	6.50
7	6.81	6.76	6.75	6.74	6.97	6.95	6.97	6.90	6.65	6.63	6.58	6.55
8	6.82	6.79	6.84	6.75	6.96	6.96	6.90	6.87	6.66	6.63	6.61	6.58
9	6.80	6.78	6.85	6.84	6.97	6.94	6.94	6.90	6.72	6.66	6.60	6.59
10	6.81	6.80	6.86	6.83	6.94	6.89	6.94	6.90	6.73	6.72	6.64	6.60
11	6.82	6.81	6.83	6.75	6.89	6.85	6.91	6.86	6.75	6.73	6.65	6.59
12	6.82	6.73	6.79	6.75	6.85	6.83	6.86	6.83	6.75	6.66	6.59	6.51
13	6.72	6.65	6.86	6.79	6.88	6.85	6.88	6.85	6.67	6.64	6.51	6.49
14	6.71	6.66	6.86	6.82	6.90	6.88	6.86	6.84	6.68	6.64	6.50	6.49
15	6.71	6.69	6.82	6.76	6.90	6.85	6.92	6.86	6.69	6.64	6.51	6.50
16	6.74	6.69	6.77	6.72	6.84	6.79	6.89	6.82	6.70	6.68	6.52	6.50
17	6.78	6.74	6.72	6.70	6.82	6.79	6.84	6.82	6.74	6.70	6.55	6.52
18	6.77	6.72	6.74	6.71	6.89	6.82	6.84	6.82	6.75	6.73	6.59	6.55
19	6.72	6.71	6.74	6.68	7.01	6.89	6.82	6.78	6.74	6.73	6.59	6.56
20	6.74	6.71	6.68	6.65	7.01	6.97	6.78	6.76	6.73	6.68	6.56	6.51
21	6.82	6.75	6.66	6.65	6.97	6.90	6.76	6.73	6.68	6.64	6.56	6.51
22	6.84	6.82	6.68	6.66	6.90	6.86	6.73	6.68	6.64	6.62	6.65	6.56
23	6.84	6.83	6.72	6.68	6.86	6.84	6.76	6.68	6.62	6.57	6.65	6.51
24	6.89	6.83	6.74	6.72	6.97	6.86	6.75	6.71	6.57	6.55	6.51	6.41
25	6.90	6.89	6.73	6.70	6.97	6.96	6.75	6.72	6.60	6.56	6.57	6.41
26	6.89	6.88	6.76	6.70	6.96	6.94	6.85	6.75	6.61	6.59	6.60	6.56
27	6.92	6.88	6.78	6.76	6.96	6.94	6.87	6.85	6.63	6.60	6.64	6.57
28	6.91	6.87	6.78	6.75	6.94	6.88	6.87	6.80	6.75	6.63	6.64	6.63
29	6.87	6.86	6.75	6.71	6.89	6.86	6.80	6.78	6.71	6.65	6.64	6.56
30	6.93	6.87	6.79	6.71	6.92	6.88	6.79	6.74	6.65	6.63	6.56	6.52
31	---	---	6.92	6.79	---	---	6.86	6.75	6.64	6.62	---	---
MONTH	6.97	6.65	6.99	6.65	7.01	6.79	6.99	6.68	6.83	6.55	6.65	6.41

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 80. SITE ID.--392334076171303. PERMIT NUMBER.--HA-81-3008.

LOCATION.--Lat 39°23'34", long 76°17'13", Hydrologic Unit 02060003, at Edgewood Arsenal.

Owner: U.S. Army.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 95 ft; casing diameter 4 in., to 90 ft; screen diameter 4 in. from 90 to 95 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from April 14, 1987 to current year.

DATUM.--Elevation of land surface is 18.1 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.65 ft above land surface.

REMARKS.--Canal Creek Hydrologic Assessment Project observation well CC-8C. Missing data due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.84 ft above sea level, April 22, 1991.

lowest measured, 4.63 ft above sea level, Sept. 4, 1987.

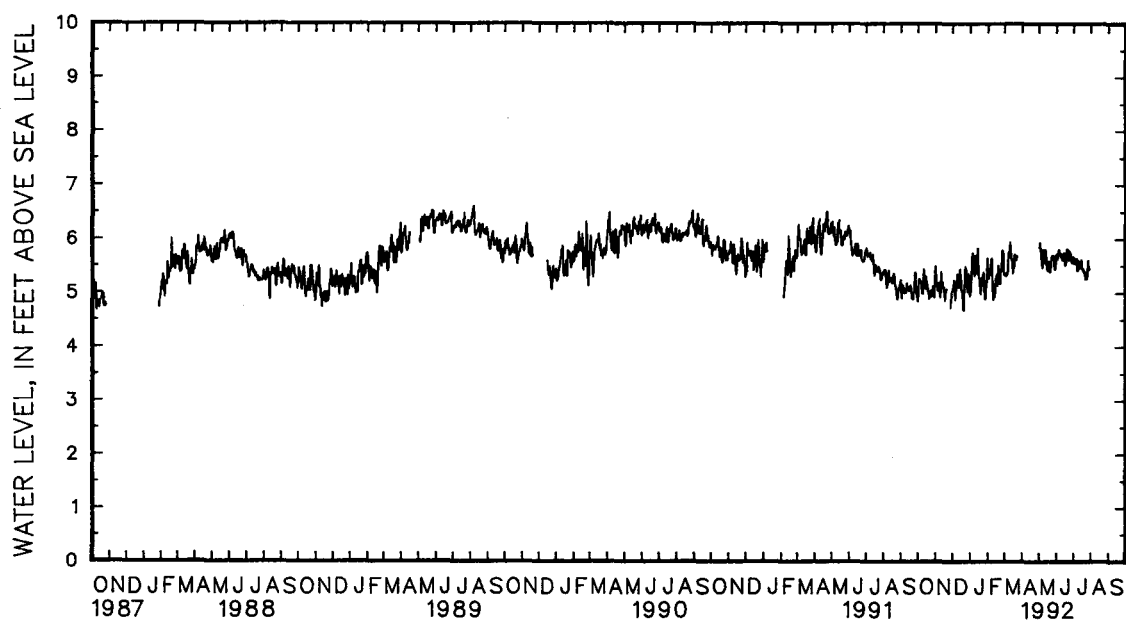
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.20	4.97	5.64	5.49	5.24	5.08	5.19	5.00	5.65	5.37	5.61	5.32
2	5.30	5.19	5.70	5.33	5.21	5.06	5.34	5.12	5.37	5.26	5.49	5.35
3	5.37	5.25	5.32	5.18	5.76	5.22	5.63	5.31	5.44	5.33	5.40	5.34
4	5.37	5.20	5.20	5.07	5.59	5.08	5.88	5.63	5.80	5.41	5.37	5.31
5	5.43	5.20	5.16	5.03	5.07	4.86	5.83	5.73	5.67	5.43	5.44	5.32
6	5.41	5.21	5.26	5.10	5.24	5.05	5.76	5.70	5.62	5.40	5.44	5.35
7	5.20	5.05	5.28	5.17	5.31	5.05	5.71	5.45	5.79	5.62	5.90	5.44
8	5.06	4.98	5.21	4.98	5.36	5.18	5.45	5.31	5.83	5.63	5.90	5.75
9	5.15	4.98	5.08	4.91	5.50	5.34	5.73	5.44	5.62	5.04	5.75	5.65
10	5.45	5.13	5.60	5.08	5.46	5.14	5.83	5.68	5.06	4.87	6.30	5.71
11	5.57	5.43	5.59	5.39	5.24	5.13	5.76	5.46	5.31	5.06	6.42	5.94
12	5.55	5.41	5.39	5.20	5.34	5.10	5.60	5.36	5.19	4.92	5.95	5.79
13	5.43	5.16	5.28	5.19	5.52	5.35	5.83	5.59	5.45	4.99	5.79	5.62
14	5.30	5.06	5.27	5.09	5.76	5.43	6.43	5.82	5.49	5.25	5.79	5.61
15	5.43	5.30	5.29	5.10	5.43	5.26	5.80	5.47	5.73	5.24	5.72	5.51
16	5.41	5.12	5.31	5.02	5.29	5.04	5.73	5.26	5.77	5.32	5.51	5.35
17	5.26	5.14	5.01	4.85	5.47	5.04	5.58	5.26	5.32	5.13	5.79	5.46
18	5.16	5.03	5.08	4.90	5.36	4.96	5.42	5.12	5.51	5.20	5.71	5.47
19	5.24	5.00	5.15	5.03	4.96	4.67	5.12	4.97	5.67	5.50	5.99	5.71
20	4.99	4.88	5.24	5.06	5.04	4.67	5.38	5.12	5.61	5.35	5.79	5.70
21	5.12	4.94	---	---	5.33	5.02	5.36	5.28	5.41	5.24	5.77	5.61
22	5.13	5.03	---	---	5.50	5.25	5.29	5.15	5.44	5.16	6.12	5.60
23	5.05	4.97	---	---	5.78	5.49	6.07	5.29	5.54	5.42	6.09	5.67
24	5.05	4.93	---	---	5.74	5.43	6.03	5.37	5.51	5.39	---	---
25	5.12	4.98	---	---	5.46	5.18	5.36	5.11	5.77	5.42	---	---
26	5.18	5.03	---	---	5.21	5.07	5.29	4.88	5.97	5.78	---	---
27	5.29	5.11	4.91	4.72	5.22	5.01	5.12	4.88	5.92	5.79	---	---
28	5.29	4.94	5.08	4.88	5.33	5.04	5.21	5.09	6.07	5.74	---	---
29	5.10	4.91	5.11	5.02	5.77	5.34	5.39	5.15	6.08	5.33	---	---
30	5.44	5.09	5.18	5.02	5.67	5.06	5.65	5.32	---	---	---	---
31	5.53	5.39	---	---	5.06	4.93	5.75	5.64	---	---	---	---
MONTH	5.57	4.88	5.70	4.72	5.78	4.67	6.43	4.88	6.08	4.87	6.42	5.31

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Ed 80--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	5.86	5.71	5.75	5.66	5.55	5.25	5.24	5.09
2	---	---	6.17	5.84	5.72	5.64	5.71	5.54	5.38	5.21	5.16	5.04
3	---	---	6.10	5.93	5.71	5.62	5.70	5.55	5.47	5.33	5.32	5.11
4	---	---	5.93	5.82	5.77	5.69	5.70	5.61	5.52	5.38	5.26	5.09
5	---	---	5.85	5.67	5.99	5.77	5.80	5.58	5.39	5.16	5.09	4.97
6	---	---	5.67	5.54	5.95	5.80	5.83	5.63	5.23	5.08	5.14	4.95
7	---	---	5.60	5.46	5.83	5.71	5.66	5.43	5.18	5.08	5.18	5.08
8	---	---	5.87	5.61	5.81	5.72	5.61	5.40	5.30	5.12	5.27	5.10
9	---	---	5.95	5.80	5.84	5.71	5.79	5.59	5.48	5.28	5.27	5.17
10	---	---	5.85	5.64	5.78	5.66	5.62	5.54	5.47	5.36	5.38	5.22
11	---	---	5.68	5.55	5.72	5.61	5.64	5.46	5.54	5.42	5.40	5.14
12	---	---	5.85	5.60	5.69	5.60	5.58	5.45	5.45	5.21	5.14	4.94
13	---	---	6.00	5.80	5.77	5.65	5.72	5.54	5.27	5.17	5.03	4.95
14	---	---	5.96	5.67	5.82	5.73	5.63	5.51	5.27	5.17	5.05	4.99
15	---	---	5.70	5.52	5.81	5.63	5.72	5.60	5.27	5.20	5.07	4.99
16	---	---	5.56	5.42	5.62	5.50	5.62	5.45	5.29	5.22	5.19	5.02
17	---	---	5.59	5.41	5.58	5.52	5.60	5.44	5.29	5.21	5.24	5.12
18	---	---	5.73	5.58	5.81	5.58	5.60	5.43	5.33	5.26	5.41	5.19
19	---	---	5.58	5.40	6.00	5.81	5.45	5.38	5.38	5.30	5.45	5.13
20	---	---	5.43	5.38	6.00	5.81	5.46	5.39	5.34	5.20	5.16	5.04
21	---	---	5.51	5.39	5.80	5.67	5.48	5.37	5.25	5.10	5.24	5.11
22	---	---	5.64	5.48	5.69	5.61	5.39	5.25	5.18	5.08	5.47	5.24
23	---	---	5.80	5.65	5.77	5.60	5.47	5.26	5.14	5.01	5.31	4.83
24	---	---	5.92	5.69	5.93	5.78	5.43	5.25	5.13	5.03	4.85	4.74
25	---	---	5.70	5.62	5.91	5.75	5.44	5.29	5.25	5.09	5.08	4.82
26	---	---	5.80	5.69	5.82	5.70	5.66	5.35	5.29	5.18	5.21	5.08
27	---	---	5.81	5.67	5.89	5.66	5.75	5.59	5.45	5.23	5.27	5.12
28	---	---	5.69	5.50	5.68	5.56	5.59	5.45	5.83	5.41	5.24	5.11
29	---	---	5.55	5.43	5.66	5.55	5.53	5.43	5.80	5.28	5.22	4.99
30	---	---	5.68	5.46	5.72	5.61	5.50	5.35	5.34	5.18	5.03	4.92
31	---	---	5.92	5.68	---	---	5.61	5.37	5.42	5.23	---	---
MONTH	---	---	6.17	5.38	6.00	5.50	5.83	5.25	5.83	5.01	5.47	4.74

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 201. SITE ID.--392437076183101. PERMIT NUMBER.--HA-88-0969.
LOCATION.--Lat 39°23'50", long 76°18'43", Hydrologic Unit 02060003, at Edgewood Arsenal.
Owner: U. S. Army.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 66 ft; casing diameter 4 in., to 61 ft; screen diameter 4 in. from 61 to 66 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
Equipped with digital water-level recorder--15-minute recorder interval from Dec. 6, 1988 to current year.
DATUM.--Elevation of land surface is 29.00 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 3.07 ft above land surface.
REMARKS.--Canal Creek Hydrologic Assessment Project observation well CC-1.
PERIOD OF RECORD.--Dec. 6, 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.49 ft above sea level, Feb. 29, 1992;
lowest measured, 12.24 ft above sea level, Oct. 9, 1991.

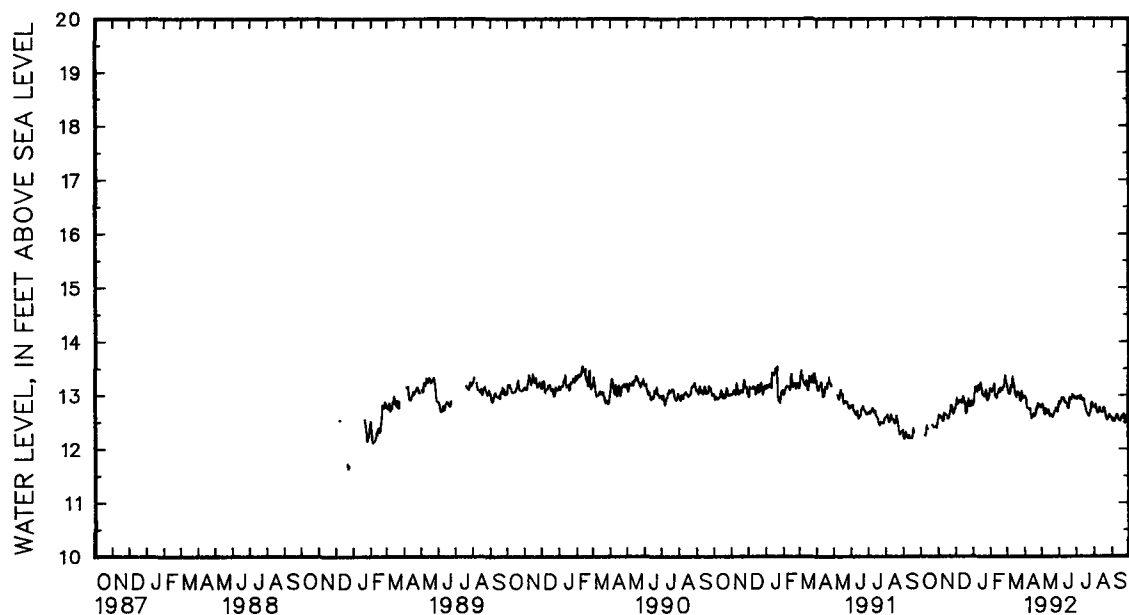
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	12.63	12.56	12.85	12.78	12.84	12.81	13.19	13.13	13.26	13.22
2	---	---	12.66	12.63	12.94	12.82	12.91	12.84	13.13	13.10	13.22	13.16
3	---	---	12.65	12.62	13.07	12.95	13.03	12.91	13.13	13.10	13.18	13.10
4	---	---	12.62	12.60	13.06	12.91	13.16	13.04	13.20	13.07	13.12	13.05
5	---	---	12.60	12.59	12.91	12.84	13.17	13.15	13.19	13.13	13.06	13.04
6	---	---	12.60	12.59	12.91	12.86	13.18	13.16	13.18	13.13	13.08	13.02
7	---	---	12.61	12.60	12.92	12.86	13.16	13.09	13.26	13.19	13.22	13.05
8	12.31	12.26	12.60	12.53	12.92	12.88	13.09	13.07	13.27	13.23	13.24	13.19
9	12.26	12.24	12.53	12.52	13.02	12.91	13.19	13.09	13.21	13.04	13.19	13.16
10	12.32	12.25	12.66	12.52	13.03	12.88	13.25	13.19	13.04	12.98	13.37	13.17
11	12.43	12.32	12.69	12.67	12.88	12.87	13.22	13.14	13.07	13.00	13.45	13.35
12	12.43	12.43	12.68	12.66	12.91	12.85	13.16	13.11	13.04	12.95	13.36	13.30
13	12.43	12.39	12.67	12.66	13.00	12.90	13.24	13.15	13.11	12.96	13.31	13.23
14	12.40	12.37	12.67	12.63	13.07	12.98	13.44	13.25	13.12	13.04	13.23	13.19
15	---	---	12.67	12.63	12.99	12.95	13.30	13.22	13.24	13.04	13.19	13.10
16	---	---	12.67	12.62	12.96	12.87	13.27	13.14	13.25	13.12	13.12	13.01
17	---	---	12.63	12.56	12.95	12.88	13.20	13.14	13.12	13.07	13.06	13.01
18	---	---	12.57	12.56	12.94	12.81	13.15	13.02	13.15	13.07	13.04	12.96
19	---	---	12.60	12.57	12.81	12.66	13.02	13.00	13.21	13.15	13.12	13.04
20	---	---	12.67	12.60	12.70	12.66	13.06	13.00	13.20	13.15	13.10	13.07
21	12.46	12.44	12.70	12.67	12.80	12.69	13.05	13.02	13.17	13.11	13.11	13.02
22	12.47	12.45	12.85	12.70	12.87	12.78	13.02	12.98	13.15	13.10	13.17	13.01
23	12.45	12.42	12.85	12.81	12.99	12.87	13.27	12.99	13.19	13.15	13.16	13.05
24	12.42	12.40	12.86	12.81	12.99	12.94	13.26	13.11	13.18	13.15	13.07	12.91
25	12.41	12.40	12.83	12.77	12.94	12.85	13.11	13.05	13.26	13.16	12.91	12.89
26	12.42	12.41	12.77	12.68	12.85	12.82	13.08	12.93	13.38	13.27	13.20	12.91
27	12.47	12.42	12.68	12.65	12.85	12.79	12.94	12.91	13.38	13.37	13.20	13.09
28	12.48	12.43	12.73	12.67	12.87	12.79	12.95	12.94	13.48	13.37	13.07	13.01
29	12.42	12.39	12.74	12.72	13.06	12.89	13.00	12.94	13.49	13.25	13.01	12.95
30	12.53	12.39	12.79	12.74	13.06	12.88	13.14	13.00	---	---	13.03	12.95
31	12.56	12.53	---	---	12.88	12.81	13.21	13.14	---	---	13.03	12.97
MONTH	12.56	12.24	12.86	12.52	13.07	12.66	13.44	12.81	13.49	12.95	13.45	12.89

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Ed 201--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.01	12.97	12.83	12.78	12.90	12.88	13.06	12.97	12.88	12.79	12.59	12.56
2	13.01	12.99	12.89	12.80	12.89	12.85	13.04	12.96	12.80	12.78	12.57	12.52
3	12.99	12.96	12.90	12.84	12.87	12.84	13.00	12.93	12.84	12.79	12.61	12.53
4	12.97	12.95	12.86	12.81	12.89	12.87	13.00	12.97	12.85	12.83	12.61	12.56
5	12.95	12.83	12.82	12.74	13.03	12.88	13.01	12.97	12.83	12.75	12.56	12.51
6	12.84	12.76	12.74	12.66	13.01	12.95	13.02	12.98	12.77	12.70	12.57	12.51
7	12.86	12.76	12.70	12.64	12.95	12.93	13.01	12.95	12.70	12.68	12.58	12.55
8	12.87	12.76	12.75	12.67	12.97	12.94	13.00	12.93	12.71	12.67	12.63	12.58
9	12.77	12.74	12.77	12.75	12.99	12.96	13.03	13.00	12.75	12.71	12.65	12.63
10	12.78	12.74	12.76	12.70	12.98	12.94	13.01	12.97	12.78	12.74	12.73	12.64
11	12.79	12.75	12.71	12.67	12.94	12.89	13.00	12.94	12.80	12.78	12.73	12.63
12	12.76	12.64	12.73	12.67	12.89	12.86	12.95	12.91	12.80	12.71	12.63	12.56
13	12.65	12.57	12.81	12.73	12.88	12.86	12.97	12.94	12.75	12.69	12.56	12.54
14	12.63	12.58	12.79	12.73	12.90	12.87	12.95	12.93	12.75	12.68	12.54	12.53
15	12.63	12.59	12.73	12.68	12.89	12.85	12.97	12.93	12.71	12.68	12.57	12.52
16	12.66	12.59	12.74	12.61	12.85	12.78	12.94	12.82	12.73	12.70	12.58	12.52
17	12.70	12.66	12.66	12.61	12.78	12.75	12.82	12.79	12.78	12.71	12.61	12.56
18	12.69	12.63	12.69	12.65	12.85	12.76	12.81	12.74	12.81	12.77	12.66	12.59
19	12.65	12.62	12.68	12.63	12.99	12.84	12.74	12.69	12.81	12.76	12.66	12.62
20	12.68	12.63	12.63	12.60	13.00	12.97	12.69	12.67	12.77	12.71	12.62	12.58
21	12.78	12.67	12.62	12.59	12.97	12.94	12.68	12.65	12.75	12.65	12.65	12.59
22	12.79	12.77	12.65	12.62	12.95	12.93	12.65	12.61	12.65	12.60	12.76	12.65
23	12.78	12.74	12.70	12.65	12.98	12.92	12.70	12.61	12.60	12.56	12.74	12.58
24	12.88	12.76	12.72	12.70	13.03	12.96	12.69	12.66	12.59	12.54	12.59	12.48
25	12.86	12.85	12.71	12.70	13.04	13.02	12.72	12.67	12.64	12.56	12.62	12.48
26	12.86	12.84	12.77	12.70	13.03	13.00	12.87	12.72	12.61	12.58	12.67	12.61
27	12.85	12.83	12.79	12.77	13.05	13.00	12.90	12.85	12.65	12.61	12.69	12.61
28	12.85	12.80	12.79	12.75	13.01	12.96	12.89	12.87	12.73	12.64	12.69	12.64
29	12.84	12.78	12.75	12.70	12.97	12.94	12.88	12.85	12.71	12.61	12.67	12.62
30	12.84	12.81	12.80	12.69	12.98	12.94	12.86	12.79	12.61	12.59	12.62	12.59
31	---	---	12.89	12.79	---	---	12.91	12.79	12.64	12.59	---	---
MONTH	13.01	12.57	12.90	12.59	13.05	12.75	13.06	12.61	12.88	12.54	12.76	12.48

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 223, SITE ID.--392024076173001 PERMIT NUMBER.--HA-81-2183.

LOCATION.--Lat 39°20'24", long 76°17'30", Hydrologic Unit 02060003, at Edgewood Arsenal.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 11 ft; casing diameter 4 in., to 9 ft; screen diameter 4 in. from 9 to 11 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with digital water-level recorder--15-minute recorder interval from December 1990 to current year.

DATUM.--Elevation of land surface is 10.12 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 3.20 ft above land surface.

REMARKS.--O-Field Hydrologic Assessment project well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.51 ft above sea level, March 30, 1991; lowest measured, 3.09 ft above sea level, Sept. 13 and 14, 1991.

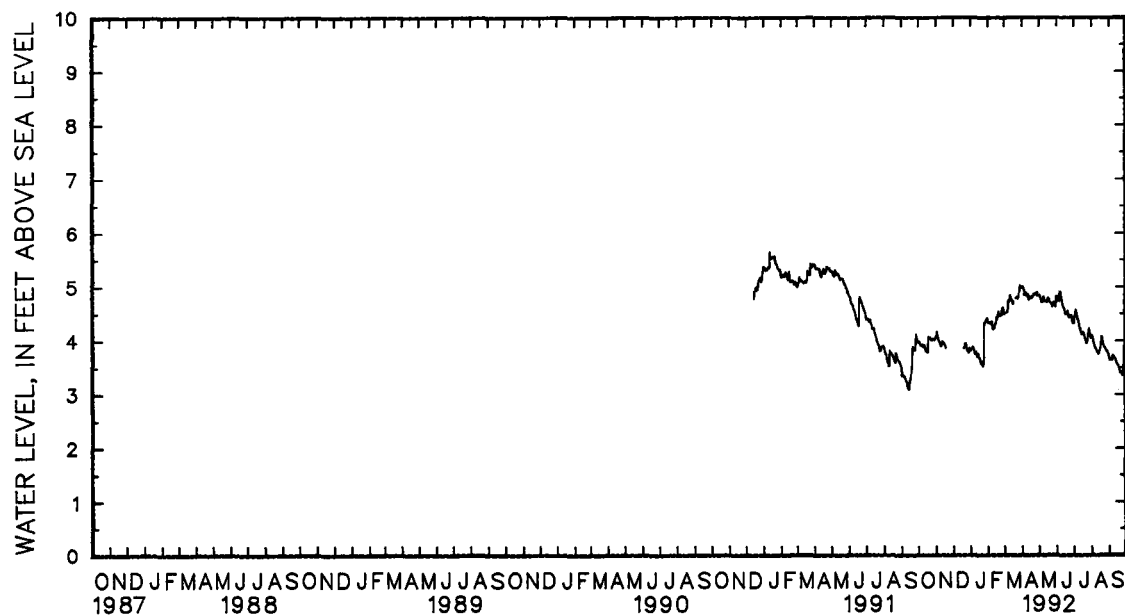
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	4.00	3.97	4.19	4.08	---	---	3.86	3.83	4.41	4.34	4.57	4.49
2	3.99	3.97	4.21	4.16	---	---	3.87	3.85	4.35	4.33	4.56	4.52
3	3.98	3.94	4.16	4.11	---	---	3.90	3.86	4.34	4.33	4.55	4.52
4	3.94	3.91	4.11	4.03	---	---	3.95	3.89	4.43	4.34	4.53	4.52
5	3.92	3.91	4.03	3.99	---	---	3.91	3.88	4.38	4.32	4.55	4.52
6	4.00	3.92	3.99	3.97	---	---	3.88	3.85	4.35	4.31	4.58	4.53
7	3.98	3.92	3.97	3.94	---	---	3.85	3.79	4.38	4.35	4.80	4.58
8	3.92	3.89	3.94	3.90	---	---	3.79	3.76	4.37	4.35	4.80	4.74
9	3.89	3.88	3.91	3.89	---	---	3.84	3.79	4.35	4.23	4.74	4.72
10	3.91	3.88	4.00	3.91	---	---	3.83	3.79	4.27	4.21	4.88	4.74
11	3.92	3.91	4.02	3.98	---	---	3.79	3.72	4.34	4.27	4.94	4.84
12	3.92	3.87	3.98	3.96	---	---	3.74	3.70	4.31	4.23	4.84	4.80
13	3.87	3.81	3.97	3.96	---	---	3.78	3.74	4.35	4.25	4.80	4.75
14	3.82	3.80	3.97	3.93	---	---	3.90	3.75	4.36	4.31	4.78	4.75
15	3.84	3.81	3.97	3.93	---	---	3.76	3.69	4.55	4.32	4.76	4.72
16	3.82	3.78	3.97	3.90	---	---	3.78	3.66	4.55	4.43	4.72	4.68
17	4.07	3.78	3.90	3.87	---	---	3.73	3.66	4.44	4.40	4.77	4.72
18	4.09	4.06	---	---	---	---	3.69	3.60	4.54	4.44	---	---
19	4.12	4.06	---	---	3.92	3.87	3.60	3.57	4.54	4.54	---	---
20	4.06	4.04	---	---	3.96	3.87	3.64	3.60	4.54	4.49	---	---
21	4.06	4.05	---	---	4.01	3.95	3.61	3.57	4.50	4.46	4.82	4.79
22	4.06	4.03	---	---	3.96	3.94	3.57	3.52	4.50	4.46	4.91	4.79
23	4.03	4.01	---	---	3.99	3.95	3.75	3.55	4.50	4.49	4.90	4.81
24	4.02	4.00	---	---	3.97	3.88	4.45	3.67	4.49	4.47	4.81	4.78
25	4.03	4.02	---	---	3.88	3.82	4.40	4.33	4.58	4.47	4.82	4.78
26	4.03	4.03	---	---	3.83	3.80	4.40	4.32	4.69	4.58	5.11	4.82
27	4.05	4.03	---	---	3.83	3.79	4.39	4.33	4.63	4.61	5.11	5.03
28	4.07	4.01	---	---	3.86	3.78	4.40	4.38	4.66	4.60	5.03	4.99
29	4.03	4.01	---	---	4.00	3.86	4.41	4.39	4.66	4.49	4.99	4.98
30	4.12	4.03	---	---	3.98	3.84	4.44	4.41	---	---	5.03	4.99
31	4.10	4.07	---	---	3.84	3.82	4.44	4.41	---	---	5.04	5.00
MONTH	4.12	3.78	4.21	3.87	4.01	3.78	4.45	3.52	4.69	4.21	5.11	4.49

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Ed 223--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.03	5.00	4.85	4.83	4.90	4.82	4.46	4.32	4.13	4.09	3.70	3.64
2	5.01	4.98	4.88	4.84	4.82	4.76	4.48	4.45	4.09	4.07	3.64	3.64
3	4.98	4.96	4.85	4.80	4.76	4.74	4.58	4.45	4.07	4.03	3.67	3.64
4	4.96	4.93	4.80	4.77	4.74	4.73	4.60	4.57	4.03	3.97	3.68	3.65
5	4.93	4.85	4.78	4.72	4.97	4.73	4.57	4.53	3.97	3.92	3.65	3.64
6	4.88	4.85	4.72	4.71	4.96	4.91	4.53	4.48	3.92	3.88	3.72	3.64
7	4.92	4.88	4.76	4.71	4.91	4.90	4.48	4.40	3.88	3.85	3.74	3.72
8	4.92	4.84	4.84	4.76	4.90	4.86	4.40	4.39	3.85	3.85	3.74	3.72
9	4.88	4.84	4.83	4.81	4.86	4.81	4.41	4.34	3.85	3.82	3.72	3.70
10	4.87	4.85	4.81	4.75	4.81	4.74	4.34	4.30	3.83	3.79	3.70	3.67
11	4.88	4.86	4.75	4.73	4.74	4.67	4.30	4.22	3.80	3.78	3.70	3.67
12	4.87	4.78	4.76	4.73	4.67	4.64	4.22	4.22	3.81	3.75	3.67	3.64
13	4.81	4.75	---	---	4.65	4.62	4.23	4.15	3.80	3.75	3.64	3.60
14	4.84	4.81	4.78	4.72	4.62	4.59	4.15	4.12	3.82	3.80	3.60	3.57
15	4.82	4.79	4.77	4.71	4.59	4.52	4.14	4.11	3.87	3.81	3.57	3.55
16	4.85	4.79	4.80	4.77	4.52	4.49	4.16	4.14	3.94	3.87	3.55	3.54
17	4.85	4.81	4.82	4.79	4.50	4.49	4.19	4.15	4.07	3.94	3.54	3.51
18	4.81	4.79	4.82	4.78	4.52	4.50	4.18	4.13	4.12	4.07	3.51	3.50
19	4.82	4.80	4.78	4.73	4.64	4.52	4.13	4.07	4.12	4.07	3.50	3.43
20	4.83	4.82	4.73	4.71	4.64	4.55	4.07	4.03	4.07	4.00	3.43	3.40
21	4.87	4.83	4.71	4.71	4.55	4.49	4.03	3.99	4.00	3.94	3.42	3.40
22	4.90	4.87	4.71	4.69	4.49	4.44	3.99	3.95	3.94	3.91	3.45	3.42
23	4.88	4.86	4.70	4.68	4.44	4.43	4.00	3.95	3.91	3.88	3.43	3.37
24	4.93	4.88	4.69	4.63	4.45	4.43	4.07	3.99	3.88	3.86	3.37	3.35
25	4.91	4.87	4.69	4.65	4.47	4.45	4.17	4.07	3.86	3.85	3.57	3.35
26	4.90	4.88	4.75	4.69	4.50	4.47	4.23	4.17	3.85	3.82	3.83	3.57
27	4.91	4.89	4.76	4.71	4.51	4.43	4.24	4.22	3.83	3.80	3.91	3.83
28	4.89	4.83	4.71	4.66	4.43	4.36	4.22	4.14	3.85	3.80	3.92	3.91
29	4.84	4.83	4.66	4.63	4.36	4.33	4.14	4.10	3.82	3.77	3.92	3.84
30	4.87	4.84	4.81	4.63	4.33	4.32	4.10	4.05	3.77	3.76	3.84	3.82
31	---	---	4.92	4.81	---	---	4.12	4.05	3.76	3.70	---	---
MONTH	5.03	4.75	4.92	4.63	4.97	4.32	4.60	3.95	4.13	3.70	3.92	3.35
YEAR	5.11	3.35										

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Ed 224. SITE ID.--392024076173002. PERMIT NUMBER.--HA-81-2184.
 LOCATION.--Lat 39°20'24", long 76°17'30", Hydrologic Unit 02060003, at Edgewood Arsenal.
 Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 21 ft; casing diameter 4 in., to 19 ft; screen diameter 4 in. from 19 to 21 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with digital water-level recorder--15-minute recorder interval from December 1990 to current year.

DATUM.--Elevation of land surface is 9.96 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 3.24 ft above land surface.

REMARKS.--O-Field Hydrologic Assessment project observation well.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.39 ft above sea level, March 28, 1991;
 lowest measured, 2.44 ft above sea level, Sept. 13 and 14, 1991.

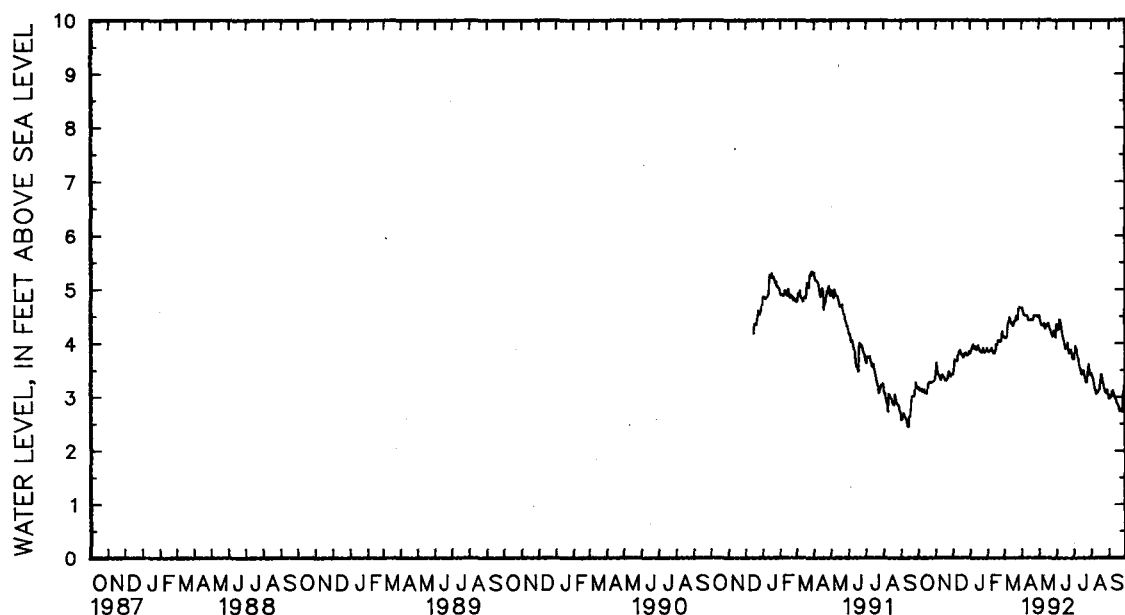
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.17	3.15	3.65	3.48	3.47	3.41	3.85	3.82	3.91	3.86	4.12	4.12
2	3.18	3.17	3.70	3.64	3.57	3.47	3.88	3.85	3.86	3.84	4.12	4.11
3	3.17	3.16	3.66	3.56	3.73	3.57	3.91	3.88	3.84	3.84	4.11	4.10
4	3.16	3.12	3.56	3.47	3.73	3.69	3.95	3.91	3.90	3.84	4.10	4.10
5	3.14	3.12	3.47	3.42	3.69	3.66	3.98	3.95	3.90	3.87	4.12	4.10
6	3.21	3.14	3.42	3.40	3.69	3.66	3.98	3.98	3.87	3.86	4.14	4.12
7	3.20	3.15	3.40	3.39	3.68	3.67	3.98	3.93	3.91	3.86	4.36	4.14
8	3.15	3.11	3.39	3.34	3.68	3.66	3.93	3.90	3.97	3.91	4.40	4.36
9	3.11	3.10	3.34	3.32	3.76	3.66	3.94	3.90	3.97	3.88	4.40	4.38
10	3.12	3.10	3.40	3.32	3.78	3.76	3.94	3.94	3.88	3.84	4.48	4.38
11	3.16	3.12	3.45	3.40	3.83	3.78	3.94	3.89	3.86	3.84	4.55	4.48
12	3.16	3.14	3.44	3.41	3.84	3.83	3.89	3.88	3.86	3.81	4.52	4.47
13	3.14	3.08	3.41	3.40	3.87	3.84	3.94	3.89	3.86	3.81	4.47	4.41
14	3.08	3.07	3.40	3.37	3.90	3.87	4.04	3.94	3.87	3.85	4.41	4.40
15	3.11	3.07	3.37	3.37	3.87	3.83	4.01	3.96	3.98	3.85	4.40	4.36
16	3.11	3.07	3.37	3.34	3.83	3.79	3.97	3.91	4.01	3.98	4.36	4.33
17	3.24	3.06	3.34	3.31	3.82	3.79	3.93	3.91	3.99	3.97	4.36	4.33
18	3.27	3.24	---	---	3.82	3.78	3.92	3.86	4.04	3.97	4.37	4.33
19	3.30	3.27	3.33	3.30	3.78	3.73	3.86	3.84	4.08	4.04	4.47	4.37
20	3.28	3.26	3.34	3.33	3.76	3.73	3.87	3.84	4.08	4.06	4.47	4.41
21	3.27	3.26	3.35	3.34	3.81	3.76	3.87	3.86	4.06	4.03	4.41	4.41
22	3.29	3.27	3.45	3.34	3.81	3.80	3.86	3.83	4.04	4.03	4.50	4.41
23	3.29	3.28	3.47	3.45	3.85	3.81	3.98	3.84	4.04	4.04	4.50	4.50
24	3.28	3.27	3.50	3.47	3.85	3.82	3.98	3.91	4.04	4.03	4.50	4.46
25	3.28	3.27	3.48	3.44	3.82	3.78	3.91	3.87	4.10	4.03	4.46	4.45
26	3.29	3.28	3.44	3.40	3.78	3.77	3.88	3.83	4.21	4.10	4.62	4.45
27	3.31	3.29	3.40	3.38	3.78	3.77	3.85	3.83	4.21	4.21	4.67	4.62
28	3.35	3.30	3.41	3.39	3.79	3.77	3.86	3.85	4.22	4.21	4.67	4.67
29	3.32	3.31	3.41	3.41	3.91	3.79	3.88	3.86	4.23	4.12	4.67	4.66
30	3.39	3.32	3.41	3.41	3.91	3.84	3.91	3.88	---	---	4.66	4.66
31	3.48	3.39	---	---	3.84	3.82	3.92	3.91	---	---	4.66	4.66
MONTH	3.48	3.06	3.70	3.30	3.91	3.41	4.04	3.82	4.23	3.81	4.67	4.10

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Ed 224--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.66	4.66	4.51	4.51	4.40	4.35	3.81	3.70	3.48	3.44	3.04	2.97
2	4.66	4.66	4.51	4.51	4.35	4.30	3.84	3.81	3.44	3.39	2.97	2.97
3	4.66	4.62	4.51	4.46	4.30	4.27	3.94	3.82	3.39	3.36	3.04	2.97
4	4.62	4.61	4.46	4.40	4.27	4.26	3.98	3.94	3.36	3.33	3.05	3.03
5	4.61	4.55	4.40	4.35	4.44	4.26	3.95	3.91	3.33	3.25	3.03	3.00
6	4.55	4.52	4.35	4.33	4.46	4.44	3.91	3.88	3.25	3.18	3.10	3.00
7	4.52	4.52	4.33	4.33	4.46	4.44	3.88	3.78	3.18	3.13	3.14	3.10
8	4.52	4.52	4.35	4.33	4.44	4.40	3.78	3.73	3.13	3.13	3.14	3.12
9	4.52	4.52	4.38	4.35	4.40	4.33	3.75	3.71	3.15	3.12	3.12	3.08
10	4.52	4.52	4.38	4.37	4.33	4.24	3.71	3.64	3.12	3.06	3.08	3.07
11	4.52	4.51	4.37	4.31	4.24	4.15	3.64	3.56	3.10	3.06	3.10	3.03
12	4.51	4.48	4.31	4.27	4.15	4.11	3.56	3.54	3.14	3.08	3.05	2.99
13	4.48	4.43	4.42	4.28	4.11	4.07	3.54	3.48	3.12	3.08	2.99	2.96
14	4.43	4.43	4.41	4.34	4.07	4.04	3.48	3.43	3.16	3.12	2.96	2.94
15	4.43	4.43	4.34	4.31	4.04	3.96	3.46	3.42	3.25	3.16	2.94	2.90
16	4.43	4.43	4.36	4.33	3.96	3.90	3.49	3.46	3.34	3.25	2.90	2.88
17	4.44	4.43	4.37	4.36	3.92	3.90	3.51	3.49	3.42	3.34	2.88	2.85
18	4.44	4.44	4.39	4.37	3.93	3.91	3.52	3.49	3.45	3.42	2.85	2.83
19	4.44	4.44	4.38	4.31	4.07	3.93	3.49	3.43	3.45	3.41	2.83	2.78
20	4.44	4.43	4.31	4.27	4.08	4.01	3.43	3.37	3.41	3.34	2.78	2.73
21	4.47	4.43	4.27	4.24	4.01	3.92	3.37	3.33	3.34	3.27	2.75	2.73
22	4.52	4.47	4.24	4.20	3.92	3.85	3.33	3.27	3.27	3.22	2.81	2.75
23	4.52	4.51	4.20	4.17	3.85	3.81	3.33	3.27	3.22	3.17	2.81	2.77
24	4.51	4.51	4.17	4.13	3.87	3.81	3.44	3.33	3.17	3.14	2.77	2.72
25	4.51	4.51	4.14	4.13	3.89	3.87	3.55	3.44	3.14	3.13	2.90	2.72
26	4.52	4.51	4.23	4.14	3.90	3.88	3.61	3.55	3.14	3.09	3.12	2.90
27	4.55	4.52	4.25	4.23	3.89	3.83	3.64	3.61	3.09	3.07	3.23	3.12
28	4.55	4.50	4.24	4.17	3.83	3.74	3.62	3.52	3.16	3.07	3.24	3.23
29	4.50	4.49	4.17	4.12	3.74	3.71	3.52	3.46	3.18	3.13	3.24	3.17
30	4.51	4.49	4.24	4.11	3.71	3.70	3.46	3.41	3.13	3.10	3.17	3.13
31	---	---	4.39	4.24	---	---	3.47	3.41	3.10	3.04	---	---
MONTH	4.66	4.43	4.51	4.11	4.46	3.70	3.98	3.27	3.48	3.04	3.24	2.72
YEAR	4.67	2.72										

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 6, SITE ID.--391817076173701

LOCATION.--Lat 39°18'11", long 76°17'39", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 21 ft; casing diameter 4 in., to 6 ft; screen diameter 4 in. from 6 to 21 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from Nov. 16, 1987 to current year.

DATUM.--Elevation of land surface is 9.76 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.68 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well TH6. Missing data due to recorder malfunction.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.03 ft above sea level, Jan. 12, 1991; lowest measured, 2.22 ft below sea level, July 21 to 25, 1992.

WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+ ")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.52	+1.50	+1.79	+1.78	+1.69	+1.68	+1.02	+ .97	1.37	1.49	.09	.20
2	+1.53	+1.52	+1.80	+1.79	+1.83	+1.68	+ .97	+ .92	1.49	1.57	.10	.13
3	+1.54	+1.53	+1.80	+1.80	+2.02	+1.83	+ .93	+ .87	1.57	1.65	.08	.13
4	+1.54	+1.54	+1.80	+1.80	+2.02	+1.97	+ .88	+ .80	1.63	1.68	.12	.15
5	+1.56	+1.54	+1.80	+1.80	+2.00	+1.97	+ .80	+ .73	1.67	1.72	.10	.14
6	+1.56	+1.56	+1.80	+1.80	+1.99	+1.93	+ .73	+ .66	1.68	2.00	.12	.16
7	+1.56	+1.55	+1.81	+1.80	+1.94	+1.90	+ .66	+ .58	1.66	1.69	+1.64	.13
8	+1.55	+1.55	+1.80	+1.80	+1.90	+1.85	+ .58	+ .51	1.68	1.72	+2.13	+1.65
9	+1.55	+1.55	+1.80	+1.79	+2.03	+1.81	+ .52	+ .46	1.72	1.79	+2.17	+2.05
10	+1.55	+1.55	+1.80	+1.79	+2.39	+2.03	+ .46	+ .38	1.76	1.80	+2.32	+2.07
11	+1.55	+1.55	+1.80	+1.79	+2.33	+2.25	+ .38	+ .28	1.73	1.79	+2.61	+2.33
12	+1.55	+1.53	+1.79	+1.79	+2.25	+2.20	+ .27	+ .22	1.77	1.99	+2.58	+2.41
13	+1.53	+1.52	+1.79	+1.78	+2.21	+2.16	+ .23	+ .16	1.74	1.80	+2.41	+2.07
14	+1.52	+1.51	+1.78	+1.77	+2.18	+2.09	+ .19	+ .02	1.74	1.80	+2.07	+1.90
15	+1.51	+1.51	+1.77	+1.77	+2.11	+2.08	+ .02	.04	1.68	1.80	+1.90	+1.54
16	+1.51	+1.49	+1.77	+1.75	+2.09	+2.03	.01	.15	1.65	1.68	+1.54	+1.36
17	+1.51	+1.48	+1.75	+1.74	+2.05	+1.99	.13	.21	1.54	1.65	+1.40	+1.20
18	+1.54	+1.49	+1.74	+1.74	+2.00	+1.92	.21	.35	1.45	1.54	+1.20	+1.00
19	+1.57	+1.54	+1.74	+1.74	+1.92	+1.85	.35	.42	1.40	1.45	+2.04	+1.21
20	+1.60	+1.57	+1.74	+1.74	+1.86	+1.82	.40	.50	1.33	1.39	+2.26	+2.04
21	+1.64	+1.60	+1.74	+1.73	+1.85	+1.76	.49	.61	1.27	1.33	+2.23	+2.03
22	+1.66	+1.64	+1.73	+1.73	+1.77	+1.71	.61	.70	1.19	1.27	+2.30	+2.03
23	+1.68	+1.66	+1.73	+1.72	+1.71	+1.64	.62	.70	1.14	1.19	+2.20	+1.94
24	+1.70	+1.68	+1.73	+1.72	+1.64	+1.54	.70	.87	1.10	1.14	+1.94	+1.74
25	+1.71	+1.70	+1.72	+1.71	+1.54	+1.44	.88	.94	1.01	1.11	+1.75	+1.69
26	+1.73	+1.71	+1.71	+1.69	+1.44	+1.38	.93	1.08	.26	1.01	+3.30	+1.71
27	+1.74	+1.73	+1.69	+1.69	+1.38	+1.28	1.07	1.11	.27	.32	+3.83	+3.32
28	+1.74	+1.74	+1.69	+1.69	+1.29	+1.24	1.11	1.19	.08	.27	+3.70	+3.43
29	+1.75	+1.74	+1.70	+1.69	+1.25	+1.18	1.18	1.24	.08	.24	+3.42	+3.20
30	+1.77	+1.75	+1.69	+1.69	+1.17	+1.05	1.23	1.27	---	---	+3.20	+3.09
31	+1.78	+1.77	---	---	+1.05	+1.02	1.27	1.37	---	---	+3.08	+2.69
MONTH	+1.78	+1.48	+1.81	+1.69	+2.39	+1.02	+1.02	1.37	.08	2.00	+3.83	.20

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 8. SITE ID.--391816076173801

LOCATION.--Lat 39°18'16", long 76°17'40", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 21 ft; casing diameter 4 in., to 6 ft; screen diameter 4 in. from 6 to 21 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from Nov. 16, 1987 to current year.

DATUM.--Elevation of land surface is 6.17 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.67 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well TH8.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.16 ft above sea level, March 24, 1991; lowest measured, 0.48 ft above sea level, Sept. 24, 1992.

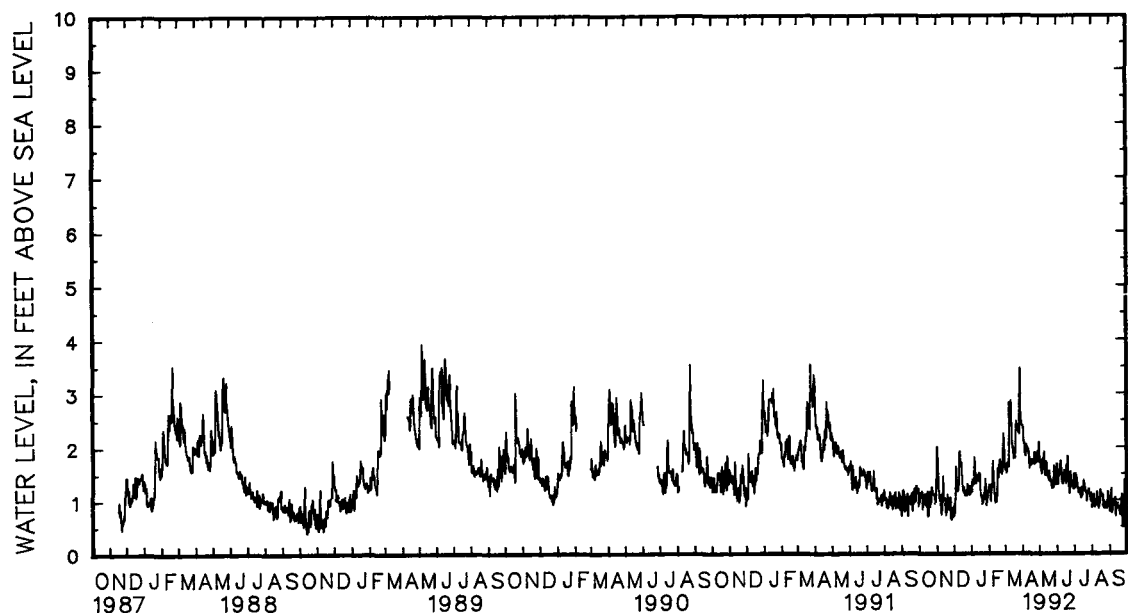
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.51	1.01	2.52	2.01	1.11	.87	1.58	1.15	1.56	1.28	2.11	1.56
2	1.68	1.12	2.38	1.78	1.21	.72	1.69	1.38	1.58	1.27	1.92	1.55
3	1.39	1.07	1.75	1.22	2.03	1.20	1.51	1.28	1.31	1.01	1.75	1.50
4	1.57	1.07	1.46	1.11	1.92	1.63	1.80	1.33	1.88	.97	1.95	1.69
5	1.61	1.16	1.29	.98	1.62	1.24	2.23	1.31	1.82	1.28	1.89	1.66
6	1.57	1.09	1.53	1.05	1.66	1.33	2.09	1.81	1.51	1.24	1.82	1.62
7	1.16	.82	1.48	1.09	1.50	1.16	2.07	1.71	1.88	1.43	3.36	1.63
8	1.36	.90	1.45	.84	1.53	1.21	1.82	1.42	2.16	1.73	3.29	2.83
9	1.40	1.08	1.00	.72	1.59	1.29	1.55	1.31	2.02	1.45	2.82	2.45
10	1.46	1.06	1.80	.90	1.98	1.60	1.68	1.41	1.44	1.14	3.14	2.42
11	1.47	1.11	1.85	1.45	2.28	1.91	1.81	1.46	1.18	1.03	3.61	2.87
12	1.41	1.08	1.58	1.02	2.17	1.67	1.82	1.37	1.17	.95	2.86	2.44
13	1.43	.90	1.32	1.00	2.08	1.67	1.69	1.40	1.34	.96	2.44	2.03
14	1.31	.94	1.31	1.02	1.93	1.70	1.78	1.50	1.38	1.13	2.34	1.97
15	1.61	1.16	1.24	1.00	1.90	1.39	2.42	1.50	1.63	1.07	2.24	1.89
16	1.31	.69	1.23	.89	1.38	1.19	2.11	1.24	1.86	1.59	1.89	1.77
17	1.10	.69	.88	.71	1.56	1.15	1.44	1.09	1.67	1.41	2.28	1.80
18	1.31	1.10	1.26	.85	1.66	1.23	1.41	1.05	1.79	1.43	2.05	1.78
19	1.42	1.15	1.40	1.11	1.24	1.09	1.41	1.07	2.00	1.66	2.60	2.04
20	1.19	.87	1.26	.92	1.12	1.08	1.17	.92	2.02	1.76	2.88	2.37
21	1.58	1.11	1.16	.84	1.42	1.10	1.14	.93	1.89	1.67	2.83	2.47
22	1.54	1.25	1.36	.82	1.47	1.11	1.22	1.02	1.70	1.51	3.04	2.31
23	1.49	1.17	1.33	.91	1.46	1.08	1.33	1.13	1.79	1.51	3.04	2.35
24	1.48	1.11	1.38	1.04	1.66	1.30	1.41	1.14	1.72	1.48	2.59	2.28
25	1.53	1.10	1.38	.91	1.57	1.21	1.96	1.40	2.05	1.65	2.76	2.35
26	1.52	1.09	1.14	.64	1.59	1.26	1.74	1.03	2.56	1.89	3.65	2.24
27	1.46	1.10	.84	.62	1.48	1.24	1.07	.92	2.62	2.25	4.04	3.48
28	1.48	.93	1.05	.86	1.42	1.10	1.23	.89	2.26	1.96	3.47	2.75
29	1.65	1.11	1.14	.78	1.27	1.10	1.39	1.17	2.12	1.58	2.75	2.48
30	1.87	1.34	1.07	.68	1.65	1.27	1.37	1.17	---	---	2.60	2.39
31	2.05	1.51	---	---	1.41	1.16	1.59	1.21	---	---	2.76	2.39
MONTH	2.05	.69	2.52	.62	2.28	.72	2.42	.89	2.62	.95	4.04	1.50

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 8--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.82	2.37	2.31	1.76	1.86	1.44	1.89	1.42	1.64	.85	1.16	.78
2	2.62	2.29	2.32	1.75	1.71	1.29	1.56	1.22	1.40	.92	1.30	.96
3	2.31	2.07	2.02	1.61	1.97	1.46	2.13	1.49	1.48	1.08	1.56	1.21
4	2.36	2.05	1.89	1.53	1.94	1.53	1.99	1.44	1.57	1.10	1.37	.75
5	2.22	1.87	2.01	1.48	2.01	1.48	1.74	1.34	1.43	.91	1.10	.77
6	2.04	1.81	2.11	1.71	2.09	1.66	1.92	1.29	1.36	.86	1.54	.82
7	2.29	1.90	2.07	1.78	2.14	1.73	1.65	1.13	1.30	.90	1.51	1.00
8	2.43	2.02	2.21	1.67	2.02	1.52	1.50	1.18	1.35	.90	1.29	.97
9	2.39	1.94	2.36	1.90	1.81	1.32	1.99	1.20	1.74	1.15	1.28	.97
10	2.26	1.95	1.96	1.46	1.73	1.30	1.50	1.15	1.37	1.01	1.53	1.04
11	2.21	1.90	1.67	1.45	1.81	1.30	1.58	1.08	1.54	1.03	1.40	.84
12	2.11	1.83	2.01	1.52	1.96	1.40	1.48	1.03	1.24	.91	1.08	.69
13	1.83	1.58	2.20	1.71	1.99	1.55	1.73	1.23	1.29	.84	1.28	.91
14	2.29	1.77	2.07	1.55	1.98	1.55	1.43	1.07	1.44	.99	1.28	.93
15	2.12	1.70	1.85	1.45	1.89	1.45	1.67	1.18	1.44	1.19	1.27	.84
16	2.05	1.66	1.84	1.46	1.83	1.30	1.56	1.17	1.56	1.14	1.24	.87
17	2.05	1.75	1.81	1.37	2.12	1.64	1.80	1.37	1.56	1.11	1.27	.85
18	1.93	1.68	1.98	1.54	2.02	1.61	1.80	1.30	1.38	1.06	1.19	.85
19	2.09	1.69	1.59	1.34	2.18	1.82	1.58	1.22	1.44	1.09	1.40	.72
20	2.11	1.69	1.70	1.38	1.92	1.37	1.65	1.14	1.35	.89	1.14	.71
21	2.24	1.70	1.69	1.34	1.51	1.28	1.59	1.16	1.35	.97	1.52	1.10
22	2.35	1.89	1.46	1.22	1.53	1.11	1.47	.97	1.37	.85	1.50	1.10
23	1.94	1.67	1.61	1.31	1.60	1.24	1.58	1.13	1.22	.84	1.40	.49
24	2.07	1.74	1.62	1.35	2.10	1.53	1.56	1.11	1.35	.85	1.02	.48
25	1.95	1.71	1.64	1.22	1.77	1.35	1.78	1.21	1.45	.93	1.29	.92
26	2.49	1.78	2.03	1.66	1.80	1.36	1.65	1.20	1.32	.94	1.83	1.08
27	2.49	1.90	1.86	1.55	1.92	1.31	1.82	1.11	1.38	.84	1.79	1.38
28	2.04	1.72	1.82	1.30	1.65	1.23	1.45	1.02	2.08	1.15	1.71	1.12
29	2.17	1.72	1.69	1.28	1.76	1.20	1.55	.98	1.99	1.10	---	---
30	2.63	2.09	1.87	1.41	1.99	1.48	1.57	1.12	1.69	.98	---	---
31	---	---	2.41	1.68	---	---	1.66	1.03	1.69	.96	---	---
MONTH	2.82	1.58	2.41	1.22	2.18	1.11	2.13	.97	2.08	.84	1.83	.48

Daily Low Water Levels



GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 21. SITE ID.--391814076173801 PERMIT NUMBER.--HA-88-1043.
 LOCATION.--Lat 39°18'14", long 76°17'38", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 81.3 ft; casing diameter 4 in., to 73.8 ft;
 screen diameter 4 in. from 73.8 to 81.3 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 12, 1990 to current year.
 DATUM.--Elevation of land surface is 7.67 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.00 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF31.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.87 ft above sea level, Nov. 1, 1991;
 lowest measured, 1.18 ft below sea level, Feb. 26, 1990.

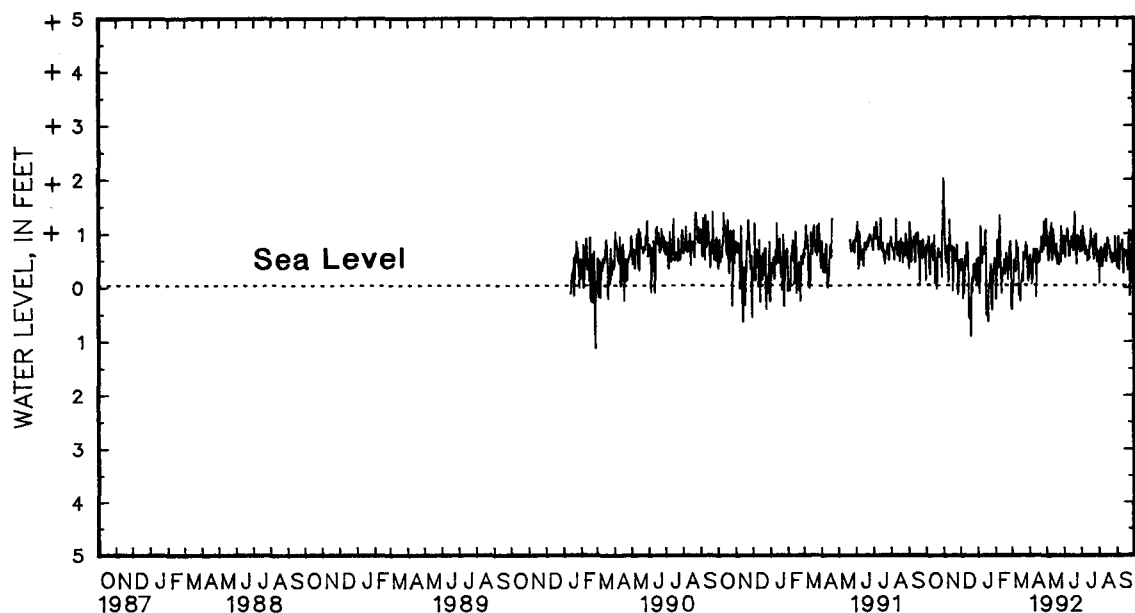
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.56	+7.76	+2.87	+2.02	+1.13	+5.50	+1.18	+5.54	+7.73	+1.12	+1.06	.44
2	+1.59	+7.71	+2.60	+1.36	+9.90	+3.30	+9.98	+3.32	+6.66	.25	+3.37	.14
3	+1.27	+7.70	+1.35	+7.70	+1.91	+5.50	+1.37	+4.44	+1.20	+4.45	+7.76	+0.01
4	+1.52	+8.80	+1.26	+5.52	+1.15	+3.37	+1.93	.14	+1.72	+8.87	+1.07	+4.49
5	+1.57	+9.94	+1.16	+4.43	+5.54	.25	+1.82	+1.14	+1.21	+3.33	+9.93	+4.40
6	+1.49	+7.40	+1.52	+6.63	+9.96	+0.07	+1.71	+1.06	+1.20	+5.54	+9.99	+3.38
7	+9.97	+2.22	+1.47	+7.75	+9.97	.14	+1.41	+4.48	+1.70	+9.90	+1.57	+2.28
8	+1.24	+4.47	+1.17	+0.07	+1.08	+3.32	+1.03	+4.43	+2.05	+1.33	+1.56	+8.86
9	+1.31	+7.70	+8.82	+1.11	+1.20	+5.57	+1.22	+6.65	+1.66	+6.65	+1.21	+6.61
10	+1.47	+7.75	+2.08	+5.54	+1.35	+3.37	+1.34	+7.73	+7.74	+1.13	+1.83	+7.70
11	+1.39	+7.79	+2.07	+1.26	+1.34	+8.82	+1.26	+6.61	+6.65	+0.03	+1.94	+7.72
12	+1.44	+8.80	+1.52	+6.68	+1.29	+5.55	+1.32	+6.67	+5.53	.14	+1.07	+3.39
13	+1.36	+4.48	+1.23	+7.72	+1.36	+8.82	+1.37	+8.85	+9.99	+3.31	+4.42	.18
14	+1.59	+5.59	+1.27	+7.74	+1.18	+5.53	+2.44	+1.05	+1.01	+3.33	+8.88	+0.02
15	+1.67	+9.96	+1.21	+7.75	+7.74	+0.04	+1.27	+0.06	+1.25	+2.28	+7.77	.10
16	+1.24	+0.06	+1.23	+3.35	+2.29	.61	+8.85	.55	+1.29	+5.50	+3.32	.29
17	+6.60	+0.05	+7.73	.09	+8.87	.30	+9.91	.44	+9.93	+2.21	+1.10	+1.10
18	+8.84	+5.53	+1.26	+5.55	+6.64	.23	+4.48	.32	+1.13	+2.29	+8.85	+0.08
19	+1.09	+1.16	+1.43	+7.72	.24	.96	+2.23	.67	+1.39	+6.63	+1.16	+2.25
20	+8.80	.06	+1.31	+6.60	+6.61	.40	+7.77	.05	+1.27	+5.54	+1.31	+1.10
21	+1.36	+5.59	+1.21	+4.47	+7.74	+1.15	+9.95	.02	+1.06	+4.41	+1.27	+6.64
22	+1.31	+7.71	+1.47	+4.47	+9.90	.12	+1.00	+1.19	+7.79	+1.12	+1.75	+4.49
23	+1.27	+6.60	+1.35	+5.50	+1.25	+4.40	+1.87	+4.41	+1.04	+3.37	+1.64	+5.51
24	+1.30	+5.55	+1.40	+7.78	+1.01	+1.16	+1.79	+3.34	+9.97	+3.30	+1.18	+6.60
25	+1.39	+5.58	+1.18	+4.48	+1.01	+4.43	+3.30	.34	+1.42	+7.71	+1.49	+8.83
26	+1.32	+5.54	+9.92	.16	+9.99	+3.30	+3.30	.45	+1.37	+8.82	+1.29	+6.64
27	+1.40	+6.64	+9.95	.10	+9.99	+2.20	+9.95	+0.04	+1.57	+8.84	+1.50	+7.75
28	+1.38	+1.17	+1.06	+4.48	+7.71	+1.11	+9.90	+2.27	+1.07	+3.37	+8.88	+1.17
29	+1.72	+1.05	+1.15	+2.28	+1.23	+5.50	+1.23	+4.41	+9.96	.44	+5.56	+0.09
30	+1.85	+1.00	+1.06	+3.30	+8.83	+0.03	+1.21	+5.53	---	---	+9.91	+2.22
31	+2.31	+1.59	---	---	+1.03	+0.03	+1.13	+5.51	---	---	+1.14	+5.51
MONTH	+2.31	.06	+2.87	.16	+1.91	.96	+2.44	.67	+2.05	.44	+1.94	.44

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 21--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.38	+ .58	+1.80	+ .86	+1.57	+ .65	+1.77	+ .81	+1.32	+ .05	+1.20	+ .35
2	+ .96	+ .47	+1.83	+ .94	+1.39	+ .54	+1.36	+ .67	+1.35	+ .44	+1.49	+ .62
3	+ .76	+ .23	+1.41	+ .55	+1.73	+ .85	+2.06	+1.13	+1.46	+ .67	+1.62	+ .94
4	+1.10	+ .40	+1.25	+ .48	+1.71	+ .92	+1.82	+ .94	+1.52	+ .72	+1.31	+ .30
5	+ .82	+ .03	+1.45	+ .55	+1.79	+ .91	+1.80	+ .90	+1.30	+ .46	+1.04	+ .53
6	+ .70	+ .14	+1.57	+ .90	+1.79	+1.09	+1.84	+ .82	+1.22	+ .36	+1.56	+ .78
7	+1.22	+ .44	+1.48	+1.02	+1.82	+1.05	+1.46	+ .59	+1.15	+ .46	+1.52	+ .70
8	+1.41	+ .70	+1.81	+ .89	+1.64	+ .76	+1.35	+ .75	+1.20	+ .66	+1.26	+ .70
9	+1.42	+ .65	+1.97	+1.19	+1.42	+ .57	+1.90	+ .60	+1.73	+ .70	+1.27	+ .71
10	+1.32	+ .64	+1.44	+ .47	+1.30	+ .58	+1.30	+ .68	+1.26	+ .65	+1.60	+ .87
11	+1.29	+ .69	+1.10	+ .60	+1.43	+ .73	+1.39	+ .47	+1.52	+ .78	+1.14	+ .41
12	+1.16	+ .46	+1.56	+1.08	+1.63	+ .73	+1.26	+ .47	+1.10	+ .54	+ .98	+ .24
13	+ .87	+ .21	+1.85	+ .95	+1.68	+ .91	+1.62	+ .66	+1.21	+ .45	+1.23	+ .62
14	+1.41	+ .70	+1.74	+ .65	+1.70	+ .94	+1.24	+ .51	+1.41	+ .61	+1.25	+ .68
15	+1.27	+ .44	+1.44	+ .63	+1.62	+ .83	+1.56	+ .78	+1.32	+ .91	+1.18	+ .56
16	+1.25	+ .44	+1.39	+ .62	+1.49	+ .67	+1.29	+ .79	+1.54	+ .86	+1.28	+ .65
17	+1.33	+ .58	+1.36	+ .56	+1.85	+1.04	+1.72	+1.08	+1.43	+ .73	+1.27	+ .63
18	+1.17	+ .45	+1.59	+ .80	+1.73	+1.09	+1.63	+ .88	+1.38	+ .75	+1.39	+ .65
19	+1.39	+ .64	+1.07	+ .42	+1.96	+1.40	+1.53	+ .83	+1.38	+ .75	+1.48	+ .30
20	+1.44	+ .67	+1.19	+ .63	+1.64	+ .79	+1.53	+ .75	+1.27	+ .52	+1.34	+ .40
21	+1.63	+ .73	+1.19	+ .55	+1.10	+ .71	+1.46	+ .73	+1.27	+ .63	+1.61	+ .91
22	+1.75	+ .94	+ .92	+ .40	+1.10	+ .41	+1.29	+ .50	+1.31	+ .44	+1.59	+1.05
23	+1.17	+ .65	+1.12	+ .59	+1.54	+ .83	+1.41	+ .94	+1.13	+ .43	+1.40	+ .19
24	+1.39	+ .84	+1.15	+ .55	+1.92	+ .96	+1.42	+ .72	+1.29	+ .61	+ .92	+ .17
25	+1.19	+ .70	+1.43	+ .45	+1.53	+ .87	+1.73	+ .81	+1.43	+ .58	+1.28	+ .53
26	+1.94	+1.22	+1.72	+1.14	+1.61	+ .93	+1.57	+ .98	+1.29	+ .49	+1.84	+ .32
27	+1.93	+1.00	+1.53	+ .95	+1.76	+ .70	+1.80	+ .56	+1.39	+ .45	+1.74	+1.04
28	+1.34	+ .77	+1.48	+ .61	+1.36	+ .65	+1.32	+ .45	+2.40	+ .94	+1.39	+ .58
29	+1.56	+1.04	+1.34	+ .65	+1.54	+ .65	+1.46	+ .55	+2.01	+ .64	---	---
30	+2.15	+1.28	+1.60	+ .85	+1.83	+1.04	+1.47	+ .65	+1.76	+ .54	---	---
31	---	---	+2.33	+ .95	---	---	+1.61	+ .60	+1.68	+ .53	---	---
MONTH	+2.15	.21	+2.33	+ .40	+1.96	+ .41	+2.06	+ .45	+2.40	+ .05	+1.84	.19

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--County

WELL NUMBER.--HA Fd 22. SITE ID.--391814076173802 PERMIT NUMBER.--HA-88-1044.
 LOCATION.--Lat 39°18'14", long 76°17'38", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 54.4 ft; casing diameter 4 in.,
 to 49.4 ft; screen diameter 4 in. from 49.4 to 54.4 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.

DATUM.--Elevation of land surface is 7.60 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 3.03 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF32. Missing data due to recorder malfunction.

PERIOD OF RECORD.--January 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.31 ft above sea level, Jan. 17, 1991;
 lowest measured, 0.88 ft above sea level, Sept. 24, and 25, 1992.

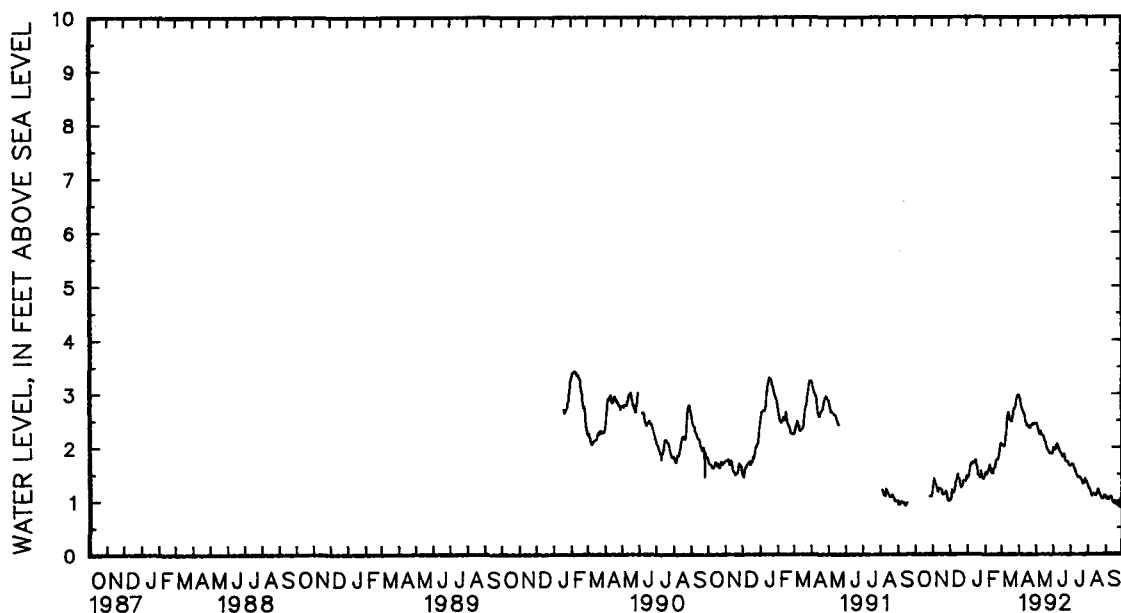
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.35	1.25	1.04	1.01	1.45	1.43	1.55	1.53	2.11	2.07
2	---	---	1.44	1.35	1.06	1.03	1.47	1.45	1.53	1.49	2.10	2.06
3	---	---	1.44	1.41	1.21	1.06	1.55	1.47	1.51	1.50	2.05	2.04
4	---	---	1.42	1.38	1.21	1.20	1.64	1.55	1.58	1.51	2.04	2.03
5	---	---	1.38	1.33	1.20	1.14	1.68	1.63	1.58	1.55	2.03	2.02
6	---	---	1.34	1.31	1.18	1.15	1.72	1.68	1.58	1.55	2.04	2.02
7	---	---	1.32	1.30	1.19	1.15	1.72	1.70	1.65	1.58	2.14	2.03
8	---	---	1.31	1.24	1.21	1.18	1.71	1.69	1.71	1.65	2.23	2.14
9	---	---	1.24	1.18	1.27	1.21	1.72	1.69	1.71	1.67	2.35	2.23
10	---	---	1.22	1.17	1.35	1.27	1.75	1.72	1.67	1.62	2.52	2.35
11	---	---	1.24	1.23	1.38	1.35	1.75	1.72	1.62	1.60	2.61	2.53
12	---	---	1.25	1.22	1.41	1.38	1.73	1.72	1.61	1.53	2.66	2.60
13	---	---	1.24	1.23	1.48	1.41	1.75	1.73	1.53	1.52	2.67	2.65
14	---	---	1.24	1.23	1.55	1.48	1.87	1.75	1.54	1.53	2.67	2.65
15	---	---	1.23	1.22	1.54	1.50	1.86	1.76	1.60	1.52	2.66	2.60
16	---	---	1.23	1.20	1.50	1.42	1.77	1.68	1.66	1.60	2.60	2.52
17	---	---	1.20	1.14	1.43	1.41	1.68	1.66	1.65	1.62	2.53	2.52
18	---	---	1.14	1.12	1.43	1.37	1.66	1.58	1.69	1.63	2.52	2.49
19	---	---	1.13	1.12	1.37	1.28	1.58	1.48	1.76	1.69	2.52	2.50
20	---	---	1.14	1.12	1.28	1.25	1.48	1.47	1.78	1.76	2.56	2.49
21	---	---	1.14	1.13	1.29	1.26	1.47	1.45	1.79	1.77	2.61	2.56
22	---	---	1.18	1.13	1.31	1.28	1.46	1.43	1.78	1.77	2.72	2.61
23	---	---	1.18	1.16	1.38	1.31	1.55	1.44	1.81	1.78	2.72	2.71
24	---	---	1.18	1.18	1.38	1.37	1.59	1.55	1.82	1.80	2.74	2.71
25	---	---	1.18	1.13	1.39	1.38	1.56	1.50	1.86	1.82	2.76	2.73
26	1.09	1.08	1.13	1.06	1.39	1.38	1.50	1.43	1.98	1.87	2.80	2.75
27	1.11	1.09	1.06	1.01	1.39	1.38	1.43	1.42	2.05	1.98	2.89	2.80
28	1.11	1.08	1.01	1.00	1.38	1.37	1.43	1.41	2.11	2.05	2.92	2.89
29	1.10	1.08	1.01	1.00	1.47	1.38	1.45	1.42	2.13	2.08	2.96	2.92
30	1.14	1.10	1.01	1.00	1.49	1.46	1.50	1.45	---	---	2.99	2.96
31	1.25	1.14	---	---	1.46	1.43	1.55	1.50	---	---	3.00	2.98
MONTH	1.25	1.08	1.44	1.00	1.55	1.01	1.87	1.41	2.13	1.49	3.00	2.02

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--County
HA Fd 22--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.02	2.98	2.48	2.45	1.99	1.99	1.68	1.65	1.36	1.27	1.09	1.05
2	3.01	2.97	2.49	2.45	1.99	1.98	1.68	1.66	1.27	1.24	1.06	1.03
3	2.97	2.92	2.49	2.45	1.98	1.97	1.69	1.66	1.26	1.23	1.08	1.04
4	2.92	2.90	2.45	2.38	1.97	1.96	1.71	1.69	1.25	1.23	1.09	1.06
5	2.90	2.81	2.38	2.33	2.02	1.96	1.70	1.68	1.23	1.17	1.07	1.03
6	2.81	2.75	2.33	2.29	2.04	2.03	1.71	1.67	1.19	1.13	1.07	1.03
7	2.75	2.72	2.29	2.25	2.07	2.04	1.68	1.62	1.14	1.10	1.08	1.06
8	2.72	2.69	2.30	2.24	2.08	2.06	1.62	1.59	1.11	1.10	1.08	1.06
9	2.69	2.67	2.33	2.30	2.08	2.04	1.63	1.58	1.15	1.11	1.09	1.07
10	2.67	2.64	2.31	2.27	2.04	2.00	1.58	1.55	1.14	1.13	1.11	1.08
11	2.64	2.62	2.27	2.23	2.00	1.96	1.56	1.51	1.16	1.13	1.11	1.06
12	2.63	2.57	2.24	2.23	1.96	1.93	1.50	1.48	1.16	1.12	1.06	1.01
13	2.57	2.48	2.25	2.23	1.93	1.91	1.49	1.46	1.12	1.11	1.01	.98
14	2.49	2.46	2.24	2.22	1.92	1.90	1.46	1.44	1.12	1.10	.99	.96
15	2.46	2.41	2.22	2.19	1.90	1.88	1.46	1.43	1.13	1.11	.98	.95
16	2.42	2.41	2.19	2.14	1.88	1.84	1.46	1.44	1.17	1.13	.97	.95
17	2.42	2.41	2.14	2.11	1.85	1.83	1.46	1.44	1.20	1.17	.97	.95
18	2.42	2.39	2.11	2.10	1.84	1.82	1.46	1.43	1.22	1.20	.97	.96
19	2.39	2.37	2.10	2.04	1.89	1.84	1.43	1.41	1.23	1.21	.99	.95
20	2.37	2.36	2.04	2.00	1.90	1.87	1.43	1.39	1.21	1.17	.95	.92
21	2.41	2.36	2.00	1.97	1.87	1.82	1.41	1.37	1.18	1.14	.95	.93
22	2.45	2.41	1.97	1.94	1.82	1.75	1.38	1.32	1.15	1.10	1.00	.94
23	2.44	2.41	1.94	1.93	1.75	1.73	1.34	1.32	1.11	1.08	1.01	.92
24	2.44	2.41	1.93	1.91	1.77	1.73	1.34	1.32	1.09	1.05	.92	.88
25	2.44	2.42	1.91	1.88	1.76	1.74	1.38	1.33	1.07	1.05	.92	.88
26	2.47	2.42	1.89	1.88	1.75	1.73	1.41	1.37	1.07	1.05	1.04	.92
27	2.47	2.45	1.90	1.89	1.75	1.71	1.44	1.41	1.07	1.04	1.10	1.03
28	2.45	2.44	1.91	1.89	1.71	1.67	1.42	1.38	1.15	1.06	1.11	1.08
29	2.45	2.44	1.89	1.88	1.67	1.66	1.39	1.37	1.15	1.10	---	---
30	2.48	2.45	1.91	1.88	1.67	1.65	1.37	1.33	1.11	1.08	---	---
31	---	---	1.99	1.91	---	---	1.36	1.32	1.12	1.09	---	---
MONTH	3.02	2.36	2.49	1.88	2.08	1.65	1.71	1.32	1.36	1.04	1.11	.88

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 23. SITE ID.--391814076173803 PERMIT NUMBER.--HA-88-1045.
 LOCATION.--Lat 39°18'14", long 76°17'38", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 20 ft; casing diameter 4 in., to 15 ft;
 screen diameter 4 in. from 15 to 20 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 12, 1990 to current year.
 DATUM.--Elevation of land surface is 7.23 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 3.00 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF33. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.30 ft above sea level, Dec. 30, and 31, 1991;
 lowest measured, 1.43 ft above sea level, Sept. 23, and 24, 1992.

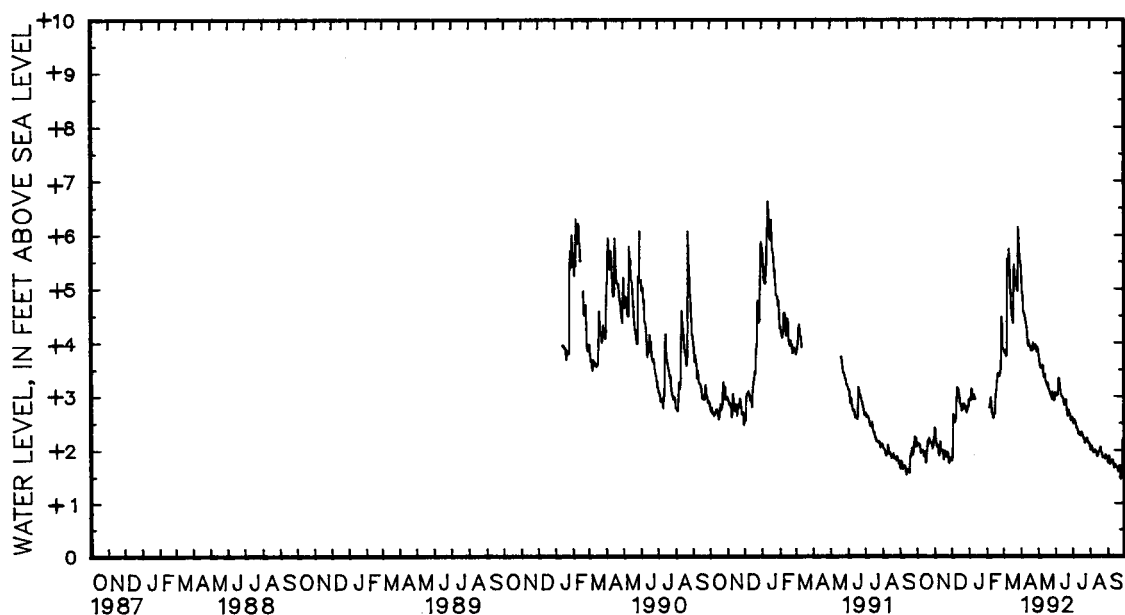
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.25	2.11	2.55	2.40	1.92	1.83	3.03	2.93	---	---	4.11	3.87
2	2.28	2.12	2.55	2.39	1.99	1.79	3.00	2.91	---	---	4.00	3.83
3	2.19	2.09	2.39	2.18	2.69	1.99	3.09	2.94	---	---	3.85	3.80
4	2.21	2.09	2.22	2.11	2.73	2.66	3.21	2.92	---	---	3.89	3.83
5	2.20	2.09	2.14	2.04	2.66	2.51	3.21	3.14	2.97	2.77	3.87	3.79
6	2.19	2.02	2.19	2.07	2.68	2.56	3.21	3.12	2.88	2.79	3.82	3.73
7	2.02	1.92	2.19	2.07	2.64	2.50	3.21	2.99	3.00	2.86	5.73	3.75
8	2.04	1.93	2.17	1.92	2.65	2.54	3.03	2.94	3.09	2.97	5.73	5.55
9	2.05	1.96	1.96	1.87	2.92	2.58	3.08	2.99	3.03	2.80	5.55	5.29
10	2.07	1.96	2.22	1.94	3.22	2.94	3.10	3.02	2.80	2.68	5.72	5.25
11	2.07	1.98	2.24	2.14	3.24	3.17	3.10	2.94	2.72	2.64	6.08	5.74
12	2.05	1.95	2.16	1.99	3.24	3.09	3.05	2.94	2.69	2.58	5.78	5.40
13	2.04	1.86	2.07	1.98	3.22	3.14	---	---	2.77	2.59	5.40	4.99
14	1.97	1.87	2.06	1.98	3.20	3.10	---	---	2.76	2.67	5.02	4.91
15	2.05	1.95	2.03	1.97	3.10	2.98	---	---	2.97	2.66	4.93	4.63
16	1.97	1.74	2.04	1.88	2.99	2.85	---	---	3.20	2.97	4.62	4.47
17	1.91	1.74	1.88	1.79	3.06	2.85	---	---	3.18	3.08	4.66	4.49
18	2.16	1.92	1.99	1.87	3.03	2.82	---	---	3.33	3.12	4.52	4.33
19	2.25	2.15	2.04	1.96	2.81	2.72	---	---	3.48	3.30	5.52	4.53
20	2.17	2.06	1.99	1.90	2.86	2.72	---	---	3.51	3.42	5.54	5.44
21	2.30	2.16	1.96	1.86	2.90	2.84	---	---	3.51	3.43	5.52	5.24
22	2.28	2.21	2.01	1.85	2.89	2.76	---	---	3.46	3.37	5.56	5.15
23	2.26	2.16	2.01	1.87	2.96	2.85	---	---	3.52	3.42	5.56	5.19
24	2.24	2.13	2.02	1.94	2.96	2.77	---	---	3.48	3.39	5.18	5.03
25	2.24	2.12	2.02	1.87	2.88	2.80	---	---	3.59	3.46	5.09	4.98
26	2.24	2.11	1.93	1.74	2.86	2.76	---	---	4.63	3.59	6.14	4.94
27	2.22	2.11	1.84	1.73	2.84	2.71	---	---	4.60	4.48	6.57	6.15
28	2.22	2.00	1.88	1.83	2.76	2.68	---	---	4.48	4.32	6.42	5.96
29	2.23	2.07	1.92	1.80	2.92	2.74	---	---	4.41	3.88	5.95	5.69
30	2.31	2.17	1.88	1.78	2.90	2.80	---	---	---	---	5.68	5.61
31	2.40	2.21	---	---	2.96	2.80	---	---	---	---	5.71	5.46
MONTH	2.40	1.74	2.55	1.73	3.24	1.79	3.21	2.91	4.63	2.58	6.57	3.73

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 23--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.53	5.41	3.90	3.73	3.18	3.03	2.66	2.55	2.24	1.97	1.84	1.73
2	5.40	5.13	3.87	3.73	3.08	2.98	2.56	2.46	2.12	2.01	1.86	1.78
3	5.12	4.92	3.78	3.60	3.12	2.99	2.70	2.53	2.14	2.04	1.93	1.86
4	4.98	4.86	3.65	3.53	3.10	2.99	2.69	2.53	2.16	2.04	1.89	1.71
5	4.86	4.55	3.62	3.50	3.33	2.99	2.59	2.50	2.12	1.96	1.80	1.72
6	4.55	4.50	3.60	3.52	3.42	3.31	2.63	2.46	2.07	1.92	1.92	1.72
7	4.63	4.51	3.58	3.51	3.44	3.32	2.54	2.37	2.03	1.92	1.92	1.78
8	4.59	4.43	3.63	3.48	3.39	3.22	2.46	2.39	2.03	1.92	1.86	1.78
9	4.49	4.36	3.67	3.55	3.30	3.10	2.59	2.36	2.14	1.97	1.85	1.77
10	4.43	4.31	3.57	3.34	3.18	3.01	2.44	2.33	2.02	1.93	1.90	1.78
11	4.36	4.25	3.40	3.32	3.11	2.97	2.43	2.27	2.05	1.94	1.87	1.70
12	4.29	4.06	3.49	3.34	3.09	2.96	2.38	2.26	1.98	1.87	1.72	1.64
13	4.06	3.90	3.54	3.38	3.07	2.95	2.44	2.29	1.96	1.84	1.78	1.70
14	4.15	4.01	3.46	3.26	3.03	2.92	2.34	2.24	1.99	1.88	1.78	1.70
15	4.08	3.91	3.33	3.23	2.98	2.85	2.39	2.27	1.99	1.93	1.77	1.66
16	4.01	3.89	3.30	3.19	2.90	2.80	2.36	2.24	2.05	1.93	1.74	1.66
17	4.01	3.90	3.28	3.16	2.98	2.86	2.40	2.30	2.05	1.94	1.75	1.65
18	3.90	3.82	3.34	3.21	2.93	2.85	2.40	2.26	2.10	2.00	1.73	1.64
19	3.91	3.82	3.21	3.11	2.99	2.90	2.30	2.22	2.11	2.02	1.77	1.57
20	3.92	3.82	3.17	3.10	2.93	2.75	2.32	2.18	2.09	1.94	1.68	1.57
21	3.98	3.83	3.15	3.06	2.77	2.70	2.28	2.17	2.04	1.92	1.77	1.68
22	4.07	3.97	3.06	3.00	2.74	2.60	2.25	2.09	2.02	1.86	1.78	1.68
23	3.99	3.90	3.08	3.00	2.73	2.64	2.26	2.14	1.95	1.82	1.75	1.43
24	4.06	3.92	3.06	2.96	2.84	2.71	2.25	2.13	1.95	1.82	1.58	1.43
25	3.98	3.85	3.04	2.91	2.76	2.64	2.32	2.16	1.97	1.84	1.71	1.56
26	4.07	3.87	3.14	3.05	2.74	2.63	2.31	2.19	1.93	1.82	2.28	1.69
27	4.10	3.92	3.12	3.01	2.76	2.57	2.37	2.16	1.93	1.80	2.29	2.19
28	3.94	3.80	3.07	2.89	2.64	2.51	2.24	2.10	2.13	1.88	2.28	2.12
29	3.89	3.80	2.99	2.89	2.65	2.51	2.23	2.09	2.12	1.85	---	---
30	4.02	3.87	3.03	2.90	2.70	2.57	2.23	2.10	1.99	1.82	---	---
31	---	---	3.26	3.04	---	---	2.25	2.08	1.99	1.80	---	---
MONTH	5.53	3.80	3.90	2.89	3.44	2.51	2.70	2.08	2.24	1.80	2.29	1.43

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 26. SITE ID.--391824076172701 PERMIT NUMBER.--HA-88-1061.
 LOCATION.--Lat 39°18'24", long 76°17'27", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, confined aquifer well, depth 79 ft; casing diameter 4 in.,
 to 74 ft; screen diameter 4 in. from 74 to 79 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.
 DATUM.--Elevation of land surface is 10.18 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.80 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF91. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.90 ft above sea level, Nov. 1, 1991;
 lowest measured, 1.12 ft below sea level, Feb. 16, 1990.

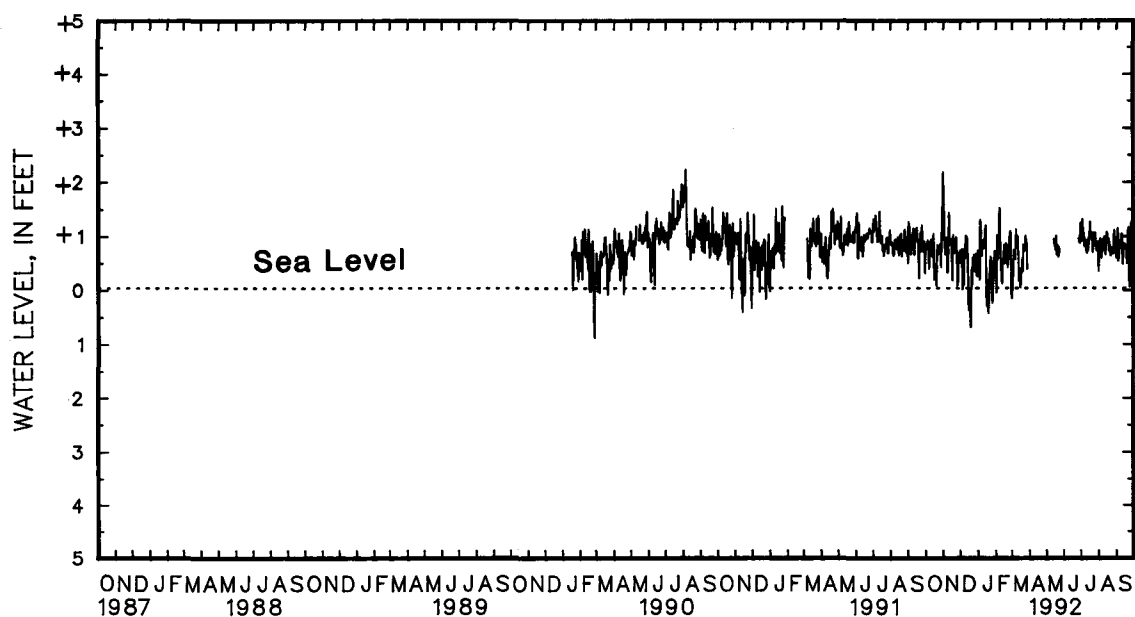
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.29	+ .72	+2.90	+2.18	+1.20	+ .71	+1.24	+ .72	+ .91	+ .34	+1.19	.18
2	+1.56	+ .80	+2.66	+1.77	+ .99	+ .49	+1.03	+ .52	+ .74	.08	+ .68	+ .12
3	+1.27	+ .80	+1.73	+ .93	+1.95	+ .70	+1.43	+ .63	+1.26	+ .61	+ .89	+ .27
4	+1.50	+ .85	+1.36	+ .76	+1.46	+ .73	+2.00	+ .17	+1.72	+1.02	+1.18	+ .73
5	+1.54	+ .90	+1.24	+ .64	+ .70	.02	+1.97	+1.30	+1.47	+ .56	+1.06	+ .66
6	+1.47	+ .73	+1.58	+ .83	+1.04	+ .38	+1.75	+1.22	+1.29	+ .75	+1.10	+ .64
7	+ .95	+ .37	+1.53	+ .95	+1.05	+ .07	+1.66	+ .69	+1.77	+1.08	+1.68	+ .56
8	+1.22	+ .59	+1.37	+ .30	+1.15	+ .52	+1.10	+ .62	+2.15	+1.52	+1.66	+1.13
9	+1.30	+ .80	+ .89	+ .31	+1.26	+ .75	+1.29	+ .83	+1.83	+ .87	+1.36	+ .87
10	+1.45	+ .84	+2.12	+ .70	+1.41	+ .58	+1.41	+ .91	+ .94	+ .39	+1.95	+ .95
11	+1.45	+ .92	+2.12	+1.42	+1.42	+1.00	+1.41	+ .77	+ .76	+ .27	+2.07	+ .98
12	+1.39	+ .90	+1.60	+ .84	+1.41	+ .75	+1.36	+ .84	+ .66	+ .10	+1.22	+ .67
13	+1.42	+ .60	+1.34	+ .88	+1.46	+ .98	+1.44	+1.02	+1.09	+ .40	+ .67	+ .14
14	+1.30	+ .69	+1.37	+ .91	+1.28	+ .78	+2.42	+1.19	+1.11	+ .57	+1.01	+ .28
15	+1.66	+1.03	+1.31	+ .93	+ .86	+ .24	+1.54	+ .29	+1.34	+ .53	+ .94	+ .22
16	+1.22	+ .17	+1.32	+ .59	+ .41	.40	+ .89	.33	+1.39	+ .82	+ .50	+ .02
17	+ .60	+ .20	+ .80	+ .15	+ .95	.23	+ .95	.31	+1.01	+ .48	+1.24	+ .37
18	+ .86	+ .45	+1.33	+ .75	+ .75	.01	+ .55	.11	+1.22	+ .55	+ .91	+ .31
19	+1.07	+ .43	+1.51	+1.01	+ .00	.72	+ .32	.46	+1.46	+ .85	+1.22	+ .55
20	+ .78	+ .05	+1.36	+ .79	+ .67	.22	+ .81	+ .13	+1.35	+ .78	+1.38	+ .33
21	+1.33	+ .66	+1.26	+ .67	+ .79	+ .37	+ .98	+ .18	+1.16	+ .67	+1.33	+ .83
22	+1.29	+ .81	+1.51	+ .68	+ .94	+ .08	+1.04	+ .39	+ .90	+ .40	+1.82	+ .70
23	+1.24	+ .70	+1.40	+ .70	+1.29	+ .59	+1.88	+ .60	+1.16	+ .62	+1.80	+ .73
24	+1.26	+ .65	+1.45	+ .97	+1.23	+ .37	+1.89	+ .54	+1.09	+ .56	+1.29	+ .79
25	+1.44	+ .74	+1.37	+ .67	+1.08	+ .64	+ .53	.13	+1.53	+ .91	+1.58	+1.00
26	+1.42	+ .74	+1.08	+ .05	+1.07	+ .51	+ .40	.27	+1.49	+1.02	+1.40	+ .86
27	+1.42	+ .84	+ .91	+ .12	+1.06	+ .42	+1.00	+ .03	+1.67	+1.08	+1.58	+ .86
28	+1.45	+ .40	+1.02	+ .66	+ .78	+ .33	+ .94	+ .45	+1.20	+ .63	+1.01	+ .38
29	+1.59	+ .93	+1.21	+ .51	+1.30	+ .66	+1.29	+ .55	+1.06	.18	---	---
30	+1.92	+1.17	+1.12	+ .49	+ .93	+ .25	+1.25	+ .70	---	---	---	---
31	+2.20	+1.49	---	---	+1.11	+ .24	+1.20	+ .70	---	---	---	---
MONTH	+2.20	+ .05	+2.90	+ .05	+1.95	.72	+2.42	.46	+2.15	.18	+2.07	.18

GROUND WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 26--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	+1.82	+1.17	+1.58	+0.33	+1.21	+0.58
2	---	---	---	---	---	---	+1.42	+0.90	+1.37	+0.68	+1.41	+0.81
3	---	---	---	---	---	---	+2.13	+1.31	+1.42	+0.89	+1.67	+1.14
4	---	---	---	---	---	---	+1.93	+1.15	+1.58	+0.94	+1.40	+0.52
5	---	---	---	---	---	---	+1.72	+1.10	+1.40	+0.65	+1.11	+0.70
6	---	---	---	---	---	---	+1.88	+1.02	+1.32	+0.58	+1.65	+0.80
7	---	---	---	---	---	---	+1.53	+0.80	+1.23	+0.68	+1.59	+0.88
8	---	---	---	---	---	---	+1.36	+0.93	+1.29	+0.73	+1.35	+0.87
9	---	---	---	---	---	---	+1.98	+0.82	+1.81	+0.94	+1.35	+0.90
10	---	---	---	---	---	---	+1.38	+0.82	+1.35	+0.84	+1.64	+1.03
11	---	---	---	---	---	---	+1.46	+0.70	+1.60	+0.98	+1.41	+0.65
12	---	---	---	---	---	---	+1.34	+0.67	+1.19	+0.71	+1.06	+0.46
13	---	---	---	---	---	---	+1.68	+0.93	+1.27	+0.64	+1.32	+0.81
14	---	---	+1.78	+0.94	---	---	+1.31	+0.72	+1.48	+0.80	+1.34	+0.85
15	---	---	+1.48	+0.84	---	---	+1.62	+0.97	+1.46	+1.07	+1.34	+0.75
16	---	---	+1.44	+0.82	---	---	+1.40	+0.95	+1.60	+1.03	+1.34	+0.82
17	---	---	+1.41	+0.74	---	---	+1.78	+1.26	+1.59	+0.93	+1.35	+0.80
18	---	---	+1.64	+1.00	---	---	+1.77	+1.07	+1.42	+0.94	+1.33	+0.82
19	---	---	+1.14	+0.64	---	---	+1.55	+1.02	+1.46	+0.93	+1.55	+0.48
20	---	---	+1.27	+0.82	---	---	+1.60	+0.93	+1.35	+0.71	+1.26	+0.59
21	---	---	+1.28	+0.75	---	---	+1.54	+0.93	+1.36	+0.80	+1.68	+1.09
22	---	---	+1.00	+0.60	---	---	+1.39	+0.69	+1.38	+0.62	+1.65	+1.15
23	---	---	+1.20	+0.78	---	---	+1.52	+1.06	+1.21	+0.64	+1.47	+0.04
24	---	---	+1.24	+0.69	---	---	+1.51	+0.91	+1.35	+0.73	+1.00	+0.04
25	---	---	---	---	---	---	+1.83	+1.02	+1.47	+0.76	+1.35	+0.84
26	---	---	---	---	---	---	+1.65	+1.05	+1.33	+0.75	+1.89	+0.59
27	---	---	---	---	+1.86	+0.95	+1.88	+0.85	+1.43	+0.67	+1.78	+1.26
28	---	---	---	---	+1.47	+0.89	+1.40	+0.72	+2.36	+1.10	+1.66	+0.82
29	---	---	---	---	+1.63	+0.87	+1.53	+0.78	+2.22	+0.85	---	---
30	---	---	---	---	+1.92	+1.24	+1.54	+0.88	+1.80	+0.77	---	---
31	---	---	---	---	---	---	+1.66	+0.82	+1.80	+0.75	---	---
MONTH	---	---	+1.78	+0.60	+1.92	+0.87	+2.13	+0.67	+2.36	+0.33	+1.89	+0.04

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 27. SITE ID.--391824076172702 PERMIT NUMBER.--HA-88-1062.

LOCATION.--Lat 39°18'24", Long 76°17'27", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 55.5 ft; casing diameter 4 in., to 50.5 ft; screen diameter 4 in. from 50.5 to 55.5 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.

DATUM.--Elevation of land-surface datum is 10.60 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 3.11 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF92. Missing data due to recorder malfunction.

PERIOD OF RECORD.--January 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.10 ft above sea level, March 30, 1991; lowest measured, 0.58 ft above sea level, Oct. 29, 1991.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	.63	---	---	---	---	---	1.23	1.19	1.88	1.84	---	---
2	.66	---	---	---	---	---	1.31	1.23	1.84	1.81	---	---
3	.70	---	---	---	---	---	1.45	1.31	1.82	1.81	---	---
4	.70	---	---	---	---	---	---	---	1.93	1.82	---	---
5	.71	---	---	---	---	---	---	---	1.92	1.87	---	---
6	.71	---	---	---	.88	.83	---	---	1.91	1.87	---	---
7	.71	---	---	---	.93	.86	---	---	1.98	1.91	---	---
8	.66	---	---	---	.95	.92	---	---	1.98	1.95	---	---
9	.62	---	---	---	1.01	.95	---	---	1.95	1.76	---	---
10	.71	---	---	---	1.01	.92	---	---	1.76	1.71	---	---
11	.77	---	---	---	.93	.92	---	---	1.85	1.75	---	---
12	.78	---	---	---	1.00	.93	---	---	1.84	1.76	---	---
13	.76	---	---	---	1.10	1.00	---	---	1.91	1.76	---	---
14	.68	---	---	---	1.23	1.10	---	---	1.93	1.89	---	---
15	.73	---	---	---	1.17	1.14	1.88	1.77	2.04	1.89	---	---
16	.73	---	---	---	1.17	1.13	1.85	1.75	2.05	1.96	---	---
17	.72	---	---	---	1.24	1.13	1.82	1.75	1.96	1.89	---	---
18	.70	---	---	---	1.24	1.13	1.81	1.69	2.02	1.91	---	---
19	.68	.63	---	---	1.13	1.01	1.69	1.66	2.11	2.02	3.51	3.40
20	---	---	---	---	1.08	1.01	1.73	1.66	2.11	2.08	3.47	3.45
21	---	---	---	---	1.19	1.08	1.71	1.69	2.11	2.08	3.45	3.41
22	---	---	---	---	1.26	1.19	1.69	1.66	2.19	2.09	3.55	3.41
23	---	---	---	---	1.37	1.26	1.90	1.66	2.28	2.19	3.55	3.48
24	---	---	---	---	1.37	1.31	1.90	1.75	2.31	2.28	3.48	3.41
25	---	---	---	---	1.31	1.20	1.75	1.67	2.46	2.31	3.45	3.41
26	---	---	---	---	1.20	1.17	1.71	1.65	2.56	2.46	3.66	3.45
27	---	---	---	---	1.19	1.15	1.65	1.65	2.60	2.56	3.66	3.64
28	---	---	---	---	1.23	1.15	1.65	1.65	---	---	3.64	3.61
29	---	---	---	---	1.41	1.23	1.68	1.65	---	---	3.62	3.60
30	---	---	---	---	1.41	1.25	1.82	1.68	---	---	3.66	3.61
31	---	---	---	---	1.25	1.19	1.88	1.82	---	---	3.66	3.66
MONTH	.78	.63	---	---	1.41	.83	1.90	1.19	2.60	1.71	3.66	3.40

GROUND-WATER LEVELS

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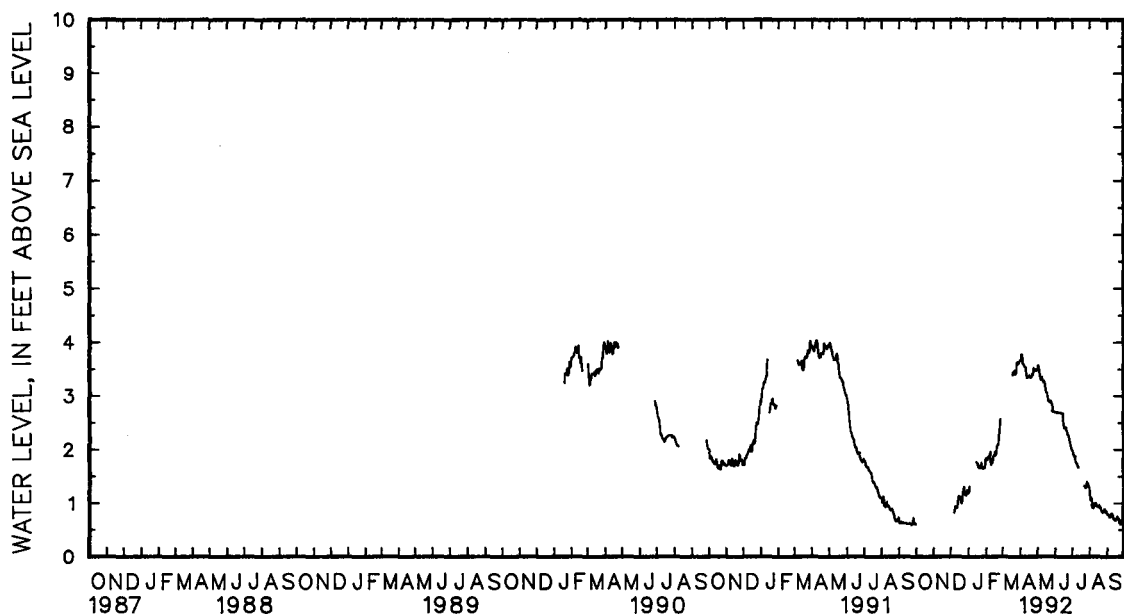
MARYLAND--Continued

HARFORD COUNTY--Continued

HA Fd 27--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.67	3.66	3.51	3.49	---	2.71	2.00	1.98	1.31	1.24	.86	.81
2	3.78	3.67	3.60	3.50	---	2.71	1.98	1.93	1.24	1.06	.81	.79
3	3.78	3.77	3.60	3.58	---	2.70	1.93	1.90	1.11	1.10	.80	.79
4	3.79	3.78	3.58	3.54	---	2.69	1.90	1.89	1.12	1.09	.80	.78
5	3.78	3.71	3.54	3.44	---	2.69	1.89	1.87	1.09	1.01	.78	.74
6	3.71	3.62	3.44	3.34	---	2.70	1.90	1.87	1.01	.93	.75	.74
7	3.64	3.62	3.34	3.30	---	2.69	1.87	1.81	.93	.91	.77	.75
8	3.65	3.59	3.36	3.30	---	2.69	1.81	1.75	.92	.91	.80	.77
9	3.59	3.56	3.36	3.36	---	2.69	1.79	1.75	1.01	.92	.81	.80
10	3.56	3.54	3.36	3.31	---	2.69	1.79	1.74	1.02	1.00	.84	.81
11	3.55	3.54	3.31	3.26	---	2.69	1.74	1.70	1.06	.97	.84	.78
12	3.55	3.44	3.28	3.26	---	2.68	1.70	1.67	1.06	.99	.78	.73
13	3.44	3.34	3.32	3.28	---	2.68	1.68	1.67	.99	.97	.73	.71
14	3.38	3.35	3.32	3.25	---	2.68	---	---	.97	.94	.71	.70
15	3.38	3.35	3.25	3.16	---	2.68	---	---	.94	.94	.70	.68
16	3.39	3.35	3.16	3.09	---	2.46	---	---	.94	.94	.70	.68
17	3.44	3.39	3.09	3.06	2.46	2.41	---	---	.94	.92	.72	.70
18	3.43	3.37	3.07	3.06	2.41	2.40	---	---	.96	.93	.77	.72
19	3.37	3.35	3.06	2.97	2.46	2.40	---	---	.97	.96	.78	.75
20	3.36	3.34	2.97	2.91	2.46	2.42	---	---	.97	.95	.75	.71
21	3.41	3.36	2.91	2.89	2.42	2.36	---	---	.95	.91	.71	.70
22	3.42	3.41	2.90	2.90	2.36	2.34	1.40	1.32	.91	.88	.76	.71
23	3.41	3.39	2.91	2.90	2.34	2.28	1.34	1.32	.88	.85	.76	.63
24	3.52	3.40	2.94	2.91	2.29	2.28	1.33	1.28	.85	.83	.63	.61
25	3.53	3.52	2.93	2.87	2.29	2.24	1.30	1.28	.85	.83	.64	.61
26	3.52	3.51	2.87	2.85	2.24	2.18	1.40	1.30	.86	.85	.67	.64
27	3.51	3.51	2.85	2.80	2.18	2.14	1.41	1.40	.89	.86	.70	.67
28	3.51	3.48	2.80	2.71	2.14	2.07	1.41	1.37	.98	.89	.72	.70
29	3.49	3.47	---	---	2.07	2.03	1.37	1.35	.97	.87	.73	.64
30	3.52	3.49	---	2.71	2.03	2.00	1.35	1.31	.87	.84	---	---
31	---	---	---	2.71	---	---	1.32	1.30	.86	.85	---	---
MONTH	3.79	3.34	3.60	2.71	2.46	2.00	2.00	1.28	1.31	.83	.86	.61

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 28. SITE ID.--391824076172703 PERMIT NUMBER.--HA-88-1063.
 LOCATION.--Lat 39°18'24", long 76°17'27", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 4 in., to 20 ft;
 screen diameter 4 in. from 20 to 25 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.

DATUM.--Elevation of land surface is 10.28 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.98 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF93.

PERIOD OF RECORD.--January 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.96 ft above sea level, March 24, 1991;
 lowest measured, 0.10 ft above sea level, Sept. 24, 1992.

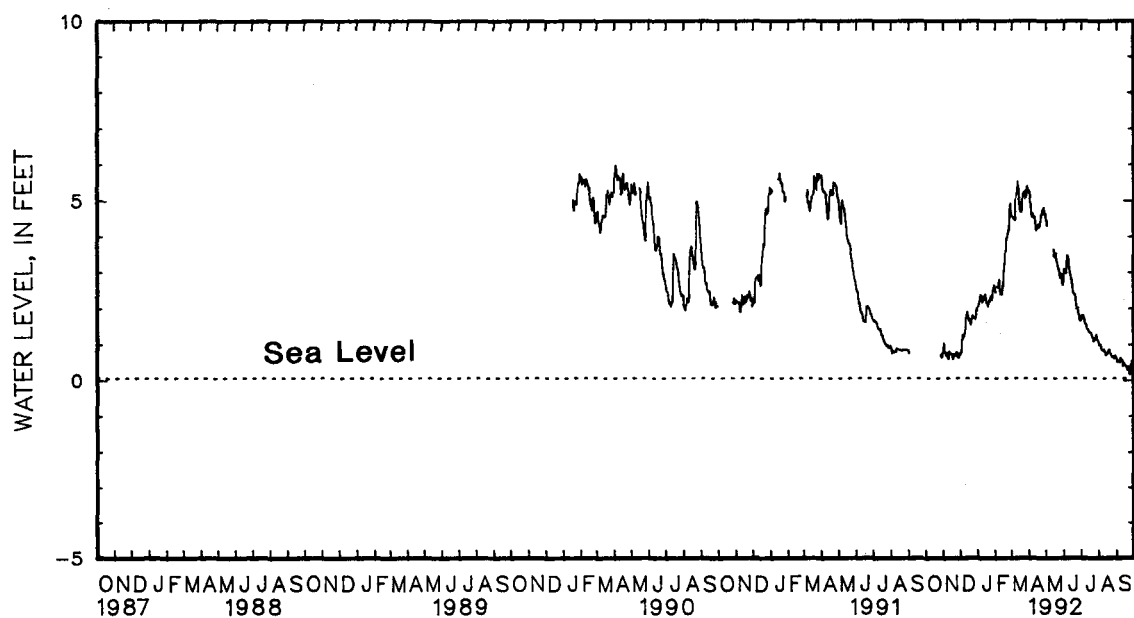
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.01	.85	.75	.69	2.09	2.01	2.57	2.43	4.70	4.57
2	---	---	1.01	.97	.81	.72	2.11	2.07	2.53	2.43	4.70	4.54
3	---	---	.97	.75	1.21	.81	2.22	2.11	---	---	4.54	4.51
4	---	---	.75	.70	1.24	1.21	2.31	2.22	---	---	4.52	4.51
5	---	---	.69	.64	1.23	1.10	2.39	2.31	2.76	2.58	4.52	4.49
6	---	---	.72	.67	1.25	1.15	2.39	2.36	2.63	2.57	4.50	4.46
7	---	---	.73	.70	1.23	1.16	2.38	2.22	2.78	2.64	5.12	4.46
8	---	---	.73	.58	1.25	1.22	2.22	2.16	2.84	2.78	5.32	5.13
9	---	---	.58	.54	1.38	1.26	2.32	2.17	2.81	2.52	5.32	5.26
10	---	---	.73	.56	1.66	1.38	2.36	2.32	2.52	2.37	5.54	5.26
11	---	---	.83	.74	1.80	1.67	2.37	2.24	2.50	2.41	5.68	5.54
12	---	---	.80	.69	1.82	1.77	2.28	2.22	2.50	2.37	5.55	5.34
13	---	---	.71	.68	1.87	1.78	2.38	2.29	2.61	2.37	5.34	5.09
14	---	---	.71	.68	1.91	1.87	2.63	2.38	2.63	2.61	5.08	5.00
15	---	---	.70	.68	1.87	1.75	2.59	2.25	2.90	2.60	5.05	4.88
16	---	---	.71	.64	1.75	1.63	2.32	2.14	3.21	2.90	4.87	4.70
17	---	---	.64	.54	1.81	1.63	2.28	2.13	3.23	3.17	4.87	4.70
18	---	---	.66	.56	1.81	1.66	2.28	2.14	3.59	3.24	4.86	4.67
19	---	---	.71	.66	1.66	1.52	2.14	2.03	3.91	3.59	5.13	4.73
20	---	---	.71	.65	1.66	1.52	2.23	2.14	3.97	3.91	5.26	5.12
21	---	---	.68	.63	1.77	1.67	2.23	2.19	4.04	3.97	5.27	5.20
22	---	---	.71	.63	1.77	1.70	2.27	2.17	4.10	3.99	5.40	5.15
23	---	---	.73	.71	1.86	1.76	2.58	2.27	4.21	4.10	5.42	5.25
24	---	---	.77	.73	1.87	1.75	2.58	2.32	4.21	4.17	5.25	5.11
25	---	---	.78	.70	1.76	1.73	2.33	2.29	4.41	4.18	5.11	5.06
26	.67	.64	.70	.58	1.73	1.70	2.35	2.21	4.84	4.42	5.34	5.11
27	.67	.65	.60	.57	1.74	1.69	2.47	2.36	4.98	4.84	5.60	5.35
28	.69	.58	.68	.60	1.72	1.67	2.53	2.47	5.03	4.92	5.58	5.39
29	.69	.58	.71	.68	2.01	1.72	2.62	2.53	5.05	4.64	5.39	5.25
30	.76	.69	.69	.64	2.03	1.96	2.68	2.62	---	---	5.28	5.21
31	.85	.73	---	---	2.00	1.91	2.69	2.58	---	---	5.33	5.26
MONTH	.85	.58	1.01	.54	2.03	.69	2.69	2.01	5.05	2.37	5.68	4.46

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 28--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.30	5.24	4.64	4.44	3.10	3.05	1.78	1.74	1.11	.92	.55	.46
2	5.30	5.12	4.52	4.43	3.05	2.99	1.77	1.67	.93	.91	.49	.46
3	5.12	4.95	4.52	4.30	3.00	2.97	1.81	1.66	.97	.93	.61	.49
4	4.95	4.92	---	---	2.98	2.95	1.82	1.75	.97	.93	.59	.46
5	4.92	4.66	---	---	3.23	2.95	1.75	1.70	.93	.82	.47	.45
6	4.66	4.55	---	---	3.44	3.24	1.74	1.66	.85	.77	.59	.45
7	4.67	4.55	---	---	3.49	3.44	1.66	1.53	.80	.77	.61	.56
8	4.68	4.61	---	---	3.48	3.42	1.53	1.51	.81	.76	.56	.54
9	4.60	4.52	---	---	3.42	3.30	1.63	1.51	.88	.80	.54	.52
10	4.57	4.54	---	---	3.30	3.12	1.53	1.44	.83	.75	.58	.51
11	4.56	4.53	---	---	3.12	2.98	1.45	1.37	.78	.74	.58	.44
12	4.56	4.41	---	---	2.98	2.88	1.37	1.34	.77	.65	.44	.35
13	4.41	4.15	---	---	2.88	2.79	1.43	1.36	.69	.63	.42	.37
14	4.35	4.18	3.80	3.59	2.79	2.69	1.35	1.30	.69	.67	.43	.40
15	4.35	4.26	3.59	3.40	2.69	2.53	1.36	1.29	.74	.69	.42	.37
16	4.31	4.23	3.41	3.38	2.52	2.38	1.36	1.27	.79	.73	.38	.35
17	4.37	4.31	3.48	3.39	2.41	2.36	1.35	1.27	.80	.77	.38	.34
18	4.36	4.25	3.59	3.48	2.36	2.33	1.36	1.26	.82	.79	.35	.32
19	4.29	4.24	3.55	3.32	2.43	2.35	1.26	1.19	.84	.80	.38	.27
20	4.37	4.29	3.32	3.24	2.43	2.25	1.22	1.15	.80	.70	.27	.23
21	4.50	4.37	3.24	3.15	2.24	2.09	1.18	1.13	.73	.68	.35	.25
22	4.64	4.50	3.15	3.07	2.09	1.96	1.13	1.03	.70	.63	.38	.33
23	4.63	4.59	3.06	3.04	1.98	1.96	1.14	1.03	.64	.60	.38	.13
24	4.78	4.61	3.04	2.95	2.11	1.97	1.13	1.08	.63	.59	.15	.10
25	4.79	4.72	2.95	2.81	2.08	1.95	1.20	1.08	.64	.60	.33	.15
26	4.84	4.72	2.95	2.83	1.96	1.81	1.25	1.17	.63	.58	.49	.33
27	4.86	4.79	2.96	2.91	1.85	1.75	1.29	1.21	.60	.55	.55	.49
28	4.79	4.62	2.91	2.71	1.75	1.62	1.20	1.08	.76	.60	.55	.48
29	4.62	4.60	2.71	2.61	1.64	1.60	1.09	1.06	.77	.63	---	---
30	4.69	4.62	2.71	2.60	1.79	1.61	1.09	1.04	.63	.58	---	---
31	---	---	3.06	2.71	---	---	1.11	1.01	.65	.55	---	---
MONTH	5.30	4.15	4.64	2.60	3.49	1.60	1.82	1.01	1.11	.55	.61	.10

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 29. SITE ID.--391812076173101 PERMIT NUMBER.--HA-88-1046.
 LOCATION.--Lat 39°18'12", long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, confined aquifer well, depth 90 ft; casing diameter 4 in.,
 to 85 ft; screen diameter 4 in. from 85 to 90 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 12, 1990 to current year.
 DATUM.--Elevation of land surface is 10.22 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.83 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF41.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.02 ft above sea level, Jan. 30, and Nov. 1, 1991;
 lowest measured, 1.03 ft below sea level, Feb. 26, 1990.

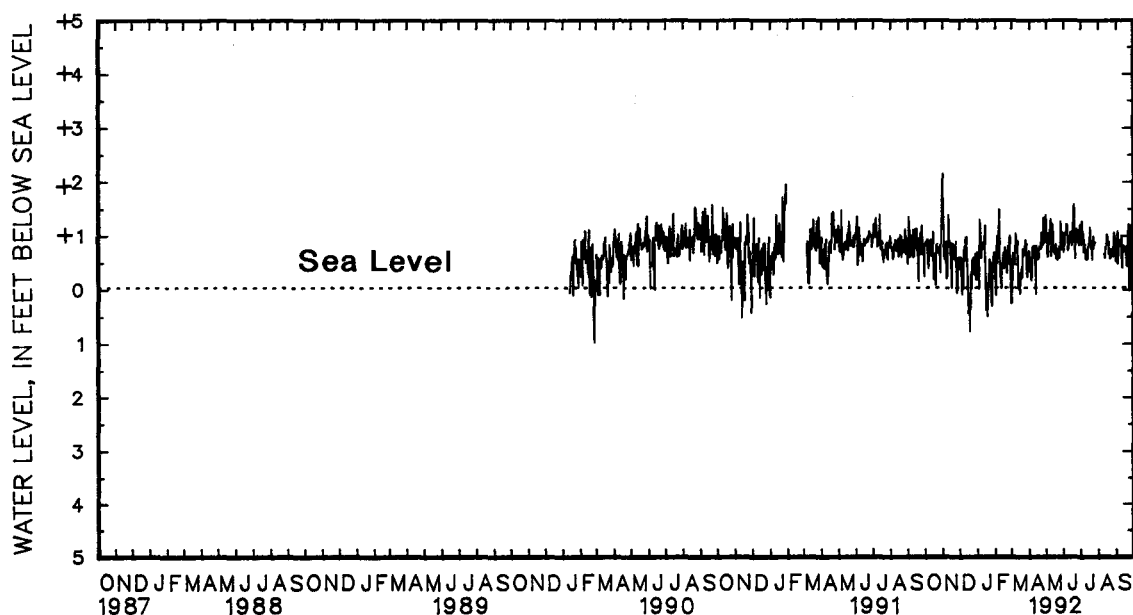
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.42	+0.87	+3.02	+2.15	+1.21	+0.58	+1.33	+0.69	+0.86	+0.24	+1.23	.28
2	+1.73	+0.82	+2.73	+1.51	+0.97	+0.36	+1.12	+0.45	+0.80	.14	+0.55	.01
3	+1.41	+0.81	+1.50	+0.83	+1.98	+0.58	+1.53	+0.59	+1.35	+0.58	+0.92	+0.16
4	+1.66	+0.91	+1.40	+0.65	+1.24	+0.49	+2.09	.01	+1.85	+1.00	+1.24	+0.66
5	+1.70	+0.91	+1.29	+0.54	+0.70	.12	+1.97	+1.30	+1.38	+0.47	+1.10	+0.57
6	+1.62	+0.64	+1.65	+0.74	+1.11	+0.21	+1.85	+1.20	+1.34	+0.67	+1.15	+0.54
7	+1.09	+0.37	+1.60	+0.86	+1.12	+0.00	+1.58	+0.63	+1.83	+1.03	+1.75	+0.45
8	+1.38	+0.59	+1.30	+0.17	+1.24	+0.47	+1.17	+0.57	+2.20	+1.49	+1.74	+1.04
9	+1.45	+0.82	.92	+0.22	+1.36	+0.72	+1.38	+0.79	+1.81	+0.79	+1.41	+0.77
10	+1.61	+0.86	+2.20	+0.64	+1.51	+0.52	+1.50	+0.86	+0.88	+0.28	+2.01	+0.88
11	+1.57	+0.91	+2.18	+1.38	+1.50	+0.97	+1.43	+0.74	+0.79	+0.16	+2.12	+0.90
12	+1.57	+0.92	+1.64	+0.77	+1.45	+0.71	+1.48	+0.80	+0.67	.01	+1.25	+0.59
13	+1.57	+0.60	+1.36	+0.81	+1.53	+0.97	+1.53	+0.99	+1.13	+0.46	+0.62	.01
14	+1.59	+0.71	+1.40	+0.84	+1.35	+0.68	+2.60	+1.19	+1.15	+0.47	+1.05	+0.19
15	+1.80	+1.07	+1.32	+0.85	+0.89	+0.19	+1.45	+0.20	+1.41	+0.44	+0.95	+0.09
16	+1.38	+0.18	+1.34	+0.46	.44	.47	+0.97	.41	+1.45	+0.66	+0.51	.11
17	.71	+0.16	.81	+0.00	+1.02	.17	+1.04	.30	+1.07	+0.37	+1.29	+0.30
18	+0.97	+0.64	+1.38	+0.65	+0.79	.11	+0.62	.20	+1.28	+0.43	+0.95	+0.17
19	+1.22	+0.31	+1.57	+0.84	.12	.82	+0.38	.53	+1.54	+0.77	+1.29	+0.36
20	+0.91	+0.05	+1.41	+0.70	.75	.26	+0.90	+0.08	+1.44	+0.69	+1.43	+0.20
21	+1.50	+0.71	+1.31	+0.56	.87	+0.30	+1.08	+0.10	+1.22	+0.57	+1.39	+0.74
22	+1.46	+0.83	+1.59	+0.56	+1.03	+0.00	+1.14	+0.32	.94	+0.28	+1.87	+0.60
23	+1.41	+0.72	+1.46	+0.58	+1.40	+0.54	+2.01	+0.55	+1.21	+0.54	+1.76	+0.63
24	+1.44	+0.67	+1.51	+0.88	+1.17	+0.29	+1.93	+0.48	+1.12	+0.46	+1.31	+0.71
25	+1.53	+0.71	+1.29	+0.55	+1.15	+0.58	.44	.22	+1.60	+0.86	+1.61	+0.92
26	+1.47	+0.67	+1.03	.09	+1.14	+0.44	.45	.33	+1.55	+0.96	+1.42	+0.76
27	+1.54	+0.77	+1.00	.03	+1.13	+0.34	+1.08	+0.15	+1.73	+0.99	+1.62	+0.84
28	+1.53	+0.29	+1.11	+0.56	+0.85	+0.26	+1.03	+0.41	+1.24	+0.54	+1.00	+0.28
29	+1.84	+1.17	+1.24	+0.37	+1.40	+0.65	+1.38	+0.56	+1.12	.28	+0.67	+0.21
30	+1.99	+1.12	+1.13	+0.38	.98	+0.17	+1.35	+0.67	---	---	+1.02	+0.33
31	+2.44	+1.72	---	---	+1.18	+0.17	+1.28	+0.66	---	---	+1.27	+0.62
MONTH	+2.44	+0.05	+3.02	.09	+1.98	.82	+2.60	.53	+2.20	.28	+2.12	.28

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 29--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.51	+.70	+1.91	+.95	+1.71	+.72	+1.92	+.98	---	---	+1.37	+.50
2	+1.07	+.59	+1.94	+1.03	+1.53	+.68	+1.51	+.81	---	---	+1.63	+.75
3	+.86	+.32	+1.54	+.66	+1.86	+.98	+2.20	+1.27	---	---	+1.77	+1.08
4	+1.21	+.52	+1.38	+.59	+1.84	+1.04	+1.95	+1.05	---	---	+1.47	+.45
5	+.92	+.14	+1.57	+.66	+1.92	+1.02	+1.90	+1.00	---	---	+1.17	+.65
6	+.80	+.25	+1.69	+1.01	+1.96	+1.21	+1.95	+.91	---	---	+1.70	+.90
7	+1.34	+.57	+1.61	+1.10	+1.96	+1.19	+1.58	+.68	---	---	+1.67	+.81
8	+1.54	+.80	+1.93	+.99	+1.79	+.90	+1.43	+.82	---	---	+1.42	+.82
9	+1.55	+.75	+2.09	+1.30	+1.58	+.71	+1.99	+.67	---	---	+1.42	+.83
10	+1.44	+.76	+1.57	+.60	+1.47	+.72	+1.39	+.74	---	---	+1.73	+.99
11	+1.40	+.80	+1.22	+.71	+1.58	+.85	+1.48	+.53	---	---	+1.28	+.57
12	+1.28	+.57	+1.68	+1.20	+1.78	+.98	+1.34	+.53	+1.25	+.64	+1.13	+.38
13	+.96	.11	+1.97	+1.04	+1.82	+1.05	+1.68	+.70	+1.34	+.56	+1.39	+.76
14	+1.53	+.81	+1.85	+.73	+1.84	+1.06	+1.30	+.55	+1.55	+.73	+1.41	+.80
15	+1.39	+.55	+1.55	+.73	+1.77	+.92	+1.53	+.84	+1.46	+1.02	+1.34	+.68
16	+1.37	+.55	+1.51	+.68	+1.66	+.81	+1.32	+.81	+1.67	+.98	+1.44	+.76
17	+1.45	+.69	+1.48	+.65	+2.02	+1.20	+1.52	+1.15	+1.57	+.85	+1.42	+.75
18	+1.28	+.56	+1.72	+.83	+1.90	+1.25	+1.51	+.90	+1.53	+.88	+1.54	+.78
19	+1.51	+.75	+1.19	+.54	+2.14	+1.58	+1.49	+.86	+1.53	+.88	+1.64	+.41
20	+1.57	+.79	+1.34	+.75	+1.75	+.92	+1.49	+.76	+1.42	+.64	+1.48	+.53
21	+1.74	+.83	+1.34	+.68	+1.28	+.85	+1.45	+.75	+1.42	+.74	+1.76	+1.05
22	+1.86	+1.05	+1.05	+.53	+1.28	+.56	+1.32	+.53	+1.45	+.55	+1.74	+1.20
23	+1.29	+.75	+1.26	+.72	+1.80	+.99	+1.42	+.98	+1.27	+.57	+1.55	.05
24	+1.52	+.94	+1.30	+.68	+2.10	+1.12	+1.42	+.74	+1.43	+.72	+1.07	.03
25	+1.30	+.81	+1.67	+.57	+1.70	+1.04	+1.71	+.86	+1.58	+.70	+1.44	+.70
26	+2.06	+1.33	+1.85	+1.26	+1.79	+1.10	+1.51	+.86	+1.44	+.63	+2.00	+.48
27	+2.05	+1.11	+1.68	+1.07	+1.94	+.88	---	---	+1.53	+.59	+1.89	+1.20
28	+1.47	+.87	+1.64	+.72	+1.55	+.81	---	---	+2.55	+1.05	+1.57	+.73
29	+1.68	+1.14	+1.49	+.88	+1.73	+.86	---	---	+2.15	+.77	---	---
30	+2.28	+1.38	+1.74	+1.05	+2.02	+1.21	---	---	+1.91	+.68	---	---
31	---	---	+2.49	+1.00	---	---	---	---	+1.83	+.66	---	---
MONTH	+2.28	.11	+2.49	+.53	+2.14	+.56	+2.20	+.53	+2.55	+.55	+2.00	.05

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 30. SITE ID.--391812076173102. PERMIT NUMBER.--HA-88-1047.
 LOCATION.--Lat 39°18'12", long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 62 ft; casing diameter 4 in., to 57 ft;
 screen diameter 4 in. from 57 to 62 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.
 DATUM.--Elevation of land surface is 10.30 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.85 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF42. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.59 ft above sea level, Feb. 15, and 16, 1991,
 April 24, and 25, 1991; lowest measured, 1.20 ft above sea level, Aug. 25, 26, and 27, 1992.

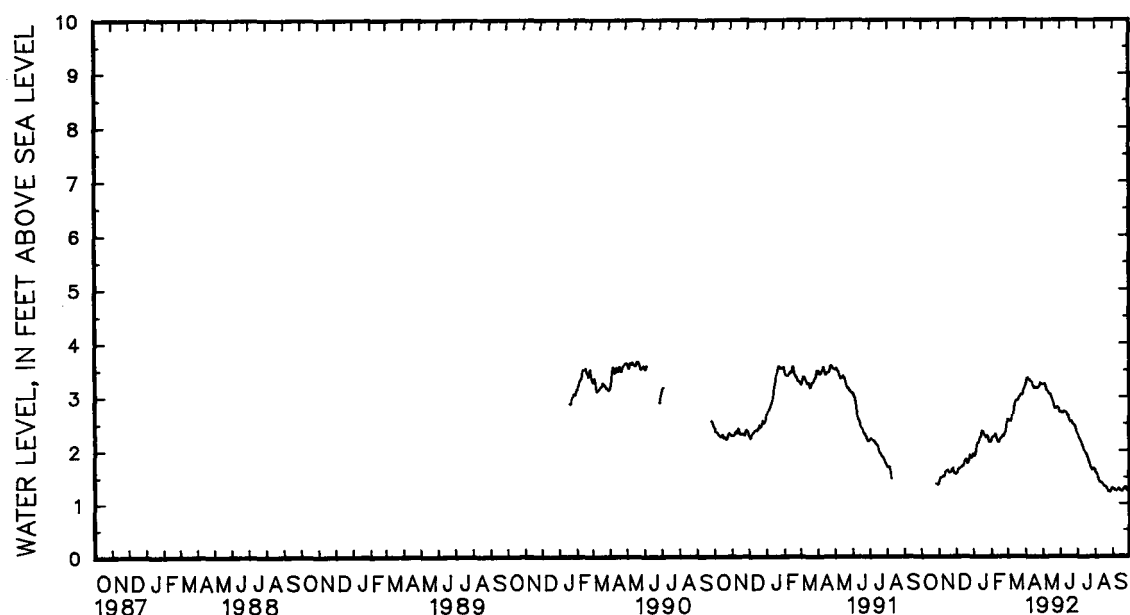
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.42	1.38	1.54	1.53	1.92	1.89	2.22	2.20	2.57	2.57
2	---	---	1.46	1.42	1.56	1.54	1.89	1.89	2.23	2.22	2.57	2.57
3	---	---	1.47	1.46	1.61	1.56	1.93	1.89	2.23	2.23	2.57	2.57
4	---	---	1.48	1.47	1.65	1.61	2.00	1.93	2.24	2.23	2.57	2.55
5	---	---	1.48	1.47	1.65	1.64	2.06	2.00	2.25	2.24	2.55	2.54
6	---	---	1.48	1.47	1.64	1.64	2.11	2.06	2.26	2.25	2.54	2.54
7	---	---	1.50	1.48	1.64	1.64	2.13	2.11	2.29	2.26	2.58	2.54
8	---	---	1.50	1.50	1.65	1.64	2.14	2.13	2.32	2.29	2.64	2.58
9	---	---	1.50	1.49	1.68	1.65	2.16	2.13	2.32	2.29	2.67	2.64
10	---	---	1.52	1.49	1.70	1.68	2.20	2.16	2.29	2.22	2.73	2.67
11	---	---	1.57	1.52	1.70	1.69	2.23	2.20	2.22	2.19	2.82	2.73
12	---	---	1.59	1.57	1.69	1.69	2.23	2.23	2.19	2.16	2.87	2.82
13	---	---	1.60	1.59	1.72	1.69	2.25	2.23	2.16	2.14	2.90	2.87
14	---	---	1.61	1.60	1.77	1.72	2.33	2.25	2.16	2.14	2.92	2.90
15	---	---	1.61	1.60	1.79	1.77	2.35	2.33	2.19	2.16	2.93	2.92
16	---	---	1.61	1.61	1.80	1.79	2.36	2.35	2.23	2.19	2.93	2.92
17	---	---	1.61	1.59	1.81	1.80	2.36	2.35	2.23	2.22	2.93	2.92
18	---	---	1.59	1.57	1.83	1.82	2.36	2.34	2.22	2.22	2.93	2.93
19	---	---	1.57	1.56	1.83	1.79	2.34	2.30	2.25	2.22	2.96	2.93
20	---	---	1.56	1.56	1.79	1.74	2.30	2.27	2.27	2.25	2.99	2.96
21	---	---	1.58	1.56	1.76	1.74	2.27	2.26	2.27	2.27	3.00	2.99
22	---	---	1.60	1.58	1.79	1.76	2.26	2.24	2.27	2.26	3.02	3.00
23	---	---	1.63	1.60	1.85	1.79	2.26	2.23	2.28	2.26	3.05	3.02
24	---	---	1.66	1.63	1.90	1.85	2.30	2.26	2.30	2.28	3.05	3.04
25	---	---	1.66	1.65	1.91	1.90	2.30	2.27	2.33	2.31	3.04	3.03
26	1.36	1.35	1.65	1.62	1.91	1.89	2.27	2.24	2.40	2.33	3.05	3.03
27	1.35	1.35	1.61	1.57	1.89	1.87	2.24	2.18	2.46	2.40	3.11	3.05
28	1.36	1.35	1.57	1.55	1.87	1.85	2.18	2.15	2.52	2.46	3.14	3.11
29	1.36	1.34	1.55	1.54	1.90	1.85	2.15	2.14	2.57	2.52	3.16	3.14
30	1.34	1.33	1.54	1.53	1.94	1.90	2.15	2.14	---	---	3.18	3.16
31	1.38	1.34	---	---	1.94	1.92	2.20	2.15	---	---	3.22	3.18
MONTH	1.38	1.33	1.66	1.38	1.94	1.53	2.36	1.89	2.57	2.14	3.22	2.54

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 30--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.26	3.22	3.23	3.22	2.70	2.70	2.29	2.27	1.61	1.59	1.27	1.26
2	3.30	3.26	3.22	3.22	2.70	2.70	2.27	2.25	1.59	1.56	1.26	1.25
3	3.33	3.30	3.24	3.22	2.70	2.68	2.25	2.22	1.56	1.54	1.25	1.24
4	3.36	3.33	3.24	3.24	2.68	2.68	2.22	2.19	1.54	1.54	1.25	1.25
5	3.36	3.36	3.24	3.23	2.70	2.68	2.19	2.17	1.54	1.51	1.25	1.23
6	3.36	3.33	3.23	3.18	2.71	2.70	2.17	2.15	1.51	1.46	1.23	1.23
7	3.33	3.32	3.18	3.12	2.71	2.71	2.15	2.12	1.46	1.42	1.23	1.22
8	3.32	3.32	3.12	3.11	2.71	2.70	2.12	2.08	1.42	1.39	1.23	1.22
9	3.32	3.30	3.11	3.10	2.70	2.70	2.08	2.06	1.39	1.38	1.24	1.23
10	3.30	3.29	3.10	3.09	2.70	2.69	2.06	2.04	1.38	1.38	1.26	1.24
11	3.29	3.28	3.09	3.06	2.69	2.68	2.04	2.00	1.39	1.38	1.27	1.26
12	3.28	3.27	3.06	3.04	2.68	2.65	2.00	1.97	1.39	1.38	1.27	1.26
13	3.27	3.22	3.04	3.04	2.65	2.64	1.97	1.95	1.38	1.36	1.26	1.24
14	3.22	3.19	3.04	3.04	2.64	2.63	1.95	1.93	1.36	1.34	1.24	1.23
15	3.19	3.16	3.04	3.01	2.63	2.62	1.93	1.92	1.34	1.32	1.23	1.22
16	3.16	3.15	3.01	2.97	2.62	2.58	1.92	1.90	1.32	1.31	1.22	1.21
17	3.17	3.15	2.97	2.93	2.58	2.54	1.90	1.87	1.31	1.30	1.22	1.21
18	3.17	3.17	2.93	2.91	2.54	2.51	1.87	1.84	1.30	1.30	1.24	1.22
19	3.17	3.16	2.91	2.87	2.52	2.51	1.84	1.80	1.30	1.30	1.26	1.24
20	3.16	3.15	2.87	2.82	2.53	2.52	1.80	1.76	1.30	1.29	1.27	1.26
21	3.16	3.15	2.82	2.78	2.53	2.52	1.76	1.73	1.29	1.28	1.27	1.27
22	3.17	3.16	2.78	2.76	2.52	2.49	1.73	1.69	1.28	1.25	1.29	1.27
23	3.17	3.17	2.77	2.76	2.49	2.47	1.69	1.66	1.25	1.23	1.29	1.29
24	3.19	3.17	2.79	2.77	2.47	2.46	1.66	1.64	1.23	1.21	1.29	1.25
25	3.22	3.19	2.79	2.79	2.46	2.45	1.64	1.62	1.21	1.20	1.25	1.23
26	3.25	3.23	2.79	2.79	2.45	2.43	1.62	1.62	1.20	1.20	1.24	1.23
27	3.25	3.25	2.79	2.78	2.43	2.41	1.64	1.62	1.21	1.20	1.26	1.24
28	3.25	3.24	2.78	2.76	2.41	2.37	1.64	1.64	1.25	1.21	1.27	1.26
29	3.24	3.23	2.76	2.72	2.37	2.33	1.64	1.64	1.27	1.25	1.27	1.27
30	3.23	3.23	2.72	2.69	2.33	2.30	1.64	1.62	1.27	1.27	1.27	1.26
31	---	---	2.70	2.69	---	---	1.62	1.61	1.27	1.27	---	---
MONTH	3.36	3.15	3.24	2.69	2.71	2.30	2.29	1.61	1.61	1.20	1.29	1.21

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 31. SITE ID.--391812076173103 PERMIT NUMBER.--HA-88-1048.
 LOCATION.--Lat 39°18'12", long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 35 ft; casing diameter 4 in., to 30 ft;
 screen diameter 4 in. from 30 to 35 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 12, 1990 to current year.
 DATUM.--Elevation of land surface is 12.72 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.90 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF43.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.30 ft above sea level, Jan. 13, 1991;
 lowest measured, 0.77 ft above sea level, Sept. 13, and 14, 1991.

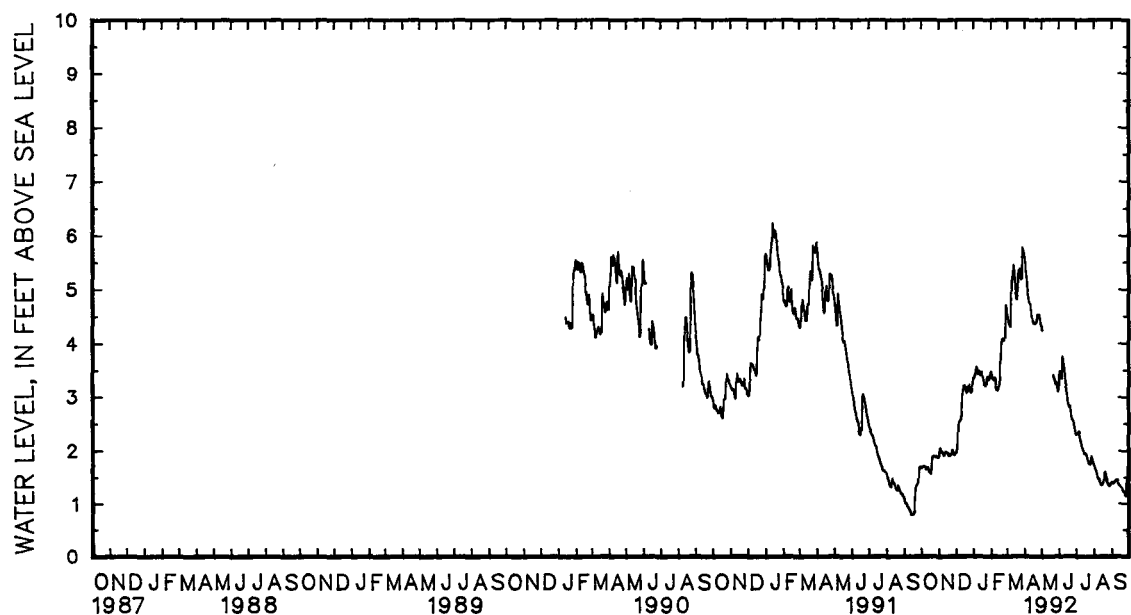
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.68	1.66	2.02	1.90	2.00	1.95	3.37	3.35	3.50	3.43	4.63	4.51
2	1.69	1.68	2.09	2.02	2.09	2.00	3.41	3.37	3.43	3.35	4.51	4.44
3	1.70	1.69	2.09	2.04	2.36	2.09	3.45	3.41	3.35	3.33	4.44	4.39
4	1.70	1.69	2.04	2.00	2.52	2.36	3.53	3.46	3.38	3.33	4.39	4.34
5	1.69	1.69	2.00	1.97	2.52	2.51	3.56	3.53	3.39	3.35	4.34	4.32
6	1.71	1.69	1.97	1.96	2.55	2.52	3.57	3.56	3.35	3.31	4.32	4.30
7	1.71	1.68	1.97	1.96	2.56	2.55	3.56	3.49	3.35	3.31	4.75	4.30
8	1.68	1.64	1.97	1.93	2.58	2.56	3.49	3.43	3.35	3.35	5.18	4.76
9	1.64	1.63	1.93	1.90	2.63	2.58	3.48	3.43	3.35	3.23	5.23	5.18
10	1.64	1.63	1.94	1.90	2.89	2.64	3.52	3.48	3.23	3.14	5.31	5.23
11	1.67	1.64	1.99	1.94	3.04	2.89	3.52	3.45	3.18	3.14	5.50	5.32
12	1.67	1.67	1.99	1.97	3.09	3.04	3.45	3.40	3.18	3.12	5.50	5.45
13	1.67	1.62	1.97	1.96	3.15	3.09	3.45	3.40	3.16	3.12	5.45	5.32
14	1.62	1.59	1.96	1.95	3.22	3.15	3.57	3.45	3.20	3.16	5.31	5.20
15	1.60	1.59	1.96	1.95	3.23	3.22	3.57	3.46	3.30	3.20	5.20	5.08
16	1.60	1.57	1.96	1.95	3.22	3.19	3.46	3.39	3.65	3.31	5.08	4.91
17	1.64	1.55	1.95	1.90	3.21	3.18	3.39	3.37	3.70	3.65	4.91	4.89
18	1.81	1.64	1.90	1.89	3.22	3.19	3.37	3.30	3.86	3.70	4.90	4.80
19	1.89	1.81	1.91	1.89	3.19	3.09	3.30	3.23	4.02	3.86	5.16	4.80
20	1.89	1.87	1.92	1.91	3.09	3.07	3.26	3.23	4.09	4.02	5.35	5.16
21	1.87	1.87	1.92	1.92	3.18	3.09	3.26	3.25	4.10	4.09	5.37	5.35
22	1.89	1.87	1.94	1.92	3.19	3.18	3.25	3.20	4.09	4.05	5.37	5.32
23	1.89	1.89	2.01	1.94	3.25	3.19	3.34	3.20	4.08	4.07	5.41	5.37
24	1.89	1.88	2.04	2.01	3.25	3.23	3.46	3.34	4.08	4.06	5.40	5.26
25	---	---	2.04	2.00	3.22	3.15	3.45	3.38	4.12	4.06	5.26	5.18
26	1.88	1.87	2.00	1.94	3.15	3.11	3.38	3.34	4.50	4.12	5.29	5.18
27	1.89	1.88	1.94	1.91	3.11	3.08	3.34	3.31	4.71	4.50	5.78	5.29
28	1.90	1.88	1.94	1.91	3.09	3.07	3.38	3.33	4.77	4.71	5.89	5.78
29	1.88	1.86	1.95	1.94	3.29	3.09	3.41	3.38	4.80	4.63	5.88	5.75
30	1.88	1.86	1.95	1.95	3.37	3.29	3.47	3.41	---	---	5.75	5.69
31	1.90	1.88	---	---	3.36	3.35	3.50	3.47	---	---	5.69	5.65
MONTH	1.90	1.55	2.09	1.89	3.37	1.95	3.57	3.20	4.80	3.12	5.89	4.30

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 31--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.65	5.58	4.29	4.22	3.52	3.42	2.28	2.26	1.71	1.68	1.38	1.35
2	5.58	5.47	4.22	4.20	3.52	3.45	2.30	2.28	1.68	1.63	1.35	1.34
3	5.47	5.31	---	---	3.45	3.37	2.31	2.29	1.63	1.61	1.38	1.34
4	5.31	5.20	---	---	3.37	3.32	2.35	2.31	1.61	1.59	1.39	1.38
5	5.20	5.03	---	---	3.52	3.31	2.35	2.33	1.59	1.54	1.38	1.36
6	5.03	4.89	---	---	3.73	3.52	2.33	2.30	1.54	1.48	1.39	1.36
7	4.88	4.86	---	---	3.75	3.73	2.30	2.21	1.48	1.44	1.41	1.39
8	4.87	4.81	---	---	3.74	3.66	2.21	2.15	1.44	1.44	1.42	1.41
9	4.81	4.73	---	---	3.66	3.57	2.15	2.14	1.44	1.44	1.42	1.41
10	4.73	4.71	---	---	3.57	3.45	2.14	2.09	1.43	1.40	1.41	1.41
11	4.71	4.70	---	---	3.45	3.30	2.09	2.03	1.40	1.38	1.41	1.38
12	4.70	4.60	---	---	3.30	3.20	2.03	2.00	1.39	1.35	1.38	1.33
13	4.60	4.45	---	---	3.20	3.13	2.00	1.97	1.35	1.33	1.33	1.32
14	4.45	4.43	---	---	3.13	3.06	1.97	1.92	1.33	1.33	1.32	1.30
15	4.43	4.37	---	---	3.06	2.96	1.92	1.90	1.35	1.33	1.30	1.29
16	4.37	4.34	---	---	2.96	2.86	1.91	1.91	1.39	1.35	1.29	1.28
17	4.38	4.35	---	---	2.86	2.80	1.91	1.90	1.44	1.39	1.28	1.27
18	4.38	4.34	---	---	2.80	2.78	1.91	1.89	1.57	1.44	1.27	1.26
19	4.34	4.33	---	---	2.81	2.78	1.89	1.85	1.61	1.57	1.26	1.24
20	4.35	4.34	---	---	2.81	2.79	1.85	1.80	1.60	1.56	1.24	1.19
21	4.37	4.35	3.43	3.37	2.79	2.70	1.80	1.76	1.56	1.49	1.19	1.18
22	4.49	4.38	3.37	3.33	2.70	2.60	1.76	1.72	1.49	1.45	1.20	1.18
23	4.50	4.49	3.33	3.30	2.60	2.54	1.72	1.71	1.44	1.40	1.20	1.16
24	4.53	4.50	3.30	3.26	2.54	2.54	1.71	1.71	1.40	1.36	1.16	1.10
25	4.54	4.51	3.25	3.21	2.54	2.52	1.79	1.71	1.36	1.34	1.15	1.10
26	4.51	4.50	3.24	3.21	2.52	2.47	1.86	1.79	1.34	1.32	1.42	1.15
27	4.52	4.50	3.27	3.24	2.47	2.42	1.89	1.86	1.32	1.30	1.59	1.42
28	4.50	4.40	3.26	3.19	2.42	2.34	1.89	1.84	1.31	1.30	1.68	1.59
29	4.40	4.32	3.18	3.10	2.34	2.29	1.84	1.78	1.35	1.31	---	---
30	4.32	4.29	3.12	3.07	2.29	2.27	1.78	1.73	1.37	1.35	---	---
31	---	---	3.42	3.12	---	---	1.73	1.71	1.39	1.37	---	---
MONTH	5.65	4.29	4.29	3.07	3.75	2.27	2.35	1.71	1.71	1.30	1.68	1.10

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 32. SITE ID.--391809076174301 PERMIT NUMBER.--HA-88-1037.
 LOCATION.--Lat 39°18'09", long 76°17'43", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, confined aquifer well, depth 90 ft; casing diameter 4 in.,
 to 85 ft; screen diameter 4 in. from 85 to 90 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.
 DATUM.--Elevation of land surface is 7.42 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.75 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF11.
 PERIOD OF RECORD.--December 1989 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.02 ft above sea level, Nov. 1, 1991;
 lowest measured, 0.97 ft below sea level, Dec. 24, 1989.

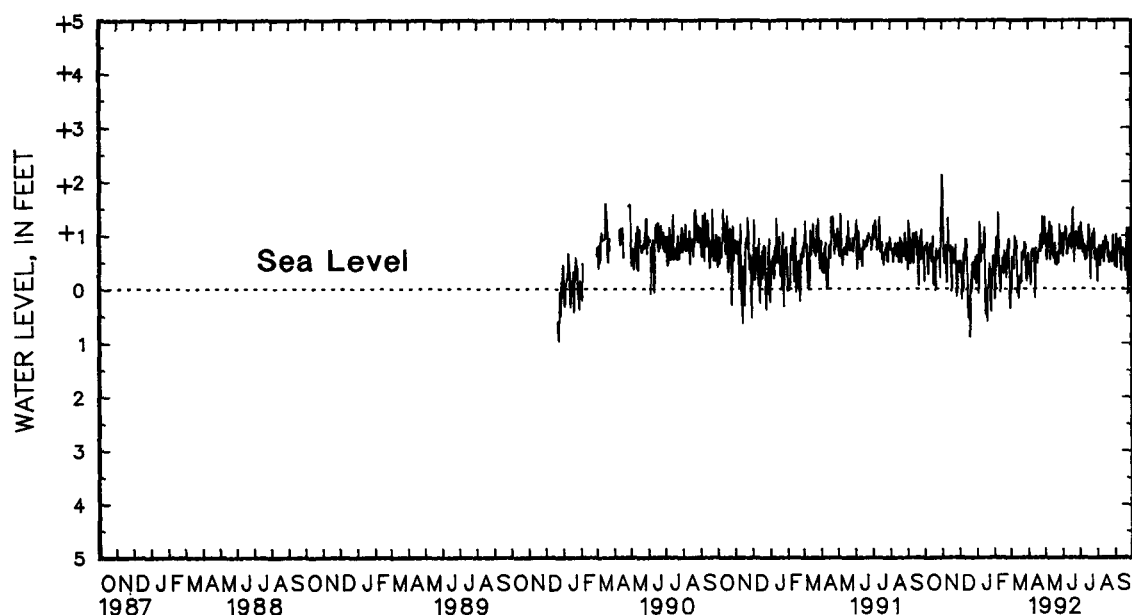
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.37	+ .81	+3.02	+2.13	+1.22	+ .51	+1.33	+ .63	+ .84	+ .15	+1.22	.33
2	+1.71	+ .75	+2.74	+1.44	+ .98	+ .30	+1.13	+ .39	+ .78	.18	+ .53	.06
3	+1.39	+ .73	+1.47	+ .77	+2.00	+ .51	+1.53	+ .51	+1.34	+ .53	+ .92	+ .11
4	+1.64	+ .84	+1.39	+ .59	+1.22	+ .39	+2.09	.08	+1.86	+ .96	+1.24	+ .60
5	+1.67	+ .86	+1.29	+ .47	+ .67	.19	+1.91	+1.25	+1.28	+ .41	+1.10	+ .51
6	+1.58	+ .54	+1.66	+ .67	+1.11	+ .10	+1.86	+1.15	+1.34	+ .60	+1.15	+ .46
7	+1.07	+ .27	+1.60	+ .81	+1.12	.05	+1.47	+ .57	+1.83	+ .99	+1.75	+ .38
8	+1.35	+ .49	+1.24	+ .12	+1.24	+ .41	+1.17	+ .51	+2.20	+1.43	+1.74	+ .99
9	+1.41	+ .74	+ .92	+ .17	+1.35	+ .66	+1.37	+ .73	+1.76	+ .73	+1.39	+ .71
10	+1.58	+ .78	+2.20	+ .59	+1.51	+ .46	+1.49	+ .81	+ .83	+ .20	+2.02	+ .83
11	+1.50	+ .83	+2.17	+1.33	+1.50	+ .93	+1.37	+ .68	+ .77	+ .09	+2.11	+ .89
12	+1.54	+ .84	+1.62	+ .72	+1.39	+ .65	+1.48	+ .74	+ .65	.06	+1.23	+ .52
13	+1.53	+ .51	+1.35	+ .77	+1.51	+ .93	+1.52	+ .95	+1.13	+ .41	+ .56	.08
14	+1.57	+ .62	+1.39	+ .79	+1.33	+ .60	+2.59	+1.15	+1.15	+ .40	+1.05	+ .13
15	+1.77	+1.00	+1.32	+ .80	+ .87	+ .13	+1.35	+ .15	+1.40	+ .37	+ .94	+ .03
16	+1.34	+ .10	+1.33	+ .40	+ .40	.53	+ .95	.47	+1.45	+ .57	+ .49	.17
17	+ .67	+ .08	+ .80	.05	+1.02	.14	+1.05	.31	+1.08	+ .29	+1.28	+ .23
18	+ .93	+ .58	+1.38	+ .59	+ .74	.18	+ .62	.26	+1.28	+ .36	+ .96	+ .11
19	+1.19	+ .21	+1.56	+ .76	.19	.88	+ .35	.60	+1.54	+ .71	+1.28	+ .27
20	+ .89	.02	+1.41	+ .64	+ .75	.32	+ .88	+ .02	+1.42	+ .62	+1.42	+ .14
21	+1.46	+ .62	+1.32	+ .49	+ .87	+ .17	+1.08	+ .03	+1.21	+ .49	+1.40	+ .68
22	+1.42	+ .75	+1.60	+ .48	+1.05	.05	+1.13	+ .24	+ .94	+ .21	+1.86	+ .53
23	+1.38	+ .63	+1.47	+ .50	+1.40	+ .47	+2.02	+ .47	+1.20	+ .47	+1.70	+ .56
24	+1.41	+ .57	+1.50	+ .82	+1.10	+ .22	+1.88	+ .36	+1.12	+ .39	+1.28	+ .66
25	+1.54	+ .65	+1.25	+ .48	+1.16	+ .50	+ .43	.29	+1.58	+ .81	+1.59	+ .88
26	+1.47	+ .61	+ .97	.14	+1.14	+ .37	+ .43	.41	+1.52	+ .92	+1.41	+ .70
27	+1.54	+ .71	+1.03	.08	+1.11	+ .28	+1.08	+ .18	+1.71	+ .94	+1.61	+ .83
28	+1.51	+ .22	+1.15	+ .50	+ .84	+ .19	+1.03	+ .35	+1.23	+ .47	+ .98	+ .22
29	+1.87	+1.14	+1.24	+ .31	+1.39	+ .59	+1.37	+ .50	+1.10	.35	+ .65	+ .15
30	+2.00	+1.08	+1.15	+ .31	+ .97	+ .11	+1.35	+ .61	---	---	+1.02	+ .27
31	+2.46	+1.69	---	---	+1.17	+ .14	+1.26	+ .60	---	---	+1.25	+ .55
MONTH	+2.46	.02	+3.02	.14	+2.00	.88	+2.59	.60	+2.20	.35	+2.11	.33

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 32--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.51	+ .66	+1.94	+ .92	+1.71	+ .72	+1.94	+ .91	+1.43	+ .14	+1.37	+ .42
2	+1.07	+ .52	+1.97	+1.02	+1.53	+ .60	+1.51	+ .74	+1.52	+ .54	+1.65	+ .69
3	+ .85	+ .27	+1.55	+ .61	+1.87	+ .93	+2.22	+1.24	+1.64	+ .76	+1.77	+1.03
4	+1.22	+ .47	+1.39	+ .54	+1.85	+ .99	+1.99	+1.03	+1.69	+ .81	+1.46	+ .39
5	+ .92	+ .08	+1.59	+ .62	+1.92	+ .97	+1.97	+ .98	+1.46	+ .51	+1.19	+ .61
6	+ .80	+ .20	+1.70	+ .99	+1.95	+1.16	+2.01	+ .90	+1.40	+ .44	+1.70	+ .92
7	+1.34	+ .51	+1.61	+1.08	+1.99	+1.14	+1.63	+ .67	+1.32	+ .55	+1.68	+ .77
8	+1.54	+ .75	+1.95	+ .97	+1.80	+ .85	+1.52	+ .82	+1.37	+ .81	+1.42	+ .80
9	+1.56	+ .70	+2.11	+1.25	+1.59	+ .65	+2.05	+ .68	+1.89	+ .78	+1.43	+ .79
10	+1.45	+ .70	+1.58	+ .55	+1.46	+ .65	+1.45	+ .79	+1.43	+ .72	+1.72	+ .95
11	+1.41	+ .74	+1.23	+ .66	+1.59	+ .79	+1.55	+ .54	+1.69	+ .89	+1.28	+ .51
12	+1.28	+ .51	+1.70	+1.17	+1.79	+ .83	+1.42	+ .54	+1.26	+ .59	+1.14	+ .33
13	+ .99	+ .17	+2.01	+1.00	+1.84	+1.01	+1.78	+ .71	+1.36	+ .51	+1.40	+ .72
14	+1.54	+ .76	+1.87	+ .69	+1.86	+1.03	+1.40	+ .57	+1.56	+ .68	+1.42	+ .76
15	+1.40	+ .49	+1.56	+ .66	+1.78	+ .94	+1.72	+ .87	+1.46	+1.00	+1.32	+ .63
16	+1.38	+ .49	+1.51	+ .65	+1.66	+ .75	+1.45	+ .85	+1.68	+ .94	+1.45	+ .73
17	+1.46	+ .63	+1.48	+ .57	+2.02	+1.14	+1.87	+1.20	+1.53	+ .80	+1.41	+ .70
18	+1.30	+ .48	+1.72	+ .85	+1.91	+1.20	+1.74	+ .96	+1.54	+ .84	+1.56	+ .73
19	+1.52	+ .69	+1.20	+ .46	+2.14	+1.52	+1.69	+ .93	+1.54	+ .86	+1.64	+ .34
20	+1.57	+ .73	+1.32	+ .69	+1.79	+ .88	+1.69	+ .19	+1.43	+ .59	+1.50	+ .47
21	+1.74	+ .79	+1.32	+ .60	+1.26	+ .79	+1.62	+ .81	+1.43	+ .70	+1.76	+1.01
22	+1.86	+1.01	+1.04	+ .45	+1.27	+ .50	+1.45	+ .57	+1.46	+ .49	+1.75	+1.14
23	+1.30	+ .70	+1.24	+ .65	+1.67	+ .95	+1.58	+1.04	+1.28	+ .51	+1.55	+ .09
24	+1.52	+ .89	+1.27	+ .61	+2.10	+1.07	+1.59	+ .81	+1.45	+ .66	+1.09	+ .06
25	+1.32	+ .76	+1.53	+ .49	+1.69	+ .99	+1.90	+ .90	+1.58	+ .62	+1.44	+ .62
26	+2.06	+1.35	+1.84	+1.21	+1.79	+1.05	+1.74	+1.13	+1.44	+ .54	+2.02	+ .41
27	+2.06	+1.07	+1.66	+1.02	+1.95	+ .82	+1.97	+ .65	+1.54	+ .51	+1.92	+1.15
28	+1.47	+ .83	+1.62	+ .65	+1.54	+ .75	+1.48	+ .55	+2.57	+1.01	+1.54	+ .67
29	+1.69	+1.14	+1.48	+ .74	+1.73	+ .75	+1.63	+ .65	+2.10	+ .71	---	---
30	+2.29	+1.34	+1.73	+ .94	+2.02	+1.16	+1.65	+ .73	+1.92	+ .61	---	---
31	---	---	+2.48	+1.04	---	---	+1.78	+ .68	+1.79	+ .59	---	---
MONTH	+2.29	+ .17	+2.48	+ .45	+2.14	+ .50	+2.22	+ .19	+2.57	+ .14	+2.02	+ .09

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 33. SITE ID.--391809076174302 PERMIT NUMBER.--HA-88-1038.

LOCATION.--Lat 39°18'09", long 76°17'43", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 55 ft; casing diameter 4 in., to 50 ft; screen diameter 4 in. from 50 to 55 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.

DATUM.--Elevation of land surface is 7.30 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.60 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF12. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.45 ft above sea level, May 2, 3, and 4, 1991; lowest measured, 0.63 ft above sea level, Oct. 25, 26, 27, 29, and 30, 1991..

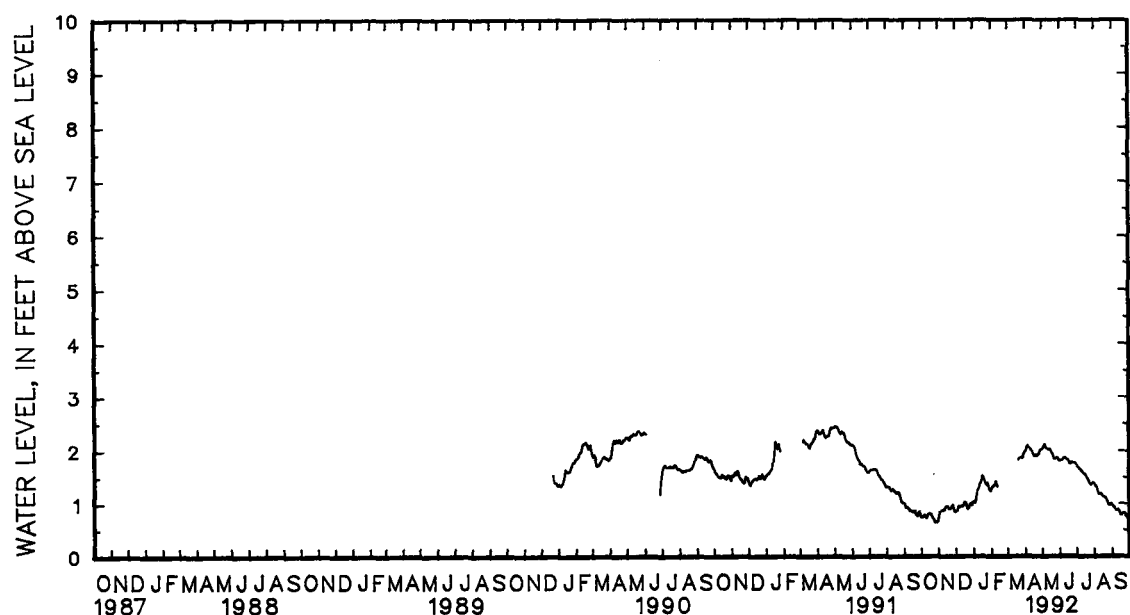
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	.75	.72	.75	.69	.84	.84	1.02	1.01	1.31	1.28	---	---
2	.72	.72	.81	.75	.85	.84	1.01	1.00	1.31	1.31	---	---
3	.73	.72	.84	.81	.90	.85	1.03	1.00	1.31	1.31	---	---
4	.74	.73	.85	.84	.95	.90	1.10	1.03	1.32	1.31	---	---
5	.75	.74	.86	.85	.95	.94	1.17	1.10	1.37	1.32	---	---
6	.77	.75	.86	.86	.95	.93	1.23	1.17	1.34	1.34	---	---
7	.77	.77	.87	.86	.93	.93	1.26	1.23	1.40	1.34	---	---
8	.77	.74	.88	.87	.93	.93	1.27	1.26	1.42	1.40	---	---
9	.74	.72	.87	.86	.94	.93	1.30	1.27	1.42	1.41	---	---
10	.72	.71	.88	.86	.95	.94	1.34	1.30	1.41	1.36	---	---
11	.75	.71	.92	.88	.95	.95	1.38	1.34	1.36	1.32	---	---
12	.78	.75	.93	.92	.95	.94	1.38	1.38	1.38	1.32	---	---
13	.80	.78	.94	.93	.96	.94	1.41	1.38	---	---	---	---
14	.80	.79	.94	.94	1.01	.96	1.49	1.41	---	---	---	---
15	.80	.79	.94	.94	1.02	1.01	1.51	1.49	---	---	---	---
16	.80	.80	.95	.94	1.02	1.02	1.52	1.51	---	---	---	---
17	.80	.80	.95	.92	1.02	1.01	1.52	1.52	---	---	---	---
18	.80	.79	.92	.89	1.02	1.01	1.52	1.49	---	---	---	---
19	.79	.78	.89	.88	1.01	.96	1.49	1.44	---	---	1.84	1.82
20	.78	.75	.89	.88	.96	.90	1.44	1.41	---	---	1.85	1.84
21	.75	.72	.90	.89	.90	.89	1.41	1.39	---	---	1.85	1.85
22	.72	.70	.92	.90	.90	.89	1.39	1.35	---	---	1.86	1.85
23	.70	.68	.94	.92	.95	.90	1.35	1.34	---	---	1.88	1.86
24	.68	.66	.97	.94	.99	.95	1.39	1.35	---	---	1.88	1.87
25	.66	.63	.97	.97	1.00	.99	1.39	1.38	---	---	1.87	1.86
26	.63	.63	.97	.94	1.00	.99	1.38	1.34	---	---	1.87	1.85
27	.64	.63	.94	.88	.99	.98	1.34	1.29	---	---	1.92	1.87
28	.64	.64	.88	.85	.98	.96	1.29	1.25	---	---	1.95	1.93
29	.64	.63	.85	.84	1.00	.96	1.25	1.23	---	---	1.96	1.95
30	.64	.63	.84	.83	1.04	1.01	1.23	1.23	---	---	1.97	1.96
31	.69	.64	---	---	1.04	1.02	1.28	1.23	---	---	2.00	1.97
MONTH	.80	.63	.97	.69	1.04	.84	1.52	1.00	1.42	1.28	2.00	1.82

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 33--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.03	2.00	2.04	2.03	1.81	1.79	1.71	1.70	1.37	1.36	.97	.95
2	2.06	2.03	2.06	2.04	1.81	1.81	1.70	1.69	1.36	1.33	.95	.93
3	2.08	2.06	2.09	2.06	1.81	1.81	1.69	1.67	1.33	1.31	.93	.92
4	2.09	2.08	2.11	2.09	1.81	1.81	1.67	1.66	1.31	1.31	.92	.91
5	2.10	2.09	2.11	2.11	1.83	1.81	1.66	1.65	1.31	1.29	.91	.89
6	2.09	2.06	2.11	2.08	1.84	1.83	1.65	1.65	1.29	1.24	.89	.87
7	2.06	2.05	2.08	2.04	1.85	1.84	1.65	1.64	1.24	1.20	.87	.86
8	2.05	2.04	2.04	2.03	1.85	1.85	1.64	1.61	1.20	1.17	.86	.86
9	2.04	2.02	2.03	2.03	1.85	1.85	1.61	1.61	1.17	1.17	.86	.86
10	2.02	2.00	2.03	2.03	1.85	1.85	1.61	1.60	1.17	1.17	.87	.86
11	2.00	2.00	2.03	2.01	1.85	1.84	1.60	1.59	1.18	1.17	.88	.87
12	2.00	1.99	2.01	2.01	1.84	1.83	1.59	1.57	1.18	1.18	.87	.85
13	1.99	1.95	2.02	2.01	1.83	1.82	1.57	1.56	1.18	1.16	.85	.82
14	1.95	1.92	2.03	2.02	1.82	1.82	1.56	1.55	1.16	1.14	.82	.80
15	1.92	1.90	2.03	2.01	1.82	1.81	1.55	1.54	1.14	1.12	.80	.78
16	1.90	1.89	2.01	1.98	1.81	1.79	1.54	1.53	1.12	1.12	.78	.77
17	1.91	1.89	1.98	1.95	1.79	1.75	1.53	1.51	1.12	1.11	.77	.77
18	1.91	1.91	1.95	1.94	1.75	1.74	1.51	1.50	1.11	1.10	.79	.77
19	1.91	1.90	1.94	1.91	1.75	1.74	1.50	1.48	1.10	1.10	.81	.79
20	1.90	1.89	1.91	1.87	1.77	1.75	1.48	1.45	1.10	1.10	.81	.81
21	1.90	1.89	1.87	1.84	1.78	1.77	1.45	1.43	1.10	1.08	.81	.81
22	1.92	1.90	1.84	1.83	1.78	1.77	1.43	1.40	1.08	1.05	.83	.81
23	1.92	1.92	1.83	1.83	1.77	1.76	1.40	1.38	1.05	1.02	.83	.81
24	1.94	1.92	1.85	1.83	1.76	1.76	1.38	1.36	1.02	.99	.81	.78
25	1.98	1.94	1.86	1.85	1.77	1.76	1.36	1.34	.99	.97	.78	.75
26	2.00	1.98	1.86	1.86	1.77	1.76	1.35	1.34	.97	.95	.76	.75
27	2.01	2.00	1.86	1.85	1.76	1.76	1.37	1.35	.95	.95	.77	.76
28	2.01	2.01	1.85	1.84	1.76	1.74	1.38	1.37	.98	.95	.78	.77
29	2.02	2.01	1.84	1.81	1.74	1.72	1.39	1.38	.99	.98	---	---
30	2.03	2.02	1.81	1.79	1.72	1.71	1.38	1.38	.99	.98	---	---
31	---	---	1.79	1.79	---	---	1.38	1.37	.98	.97	---	---
MONTH	2.10	1.89	2.11	1.79	1.85	1.71	1.71	1.34	1.37	.95	.97	.75

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 34. SITE ID.--391809076174303 PERMIT NUMBER.--HA-88-1039.

LOCATION.--Lat 39°18'09", long 76°17'43", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25.5 ft; casing diameter 4 in., to 20.5 ft; screen diameter 4 in. from 20.5 to 25.5 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.

DATUM.--Elevation of land surface is 7.18 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.95 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF13.

PERIOD OF RECORD.--December 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.26 ft above sea level, Jan. 12, 1991; lowest measured, 0.15 ft below sea level, Sept. 12, 1991.

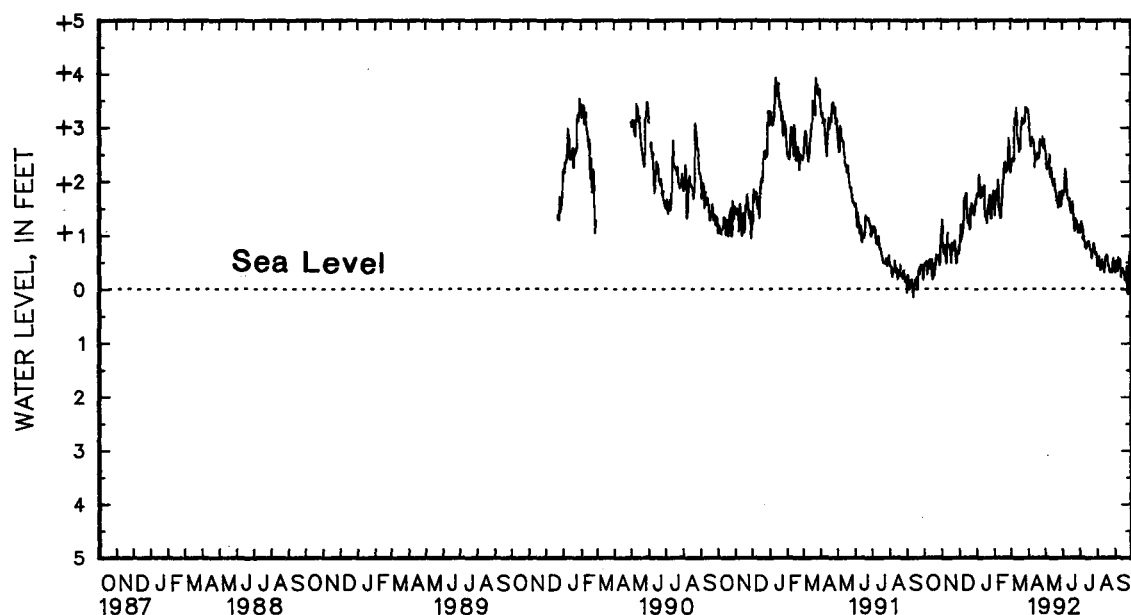
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.58	+1.23	+1.50	+1.15	+1.90	+1.78	+1.91	+1.76	+1.90	+1.60	+2.62	+2.17
2	+1.67	+1.47	+1.48	+1.29	+1.88	+1.72	+1.87	+1.72	+1.59	+1.38	+2.57	+2.27
3	+1.57	+1.44	+1.29	+1.86	+1.45	+1.87	+2.01	+1.77	+1.83	+1.58	+2.43	+2.29
4	+1.63	+1.44	+1.91	+1.75	+1.43	+1.20	+2.17	+1.74	+2.06	+1.82	+2.56	+2.42
5	+1.70	+1.51	+1.81	+1.66	+1.20	+1.90	+2.22	+2.13	+2.06	+1.66	+2.55	+2.43
6	+1.71	+1.47	+1.95	+1.75	+1.25	+1.07	+2.19	+2.06	+1.83	+1.68	+2.49	+2.38
7	+1.46	+1.27	+1.95	+1.82	+1.24	+1.98	+2.17	+1.80	+2.06	+1.83	+3.22	+2.41
8	+1.50	+1.35	+1.95	+1.55	+1.30	+1.13	+1.83	+1.70	+2.21	+2.04	+3.32	+3.18
9	+1.56	+1.46	+1.62	+1.48	+1.44	+1.25	+1.95	+1.80	+2.15	+1.70	+3.24	+3.11
10	+1.62	+1.49	+1.10	+1.62	+1.70	+1.39	+1.99	+1.88	+1.69	+1.48	+3.53	+3.13
11	+1.64	+1.54	+1.18	+1.05	+1.87	+1.71	+2.00	+1.74	+1.56	+1.44	+3.67	+3.37
12	+1.65	+1.51	+1.07	+1.79	+1.88	+1.70	+1.91	+1.75	+1.52	+1.32	+3.37	+3.14
13	+1.64	+1.37	+1.92	+1.79	+1.92	+1.78	+1.98	+1.89	+1.68	+1.33	+3.13	+2.84
14	+1.53	+1.39	+1.92	+1.82	+1.91	+1.77	+2.37	+1.93	+1.69	+1.58	+3.01	+2.80
15	+1.72	+1.54	+1.90	+1.82	+1.77	+1.50	+2.21	+1.64	+1.96	+1.56	+3.00	+2.75
16	+1.61	+1.18	+1.93	+1.69	+1.51	+1.23	+1.76	+1.35	+2.22	+1.96	+2.74	+2.55
17	+1.29	+1.18	+1.68	+1.49	+1.70	+1.23	+1.69	+1.34	+2.17	+2.01	+2.98	+2.63
18	+1.50	+1.26	+1.88	+1.63	+1.69	+1.36	+1.64	+1.38	+2.34	+2.07	+2.89	+2.60
19	+1.60	+1.47	+1.98	+1.86	+1.35	+1.11	+1.46	+1.23	+2.51	+2.32	+3.12	+2.77
20	+1.49	+1.25	+1.92	+1.77	+1.50	+1.13	+1.63	+1.37	+2.51	+2.36	+3.32	+2.98
21	+1.71	+1.44	+1.88	+1.72	+1.61	+1.49	+1.66	+1.50	+2.41	+2.29	+3.32	+3.18
22	+1.73	+1.63	+1.97	+1.72	+1.61	+1.38	+1.66	+1.52	+2.30	+2.17	+3.55	+3.11
23	+1.72	+1.58	+1.97	+1.80	+1.79	+1.59	+2.08	+1.63	+2.37	+2.24	+3.55	+3.14
24	+1.70	+1.55	+1.99	+1.90	+1.79	+1.50	+2.12	+1.75	+2.31	+2.20	+3.19	+3.08
25	+1.73	+1.57	+1.99	+1.75	+1.64	+1.54	+1.75	+1.46	+2.53	+2.30	+3.29	+3.12
26	+1.74	+1.58	+1.83	+1.48	+1.61	+1.49	+1.55	+1.32	+2.84	+2.53	+3.38	+3.12
27	+1.73	+1.62	+1.66	+1.49	+1.61	+1.43	+1.76	+1.32	+2.96	+2.81	+3.82	+3.38
28	+1.77	+1.44	+1.80	+1.67	+1.48	+1.37	+1.80	+1.68	+2.88	+2.65	+3.71	+3.38
29	+1.82	+1.49	+1.88	+1.70	+1.84	+1.46	+1.93	+1.71	+2.79	+2.20	+3.38	+3.30
30	+1.96	+1.79	+1.82	+1.65	+1.82	+1.61	+1.97	+1.82	---	---	+3.43	+3.29
31	+1.15	+1.82	---	---	+1.81	+1.57	+1.95	+1.82	---	---	+3.51	+3.34
MONTH	+1.15	+1.18	+1.50	+1.48	+1.92	+1.72	+2.37	+1.23	+2.96	+1.32	+3.82	+2.17

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 34--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+3.52	+3.32	+2.85	+2.58	+2.06	+1.83	+1.34	+1.19	+.91	+.43	+.50	+.30
2	+3.46	+3.19	+2.78	+2.56	+1.89	+1.74	+1.23	+1.05	+.63	+.47	+.50	+.41
3	+3.18	+2.99	+2.72	+2.38	+1.97	+1.79	+1.47	+1.14	+.71	+.58	+.72	+.51
4	+3.12	+2.97	+2.42	+2.26	+1.95	+1.82	+1.49	+1.25	+.76	+.60	+.67	+.33
5	+3.06	+2.71	+2.41	+2.22	+2.19	+1.81	+1.27	+1.19	+.70	+.42	+.47	+.33
6	+2.73	+2.65	+2.43	+2.31	+2.35	+2.20	+1.37	+1.12	+.60	+.36	+.76	+.37
7	+2.93	+2.73	+2.42	+2.31	+2.38	+2.23	+1.22	+.93	+.54	+.36	+.78	+.58
8	+2.98	+2.82	+2.53	+2.27	+2.30	+2.05	+1.07	+.93	+.56	+.38	+.66	+.55
9	+2.92	+2.74	+2.64	+2.50	+2.13	+1.84	+1.32	+.97	+.79	+.54	+.64	+.53
10	+2.89	+2.78	+2.50	+2.13	+1.95	+1.69	+1.05	+.90	+.60	+.45	+.73	+.54
11	+2.87	+2.75	+2.18	+2.09	+1.85	+1.68	+1.03	+.79	+.65	+.45	+.72	+.36
12	+2.80	+2.57	+2.34	+2.09	+1.85	+1.66	+.94	+.76	+.57	+.37	+.36	+.22
13	+2.57	+2.26	+2.43	+2.25	+1.84	+1.68	+1.08	+.86	+.52	+.31	+.49	+.35
14	+2.69	+2.43	+2.31	+2.04	+1.80	+1.63	+.89	+.76	+.59	+.42	+.49	+.38
15	+2.66	+2.45	+2.08	+1.96	+1.72	+1.50	+1.00	+.81	+.64	+.58	+.48	+.32
16	+2.60	+2.41	+2.09	+1.93	+1.56	+1.42	+.99	+.82	+.77	+.58	+.42	+.32
17	+2.63	+2.52	+2.10	+1.92	+1.73	+1.57	+1.09	+.89	+.77	+.63	+.45	+.30
18	+2.54	+2.43	+2.23	+2.05	+1.67	+1.54	+1.10	+.88	+.72	+.62	+.42	+.30
19	+2.61	+2.43	+2.05	+1.83	+1.80	+1.62	+.91	+.80	+.75	+.60	+.51	+.17
20	+2.66	+2.49	+1.92	+1.83	+1.73	+1.39	+.94	+.74	+.68	+.43	+.30	+.16
21	+2.77	+2.53	+1.89	+1.75	+1.40	+1.27	+.89	+.73	+.60	+.43	+.51	+.31
22	+2.95	+2.78	+1.75	+1.65	+1.32	+1.08	+.82	+.57	+.59	+.34	+.57	+.42
23	+2.82	+2.68	+1.77	+1.65	+1.30	+1.11	+.89	+.60	+.49	+.31	+.52	.07
24	+2.89	+2.69	+1.75	+1.61	+1.59	+1.31	+.87	+.71	+.51	+.31	+.18	.09
25	+2.81	+2.67	+1.72	+1.52	+1.48	+1.27	+1.02	+.73	+.56	+.36	+.48	+.18
26	+3.05	+2.68	+1.96	+1.72	+1.43	+1.26	+1.03	+.85	+.52	+.36	+.78	+.34
27	+3.09	+2.83	+1.95	+1.80	+1.47	+1.16	+1.14	+.83	+.51	+.31	+.83	+.69
28	+2.83	+2.62	+1.85	+1.56	+1.26	+1.06	+.89	+.66	+.93	+.48	+.83	+.56
29	+2.79	+2.62	+1.68	+1.54	+1.26	+1.04	+.86	+.64	+.94	+.56	---	---
30	+3.00	+2.78	+1.83	+1.56	+1.38	+1.18	+.86	+.68	+.74	+.50	---	---
31	---	---	+2.23	+1.83	---	---	+.90	+.64	+.77	+.46	---	---
MONTH	+3.52	+2.26	+2.85	+1.52	+2.38	+1.04	+1.49	+.57	+.94	+.31	+.83	.09

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 35. SITE ID.--391809076174601 PERMIT NUMBER.--HA-88-1040.

LOCATION.--Lat 39°18'09", long 76°17'46", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, confined aquifer well, depth 71 ft; casing diameter 4 in., to 68 ft; screen diameter 4 in. from 68 to 71 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.

DATUM.--Elevation of land surface is 2.99 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 2.92 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF21. Missing data due to recorder malfunction.

PERIOD OF RECORD.--December 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.84 ft above sea level, Oct. 29, 1991; lowest measured, 0.90 ft below sea level, Dec. 19, 1991.

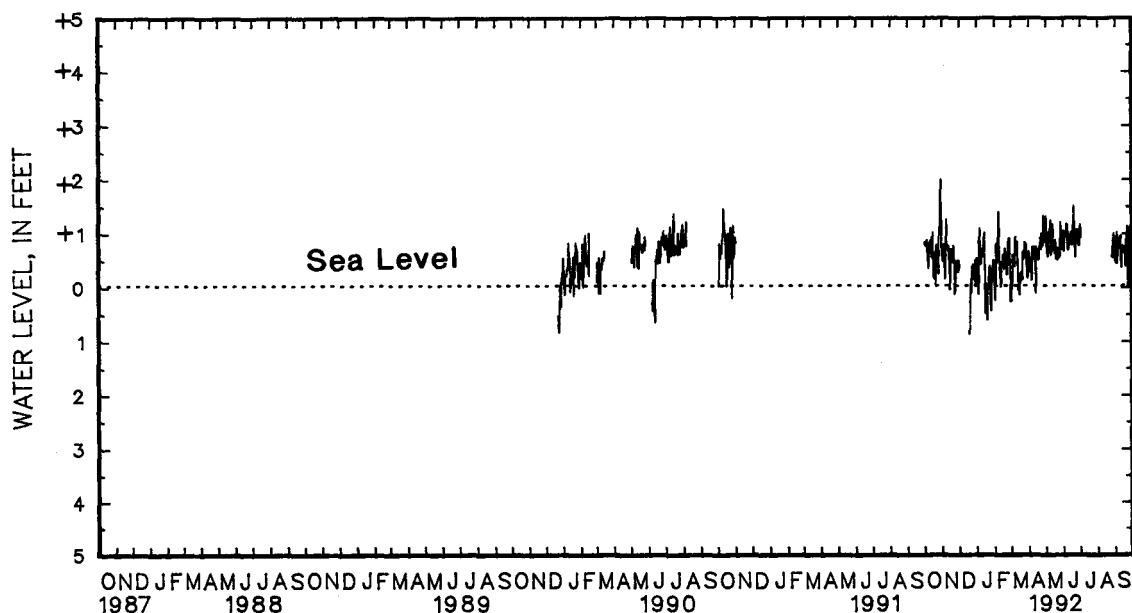
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.37	+.82	+1.31	+.56	+1.13	+.35	+1.19	+.53	+.70	+.07	+1.19	.28
2	+1.68	+.77	+1.23	+.46	---	---	+1.00	+.29	+.66	.26	+.53	.04
3	+1.38	+.76	+1.58	+.64	---	---	+1.38	+.43	+1.19	+.41	+.89	+.13
4	+1.61	+.85	+1.52	+.77	---	---	+1.91	.15	+1.82	+.81	+1.18	+.59
5	+1.66	+.87	+1.18	+.13	---	---	+1.74	+1.09	+1.28	+.45	+1.06	+.50
6	+1.57	+.58	+.87	+.17	---	---	+1.67	+1.01	+1.33	+.64	+1.11	+.46
7	+1.09	+.33	+2.07	+.56	---	---	+1.35	+.46	+1.78	+.99	+1.67	+.38
8	+1.35	+.54	+2.04	+1.26	---	---	+1.03	+.41	+2.13	+1.41	+1.67	+.94
9	+1.41	+.76	+1.53	+.68	---	---	+1.22	+.61	+1.72	+.75	+1.33	+.69
10	+1.57	+.81	+1.27	+.72	---	---	+1.33	+.69	+.85	+.25	+1.91	+.79
11	+1.50	+.84	+1.31	+.74	---	---	+1.23	+.56	+.79	+.16	+1.99	+.84
12	+1.53	+.86	+1.24	+.75	---	---	+1.32	+.62	+.67	.01	+1.17	+.51
13	+1.52	+.55	+1.26	+.38	---	---	+1.36	+.81	+1.12	+.45	+.55	.07
14	+1.56	+.66	+.75	.06	---	---	+2.36	+1.01	+1.13	+.42	+1.00	+.14
15	+1.74	+1.02	+1.29	+.55	---	---	+1.23	+.06	+1.38	+.40	+.90	+.02
16	+1.34	+.17	+1.47	+.70	---	---	+.81	.52	+1.42	+.59	+.47	.16
17	+.70	+.14	+1.32	+.59	---	---	+.90	.39	+1.07	+.32	+1.21	+.24
18	+.95	+.62	+1.24	+.46	---	---	+.51	.33	+1.26	+.39	+.91	+.11
19	+1.20	+.26	+1.50	+.45	.24	.90	+.28	.64	+1.51	+.71	+1.22	+.27
20	+.91	+.04	+1.38	+.47	+.64	.36	+.77	.05	+1.39	+.62	+1.36	+.14
21	+1.46	+.66	+1.40	+.76	+.75	+.13	+.95	.05	+1.19	+.50	+1.33	+.64
22	+1.42	+.77	+1.16	+.47	+.92	.13	+1.00	+.16	+.93	+.23	+1.77	+.51
23	+1.38	+.66	+.90	.15	+1.26	+.38	+1.82	+.38	+1.18	+.49	+1.63	+.55
24	+1.41	+.61	+.96	.10	+.98	+.14	+1.72	+.32	+1.10	+.41	+1.23	+.64
25	+1.12	+.23	+1.08	+.46	+1.02	+.41	+.32	.35	+1.54	+.80	+1.53	+.84
26	+1.77	+1.09	+1.16	+.28	+1.00	+.28	+.32	.46	+1.48	+.89	+1.35	+.67
27	+1.89	+1.03	+1.07	+.29	+.99	+.19	+.94	+.06	+1.65	+.91	+1.54	+.79
28	+2.32	+1.60	+1.14	+.47	+.73	+.11	+.89	+.24	+1.19	+.47	+.93	+.23
29	+2.84	+2.00	+.91	+.27	+1.25	+.49	+1.21	+.39	+1.07	.30	+.64	+.16
30	+2.58	+1.35	+1.86	+.48	+.83	+.04	+1.19	+.49	---	---	+1.00	+.27
31	+1.38	+.73	---	---	+1.04	+.05	+1.10	+.48	---	---	+1.22	+.55
MONTH	+2.84	+.04	+2.07	.15	+1.26	.90	+2.36	.64	+2.13	.30	+1.99	.28

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 35--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.44	+ .65	+1.87	+ .91	+1.70	+ .77	+1.89	+ .92	---	---	+1.35	+ .44
2	+1.03	+ .52	+1.92	+1.01	+1.54	+ .65	---	---	---	---	+1.61	+ .69
3	+ .83	+ .27	+1.52	+ .63	+1.84	+ .94	---	---	---	---	+1.71	+1.02
4	+1.18	+ .47	+1.37	+ .56	+1.82	+1.00	---	---	---	---	+1.43	+ .41
5	+ .89	+ .11	+1.57	+ .63	+1.89	+ .98	---	---	---	---	+1.17	+ .62
6	+ .78	+ .21	+1.66	+ .98	+1.91	+1.17	---	---	---	---	+1.65	+ .90
7	+1.29	+ .50	+1.58	+1.08	+1.94	+1.14	---	---	---	---	+1.63	+ .77
8	+1.48	+ .74	+1.89	+ .97	+1.78	+ .86	---	---	---	---	+1.40	+ .79
9	+1.50	+ .70	+2.05	+1.24	+1.58	+ .68	---	---	---	---	+1.41	+ .79
10	+1.41	+ .69	+1.56	+ .58	+1.47	+ .69	---	---	---	---	+1.67	+ .94
11	+1.37	+ .73	+1.23	+ .68	+1.58	+ .81	---	---	---	---	+1.26	+ .53
12	+1.24	+ .52	+1.67	+1.17	+1.76	+ .84	---	---	---	---	+1.12	+ .35
13	+ .95	+ .14	+1.96	+1.00	+1.81	+1.01	---	---	---	---	+1.37	+ .72
14	+1.49	+ .74	+1.84	+ .72	+1.82	+1.02	---	---	---	---	+1.39	+ .76
15	+1.36	+ .50	+1.55	+ .69	+1.75	+ .96	---	---	---	---	+1.30	+ .64
16	+1.35	+ .50	+1.50	+ .68	+1.64	+ .78	---	---	---	---	+1.42	+ .73
17	+1.43	+ .63	+1.48	+ .62	+1.97	+1.14	---	---	---	---	+1.38	+ .72
18	+1.27	+ .50	+1.70	+ .87	+1.87	+1.20	---	---	---	---	+1.53	+ .74
19	+1.48	+ .69	+1.21	+ .51	+2.08	+1.51	---	---	---	---	+1.60	+ .37
20	+1.53	+ .73	+1.33	+ .72	+1.76	+ .89	---	---	---	---	+1.47	+ .49
21	+1.70	+ .79	+1.33	+ .65	+1.25	+ .82	---	---	---	---	+1.72	+1.00
22	+1.81	+1.00	+1.06	+ .50	+1.27	+ .54	---	---	---	---	+1.70	+1.13
23	+1.28	+ .70	+1.25	+ .69	+1.65	+ .95	---	---	---	---	+1.51	+ .04
24	+1.49	+ .90	+1.28	+ .65	+2.05	+1.07	---	---	---	---	+1.07	+ .01
25	+1.30	+ .77	+1.52	+ .55	+1.67	+1.00	---	---	---	---	+1.42	+ .64
26	+2.00	+1.33	+1.82	+1.21	+1.76	+1.06	---	---	+1.41	+ .56	+1.96	+ .43
27	+2.00	+1.06	+1.65	+1.03	+1.90	+ .83	---	---	+1.51	+ .53	+1.86	+1.13
28	+1.44	+ .83	+1.61	+ .69	+1.53	+ .77	---	---	+2.49	+ .99	+1.50	+ .69
29	+1.65	+1.13	+1.48	+ .77	+1.70	+ .77	---	---	+2.03	+ .71	---	---
30	+2.21	+1.31	+1.72	+ .95	+1.97	+1.16	---	---	+1.86	+ .61	---	---
31	---	---	+2.41	+1.05	---	---	---	---	+1.75	+ .60	---	---
MONTH	+2.21	+ .14	+2.41	+ .50	+2.08	+ .54	+1.89	+ .92	+2.49	+ .53	+1.96	+ .04

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 36. SITE ID.--391809076174602 PERMIT NUMBER.--HA-88-1041.
 LOCATION.--Lat 39°18'09", Long 76°17'46", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 52.5 ft; casing diameter 4 in.,
 to 47.5 ft; screen diameter 4 in. from 47.5 to 52.5 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.
 DATUM.--Elevation of land surface is 2.99 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.65 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF22. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--December 1989 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.77 ft above sea level,
 April 1, 24, 25, and 26, 1991; lowest measured, 0.60 ft above sea level, Dec. 25, and 26, 1989.

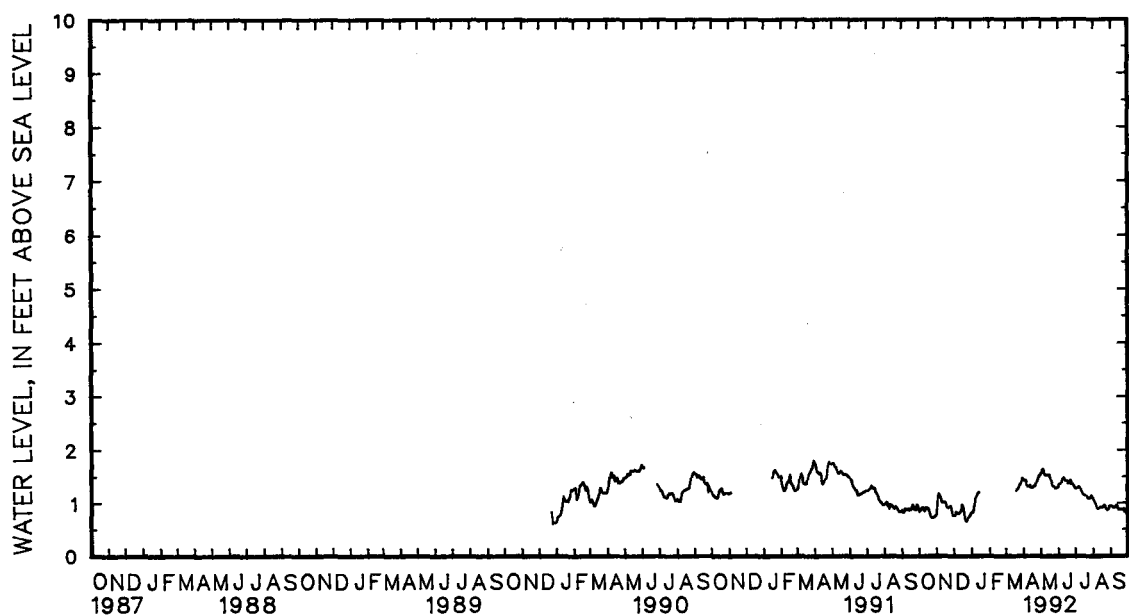
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	.86	.82	1.01	.87	.75	.75	.81	.81	---	---	---	---
2	.86	.85	1.12	1.01	.75	.75	.81	.81	---	---	---	---
3	.88	.86	1.17	1.12	.82	.75	.86	.81	---	---	---	---
4	.89	.88	1.18	1.17	.84	.82	.95	.86	---	---	---	---
5	.91	.89	1.18	1.17	.84	.81	1.01	.95	---	---	---	---
6	.92	.91	1.17	1.14	.83	.81	1.08	1.01	---	---	---	---
7	.92	.91	1.14	1.12	.81	.80	1.11	1.08	---	---	---	---
8	.91	.88	1.12	1.08	.80	.79	1.12	1.11	---	---	---	---
9	.88	.85	1.08	1.03	.80	.79	1.15	1.13	---	---	---	---
10	.85	.84	1.03	1.00	.82	.80	1.18	1.15	---	---	---	---
11	.88	.85	1.01	1.00	.82	.82	1.19	1.18	---	---	---	---
12	.91	.88	1.01	1.01	.85	.82	1.19	1.19	---	---	---	---
13	.91	.91	1.02	1.01	.90	.85	1.20	1.19	---	---	---	---
14	.91	.89	1.02	1.01	.96	.90	1.29	1.20	---	---	---	---
15	.89	.89	1.01	1.00	.97	.96	---	---	---	---	---	---
16	.90	.89	1.00	1.00	.97	.94	---	---	---	---	---	---
17	.89	.88	1.00	.96	.94	.90	---	---	---	---	---	---
18	.88	.82	.96	.92	.90	.84	---	---	---	---	---	---
19	.82	.80	.92	.90	.84	.75	---	---	---	---	1.25	1.23
20	.80	.75	.90	.90	.75	.66	---	---	---	---	1.26	1.25
21	.75	.72	.91	.90	.66	.64	---	---	---	---	1.26	1.26
22	.72	.71	.92	.91	.64	.64	---	---	---	---	1.29	1.26
23	.71	.71	.93	.92	.68	.64	---	---	---	---	1.33	1.29
24	.71	.71	.94	.93	.71	.68	---	---	---	---	1.34	1.33
25	.73	.71	.94	.94	.72	.71	---	---	---	---	1.34	1.34
26	.73	.72	.94	.90	.74	.72	---	---	---	---	1.39	1.34
27	.73	.73	.89	.83	.74	.74	---	---	---	---	1.46	1.39
28	.75	.73	.83	.78	.74	.74	---	---	---	---	1.47	1.46
29	.75	.75	.78	.75	.80	.74	---	---	---	---	1.47	1.46
30	.76	.75	.75	.75	.83	.80	---	---	---	---	1.46	1.44
31	.87	.76	---	---	.83	.81	---	---	---	---	1.44	1.43
MONTH	.92	.71	1.18	.75	.97	.64	1.29	.81	---	---	1.47	1.23

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 36--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.43	1.42	1.59	1.56	1.35	1.31	1.27	1.27	1.11	1.07	.95	.94
2	1.43	1.42	1.63	1.59	1.36	1.35	1.28	1.27	1.07	1.04	.94	.93
3	1.43	1.43	1.64	1.63	1.36	1.36	1.27	1.27	1.04	1.01	.93	.93
4	1.43	1.43	1.65	1.64	1.36	1.36	1.28	1.27	1.01	1.00	.93	.93
5	1.43	1.39	1.64	1.60	1.41	1.36	1.30	1.28	1.00	.98	.93	.90
6	1.39	1.34	1.60	1.55	1.44	1.41	1.31	1.30	.98	.94	.90	.90
7	1.34	1.32	1.55	1.52	1.46	1.44	1.31	1.30	.94	.90	.90	.90
8	1.32	1.31	1.52	1.51	1.47	1.46	1.30	1.28	.90	.88	.91	.90
9	1.31	1.30	1.53	1.52	1.48	1.47	1.28	1.27	.88	.88	.93	.91
10	1.31	1.30	1.54	1.53	1.48	1.47	1.27	1.26	.89	.88	.95	.93
11	1.33	1.31	1.54	1.53	1.47	1.45	1.26	1.23	.91	.89	.96	.95
12	1.34	1.33	1.53	1.52	1.44	1.42	1.23	1.20	.92	.91	.95	.93
13	1.34	1.30	1.53	1.52	1.42	1.41	1.20	1.18	.92	.91	.93	.90
14	1.30	1.29	1.54	1.53	1.41	1.41	1.18	1.16	.91	.91	.90	.88
15	1.29	1.28	1.54	1.53	1.42	1.41	1.16	1.15	.91	.90	.88	.86
16	1.28	1.28	1.53	1.49	1.41	1.39	1.15	1.14	.91	.90	.86	.86
17	1.30	1.28	1.49	1.45	1.39	1.37	1.14	1.13	.92	.91	.86	.86
18	1.31	1.30	1.45	1.43	1.37	1.36	1.13	1.13	.94	.92	.87	.86
19	1.31	1.31	1.43	1.40	1.41	1.37	1.13	1.13	.95	.94	.88	.87
20	1.31	1.31	1.39	1.36	1.43	1.41	1.13	1.12	.95	.95	.88	.87
21	1.34	1.31	1.36	1.33	1.44	1.43	1.12	1.12	.95	.95	.87	.86
22	1.38	1.34	1.33	1.32	1.44	1.40	1.12	1.10	.95	.93	.88	.86
23	1.41	1.38	1.32	1.31	1.40	1.36	1.10	1.08	.93	.90	.89	.88
24	1.44	1.41	1.31	1.31	1.36	1.35	1.08	1.08	.90	.88	.88	.85
25	1.47	1.44	1.31	1.29	1.35	1.35	1.08	1.08	.88	.86	.84	.82
26	1.50	1.47	1.29	1.27	1.35	1.35	1.10	1.08	.86	.86	.82	.82
27	1.52	1.50	1.27	1.27	1.35	1.34	1.13	1.10	.87	.86	.84	.82
28	1.54	1.52	1.28	1.27	1.34	1.32	1.14	1.13	.93	.87	.88	.84
29	1.54	1.53	1.28	1.28	1.32	1.29	1.14	1.13	.93	.93	---	---
30	1.56	1.54	1.28	1.28	1.29	1.27	1.13	1.11	.94	.93	---	---
31	---	---	1.31	1.28	---	---	1.11	1.10	.95	.94	---	---
MONTH	1.56	1.28	1.65	1.27	1.48	1.27	1.31	1.08	1.11	.86	.96	.82

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 37. SITE ID.--391809076174603 PERMIT NUMBER.--HA-88-1042.
 LOCATION.--Lat 39°18'09", long 76°17'46", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 4 in., to 16 ft;
 screen diameter 4 in. from 16 to 19 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Dec. 21, 1989 to current year.
 DATUM.--Elevation of land surface is 3.10 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.68 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF23. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--December 1989 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.47 ft above sea level, March 11, 1992;
 lowest measured, 1.05 ft below sea level, Oct. 31, 1991.

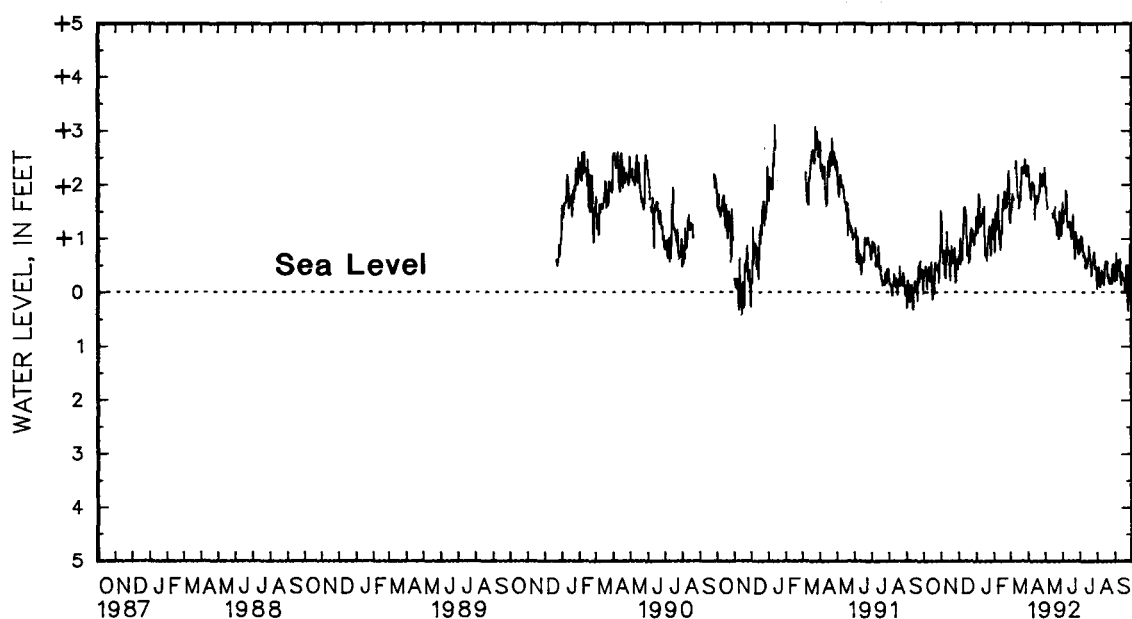
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+ .74	+ .22	+2.02	+1.52	+ .96	+ .65	+1.74	+1.41	+1.47	+1.02	+ .85	+ .02
2	+ .89	+ .40	+1.91	+1.33	+ .86	+ .52	+1.57	+1.26	+1.18	+ .73	+ .60	+ .11
3	+ .69	+ .39	+1.31	+ .75	+1.66	+ .76	+1.82	+1.34	+1.60	+1.14	+ .49	+ .16
4	+ .82	+ .39	+ .99	+ .62	+1.49	+1.01	+2.15	+1.10	+1.94	+1.48	+ .66	+ .41
5	+ .86	+ .48	+ .90	+ .53	+1.00	+ .51	+2.15	+1.84	+1.82	+1.10	+ .54	+ .27
6	+ .85	+ .34	+1.13	+ .68	+1.19	+ .80	+2.03	+1.74	+1.50	+1.19	+ .46	+ .16
7	+ .39	+ .05	+1.11	+ .77	+1.17	+ .60	+1.99	+1.32	+1.78	+1.39	+2.63	+ .13
8	+ .62	+ .21	+1.07	+ .31	+1.25	+ .85	+1.54	+1.23	+1.98	+1.65	+2.68	+2.25
9	+ .69	+ .37	+ .64	+ .26	+1.39	+1.01	+1.71	+1.40	+1.81	+1.07	+3.00	+2.24
10	+ .78	+ .40	+1.48	+ .56	+1.72	+1.11	+1.75	+1.46	+1.09	+ .69	+3.35	+2.72
11	+ .78	+ .47	+1.51	+1.13	+1.83	+1.59	+1.75	+1.29	+ .84	+ .57	+3.47	+2.74
12	+ .75	+ .44	+1.23	+ .70	+1.83	+1.40	+1.70	+1.34	+ .76	+ .39	+2.76	+2.40
13	+ .76	+ .19	+1.01	+ .72	+1.84	+1.56	+1.74	+1.51	+ .98	+ .48	+2.40	+2.02
14	+ .65	+ .27	+1.03	+ .77	+1.76	+1.44	+2.50	+1.59	+ .96	+ .63	+2.44	+1.99
15	+ .92	+ .56	+ .98	+ .76	+1.46	+1.03	+1.91	+1.05	+1.18	+ .56	+2.38	+1.86
16	+ .65	+ .13	+1.00	+ .51	+1.10	+ .66	+1.38	+ .68	+1.41	+1.13	+1.87	+1.64
17	+ .14	+ .11	+ .57	+ .21	+1.49	+ .67	+1.39	+ .67	+1.16	+ .86	+2.38	+1.81
18	+ .51	+ .14	+ .98	+ .58	+1.39	+ .85	+1.13	+ .75	+1.34	+ .88	+2.07	+1.70
19	+ .69	+ .30	+1.12	+ .86	+ .83	+ .53	+ .92	+ .58	+1.48	+1.14	+2.48	+2.03
20	+ .42	+ .03	+ .97	+ .63	+1.23	+ .62	+1.29	+ .84	+1.41	+1.04	+2.68	+2.00
21	+ .85	+ .39	+ .89	+ .54	+1.33	+1.09	+1.37	+ .91	+1.20	+ .89	+2.64	+2.33
22	+ .83	+ .55	+1.11	+ .55	+1.37	+ .85	+1.40	+1.02	+ .96	+ .67	+2.97	+2.21
23	+ .78	+ .46	+1.09	+ .65	+1.62	+1.19	+2.01	+1.16	+1.04	+ .74	+2.96	+2.24
24	+ .80	+ .42	+1.10	+ .82	+1.60	+1.00	+2.02	+1.23	+ .90	+ .61	+2.52	+2.21
25	+ .87	+ .45	+1.09	+ .60	+1.43	+1.15	+1.22	+ .82	+1.18	+ .80	+2.70	+2.35
26	+ .86	+ .45	+ .85	+ .17	+1.40	+1.06	+1.07	+ .68	+1.36	+1.04	+2.60	+2.28
27	+ .88	+ .51	+ .65	+ .21	+1.39	+ .97	+1.51	+ .78	+1.44	+1.11	+3.03	+2.47
28	+ .89	+ .18	+ .80	+ .61	+1.16	+ .88	+1.50	+1.20	+1.10	+ .71	+2.70	+2.21
29	+1.04	+ .52	+ .93	+ .48	+1.67	+1.08	+1.72	+1.25	+ .92	+ .04	+2.34	+2.16
30	+1.21	+ .74	+ .83	+ .43	+1.52	+1.09	+1.70	+1.36	---	---	+2.53	+2.19
31	+1.47	+ .94	---	---	+1.63	+1.07	+1.62	+1.32	---	---	+2.70	+2.36
MONTH	+1.47	+ .13	+2.02	+ .17	+1.84	+ .51	+2.50	+ .58	+1.98	+ .04	+3.47	+ .02

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA Fd 37--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+2.78	+2.35	+2.50	+1.97	+1.89	+1.41	+1.34	+0.95	+0.99	+0.06	+0.60	+0.19
2	+2.55	+2.22	+2.45	+1.96	+1.71	+1.29	+1.09	+0.74	+0.71	+0.30	+0.74	+0.41
3	+2.22	+1.97	+2.16	+1.71	+1.88	+1.44	+1.59	+1.03	+0.77	+0.41	+0.94	+0.72
4	+2.38	+2.02	+1.96	+1.60	+1.84	+1.46	+1.57	+1.04	+0.86	+0.46	+0.88	+0.23
5	+2.22	+1.76	+2.05	+1.56	+2.09	+1.46	+1.30	+0.99	+0.75	+0.18	+0.63	+0.31
6	+1.97	+1.73	---	---	+2.23	+1.89	+1.44	+0.89	+0.64	+0.10	+1.06	+0.39
7	+2.32	+1.90	---	---	+2.26	+1.87	+1.19	+0.65	+0.57	+0.17	+1.08	+0.59
8	+2.42	+2.06	---	---	+2.11	+1.59	+1.00	+0.73	+0.61	+0.17	+0.87	+0.58
9	+2.38	+1.96	---	---	+1.88	+1.33	+1.43	+0.66	+0.98	+0.40	+0.84	+0.54
10	+2.34	+2.02	---	---	+1.69	+1.20	+0.97	+0.65	+0.63	+0.25	+0.97	+0.61
11	+2.30	+2.00	---	---	+1.66	+1.20	+1.00	+0.46	+0.77	+0.34	+0.87	+0.31
12	+2.19	+1.79	---	---	+1.72	+1.23	+0.89	+0.44	+0.53	+0.17	+0.49	+0.13
13	+1.79	+1.35	---	---	+1.72	+1.31	+1.12	+0.61	+0.60	+0.13	+0.67	+0.37
14	+2.23	+1.81	+2.04	+1.47	+1.67	+1.26	+0.82	+0.46	+0.75	+0.31	+0.67	+0.35
15	+2.14	+1.69	+1.76	+1.39	+1.57	+1.13	+1.02	+0.60	+0.77	+0.57	+0.66	+0.24
16	+2.06	+1.66	+1.82	+1.42	+1.41	+0.99	+0.94	+0.63	+0.97	+0.57	+0.59	+0.26
17	+2.12	+1.78	+1.83	+1.39	+1.69	+1.24	+1.21	+0.86	+0.97	+0.56	+0.62	+0.23
18	+2.01	+1.70	+1.99	+1.60	+1.57	+1.25	+1.18	+0.71	+0.85	+0.57	+0.57	+0.22
19	+2.19	+1.78	+1.60	+1.29	+1.76	+1.45	+0.93	+0.62	+0.90	+0.54	+0.73	+0.00
20	+2.24	+1.85	+1.62	+1.34	+1.59	+0.98	+0.98	+0.52	+0.79	+0.27	+0.47	+0.06
21	+2.38	+1.87	+1.58	+1.22	+1.09	+0.90	+0.91	+0.52	+0.73	+0.32	+0.80	+0.47
22	+2.59	+2.23	+1.31	+1.07	+1.06	+0.61	+0.80	+0.30	+0.73	+0.18	+0.81	+0.48
23	+2.24	+1.98	+1.41	+1.13	+1.14	+0.79	+0.93	+0.50	+0.57	+0.16	+0.71	+0.33
24	+2.39	+2.09	+1.38	+1.07	+1.58	+1.12	+0.91	+0.57	+0.66	+0.19	+0.27	+0.35
25	+2.24	+1.98	+1.49	+0.99	+1.35	+0.96	+1.19	+0.71	+0.74	+0.25	+0.67	+0.22
26	+2.74	+2.13	+1.80	+1.51	+1.36	+0.98	+1.12	+0.74	+0.65	+0.23	+1.20	+0.31
27	+2.76	+2.20	+1.75	+1.41	+1.45	+0.80	+1.29	+0.61	+0.65	+0.16	+1.20	+0.89
28	+2.31	+2.00	+1.65	+1.06	+1.12	+0.71	+0.91	+0.44	+1.42	+0.48	+1.16	+0.60
29	+2.38	+2.01	+1.46	+1.06	+1.20	+0.70	+0.94	+0.43	+1.34	+0.52	---	---
30	+2.76	+2.32	+1.66	+1.18	+1.41	+0.97	+0.94	+0.48	+1.09	+0.48	---	---
31	---	---	+2.31	+1.67	---	---	+1.00	+0.45	+1.10	+0.37	---	---
MONTH	+2.78	+1.35	+2.50	+0.99	+2.26	+0.61	+1.59	+0.30	+1.42	+0.06	+1.20	+0.35

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 38. SITE ID.--391826076173101. PERMIT NUMBER.--HA-88-1067.

LOCATION.--Lat 39°18'26", Long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area, Aberdeen Proving Ground.

Owner: U.S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT

WELL CHARACTERISTICS.--Drilled, observation, confined aquifer well, depth 75 ft; casing diameter 4 in., to 72 ft; screen diameter 4 in. from 72 to 75 ft.

INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.

DATUM.--Elevation of land surface is 6.51 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of casing, 3.09 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well JF111. Missing data due to recorder malfunction.

PERIOD OF RECORD.--January 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.00 ft above sea level, Nov. 1, 1991; lowest measured, 1.00 ft below sea level, Feb. 26, 1990.

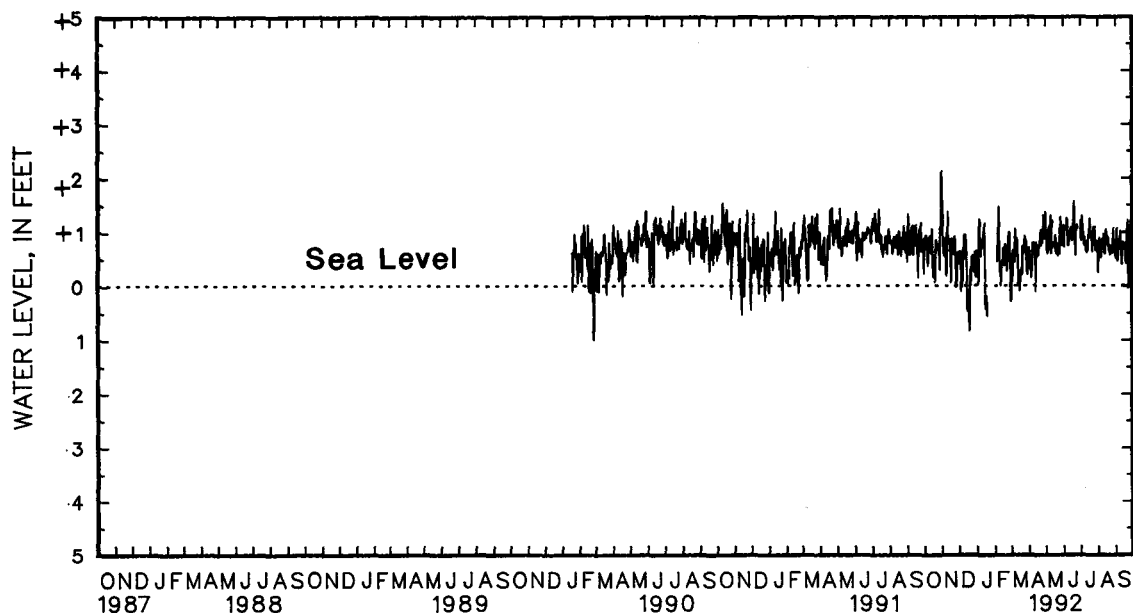
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	+1.37	+0.89	+3.00	+2.13	+1.21	+0.63	+1.26	+0.65	---	---	+1.19	.28
2	+1.68	+0.82	+2.70	+1.52	+0.99	+0.41	+1.04	+0.45	---	---	+0.54	+0.02
3	+1.36	+0.81	+1.52	+0.84	+2.01	+0.64	+1.46	+0.56	---	---	+0.88	+0.19
4	+1.60	+0.93	+1.34	+0.66	+1.28	+0.51	+2.07	+0.03	---	---	+1.19	+0.66
5	+1.65	+0.93	+1.24	+0.57	+0.64	.10	+1.99	+1.24	+1.41	+0.46	+1.04	+0.58
6	+1.58	+0.68	+1.60	+0.76	+1.06	+0.22	+1.79	+1.18	+1.29	+0.67	+1.08	+0.54
7	+1.07	+0.37	+1.54	+0.89	+1.06	.01	+1.62	+0.61	+1.78	+1.03	+1.70	+0.45
8	+1.32	+0.60	+1.32	+0.19	+1.16	+0.45	+1.10	+0.56	+2.17	+1.47	+1.67	+1.05
9	+1.39	+0.83	+0.89	+0.24	+1.28	+0.70	+1.31	+0.78	+1.81	+0.78	+1.34	+0.78
10	+1.55	+0.86	+2.19	+0.66	+1.45	+0.50	+1.43	+0.85	+0.87	+0.26	+1.97	+0.88
11	+1.55	+0.91	+2.19	+1.38	+1.45	+0.95	+1.40	+0.73	+0.73	+0.18	+2.13	+0.88
12	+1.52	+0.93	+1.61	+0.79	+1.42	+0.68	+1.40	+0.80	+0.62	+0.00	+1.21	+0.58
13	+1.52	+0.61	+1.33	+0.84	+1.47	+0.95	+1.45	+0.98	+1.08	+0.39	+0.58	+0.02
14	+1.51	+0.72	+1.37	+0.86	+1.26	+0.68	+2.56	+1.16	+1.10	+0.46	+1.02	+0.20
15	+1.77	+1.06	+1.30	+0.86	+0.84	+0.18	+1.48	+0.19	+1.34	+0.44	+0.90	+0.11
16	+1.31	+0.18	+1.32	+0.50	+0.39	.47	+0.91	.42	+1.38	+0.70	+0.47	.09
17	+0.67	+0.16	+0.80	+0.06	+0.97	.25	+0.98	.38	+1.00	+0.38	+1.24	+0.29
18	+0.95	+0.56	+1.34	+0.69	+0.79	.10	+0.56	.19	+1.21	+0.44	+0.88	+0.20
19	+1.17	+0.36	+1.52	+0.88	.09	.84	+0.31	.55	+1.47	+0.78	+1.22	+0.32
20	+0.88	+0.07	+1.38	+0.74	+0.69	.27	---	---	+1.37	+0.70	+1.37	+0.22
21	+1.45	+0.71	+1.28	+0.61	+0.80	+0.30	---	---	+1.15	+0.58	+1.32	+0.74
22	+1.39	+0.85	+1.55	+0.60	+0.96	+0.01	---	---	+0.89	+0.28	+1.82	+0.60
23	+1.35	+0.74	+1.42	+0.63	+1.32	+0.53	---	---	+1.15	+0.55	+1.67	+0.62
24	+1.37	+0.68	+1.49	+0.92	+1.20	+0.29	---	---	+1.08	+0.47	+1.26	+0.71
25	+1.47	+0.72	+1.32	+0.60	+1.08	+0.57	---	---	+1.54	+0.86	+1.56	+0.93
26	+1.39	+0.68	+1.03	.02	+1.06	+0.42	---	---	+1.49	+0.96	+1.36	+0.72
27	+1.47	+0.78	+1.01	+0.05	+1.06	+0.34	---	---	+1.70	+1.00	+1.57	+0.85
28	+1.47	+0.30	+1.12	+0.61	+0.77	+0.25	---	---	+1.18	+0.54	+0.96	+0.28
29	+1.75	+1.07	+1.22	+0.42	+1.32	+0.63	---	---	+1.06	.28	+0.63	+0.22
30	+1.95	+1.12	+1.14	+0.43	+0.92	+0.17	---	---	---	---	+0.96	+0.34
31	+2.38	+1.65	---	---	+1.12	+0.17	---	---	---	---	+1.21	+0.61
MONTH	+2.38	+0.07	+3.00	.02	+2.01	.84	+2.56	.55	+2.17	.28	+2.13	.28

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 38--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.44	+ .71	+1.85	+ .96	+1.67	+ .81	+1.87	+ .90	+1.52	+ .25	+1.29	+ .52
2	+1.02	+ .56	+1.90	+1.03	+1.50	+ .73	+1.45	+ .85	+1.44	+ .64	+1.54	+ .77
3	+ .82	+ .32	+1.48	+ .66	+1.83	+1.04	+2.20	+1.30	+1.53	+ .84	+1.74	+1.07
4	+1.16	+ .52	+1.30	+ .61	+1.82	+1.10	+1.96	+1.09	+1.63	+ .89	+1.41	+ .46
5	+ .87	+ .15	+1.53	+ .67	+1.92	+1.08	+1.85	+1.06	+1.42	+ .61	+1.13	+ .66
6	+ .75	+ .27	+1.65	+1.02	+1.90	+1.26	+1.94	+ .99	+1.34	+ .53	+1.67	+ .85
7	+1.28	+ .56	+1.56	+1.12	+1.93	+1.23	+1.57	+ .76	+1.28	+ .64	+1.62	+ .83
8	+1.48	+ .80	+1.89	+1.00	+1.75	+ .94	+1.41	+ .90	+1.32	+ .76	+1.36	+ .83
9	+1.48	+ .75	+2.06	+1.30	+1.53	+ .75	+2.05	+ .76	+1.85	+ .87	+1.38	+ .86
10	+1.38	+ .75	+1.50	+ .61	+1.42	+ .76	+1.41	+ .79	+1.38	+ .79	+1.74	+1.01
11	+1.35	+ .80	+1.17	+ .72	+1.55	+ .89	+1.51	+ .64	+1.65	+ .96	+1.31	+ .56
12	+1.22	+ .57	+1.62	+1.21	+1.75	+ .91	+1.37	+ .63	+1.22	+ .68	+1.08	+ .40
13	+ .99	+ .10	---	---	+1.79	+1.08	+1.74	+ .83	+1.31	+ .60	+1.33	+ .78
14	+1.47	+ .81	+1.83	+ .80	+1.81	+1.09	+1.35	+ .67	+1.52	+ .76	+1.35	+ .81
15	+1.32	+ .56	+1.54	+ .79	+1.74	+1.00	+1.67	+ .94	+1.46	+1.05	+1.32	+ .69
16	+1.31	+ .56	+1.49	+ .77	+1.61	+ .85	+1.41	+ .93	+1.63	+1.00	+1.37	+ .77
17	+1.37	+ .69	+1.46	+ .70	+1.99	+1.21	+1.84	+1.25	+1.58	+ .87	+1.37	+ .76
18	+1.23	+ .58	+1.69	+ .94	+1.86	+1.26	+1.78	+1.03	+1.48	+ .91	+1.44	+ .78
19	+1.45	+ .76	+1.16	+ .60	+2.11	+1.57	+1.63	+1.00	+1.49	+ .89	+1.60	+ .42
20	+1.50	+ .78	+1.31	+ .79	+1.77	+ .96	+1.64	+ .89	+1.37	+ .67	+1.38	+ .54
21	+1.69	+ .84	+1.30	+ .72	+1.24	+ .87	+1.58	+ .87	+1.39	+ .75	+1.73	+1.06
22	+1.81	+1.03	+1.02	+ .56	+1.25	+ .57	+1.44	+ .64	+1.42	+ .58	+1.69	+1.21
23	+1.24	+ .75	+1.23	+ .75	+1.64	+1.01	+1.55	+1.09	+1.23	+ .60	+1.49	+ .04
24	+1.47	+ .94	+1.29	+ .70	+2.10	+1.13	+1.54	+ .87	+1.38	+ .74	+1.02	+ .04
25	+1.29	+ .81	+1.56	+ .60	+1.65	+1.07	+1.87	+ .97	+1.52	+ .72	+1.37	+ .73
26	+2.04	+1.31	+1.85	+1.28	---	---	+1.68	+1.09	+1.38	+ .67	+1.94	+ .50
27	+2.03	+1.10	+1.64	+1.11	---	---	+1.91	+ .76	+1.47	+ .62	+1.82	+1.20
28	+1.41	+ .88	+1.61	+ .76	---	---	+1.44	+ .66	+2.48	+1.07	+1.58	+ .75
29	+1.62	+1.15	+1.47	+ .81	---	---	+1.57	+ .73	+2.19	+ .79	---	---
30	+2.26	+1.37	+1.71	+1.02	+1.96	+1.21	+1.58	+ .83	+1.85	+ .71	---	---
31	---	---	+2.50	+1.12	---	---	+1.71	+ .76	+1.82	+ .69	---	---
MONTH	+2.26	.10	+2.50	+ .56	+2.11	+ .57	+2.20	+ .63	+2.48	+ .25	+1.94	.04

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 39. SITE ID.--391826076173102 PERMIT NUMBER.--HA-88-1068.
 LOCATION.--Lat 39°18'26", long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.
 WELL CHARACTERISTICS.--Drilled, observation, confining unit well, depth 50 ft; casing diameter 4 in., to 47 ft;
 screen diameter 4 in. from 47 to 50 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.
 DATUM.--Elevation of land surface is 6.77 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.42 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF112. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.32 ft above sea level, Jan. 13, 1991;
 lowest measured, 0.84 ft above sea level, Sept. 26, 27, and 28, 1992.

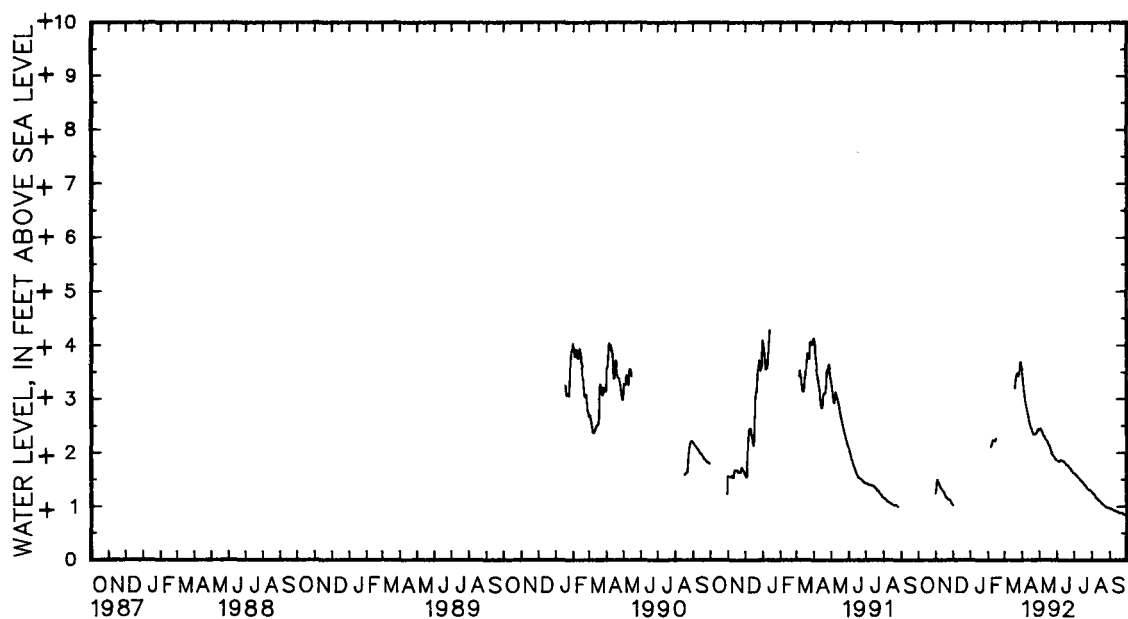
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.39	1.29	1.03	1.02	---	---	---	---	---	---
2	---	---	1.49	1.39	---	---	---	---	---	---	---	---
3	---	---	1.51	1.49	---	---	---	---	---	---	---	---
4	---	---	1.51	1.49	---	---	---	---	---	---	---	---
5	---	---	1.49	1.44	---	---	---	---	2.13	2.11	---	---
6	---	---	1.44	1.42	---	---	---	---	2.15	2.13	---	---
7	---	---	1.42	1.40	---	---	---	---	2.19	2.15	---	---
8	---	---	1.40	1.37	---	---	---	---	2.23	2.19	---	---
9	---	---	1.37	1.34	---	---	---	---	2.26	2.23	---	---
10	---	---	1.34	1.33	---	---	---	---	2.25	2.23	---	---
11	---	---	1.33	1.32	---	---	---	---	2.24	2.23	---	---
12	---	---	1.32	1.30	---	---	---	---	2.25	2.23	---	---
13	---	---	1.30	1.28	---	---	---	---	2.24	2.22	---	---
14	---	---	1.28	1.27	---	---	---	---	2.26	2.24	---	---
15	---	---	1.27	1.25	---	---	---	---	2.27	2.26	---	---
16	---	---	1.25	1.23	---	---	---	---	---	---	---	---
17	---	---	1.23	1.20	---	---	---	---	---	---	---	---
18	---	---	1.20	1.18	---	---	---	---	---	---	---	---
19	---	---	1.18	1.16	---	---	---	---	---	---	---	---
20	---	---	1.16	1.15	---	---	---	---	---	---	3.34	3.21
21	---	---	1.15	1.14	---	---	---	---	---	---	3.40	3.34
22	---	---	1.14	1.13	---	---	---	---	---	---	3.46	3.40
23	---	---	1.13	1.12	---	---	---	---	---	---	3.50	3.46
24	---	---	1.12	1.12	---	---	---	---	---	---	3.50	3.48
25	---	---	1.13	1.12	---	---	---	---	---	---	3.48	3.45
26	---	---	1.13	1.11	---	---	---	---	---	---	3.47	3.43
27	---	---	1.11	1.08	---	---	---	---	---	---	3.68	3.47
28	---	---	1.08	1.05	---	---	---	---	---	---	3.74	3.68
29	---	---	1.05	1.04	---	---	---	---	---	---	3.74	3.69
30	---	---	1.04	1.03	---	---	---	---	---	---	3.69	3.63
31	1.29	1.24	---	---	---	---	---	---	---	---	3.63	3.57
MONTH	1.29	1.24	1.51	1.03	1.03	1.02	---	---	2.27	2.11	3.74	3.21

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 39--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.57	3.52	2.45	2.44	1.86	1.86	1.63	1.62	1.28	1.27	.97	.96
2	3.52	3.43	2.45	2.45	1.86	1.85	1.62	1.61	1.27	1.25	.96	.96
3	3.43	3.33	2.45	2.45	1.85	1.85	1.61	1.60	1.25	1.24	.96	.95
4	3.33	3.24	2.45	2.43	1.85	1.84	1.60	1.59	1.24	1.23	.95	.95
5	3.24	3.13	2.43	2.40	1.84	1.84	1.59	1.58	1.23	1.22	.95	.94
6	3.13	3.02	2.40	2.37	1.85	1.84	1.58	1.57	1.22	1.20	.94	.94
7	3.02	2.94	2.37	2.33	1.86	1.85	1.57	1.56	1.20	1.18	.94	.93
8	2.94	2.88	2.33	2.31	1.86	1.86	1.56	1.54	1.18	1.16	.93	.92
9	2.88	2.82	2.31	2.31	1.86	1.86	1.54	1.53	1.16	1.15	.92	.92
10	2.82	2.76	2.31	2.28	1.86	1.86	1.53	1.52	1.15	1.14	.92	.92
11	2.76	2.72	2.28	2.25	1.86	1.85	1.52	1.51	1.14	1.13	.92	.91
12	2.72	2.67	2.25	2.24	1.85	1.85	1.51	1.49	1.13	1.13	.91	.91
13	2.67	2.59	2.24	2.23	1.85	1.84	1.49	1.48	1.13	1.11	.91	.90
14	2.59	2.54	2.23	2.22	1.84	1.83	1.48	1.47	1.11	1.10	.90	.90
15	2.54	2.50	2.22	2.19	1.83	1.82	1.47	1.46	1.10	1.09	.90	.89
16	2.50	2.46	2.19	2.16	1.82	1.80	1.46	1.45	1.09	1.08	.89	.88
17	2.46	2.44	2.16	2.14	1.80	1.79	1.45	1.44	1.09	1.06	.88	.88
18	2.44	2.40	2.14	2.12	1.79	1.77	1.44	1.42	1.06	1.05	.88	.88
19	2.40	2.37	2.12	2.09	1.77	1.77	1.42	1.40	1.05	1.05	.88	.88
20	2.37	2.34	2.09	2.05	1.77	1.77	1.40	1.39	1.05	1.04	.88	.88
21	2.34	2.34	2.07	2.03	1.77	1.76	1.39	1.38	1.04	1.03	.88	.88
22	2.34	2.34	2.03	2.00	1.76	1.74	1.38	1.36	1.06	1.02	.88	.88
23	2.35	2.34	2.00	1.98	1.74	1.72	1.36	1.35	1.02	1.01	.88	.86
24	2.36	2.35	1.98	1.97	1.72	1.72	1.35	1.33	1.01	1.00	.86	.85
25	2.37	2.36	1.97	1.95	1.72	1.71	1.33	1.32	1.00	.99	.85	.85
26	2.39	2.37	1.95	1.94	1.71	1.68	1.32	1.31	.99	.98	.85	.84
27	2.43	2.39	1.94	1.92	1.68	1.67	1.31	1.31	.98	.98	.84	.84
28	2.43	2.43	1.92	1.90	1.67	1.65	1.31	1.30	.98	.98	.84	.84
29	2.43	2.42	1.90	1.88	1.65	1.63	1.30	1.30	.98	.97	.85	.84
30	2.44	2.42	1.88	1.86	1.63	1.62	1.30	1.29	.97	.97	.86	.84
31	---	---	1.86	1.86	---	---	1.29	1.28	.97	.97	---	---
MONTH	3.57	2.34	2.45	1.86	1.86	1.62	1.63	1.28	1.28	.97	.97	.84

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 40. SITE ID.--391826076173103 PERMIT NUMBER.--HA-88-1069.
 LOCATION.--Lat 39°18'26", long 76°17'31", Hydrologic Unit 02060003, at J-Field, Edgewood Area,
 Aberdeen Proving Ground.
 Owner: U.S. Army.
 AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 4 in., to 22 ft;
 screen diameter 4 in. from 22 to 25 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--15-minute recorder interval from Jan. 17, 1990 to current year.
 DATUM.--Elevation of land surface is 6.77 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.52 ft above land surface.
 REMARKS.--J-Field Remedial Investigation observation well JF113. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.55 ft above sea level, Jan. 12, 1991;
 lowest measured, 0.29 ft below sea level, Sept. 24, 1992.

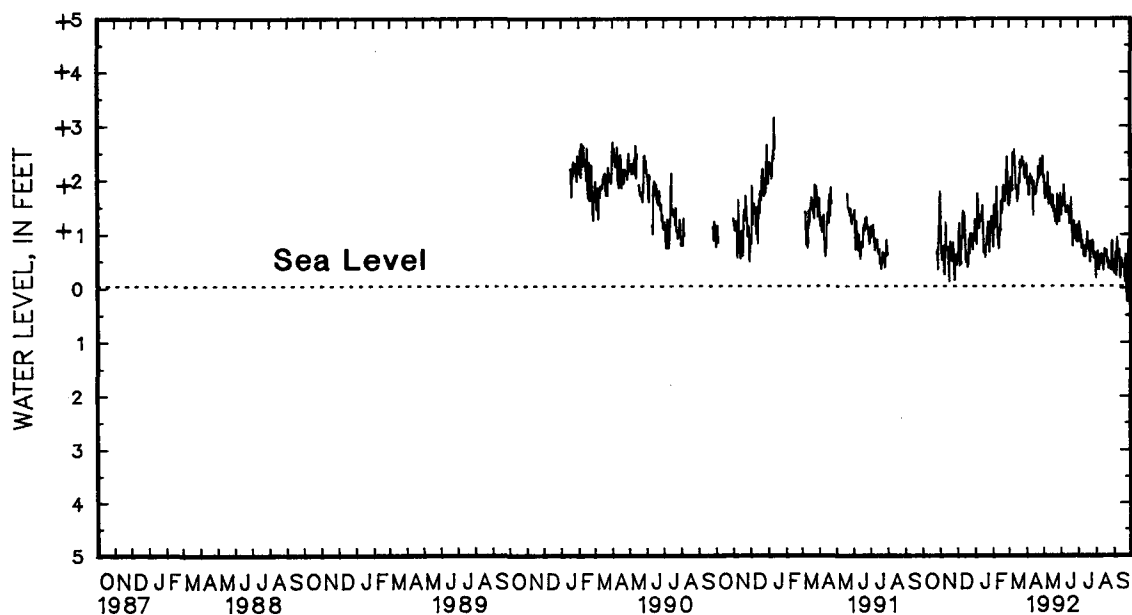
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	+2.44	+1.78	+1.09	+1.59	+1.76	+1.26	+1.46	+1.03	+2.54	+1.52
2	---	---	+2.26	+1.39	+1.96	+1.47	+1.57	+1.04	+1.38	+1.73	+2.08	+1.58
3	---	---	+1.36	+1.72	+1.98	+1.70	+1.87	+1.14	+1.82	+1.22	+2.25	+1.68
4	---	---	+1.16	+1.58	+1.72	+1.19	+2.38	+1.80	+2.20	+1.54	+2.48	+2.04
5	---	---	+1.09	+1.49	+1.19	+1.38	+2.29	+1.74	+1.88	+1.10	+2.34	+1.91
6	---	---	+1.39	+1.65	+1.28	+1.64	+2.17	+1.63	+1.74	+1.23	+2.35	+1.86
7	---	---	+1.34	+1.75	+1.27	+1.42	+1.99	+1.17	+2.15	+1.49	+3.01	+1.80
8	---	---	+1.25	+1.22	+1.34	+1.73	+1.56	+1.09	+2.45	+1.86	+3.10	+2.51
9	---	---	+1.77	+1.22	+1.45	+1.92	+1.73	+1.25	+2.17	+1.31	+2.87	+2.37
10	---	---	+1.80	+1.55	+1.83	+1.91	+1.84	+1.34	+1.41	+1.89	+3.32	+2.42
11	---	---	+1.83	+1.20	+1.85	+1.42	+1.83	+1.23	+1.24	+1.79	+3.48	+2.56
12	---	---	+1.40	+1.67	+1.83	+1.18	+1.77	+1.26	+1.19	+1.71	+2.74	+2.24
13	---	---	+1.14	+1.70	+1.82	+1.38	+1.81	+1.41	+1.54	+1.95	+2.24	+1.83
14	---	---	+1.17	+1.73	+1.67	+1.22	+2.72	+1.52	+1.61	+1.10	+2.51	+1.89
15	---	---	+1.09	+1.73	+1.35	+1.80	+1.89	+1.90	+1.83	+1.05	+2.43	+1.78
16	---	---	+1.11	+1.43	+1.98	+1.45	+1.43	+1.63	+2.12	+1.60	+1.99	+1.59
17	---	---	+1.63	+1.09	+1.44	+1.48	+1.52	+1.62	+1.92	+1.38	+2.60	+1.83
18	---	---	+1.16	+1.58	+1.25	+1.62	+1.18	+1.66	+2.18	+1.44	+2.28	+1.72
19	---	---	+1.31	+1.84	+1.62	+1.36	+1.98	+1.54	+2.48	+1.80	+2.61	+2.03
20	---	---	+1.15	+1.59	+1.22	+1.45	+1.39	+1.76	+2.46	+1.89	+2.92	+1.94
21	---	---	+1.07	+1.47	+1.31	+1.88	+1.53	+1.79	+2.31	+1.81	+2.89	+2.36
22	---	---	+1.31	+1.47	+1.40	+1.60	+1.53	+1.94	+2.09	+1.59	+3.20	+2.22
23	---	---	+1.28	+1.57	+1.67	+1.00	+2.25	+1.06	+2.32	+1.79	+3.17	+2.27
24	---	---	+1.34	+1.82	+1.55	+1.80	+2.23	+1.21	+2.24	+1.73	+2.76	+2.31
25	---	---	+1.34	+1.58	+1.45	+1.99	+1.20	+1.80	+2.62	+2.04	+2.97	+2.43
26	+1.27	+1.61	+1.01	+1.11	+1.42	+1.88	+1.10	+1.64	+2.74	+2.22	+2.76	+2.30
27	+1.31	+1.68	+1.69	+1.14	+1.40	+1.78	+1.64	+1.84	+2.97	+2.43	+3.10	+2.33
28	+1.31	+1.31	+1.96	+1.59	+1.14	+1.70	+1.62	+1.15	+2.57	+2.05	+2.63	+2.11
29	+1.49	+1.88	+1.10	+1.42	+1.64	+1.99	+1.88	+1.22	+2.48	+1.55	+2.32	+2.03
30	+1.69	+1.94	+1.00	+1.40	+1.42	+1.86	+1.85	+1.31	---	---	+2.56	+2.05
31	+1.89	+1.32	---	---	+1.65	+1.86	+1.79	+1.31	---	---	+2.77	+2.26
MONTH	+1.89	+1.31	+2.44	+1.09	+1.98	+1.36	+2.72	+1.54	+2.97	+1.71	+3.48	+1.52

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 40--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+2.91	+2.30	+2.84	+2.04	+2.17	+1.50	+1.73	+1.04	+1.30	+1.15	+1.08	+.26
2	+2.56	+2.18	+2.80	+2.07	+2.03	+1.34	+1.40	+.83	+1.16	+.45	+.94	+.24
3	+2.33	+1.91	+2.46	+1.74	+2.28	+1.57	+2.01	+1.21	+1.19	+.60	+1.27	+.45
4	+2.56	+2.03	+2.27	+1.65	+2.22	+1.55	+1.85	+1.07	+1.31	+.65	+1.19	+.64
5	+2.29	+1.70	+2.40	+1.66	+2.32	+1.52	+1.67	+1.03	+1.13	+.38	+.80	+.20
6	+2.14	+1.70	+2.45	+1.93	+2.50	+1.89	+1.80	+.93	+1.05	+.31	+1.04	+.38
7	+2.53	+1.93	+2.35	+1.91	+2.55	+1.90	+1.47	+.71	+.97	+.39	+1.27	+.92
8	+2.68	+2.10	+2.54	+1.79	+2.37	+1.62	+1.28	+.85	+1.01	+.45	+1.05	+.54
9	+2.64	+2.03	+2.77	+2.13	+2.15	+1.41	+1.80	+.71	+1.45	+.59	+1.03	+.58
10	+2.55	+2.00	+2.33	+1.54	+2.01	+1.38	+1.28	+.71	+1.03	+.49	+1.18	+.55
11	+2.50	+2.03	+1.99	+1.60	+2.06	+1.39	+1.34	+.56	+1.22	+.59	+1.26	+.69
12	+2.38	+1.84	+2.32	+1.83	+2.16	+1.42	+1.22	+.54	+1.03	+.52	+.68	+.15
13	+1.97	+1.33	+2.56	+1.85	+2.14	+1.50	+1.51	+.75	+.88	+.37	+.88	+.20
14	+2.54	+1.97	+2.47	+1.61	+2.11	+1.46	+1.16	+.55	+.94	+.30	+.98	+.52
15	+2.43	+1.74	+2.15	+1.52	+1.99	+1.36	+1.42	+.75	+1.13	+.46	+.97	+.48
16	+2.36	+1.72	+2.14	+1.51	+1.82	+1.17	+1.21	+.74	+1.14	+.71	+.87	+.36
17	+2.42	+1.81	+2.14	+1.47	+2.14	+1.43	+1.57	+1.02	+1.28	+.68	+.96	+.40
18	+2.31	+1.74	+2.35	+1.70	+1.99	+1.45	+1.53	+.83	+1.28	+.60	+.88	+.37
19	+2.49	+1.88	+1.90	+1.39	+2.15	+1.66	+1.33	+.78	+1.19	+.67	+1.09	+.37
20	+2.55	+1.92	+1.96	+1.50	+1.88	+1.12	+1.35	+.67	+1.21	+.67	+.57	+.09
21	+2.70	+1.96	+1.91	+1.36	+1.37	+1.04	+1.27	+.66	+1.11	+.43	+1.20	+.48
22	+2.85	+2.24	+1.62	+1.21	+1.36	+.75	+1.14	+.44	+1.09	+.50	+1.16	+.60
23	+2.43	+2.01	+1.76	+1.31	+1.51	+1.10	+1.25	+.84	+1.10	+.33	+1.12	+.11
24	+2.60	+2.19	+1.75	+1.26	+2.01	+1.22	+1.25	+.67	+.93	+.34	+.43	+.29
25	+2.44	+2.07	+1.83	+1.15	+1.65	+1.10	+1.54	+.80	+1.06	+.45	+.93	+.40
26	+3.08	+2.39	+2.19	+1.72	+1.70	+1.13	+1.44	+.85	+1.16	+.42	+1.40	+.22
27	+3.08	+2.30	+2.04	+1.56	+1.81	+.92	+1.64	+.63	+1.03	+.31	+1.55	+.89
28	+2.56	+2.09	+1.99	+1.21	+1.46	+.84	+1.22	+.52	+1.07	+.50	+1.48	+.52
29	+2.76	+2.20	+1.81	+1.21	+1.59	+.83	+1.32	+.56	+1.93	+.86	---	---
30	+3.16	+2.44	+1.98	+1.37	+1.83	+1.15	+1.33	+.63	+1.21	+.43	---	---
31	---	---	+2.68	+1.74	---	---	+1.41	+.56	+1.43	+.44	---	---
MONTH	+3.16	+1.33	+2.84	+1.15	+2.55	+.75	+2.01	+.44	+1.93	+.15	+1.55	+.29

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 44. SITE ID.--391810076172801. PERMIT NUMBER.--HA-88-1052.

LOCATION.--Lat 39°18'10", long 76°17'28", Hydrologic Unit 02060003, at J-Field, Edgewood area.

Owner: U. S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 100 ft; casing diameter 4 in., to 95 ft; screen diameter 4 in. from 95 to 100 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from August 8, 1990 to current year.

DATUM.--Elevation of land surface is 4.29 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 6.99 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well Jf61.

PERIOD OF RECORD.--Nov. 16, 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.32 ft above sea level, Sept. 30, 1990; lowest measured, 0.23 ft above sea level, Dec. 20, 1991.

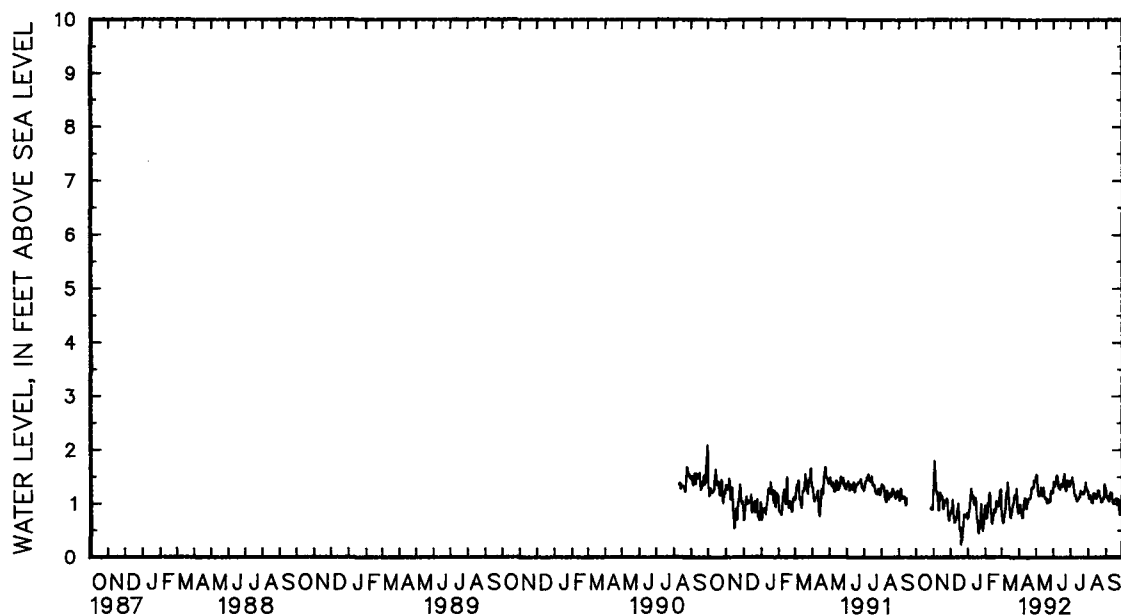
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.80	1.44	.92	.86	.84	.75	1.02	.91	.87	.76
2	---	---	1.94	1.80	.92	.87	.88	.84	.91	.73	.79	.68
3	---	---	1.93	1.65	1.13	.89	.99	.88	.82	.73	.68	.64
4	---	---	1.65	1.42	1.14	1.07	1.10	1.00	1.05	.82	.75	.65
5	---	---	1.41	1.25	1.07	.83	1.28	1.11	1.06	1.01	.81	.75
6	---	---	1.24	1.20	.83	.75	1.34	1.28	1.03	.99	.88	.81
7	---	---	1.23	1.21	.75	.65	1.34	1.22	1.20	1.03	1.10	.88
8	---	---	1.23	1.05	.68	.65	1.22	1.09	1.39	1.20	1.22	1.10
9	---	---	1.05	.88	.77	.68	1.16	1.09	1.39	1.16	1.22	1.20
10	---	---	1.05	.88	.78	.72	1.16	1.14	1.15	.90	1.39	1.20
11	---	---	1.27	1.05	.86	.74	1.14	1.01	.90	.81	1.54	1.39
12	---	---	1.28	1.20	.88	.86	1.01	.98	.81	.63	1.50	1.30
13	---	---	1.21	1.16	1.00	.89	1.09	1.02	.75	.63	1.30	1.02
14	---	---	1.17	1.15	1.06	1.00	1.31	1.10	.79	.75	1.02	.94
15	---	---	1.16	1.14	1.03	.80	1.31	1.03	.88	.78	.96	.89
16	---	---	1.18	1.10	.80	.53	1.03	.76	.96	.89	.89	.74
17	---	---	1.10	.90	.61	.49	.76	.71	.95	.86	.88	.74
18	---	---	.96	.90	.64	.55	.75	.63	.88	.84	.88	.83
19	---	---	1.07	.96	.55	.26	.63	.45	1.05	.88	.98	.87
20	---	---	1.09	1.06	.31	.23	.59	.45	1.07	1.05	1.00	.93
21	---	---	1.09	1.05	.52	.31	.67	.59	1.06	1.01	1.04	1.00
22	---	---	1.07	1.03	.59	.53	.71	.67	1.01	.95	1.21	1.02
23	---	---	1.09	1.06	.79	.59	.99	.71	.98	.95	1.23	1.16
24	---	---	1.14	1.09	.82	.79	1.11	.99	.98	.97	1.16	1.10
25	---	---	1.14	1.04	.82	.80	1.04	.76	1.11	.97	1.18	1.11
26	.93	.91	1.04	.79	.82	.80	.76	.51	1.24	1.12	1.29	1.18
27	.97	.93	.79	.69	.82	.78	.60	.49	1.31	1.24	1.31	1.28
28	.98	.89	.79	.69	.78	.75	.69	.60	1.31	1.26	1.28	1.02
29	.97	.89	.86	.79	.94	.77	.81	.69	1.27	.88	1.02	.86
30	1.18	.98	.86	.82	.95	.82	.95	.81	---	---	.86	.82
31	1.44	1.18	---	---	.82	.72	1.02	.96	---	---	.90	.86
MONTH	1.44	.89	1.94	.69	1.14	.23	1.34	.45	1.39	.63	1.54	.64

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA FD 44--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.03	.90	1.60	1.54	1.49	1.41	1.48	1.43	1.32	1.16	1.28	1.14
2	1.03	.99	1.58	1.53	1.41	1.34	1.47	1.39	1.16	1.10	1.14	1.11
3	.99	.89	1.57	1.37	1.35	1.32	1.51	1.39	1.16	1.11	1.23	1.12
4	.93	.88	1.37	1.20	1.40	1.35	1.55	1.49	1.22	1.16	1.25	1.14
5	.93	.81	1.20	1.15	1.50	1.40	1.49	1.40	1.21	1.12	1.14	1.05
6	.81	.74	1.17	1.14	1.53	1.50	1.42	1.35	1.12	1.04	1.16	1.05
7	.90	.74	1.20	1.17	1.56	1.53	1.35	1.21	1.05	1.02	1.23	1.16
8	.99	.90	1.30	1.20	1.56	1.50	1.21	1.15	1.08	1.02	1.23	1.21
9	1.07	.99	1.39	1.30	1.50	1.39	1.25	1.16	1.21	1.08	1.22	1.21
10	1.12	1.07	1.40	1.26	1.39	1.30	1.22	1.15	1.22	1.20	1.28	1.21
11	1.14	1.11	1.25	1.15	1.30	1.28	1.15	1.08	1.25	1.20	1.28	1.18
12	1.15	1.09	1.24	1.15	1.32	1.27	1.08	1.05	1.25	1.15	1.18	1.02
13	1.09	.91	1.35	1.24	1.37	1.32	1.12	1.06	1.14	1.11	1.03	1.01
14	1.03	.91	1.36	1.30	1.40	1.36	1.12	1.09	1.13	1.10	1.07	1.03
15	1.06	1.03	1.30	1.20	1.41	1.37	1.17	1.09	1.18	1.11	1.07	1.06
16	1.10	1.03	1.20	1.12	1.37	1.32	1.17	1.13	1.25	1.18	1.08	1.07
17	1.15	1.10	1.12	1.09	1.41	1.33	1.24	1.13	1.26	1.25	1.10	1.08
18	1.15	1.10	1.17	1.11	1.50	1.41	1.27	1.24	1.26	1.25	1.13	1.10
19	1.12	1.09	1.16	1.10	1.64	1.50	1.25	1.20	1.27	1.25	1.17	1.10
20	1.17	1.11	1.10	1.01	1.65	1.56	1.22	1.21	1.26	1.17	1.10	.98
21	1.28	1.17	1.06	1.04	1.56	1.41	1.28	1.22	1.17	1.13	1.08	.98
22	1.39	1.29	1.06	1.03	1.41	1.26	1.27	1.18	1.14	1.09	1.19	1.08
23	1.38	1.30	1.08	1.03	1.28	1.24	1.26	1.18	1.09	1.03	1.19	.96
24	1.35	1.29	1.12	1.08	1.46	1.28	1.28	1.22	1.05	1.03	.95	.80
25	1.35	1.30	1.09	1.04	1.48	1.44	1.31	1.22	1.10	1.04	.92	.80
26	1.44	1.30	1.23	1.06	1.45	1.43	1.40	1.30	1.11	1.10	1.05	.92
27	1.52	1.44	1.32	1.24	1.47	1.43	1.46	1.40	1.14	1.09	1.19	1.05
28	1.51	1.41	1.32	1.24	1.42	1.33	1.42	1.29	1.37	1.14	1.20	1.16
29	1.45	1.41	1.24	1.20	1.36	1.32	1.29	1.27	1.42	1.36	1.17	1.03
30	1.60	1.45	1.29	1.20	1.43	1.36	1.28	1.26	1.36	1.28	1.03	.91
31	---	---	1.49	1.29	---	---	1.31	1.24	1.33	1.29	---	---
MONTH	1.60	.74	1.60	1.01	1.65	1.24	1.55	1.05	1.42	1.02	1.28	.80

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 45. SITE ID.--391810076172802. PERMIT NUMBER.--HA-88-1053.

LOCATION.--Lat 39°18'10", long 76°17'28", Hydrologic Unit 02060003, at J-Field, Edgewood area.

Owner: U. S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 65 ft; casing diameter 4 in., to 60 ft; screen diameter 4 in. from 60 to 65 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from August 8, 1990 to current year.

DATUM.--Elevation of land surface is 4.08 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 7.23 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--Nov. 16, 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.53 ft above sea level, Feb. 15, and 16, 1991; lowest measured, 0.85 ft above sea level, Sept. 23, 1991.

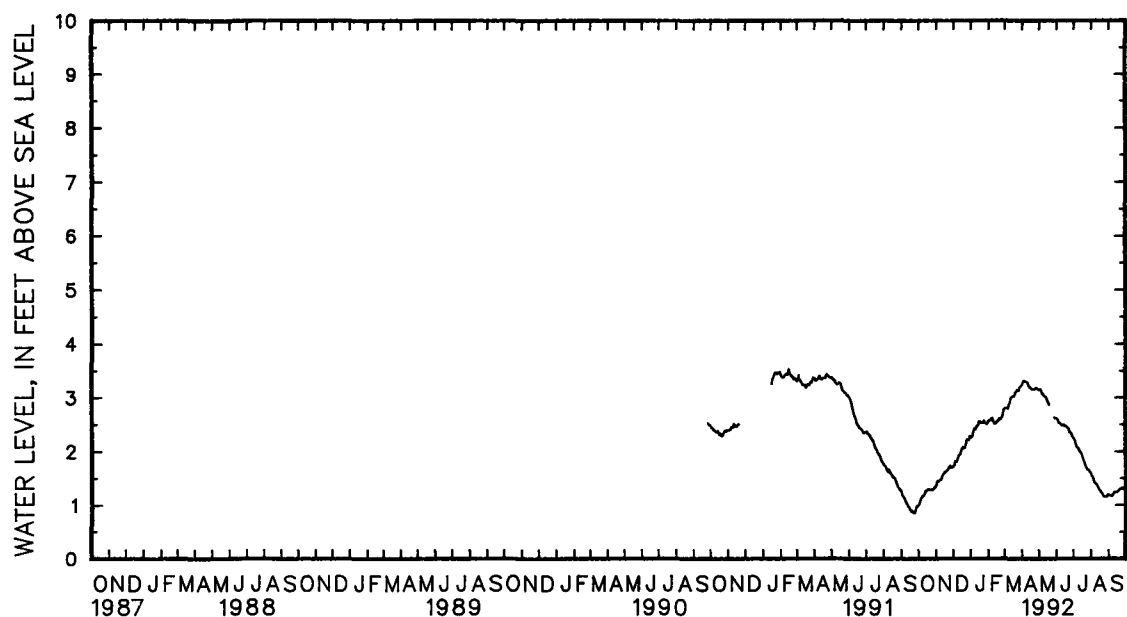
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.03	1.00	1.43	1.38	1.74	1.72	2.26	2.26	2.58	2.57	2.80	2.79
2	1.07	1.03	1.45	1.43	1.76	1.74	2.27	2.26	2.58	2.57	2.80	2.80
3	1.10	1.07	1.45	1.45	1.82	1.76	2.30	2.27	2.58	2.57	2.80	2.80
4	1.13	1.10	1.45	1.45	1.83	1.82	2.36	2.30	2.60	2.58	2.80	2.80
5	1.16	1.13	1.45	1.44	1.83	1.81	2.39	2.36	2.60	2.60	2.80	2.80
6	1.17	1.15	1.46	1.45	1.82	1.81	2.42	2.39	2.60	2.59	2.80	2.80
7	1.17	1.17	1.48	1.46	1.84	1.82	2.42	2.42	2.62	2.60	2.86	2.80
8	1.17	1.16	1.48	1.48	1.87	1.84	2.42	2.41	2.63	2.62	2.89	2.86
9	1.18	1.17	1.49	1.48	1.91	1.87	2.44	2.41	2.63	2.59	2.91	2.89
10	1.20	1.18	1.53	1.49	1.93	1.91	2.47	2.44	2.59	2.55	2.96	2.91
11	1.24	1.20	1.56	1.53	1.94	1.93	2.47	2.47	2.55	2.54	3.00	2.96
12	1.26	1.24	1.57	1.56	1.95	1.94	2.48	2.47	2.54	2.51	3.01	3.00
13	1.27	1.26	1.59	1.57	1.99	1.95	2.50	2.48	2.52	2.51	3.02	3.01
14	1.27	1.26	1.59	1.59	2.03	1.99	2.56	2.50	2.53	2.52	3.02	3.02
15	1.29	1.27	1.62	1.59	2.05	2.03	2.56	2.55	2.56	2.53	3.03	3.02
16	1.29	1.28	1.63	1.62	2.05	2.05	2.56	2.55	2.58	2.56	3.03	3.02
17	1.30	1.28	1.63	1.62	2.08	2.05	2.56	2.55	2.58	2.56	3.03	3.02
18	1.30	1.30	1.63	1.62	2.09	2.08	2.56	2.55	2.58	2.56	3.05	3.03
19	1.30	1.29	1.64	1.63	2.09	2.06	2.54	2.53	2.61	2.58	3.09	3.05
20	1.30	1.29	1.65	1.64	2.06	2.06	2.53	2.53	2.61	2.61	3.11	3.09
21	1.29	1.28	1.67	1.65	2.10	2.06	2.54	2.53	2.61	2.60	3.11	3.11
22	1.29	1.28	1.70	1.67	2.14	2.10	2.54	2.53	2.60	2.60	3.14	3.11
23	1.29	1.29	1.71	1.70	2.20	2.14	2.57	2.53	2.62	2.60	3.15	3.14
24	1.29	1.28	1.73	1.71	2.22	2.20	2.59	2.57	2.63	2.62	3.15	3.14
25	1.29	1.28	1.73	1.73	2.23	2.22	2.58	2.56	2.66	2.63	3.14	3.13
26	1.30	1.29	1.73	1.71	2.23	2.22	2.56	2.53	2.72	2.66	3.17	3.13
27	1.33	1.30	1.71	1.70	2.22	2.21	2.53	2.52	2.76	2.72	3.20	3.17
28	1.33	1.33	1.70	1.70	2.22	2.21	2.52	2.51	2.80	2.76	3.21	3.20
29	1.33	1.33	1.71	1.70	2.28	2.22	2.51	2.51	2.81	2.79	3.21	3.21
30	1.35	1.33	1.72	1.71	2.29	2.28	2.54	2.51	---	---	3.23	3.21
31	1.38	1.35	---	---	2.28	2.26	2.57	2.54	---	---	3.25	3.23
MONTH	1.38	1.00	1.73	1.38	2.29	1.72	2.59	2.26	2.81	2.51	3.25	2.79

GROUND-WATER LEVELS
MARYLAND--Continued
HARFORD COUNTY--Continued
HA Fd 45--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.28	3.25	3.16	3.14	2.63	2.62	2.26	2.25	1.60	1.58	1.19	1.18
2	3.30	3.28	3.15	3.14	2.62	2.61	2.25	2.23	1.58	1.55	1.18	1.18
3	3.31	3.30	3.15	3.15	2.61	2.60	2.23	2.21	1.54	1.53	1.19	1.18
4	3.33	3.31	3.15	3.15	2.60	2.57	2.21	2.18	1.53	1.52	1.19	1.18
5	3.33	3.32	3.15	3.13	2.57	2.54	2.18	2.14	1.52	1.49	1.18	1.17
6	3.32	3.31	3.13	3.10	2.54	2.53	2.14	2.11	1.49	1.45	1.18	1.17
7	3.31	3.31	3.10	3.07	2.53	2.53	2.11	2.08	1.45	1.42	1.19	1.18
8	3.31	3.31	3.07	3.07	2.53	2.52	---	---	1.42	1.41	1.20	1.19
9	3.31	3.30	3.07	3.06	2.52	2.50	2.07	2.06	1.41	1.40	1.22	1.20
10	3.30	3.29	3.06	3.04	2.50	2.49	2.07	2.04	1.40	1.39	1.24	1.22
11	3.29	3.28	3.04	3.02	2.49	2.48	2.07	2.02	1.39	1.38	1.24	1.24
12	3.28	3.26	3.02	3.01	2.50	2.48	2.03	2.00	1.38	1.35	1.24	1.24
13	3.26	3.22	3.01	3.01	2.51	2.50	2.00	1.99	1.35	1.33	1.24	1.24
14	3.22	3.21	3.01	3.01	2.50	2.49	1.99	1.97	1.33	1.31	1.24	1.24
15	3.21	3.19	3.02	2.98	2.49	2.48	1.97	1.96	1.31	1.29	1.25	1.24
16	3.19	3.18	2.98	2.95	2.48	2.48	1.96	1.93	1.29	1.27	1.26	1.25
17	3.19	3.18	2.94	2.92	2.48	2.47	1.93	1.90	1.27	1.26	1.27	1.26
18	3.19	3.17	2.92	2.91	2.47	2.47	1.90	1.86	1.26	1.24	1.29	1.27
19	3.17	3.15	2.91	2.87	2.47	2.46	1.86	1.83	1.24	1.23	1.30	1.29
20	3.15	3.15	---	---	2.46	2.45	1.83	1.80	1.23	1.22	1.30	1.30
21	3.15	3.15	---	---	2.45	2.44	1.80	1.77	1.22	1.20	1.31	1.30
22	3.16	3.15	---	---	2.44	2.43	1.77	1.73	1.20	1.18	1.33	1.31
23	3.16	3.15	---	---	2.43	2.40	1.73	1.71	1.18	1.16	1.33	1.32
24	3.17	3.15	---	---	2.40	2.36	1.71	1.68	1.17	1.15	1.32	1.30
25	3.18	3.17	---	---	2.36	2.35	1.68	1.66	1.15	1.15	1.31	1.30
26	3.19	3.18	---	---	2.35	2.35	1.66	1.66	1.15	1.15	1.32	1.31
27	3.19	3.18	---	---	2.35	2.34	1.66	1.66	1.15	1.15	1.33	1.32
28	3.18	3.17	2.65	2.63	2.34	2.31	1.66	1.64	1.18	1.15	1.34	1.33
29	3.17	3.16	2.63	2.62	2.31	2.28	1.64	1.63	1.19	1.18	1.34	1.33
30	3.16	3.16	2.62	2.62	2.28	2.26	1.63	1.61	1.19	1.19	1.36	1.34
31	---	---	2.63	2.62	---	---	1.61	1.60	1.20	1.19	---	---
MONTH	3.33	3.15	3.16	2.62	2.63	2.26	2.26	1.60	1.60	1.15	1.36	1.17

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HARFORD COUNTY--Continued

WELL NUMBER.--HA Fd 46. SITE ID.--391810076172803. PERMIT NUMBER.--HA-88-1054.

LOCATION.--Lat 39°18'10", long 76°17'28", Hydrologic Unit 02060003, at J-Field, Edgewood area.

Owner: U. S. Army.

AQUIFER.--Talbot Formation of Pleistocene age. Aquifer code: 112TLBT.

WELL CHARACTERISTICS.--Drilled, observation, water-table, depth 19 ft; casing diameter 4 in., to 16 ft; screen diameter 4 in. from 16 to 19 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--15-minute recorder interval from August 8, 1990 to current year.

DATUM.--Elevation of land surface is 4.1 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 6.98 ft above land surface.

REMARKS.--J-Field Remedial Investigation observation well Jf63.

PERIOD OF RECORD.--Nov. 16, 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.93 ft above sea level, Jan. 12, 1991; lowest measured, at sea level, Sept. 13, and 14, 1991.

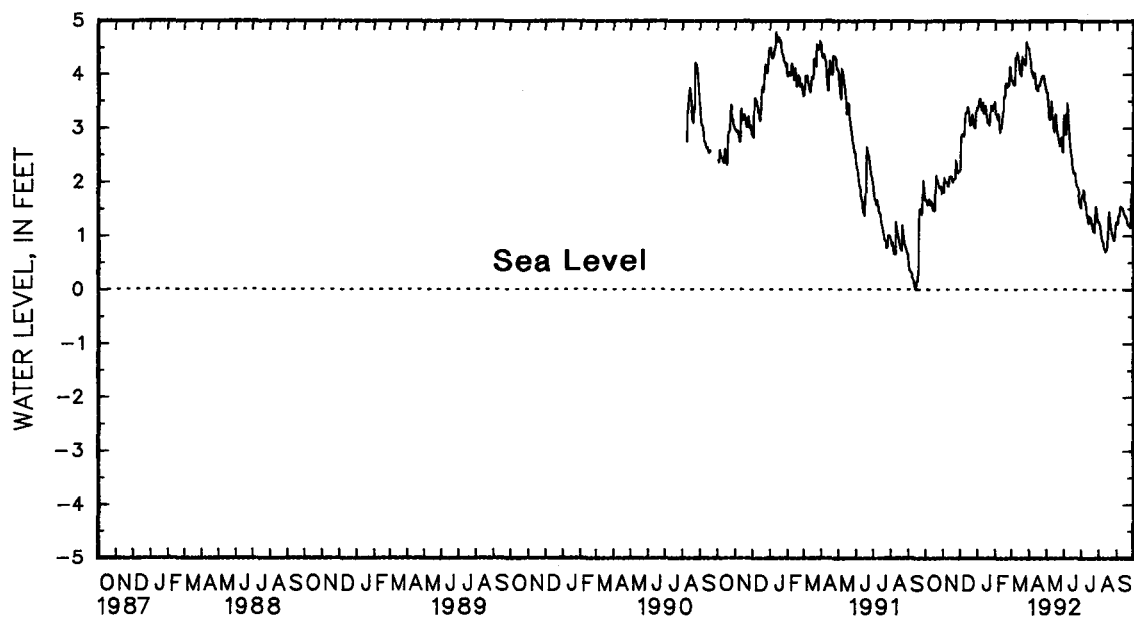
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.70	1.69	2.08	1.81	2.58	2.23	3.42	3.37	3.48	3.33	3.97	3.90
2	1.70	1.66	2.13	2.08	2.83	2.55	3.46	3.41	3.33	3.26	3.95	3.89
3	1.68	1.64	2.08	2.04	3.04	2.84	3.53	3.45	3.30	3.26	3.90	3.85
4	1.64	1.58	2.05	2.01	3.04	2.88	3.64	3.53	3.40	3.26	3.84	3.81
5	1.61	1.58	2.01	1.99	---	---	3.60	3.54	3.35	3.21	3.83	3.81
6	1.78	1.60	2.02	2.00	2.98	2.89	3.53	3.49	3.26	3.17	3.84	3.80
7	1.76	1.68	2.01	1.98	2.95	2.89	3.48	3.38	3.30	3.26	4.31	3.85
8	1.68	1.61	1.98	1.93	2.92	2.85	3.38	3.33	3.28	3.22	4.36	4.31
9	1.61	1.58	1.97	1.92	3.10	2.89	3.51	3.35	3.22	3.00	4.34	4.30
10	1.65	1.59	2.13	1.97	3.27	3.11	3.51	3.47	3.03	2.92	4.47	4.31
11	1.66	1.64	2.16	2.10	3.30	3.27	3.47	3.32	3.16	3.04	4.54	4.41
12	1.65	1.61	2.11	2.07	3.32	3.27	3.33	3.27	3.16	3.01	4.41	4.36
13	1.61	1.52	2.16	2.11	3.39	3.32	3.40	3.33	3.20	3.01	4.36	4.26
14	1.52	1.48	2.16	2.10	3.51	3.39	3.66	3.41	3.23	3.19	4.26	4.22
15	1.55	1.52	2.15	2.10	3.42	3.37	3.47	3.34	3.58	3.22	4.22	4.11
16	1.55	1.47	2.15	2.06	3.38	3.29	3.47	3.27	3.67	3.58	4.11	4.02
17	2.04	1.47	2.06	2.00	3.40	3.29	3.38	3.27	3.61	3.57	4.12	4.04
18	2.18	2.04	2.06	2.03	3.37	3.17	3.34	3.19	3.83	3.60	4.11	3.98
19	2.21	2.12	2.06	2.04	3.17	3.05	3.19	3.09	3.91	3.83	4.35	4.11
20	2.11	2.06	2.09	2.05	3.18	3.06	3.21	3.14	3.90	3.84	4.37	4.33
21	2.06	2.02	2.10	2.07	3.28	3.18	3.18	3.15	3.86	3.79	4.35	4.28
22	2.03	1.98	2.40	2.07	3.25	3.20	3.15	3.05	3.85	3.77	4.43	4.26
23	1.98	1.93	2.43	2.40	3.34	3.25	3.55	3.12	3.85	3.83	4.43	4.29
24	1.94	1.90	2.47	2.36	3.34	3.19	3.55	3.41	3.82	3.79	4.29	4.20
25	1.93	1.90	2.35	2.25	3.19	3.06	3.42	3.33	3.94	3.80	4.21	4.18
26	1.92	1.91	2.25	2.19	3.08	3.02	3.44	3.34	4.17	3.94	4.52	4.21
27	1.95	1.92	2.21	2.17	3.08	3.01	3.42	3.32	4.18	4.15	4.68	4.52
28	1.95	1.84	2.23	2.20	3.13	3.00	3.44	3.42	4.23	4.13	4.67	4.61
29	1.84	1.79	2.23	2.20	3.53	3.13	3.46	3.41	4.24	3.90	4.60	4.52
30	1.89	1.80	2.23	2.20	3.54	3.37	3.52	3.44	---	---	4.57	4.52
31	1.89	1.81	---	---	3.38	3.34	3.53	3.48	---	---	4.59	4.50
MONTH	2.21	1.47	2.47	1.81	3.54	2.23	3.66	3.05	4.24	2.92	4.68	3.80

GROUND-WATER LEVELS
 MARYLAND--Continued
 HARFORD COUNTY--Continued
 HA FD 46--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.51	4.48	3.72	3.66	3.34	3.23	1.76	1.52	1.35	1.26	1.25	1.22
2	4.48	4.39	3.70	3.66	3.23	3.08	1.77	1.72	1.26	1.22	1.24	1.22
3	4.39	4.30	3.69	3.53	3.08	2.96	1.84	1.71	1.22	1.18	1.42	1.25
4	4.30	4.25	3.53	3.39	2.96	2.88	1.90	1.85	1.18	1.11	1.42	1.38
5	4.25	4.09	3.39	3.27	3.46	2.88	1.86	1.84	1.11	1.00	1.38	1.37
6	4.09	4.03	3.27	3.17	3.50	3.46	1.84	1.77	1.00	.93	1.51	1.38
7	4.10	4.05	3.17	3.15	3.45	3.36	1.77	1.65	.93	.89	1.54	1.51
8	4.10	3.97	3.49	3.17	3.37	3.27	1.65	1.63	.89	.88	1.57	1.54
9	3.97	3.94	3.52	3.49	3.28	3.13	1.67	1.57	.89	.81	1.55	1.53
10	4.02	3.97	3.49	3.37	3.13	2.90	1.57	1.52	.82	.75	1.53	1.52
11	4.03	4.02	3.37	3.24	2.90	2.71	1.52	1.39	.76	.73	1.58	1.52
12	4.02	3.85	3.24	3.20	2.71	2.60	1.39	1.38	.75	.70	1.53	1.48
13	3.85	3.74	3.21	3.15	2.62	2.52	1.41	1.28	.73	.70	1.48	1.45
14	3.81	3.78	3.14	2.97	2.53	2.44	1.28	1.23	.78	.73	1.45	1.40
15	3.79	3.70	3.04	2.92	2.44	2.29	1.38	1.23	.91	.77	1.40	1.37
16	3.79	3.69	3.25	3.04	2.29	2.21	1.38	1.35	1.05	.90	1.37	1.36
17	3.84	3.79	3.29	3.25	2.21	2.15	1.37	1.34	1.31	1.04	1.36	1.34
18	3.83	3.79	3.31	3.24	2.18	2.15	1.37	1.31	1.54	1.32	1.34	1.33
19	3.85	3.79	3.23	3.03	2.26	2.16	1.31	1.25	1.53	1.44	1.34	1.25
20	3.88	3.85	3.03	2.90	2.26	2.14	1.25	1.19	1.44	1.33	1.25	1.20
21	3.92	3.88	2.90	2.84	2.14	2.03	1.19	1.12	1.33	1.22	1.20	1.19
22	4.00	3.92	2.84	2.79	2.03	1.95	1.12	1.08	1.22	1.14	1.24	1.19
23	4.00	3.96	2.80	2.75	1.95	1.91	1.10	1.08	1.14	1.07	1.26	1.17
24	4.03	3.96	2.76	2.66	1.93	1.90	1.29	1.06	1.07	1.02	1.17	1.15
25	4.04	3.98	2.73	2.67	1.92	1.88	1.48	1.29	1.02	.99	1.62	1.16
26	4.01	3.98	2.88	2.73	1.88	1.83	1.55	1.48	.99	.94	2.14	1.62
27	3.99	3.92	2.90	2.82	1.85	1.71	1.58	1.54	.95	.91	2.30	2.14
28	3.92	3.82	2.82	2.66	1.71	1.61	1.54	1.43	.99	.91	2.33	2.29
29	3.82	3.78	2.66	2.56	1.63	1.57	1.43	1.36	1.16	.99	2.33	2.22
30	3.78	3.72	2.95	2.55	1.59	1.53	1.36	1.27	1.28	1.16	2.22	2.14
31	---	---	3.31	2.96	---	---	1.35	1.26	1.28	1.25	---	---
MONTH	4.51	3.69	3.72	2.55	3.50	1.53	1.90	1.06	1.54	.70	2.33	1.15

Daily Low Water Levels

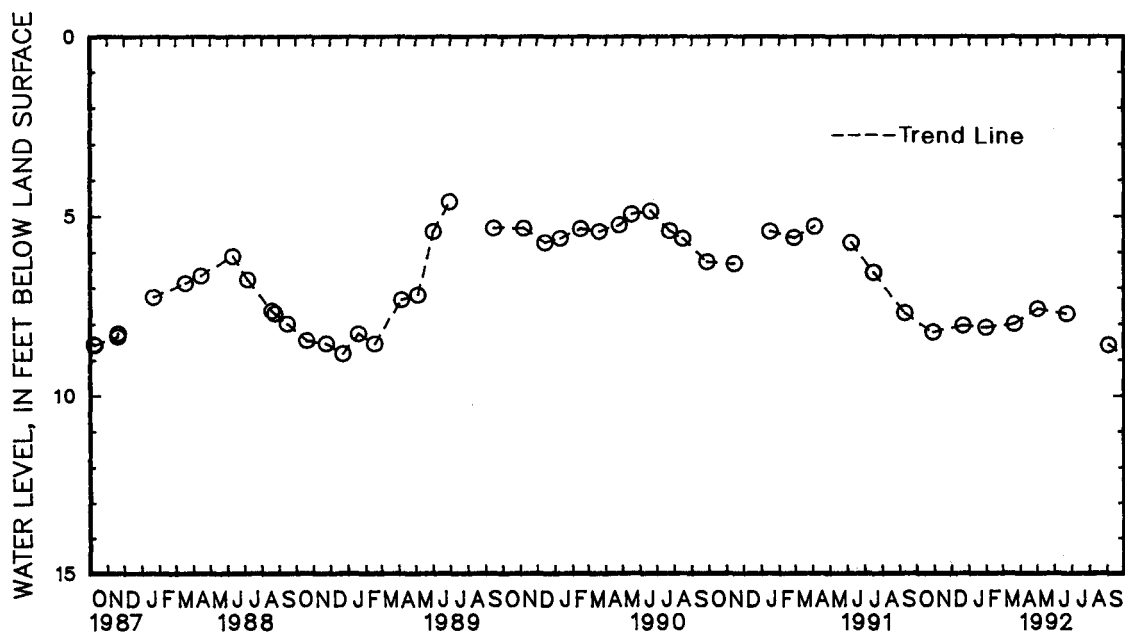


5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

HOWARD COUNTY--Continued

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	8.28	JAN 30	8.15	MAY 1	7.62	SEP 3	8.64
DEC 20	8.09	MAR 20	8.03	JUN 22	7.76		
WATER YEAR 1992		HIGHEST	7.62	MAY 1, 1992		LOWEST	8.64 SEP 3, 1992



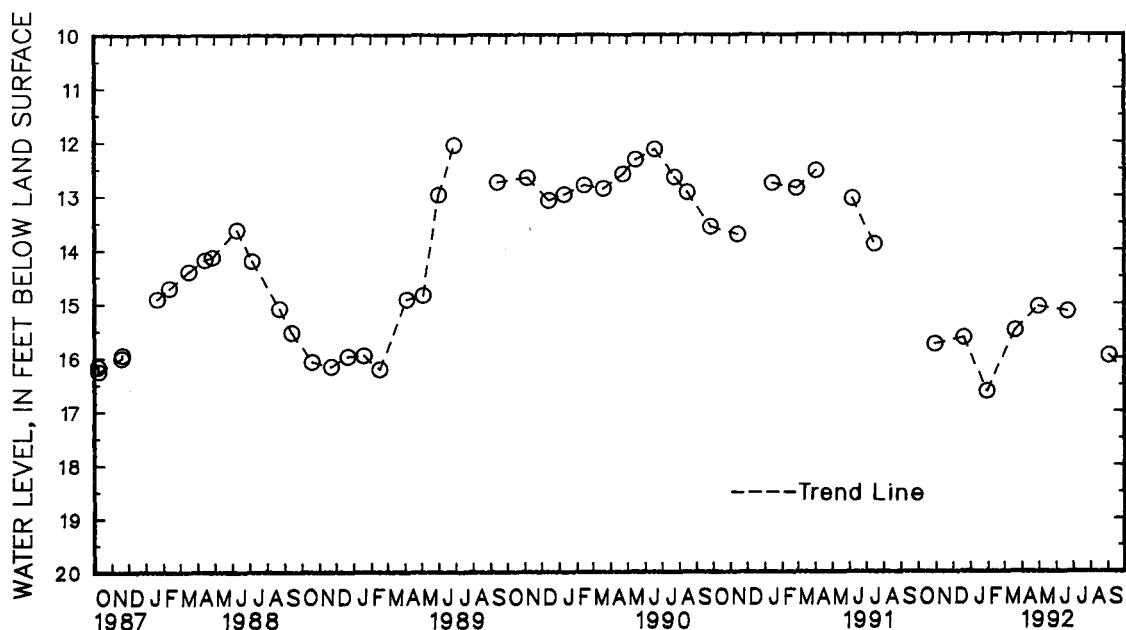
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 21. SITE ID.--391442076555301. PERMIT NUMBER.--HO-81-1574.
LOCATION.--Lat 39°14'43", long 76°55'50", Hydrologic Unit 02060006, south of Homewood Rd. at the University of Maryland Central Farm.
Owner: U.S. Geological Survey.
AQUIFER.--Loch Raven Formation of Paleozoic age. Aquifer code: 300LCRV.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 96 ft; casing diameter 6 in., to 55 ft; open hole.
INSTRUMENTATION.--Periodic measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from October 1986 to February 1988.
DATUM.--Elevation of land surface is 434.18 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 3.19 ft above land surface.
REMARKS.--Best Management Practices Project observation well.
PERIOD OF RECORD.--October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.05 ft below land surface, June 29, 1989; lowest measured, 18.85 ft below land surface, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	15.76	JAN 30	16.64	MAY 1	15.06	SEP 3	15.97
DEC 20	15.64	MAR 20	15.50	JUN 22	15.14		
WATER YEAR 1992		HIGHEST	15.06	MAY 1, 1992		LOWEST	16.64
							JAN 30, 1992



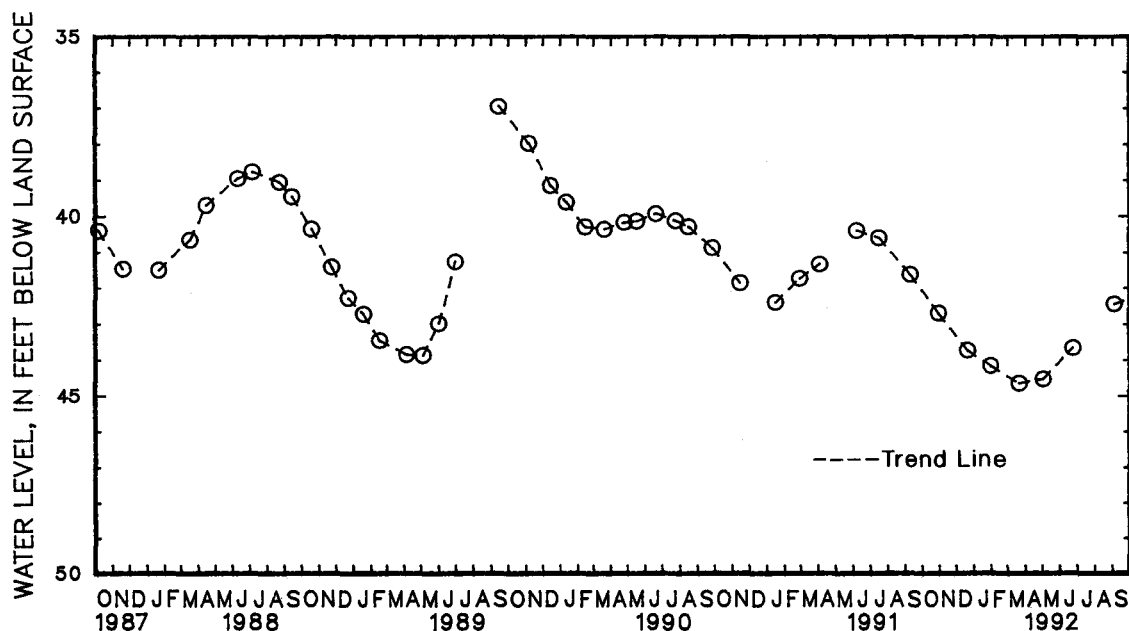
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

MARYLAND--Continued

HOWARD COUNTY--Continued

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	42.75	JAN 30	44.23	MAY 1	44.59	SEP 3	42.46
DEC 20	43.80	MAR 20	44.71	JUN 23	43.70		
WATER YEAR 1992		HIGHEST	42.46	SEP 3, 1992		LOWEST	44.71 MAR 20, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

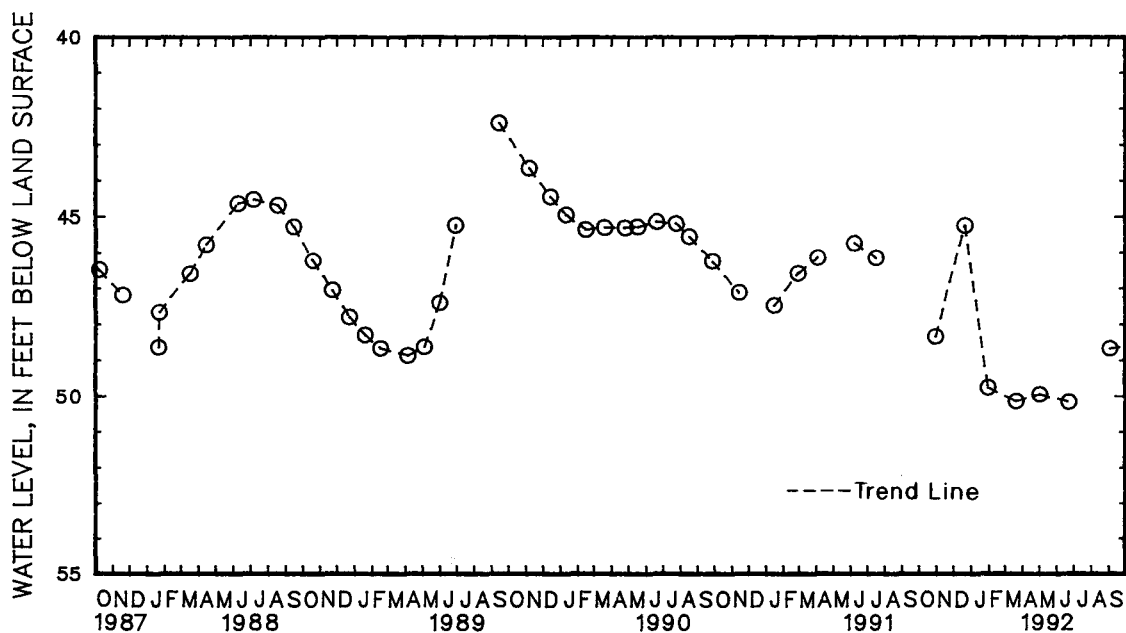
MARYLAND--Continued

HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 26. SITE ID.--391442076554701. PERMIT NUMBER.--HO-81-1579.
 LOCATION.--Lat 39°14'42", long 76°55'50", Hydrologic Unit 02060006, south of Homewood Rd. at the
 University of Maryland Central Farm.
 Owner: U.S. Geological Survey.
 AQUIFER.--Loch Raven Formation of Paleozoic age. Aquifer code: 300LCRV.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 143 ft; casing diameter 6 in., to 106 ft;
 open hole.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-
 level recorder--1-hour recorder interval from October 1986 to August 1988.
 DATUM.--Elevation of land surface is 469.94 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 1.48 ft above land surface.
 REMARKS.--Best Management Practices Project observation well.
 PERIOD OF RECORD.--October 1986 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.41 ft below land surface, Sept. 14, 1989;
 lowest measured, 51.77 ft below land surface, Dec. 3, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	48.40	JAN 30	49.82	MAY 1	50.00	SEP 3	48.69
DEC 20	45.25	MAR 20	50.20	JUN 22	50.22		
WATER YEAR 1992		HIGHEST	45.25	DEC 20, 1991	LOWEST	50.22	JUN 22, 1992



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 28. SITE ID.--391447076554702.

LOCATION.--Lat 39°14'43", long 76°55'48", Hydrologic Unit 02060006, south of Homewood Rd. at the University of Maryland Central Farm.

Owner: U.S. Geological Survey.

AQUIFER.--Loch Raven Schist of Paleozoic age. Aquifer code: 300LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 46 ft; casing diameter 3.5 in., to 41 ft; screen diameter 3.5 in. from 41 to 46 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with digital water-level recorder--60-minute recorder interval from Oct. 30, 1986 to current year.

DATUM.--Elevation of land surface is 453.11 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 3.17 ft above land surface.

REMARKS.--Best Management Practice Project observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.63 ft below land surface, Aug. 6, and 7, 1989, and Sept. 1, 1989; lowest measured, 32.03 ft below land surface, Dec. 13, and 14, 1986.

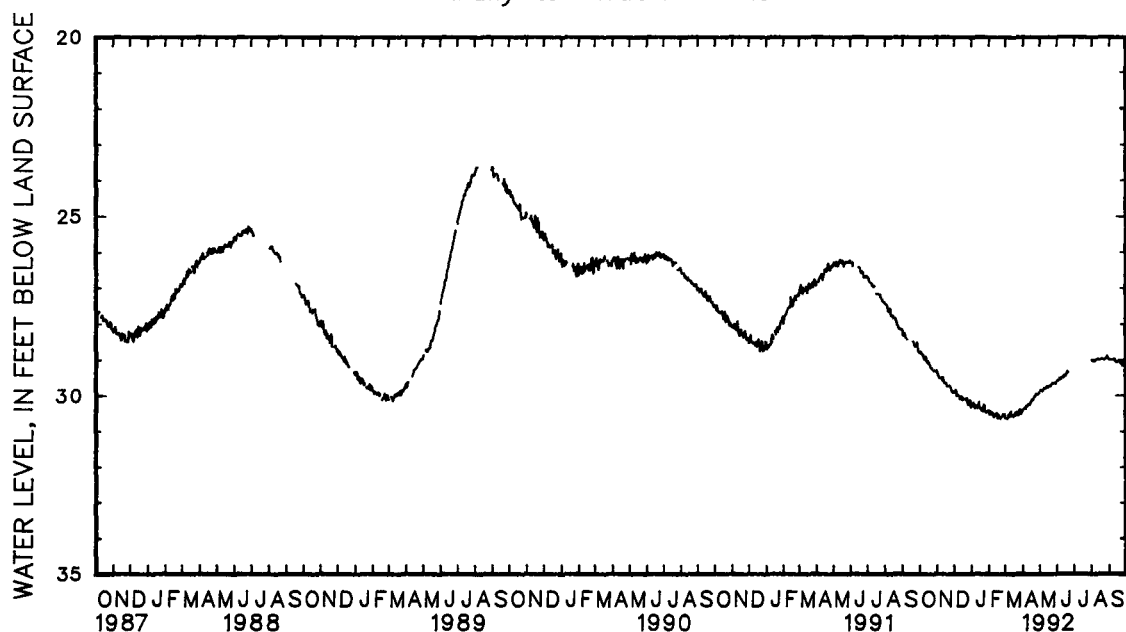
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	28.84	28.79	29.42	29.40	29.96	29.94	30.35	30.33	30.53	30.47	30.69	30.63
2	28.82	28.79	29.47	29.40	29.98	29.94	30.33	30.30	30.55	30.54	30.66	30.64
3	28.85	28.82	29.50	29.47	29.95	29.86	30.30	30.26	30.55	30.54	30.66	30.65
4	28.91	28.85	29.53	29.50	30.04	29.89	30.26	30.21	30.55	30.46	30.67	30.66
5	28.91	28.88	29.54	29.52	30.07	30.03	30.32	30.26	30.56	30.50	30.66	30.64
6	28.94	28.88	29.53	29.52	30.04	29.99	30.34	30.32	30.56	30.53	30.64	30.63
7	28.99	28.94	29.56	29.53	30.04	30.00	30.38	30.35	30.53	30.50	30.63	30.55
8	29.02	28.99	29.61	29.56	30.06	30.02	30.39	30.37	30.58	30.52	30.59	30.54
9	29.03	29.01	29.62	29.60	30.04	30.03	30.37	30.30	30.64	30.58	30.62	30.60
10	29.01	28.94	29.60	29.51	30.12	30.03	30.32	30.30	30.65	30.61	30.60	30.49
11	28.96	28.92	29.63	29.51	30.12	30.11	30.39	30.33	30.60	30.55	30.56	30.45
12	29.05	28.96	29.66	29.63	30.13	30.10	30.40	30.36	30.64	30.57	30.58	30.56
13	29.11	29.05	29.67	29.66	30.10	30.07	30.36	30.32	30.63	30.53	30.60	30.58
14	29.13	29.09	29.70	29.66	30.12	30.04	30.34	30.20	30.61	30.52	30.60	30.57
15	29.09	29.05	29.70	29.67	30.15	30.12	30.42	30.35	30.61	30.51	30.60	30.57
16	29.15	29.07	29.74	29.67	30.17	30.14	30.43	30.35	30.64	30.51	30.63	30.60
17	29.15	29.11	29.77	29.74	30.17	30.09	30.43	30.36	30.67	30.64	30.60	30.53
18	29.20	29.15	29.77	29.75	---	---	30.45	30.40	30.65	30.59	30.60	30.54
19	29.23	29.17	29.77	29.75	---	---	30.47	30.44	30.60	30.57	30.53	30.48
20	29.26	29.23	29.78	29.76	---	---	30.43	30.38	30.67	30.60	30.57	30.53
21	29.27	29.24	29.79	29.76	30.17	30.11	30.45	30.41	30.68	30.66	30.59	30.57
22	29.28	29.24	29.79	29.74	30.15	30.14	30.48	30.45	30.68	30.63	30.59	30.49
23	29.31	29.28	29.82	29.75	30.14	30.09	30.46	30.28	30.62	30.62	30.57	30.49
24	29.33	29.31	29.85	29.79	30.22	30.11	30.47	30.29	30.65	30.62	30.61	30.57
25	29.33	29.31	29.90	29.85	30.28	30.22	30.51	30.46	30.66	30.59	30.61	30.56
26	29.34	29.33	29.94	29.90	30.29	30.27	30.53	30.46	30.58	30.54	30.56	30.41
27	29.34	29.34	29.95	29.93	30.30	30.27	30.53	30.49	30.61	30.57	30.50	30.41
28	29.42	29.34	29.93	29.92	30.30	30.23	30.50	30.48	30.61	30.54	30.53	30.50
29	---	---	29.94	29.91	30.22	30.15	---	---	30.69	30.53	30.54	30.52
30	---	---	29.95	29.94	30.34	30.17	---	---	---	---	30.52	30.45
31	29.40	29.32	---	---	30.35	30.34	30.47	30.43	---	---	30.45	30.43
MONTH	29.42	28.79	29.95	29.40	30.35	29.86	30.53	30.20	30.69	30.46	30.69	30.41

GROUND-WATER LEVELS
 MARYLAND--Continued
 HOWARD COUNTY--Continued
 HO Cd 28--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	30.44	30.41	---	---	29.60	29.59	---	---	29.07	29.02	29.02	29.00
2	30.41	30.40	29.91	29.85	29.61	29.60	---	---	29.07	29.05	---	---
3	30.41	30.39	29.88	29.85	29.61	29.59	---	---	29.05	29.02	---	---
4	30.39	30.37	29.87	29.87	29.59	29.57	---	---	29.04	29.02	29.00	29.00
5	30.41	30.37	29.89	29.87	29.57	29.53	---	---	29.06	29.04	29.00	29.00
6	30.42	30.38	29.91	29.89	29.56	29.53	---	---	29.07	29.06	29.02	29.00
7	30.38	30.31	29.91	29.86	29.57	29.55	---	---	29.06	29.04	29.02	29.01
8	30.33	30.31	29.86	29.80	29.55	29.53	---	---	29.04	29.01	29.01	28.99
9	30.33	30.30	29.81	29.80	29.53	29.51	---	---	29.01	29.00	29.02	29.01
10	30.30	30.28	29.82	29.81	29.52	29.51	---	---	29.00	28.99	29.01	28.99
11	30.28	30.25	29.83	29.81	29.52	29.51	---	---	28.99	28.98	29.06	29.01
12	30.28	30.25	29.81	29.77	29.51	29.49	---	---	29.03	28.99	29.08	29.06
13	30.31	30.27	29.77	29.74	29.49	29.46	---	---	29.03	29.01	29.08	29.07
14	30.27	30.21	29.78	29.75	29.46	29.44	---	---	29.02	29.01	29.07	29.07
15	30.22	30.20	29.79	29.78	29.45	29.44	---	---	29.02	29.01	29.08	29.07
16	30.20	30.15	29.79	29.78	29.47	29.46	---	---	29.01	29.00	29.07	29.05
17	30.15	30.12	29.79	29.74	29.46	29.43	---	---	29.01	28.99	29.05	29.04
18	30.15	30.13	29.74	29.72	29.43	29.38	---	---	28.99	28.98	29.04	29.02
19	30.14	30.13	29.77	29.74	29.37	29.34	---	---	28.98	28.98	29.09	29.02
20	30.13	30.08	29.76	29.74	29.36	29.34	---	---	29.00	28.98	29.11	29.09
21	30.08	30.04	29.74	29.71	29.36	29.36	---	---	29.02	29.00	29.11	29.09
22	30.05	30.04	29.71	29.68	---	---	---	---	29.01	29.01	29.09	29.05
23	30.06	30.04	29.68	29.65	---	---	---	---	29.02	29.01	29.17	29.07
24	30.03	29.97	29.66	29.64	---	---	---	---	29.01	28.99	29.20	29.17
25	29.98	29.97	29.67	29.66	---	---	---	---	28.99	28.98	29.19	29.12
26	29.98	29.98	29.67	29.65	---	---	---	---	28.98	28.97	29.14	29.11
27	29.98	29.98	29.65	29.64	---	---	---	---	28.97	28.95	29.14	29.13
28	29.98	29.97	29.67	29.65	---	---	---	---	28.95	28.90	29.17	29.14
29	29.97	29.95	29.68	29.67	---	---	---	---	29.01	28.95	29.20	29.15
30	29.95	29.92	29.67	29.62	---	---	---	---	29.02	28.98	29.21	29.20
31	---	---	29.61	29.59	---	---	---	---	29.00	28.98	---	---
MONTH	30.44	29.92	29.91	29.59	29.61	29.34	---	---	29.07	28.90	29.21	28.99

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 29. SITE ID.--391442076554702.

LOCATION.--Lat 39°14'42", long 76°55'45", Hydrologic Unit 02060006, south of Homewood Rd. at the University of Maryland Central Farm.

Owner: U.S. Geological Survey.

AQUIFER.--Loch Raven Schist of Paleozoic age. Aquifer code: 300LCRV.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 68 ft; casing diameter 3.5 in., to 63 ft; screen diameter 3.5 in. from 63 to 68 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from Oct. 24, 1986 to current year. Recorder malfunction from June 22, 1992 through September 4, 1992.

DATUM.--Elevation of land surface is 470.34 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 2.44 ft above land surface.

REMARKS.--Best Management Practice Project observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1986 to current year.

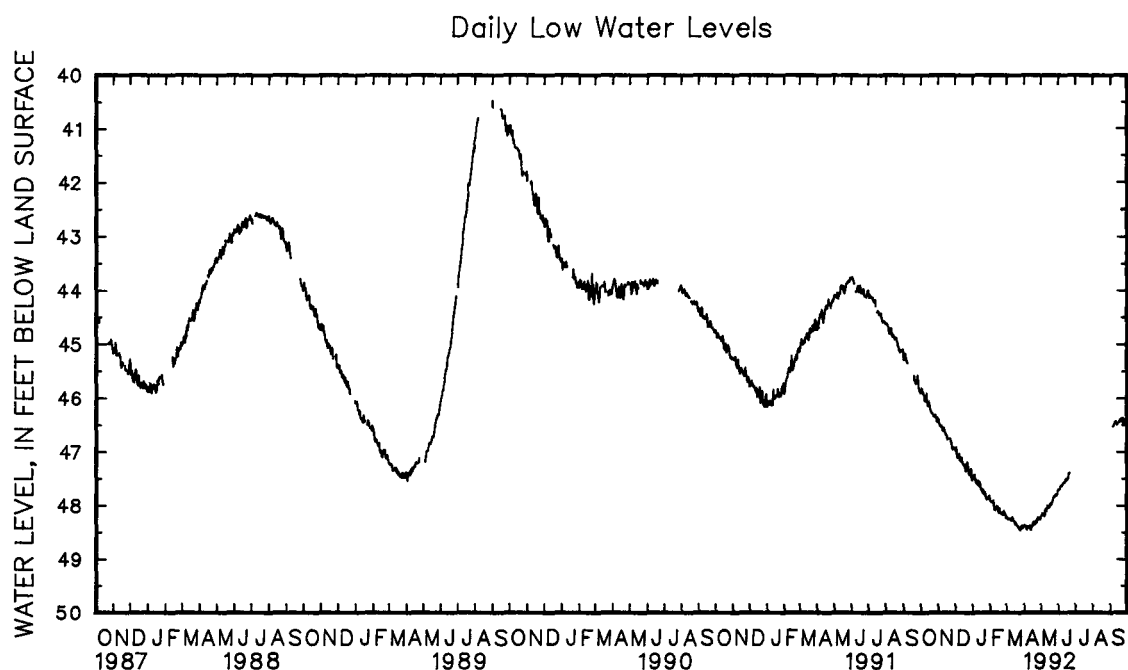
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.37 ft below land surface, Aug. 30, 1989; lowest measured, 49.71 ft below land surface, Jan. 16, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	45.86	45.78	46.39	46.36	46.96	46.92	47.51	47.48	47.91	47.83	48.24	48.18
2	45.83	45.80	46.48	46.35	46.99	46.92	47.48	47.45	47.93	47.91	48.23	48.21
3	45.85	45.79	46.50	46.48	46.93	46.81	47.44	47.40	47.94	47.92	48.25	48.22
4	45.91	45.85	46.53	46.50	47.08	46.86	47.43	47.33	47.94	47.83	48.26	48.25
5	45.91	45.86	46.54	46.50	47.12	47.02	47.50	47.43	47.94	47.86	48.26	48.24
6	45.95	45.87	46.52	46.49	47.07	46.97	47.53	47.49	47.95	47.91	48.26	48.24
7	46.02	45.95	46.55	46.51	47.07	46.99	47.58	47.53	47.92	47.89	48.25	48.17
8	46.06	46.02	46.61	46.55	47.09	47.04	47.60	47.56	47.99	47.92	48.25	48.17
9	46.06	46.01	46.62	46.56	47.05	47.03	47.56	47.49	48.08	47.99	48.28	48.25
10	46.02	45.92	46.56	46.45	47.17	47.05	47.55	47.50	48.08	47.95	48.26	48.15
11	45.92	45.88	46.60	46.44	47.17	47.15	47.63	47.55	48.09	47.95	48.22	48.10
12	46.05	45.92	46.64	46.60	47.19	47.12	47.65	47.59	48.08	47.96	48.28	48.22
13	46.14	46.05	46.65	46.63	47.12	47.09	47.58	47.53	48.02	47.94	48.29	48.27
14	46.15	46.08	46.69	46.63	47.19	47.04	47.62	47.38	48.06	47.99	48.30	48.27
15	46.08	46.01	46.69	46.63	47.22	47.19	47.69	47.61	48.03	47.94	48.31	48.28
16	46.15	46.05	46.74	46.64	47.26	47.20	47.71	47.59	48.14	48.03	48.35	48.31
17	46.16	46.09	46.78	46.74	47.25	47.13	47.70	47.61	48.14	48.06	48.33	48.26
18	46.22	46.16	46.77	46.72	47.32	47.17	47.75	47.69	48.06	48.02	48.36	48.27
19	46.25	46.15	46.76	46.74	47.37	47.32	47.77	47.72	48.12	48.02	---	---
20	46.28	46.25	46.76	46.72	47.36	47.26	47.72	47.66	48.15	48.12	48.38	48.34
21	46.28	46.23	46.76	46.73	47.24	47.17	47.78	47.71	48.17	48.13	48.41	48.38
22	46.29	46.24	46.77	46.69	47.25	47.20	47.81	47.77	48.17	48.10	48.41	48.28
23	46.32	46.29	46.81	46.73	47.20	47.15	47.77	47.55	48.15	48.10	48.42	48.30
24	46.35	46.31	46.84	46.73	47.34	47.19	47.82	47.60	48.17	48.13	48.45	48.42
25	46.33	46.30	46.91	46.84	47.42	47.35	47.86	47.79	48.17	48.05	48.45	48.40
26	46.33	46.31	46.96	46.91	47.43	47.39	47.89	47.79	48.11	48.04	48.40	48.25
27	46.32	46.30	46.96	46.92	47.44	47.39	47.89	47.83	48.16	48.11	48.38	48.25
28	46.42	46.31	46.93	46.89	47.44	47.33	47.86	47.83	48.17	48.07	48.42	48.38
29	46.45	46.42	46.93	46.89	47.32	47.23	47.86	47.83	48.24	48.07	48.43	48.41
30	46.42	46.27	46.94	46.91	47.51	47.29	---	---	---	---	48.41	48.34
31	46.37	46.28	---	---	47.53	47.51	47.83	47.77	---	---	48.38	48.34
MONTH	46.45	45.78	46.96	46.35	47.53	46.81	47.89	47.33	48.24	47.83	48.45	48.10

GROUND-WATER LEVELS
MARYLAND--Continued
HOWARD COUNTY--Continued
HO Cd 29--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	48.38	48.35	---	---	47.71	47.69	---	---	---	---	---	---
2	48.38	48.36	48.18	48.10	47.71	47.70	---	---	---	---	---	---
3	48.39	48.37	48.15	48.12	47.70	47.68	---	---	---	---	---	---
4	48.39	48.36	48.15	48.14	47.68	47.65	---	---	---	---	---	---
5	48.44	48.39	48.18	48.14	47.64	47.60	---	---	---	---	46.53	46.51
6	48.45	48.41	48.20	48.18	47.64	47.61	---	---	---	---	46.52	46.48
7	48.41	48.35	48.19	48.13	47.64	47.62	---	---	---	---	46.48	46.46
8	48.41	48.35	48.13	48.06	47.62	47.59	---	---	---	---	46.46	46.42
9	48.41	48.38	48.08	48.06	47.59	47.57	---	---	---	---	46.45	46.43
10	48.40	48.38	48.09	48.07	47.58	47.56	---	---	---	---	46.43	46.40
11	48.38	48.36	48.10	48.07	47.58	47.56	---	---	---	---	46.48	46.43
12	48.44	48.36	48.08	48.01	47.57	47.54	---	---	---	---	46.50	46.47
13	48.46	48.40	48.01	47.97	47.54	47.51	---	---	---	---	46.48	46.45
14	48.40	48.34	48.02	47.99	47.51	47.49	---	---	---	---	46.46	46.44
15	48.38	48.35	48.04	48.02	47.51	47.49	---	---	---	---	46.46	46.43
16	48.37	48.31	48.04	48.02	47.53	47.51	---	---	---	---	46.44	46.40
17	48.31	48.28	48.03	47.97	47.51	47.47	---	---	---	---	46.41	46.39
18	48.35	48.31	47.97	47.94	47.47	47.41	---	---	---	---	46.39	46.35
19	48.36	48.34	47.99	47.96	47.41	47.37	---	---	---	---	46.41	46.35
20	48.34	48.30	47.98	47.95	47.40	47.38	---	---	---	---	46.43	46.41
21	48.30	48.26	47.95	47.91	47.40	47.39	---	---	---	---	46.42	46.37
22	48.29	48.26	47.91	47.87	---	---	---	---	---	---	46.37	46.33
23	48.32	48.28	47.86	47.82	---	---	---	---	---	---	46.47	46.37
24	48.28	48.19	47.83	47.80	---	---	---	---	---	---	46.49	46.46
25	48.23	48.21	47.84	47.83	---	---	---	---	---	---	46.47	46.37
26	48.25	48.23	47.83	47.80	---	---	---	---	---	---	46.40	46.36
27	48.26	48.24	47.80	47.79	---	---	---	---	---	---	46.39	46.36
28	48.26	48.24	47.82	47.80	---	---	---	---	---	---	46.41	46.37
29	48.26	48.22	47.82	47.79	---	---	---	---	---	---	46.43	46.37
30	48.22	48.19	47.79	47.73	---	---	---	---	---	---	46.43	46.39
31	---	---	47.72	47.70	---	---	---	---	---	---	---	---
MONTH	48.46	48.19	48.20	47.70	47.71	47.37	---	---	---	---	46.53	46.33



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HOWARD COUNTY--Continued

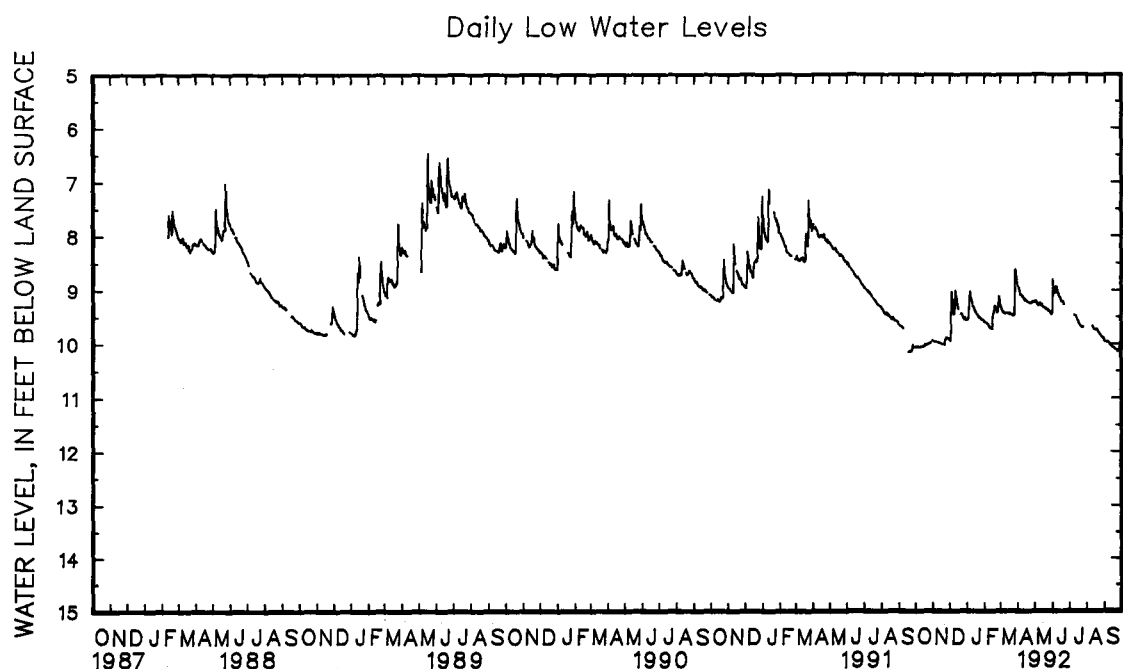
WELL NUMBER.--HO Cd 78. SITE ID.--391440076555402. PERMIT NUMBER.--HO-81-2389.
 LOCATION.--Lat 39°14'41", long 76°55'52", Hydrologic Unit 02060006, south of Homewood Rd. at the
 University of Maryland Central Farm.
 Owner: U.S. Geological Survey.
 AQUIFER.--Loch Raven Schist of Paleozoic age. Aquifer code: 300LCRV.
 WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 19 ft; casing diameter 3.5 in., to 9 ft;
 screen diameter 3.5 in. from 9 to 19 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--30-minute recorder interval from Feb. 11, 1988 to current year.
 DATUM.--Elevation of land surface is 425.58 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.6 ft above land surface.
 REMARKS.--Best Management Practice Project observation well.
 PERIOD OF RECORD.--February 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.95 ft below land surface, May 17, 1989;
 lowest measured, 10.19 ft below land surface, Sept. 18, 21, and 22, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.09	10.09	9.97	9.97	9.96	9.95	9.58	9.58	9.62	9.59	9.30	9.27
2	10.09	10.08	9.98	9.97	9.97	9.80	9.58	9.57	9.62	9.61	9.33	9.30
3	10.09	10.07	9.99	9.98	9.80	8.99	9.57	9.55	9.63	9.62	9.37	9.33
4	10.10	10.09	9.99	9.99	9.04	8.92	9.55	9.14	9.63	9.60	9.40	9.37
5	10.09	10.09	9.99	9.99	9.19	9.04	9.14	8.92	9.65	9.63	9.42	9.40
6	10.09	10.08	9.99	9.99	9.33	9.19	9.04	8.94	9.64	9.64	9.45	9.42
7	10.10	10.09	10.00	9.99	9.39	9.33	9.15	9.04	9.65	9.64	9.43	9.39
8	10.10	10.10	10.00	10.00	9.45	9.39	9.18	9.15	9.68	9.65	9.45	9.41
9	10.10	10.09	10.00	10.00	9.48	9.44	9.22	9.17	9.72	9.68	9.47	9.45
10	10.09	10.08	10.00	9.99	9.44	8.87	9.26	9.22	9.72	9.71	9.47	9.41
11	10.08	10.07	10.01	9.99	9.02	8.87	9.32	9.26	9.72	9.69	9.46	9.39
12	10.08	10.06	10.01	10.01	9.12	9.02	9.34	9.32	9.74	9.72	9.45	9.43
13	10.08	10.07	10.01	10.01	9.17	9.11	9.34	9.31	9.74	9.71	9.45	9.43
14	10.08	10.07	10.02	10.01	9.26	9.17	9.39	9.26	9.75	9.71	9.45	9.41
15	10.07	10.07	10.02	10.02	9.30	9.26	9.41	9.37	9.75	9.56	9.45	9.42
16	10.08	10.07	10.03	10.02	9.35	9.30	9.43	9.37	9.55	9.47	9.47	9.45
17	10.08	10.05	10.04	10.03	9.37	9.32	9.43	9.39	9.47	9.44	9.46	9.43
18	10.05	10.05	10.04	10.04	---	---	9.47	9.43	9.45	9.35	9.48	9.44
19	10.05	10.04	10.04	10.04	---	---	9.48	9.47	9.34	9.27	9.46	9.41
20	10.06	10.05	10.04	10.04	---	---	9.49	9.45	9.31	9.28	9.47	9.45
21	10.05	10.04	10.05	10.04	9.47	9.42	9.51	9.48	9.35	9.30	9.48	9.47
22	10.04	10.04	10.05	9.96	9.48	9.46	9.54	9.51	9.36	9.35	9.48	9.42
23	10.04	10.03	9.96	9.93	9.47	9.45	9.52	9.42	9.39	9.36	9.49	9.44
24	10.03	10.02	9.93	9.90	9.51	9.47	9.54	9.46	9.45	9.39	9.50	9.49
25	10.02	10.02	9.91	9.90	9.54	9.51	9.55	9.53	9.45	9.41	9.50	9.48
26	10.02	10.01	9.93	9.91	9.55	9.54	9.57	9.53	9.42	9.14	9.48	8.70
27	10.01	10.00	9.93	9.93	9.57	9.54	9.57	9.56	9.14	9.10	8.63	8.29
28	10.01	10.00	9.93	9.93	9.57	9.54	9.58	9.56	9.14	9.12	8.63	8.40
29	---	---	9.94	9.93	9.54	9.50	---	---	9.28	9.15	8.74	8.64
30	---	---	9.95	9.94	9.58	9.52	---	---	---	---	8.80	8.74
31	9.97	9.96	---	---	9.59	9.58	9.59	9.56	---	---	8.90	8.81
MONTH	10.10	9.96	10.05	9.90	9.97	8.87	9.59	8.92	9.75	9.10	9.50	8.29

GROUND-WATER LEVELS
MARYLAND--Continued
HOWARD COUNTY--Continued
HO Cd 78--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.94	8.90	---	---	8.81	8.53	---	---	---	---	9.99	9.96
2	8.98	8.94	9.23	9.19	8.94	8.81	---	---	---	---	---	---
3	9.01	8.98	9.25	9.21	9.03	8.94	---	---	---	---	---	---
4	9.05	9.01	9.27	9.25	9.07	9.03	---	---	---	---	10.00	9.98
5	9.11	9.05	9.30	9.26	9.07	8.99	---	---	---	---	10.01	10.00
6	9.11	9.09	9.31	9.30	8.99	8.91	---	---	---	---	10.01	10.00
7	9.11	9.08	9.31	9.29	8.95	8.92	---	---	---	---	10.00	10.00
8	9.14	9.10	9.29	9.25	9.00	8.95	---	---	---	---	10.01	10.00
9	9.14	9.13	9.27	9.26	9.05	9.00	---	---	---	---	10.03	10.01
10	9.16	9.14	9.29	9.27	9.09	9.05	9.50	9.47	9.70	9.66	10.03	10.02
11	9.17	9.14	9.31	9.29	9.13	9.09	9.51	9.49	9.72	9.70	10.06	10.03
12	9.21	9.16	9.30	9.27	9.15	9.13	9.51	9.51	9.75	9.72	10.07	10.06
13	9.22	9.20	9.29	9.27	9.16	9.15	9.52	9.51	9.75	9.75	10.08	10.07
14	9.20	9.18	9.33	9.29	9.18	9.16	9.56	9.52	9.76	9.75	10.09	10.08
15	9.22	9.19	9.34	9.33	9.22	9.18	9.59	9.56	9.77	9.76	10.10	10.09
16	9.22	9.20	9.35	9.34	9.24	9.22	9.61	9.59	9.76	9.76	10.10	10.10
17	9.23	9.19	9.35	9.32	9.24	9.24	9.61	9.61	9.76	9.76	10.11	10.09
18	9.25	9.23	9.35	9.32	9.24	9.24	9.65	9.61	9.76	9.76	10.11	10.11
19	9.25	9.24	9.37	9.35	9.24	9.22	9.66	9.65	9.77	9.76	10.13	10.11
20	9.26	9.24	9.38	9.37	9.27	9.23	9.69	9.66	9.80	9.77	10.14	10.13
21	9.26	9.25	9.39	9.38	9.29	9.27	9.70	9.69	9.82	9.80	10.14	10.14
22	9.25	9.22	9.39	9.38	---	---	9.71	9.70	9.83	9.82	10.15	10.14
23	9.26	9.24	9.39	9.39	---	---	9.73	9.71	9.85	9.83	10.17	10.15
24	9.25	9.21	9.42	9.39	---	---	9.73	9.73	9.86	9.85	10.18	10.17
25	9.26	9.24	9.42	9.42	---	---	9.73	9.72	9.87	9.86	10.18	10.15
26	9.27	9.25	9.42	9.42	---	---	9.72	9.67	9.89	9.87	10.15	10.10
27	9.25	9.23	9.44	9.42	---	---	---	---	9.90	9.89	10.10	10.07
28	9.25	9.24	9.46	9.44	---	---	---	---	9.91	9.90	10.07	10.04
29	9.25	9.23	9.48	9.46	---	---	---	---	9.93	9.91	10.05	10.04
30	9.24	9.23	9.48	9.43	---	---	---	---	9.94	9.93	10.06	10.05
31	---	---	9.43	8.51	---	---	---	---	9.96	9.94	---	---
MONTH	9.27	8.90	9.48	8.51	9.29	8.53	9.73	9.47	9.96	9.66	10.18	9.96



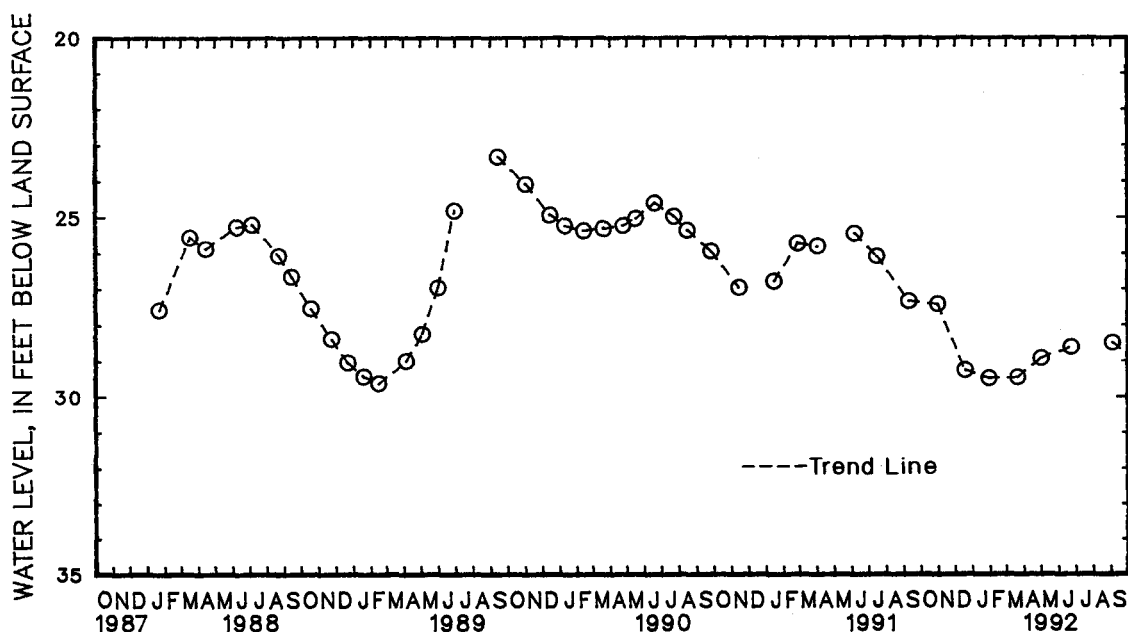
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 79. SITE ID.--391445076555101. PERMIT NUMBER.--HO-81-2387.
LOCATION.--Lat 39°14'45", long 76°55'49", Hydrologic Unit 02060006, south of Homewood Rd. at the
University of Maryland Central Farm.
Owner: U.S. Geological Survey.
AQUIFER.--Loch Raven Formation of Paleozoic age. Aquifer code: 300LCRV.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 53 ft; casing diameter 3.5 in., to 43 ft;
screen diameter 3.5 in. from 43 to 53 ft.
INSTRUMENTATION.--Periodic measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 452.37 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.05 ft above land surface.
REMARKS.--Best Management Practices Project observation well.
PERIOD OF RECORD.--January 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.32 ft below land surface, Sept. 14, 1989;
lowest measured, 29.68 ft below land surface, Feb. 15, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	27.46	JAN 29	29.54	MAY 1	28.97	SEP 3	28.53
DEC 18	29.32	MAR 20	29.51	JUN 22	28.65		
WATER YEAR 1992		HIGHEST	27.46	OCT 30, 1991	LOWEST	29.54	JAN 29, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

HOWARD COUNTY--Continued

WELL NUMBER.--HO Cd 342. SITE ID.--391438076555001. PERMIT NUMBER.--HO-88-0062.
LOCATION.--Lat 39°14'39", long 76°55'49", Hydrologic Unit 02060006, south of Homewood Rd. at the
University of Maryland Central Farm.
Owner: U.S. Geological Survey.
AQUIFER.--Loch Raven Schist of Paleozoic age. Aquifer code: 300LCRV.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 25 ft; casing diameter 3.5 in.,
to 20 ft.; screen diameter 3.5 in. from 20 to 25 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
water-level recorder--30-minute recorder interval from Aug. 23, 1988 to current year.
DATUM.--Elevation of land surface is 436.46 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 3.79 ft above land surface.
REMARKS.--Best Management Practice Project observation well. Missing data due to recorder malfunction.
PERIOD OF RECORD.--August 1988 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.46 ft below land surface, June 27, and 28,
1989; lowest measured, 24.01 ft below land surface, Sept. 30, 1992. Dry from Sept. 9, 1991 to March 3, 1992.

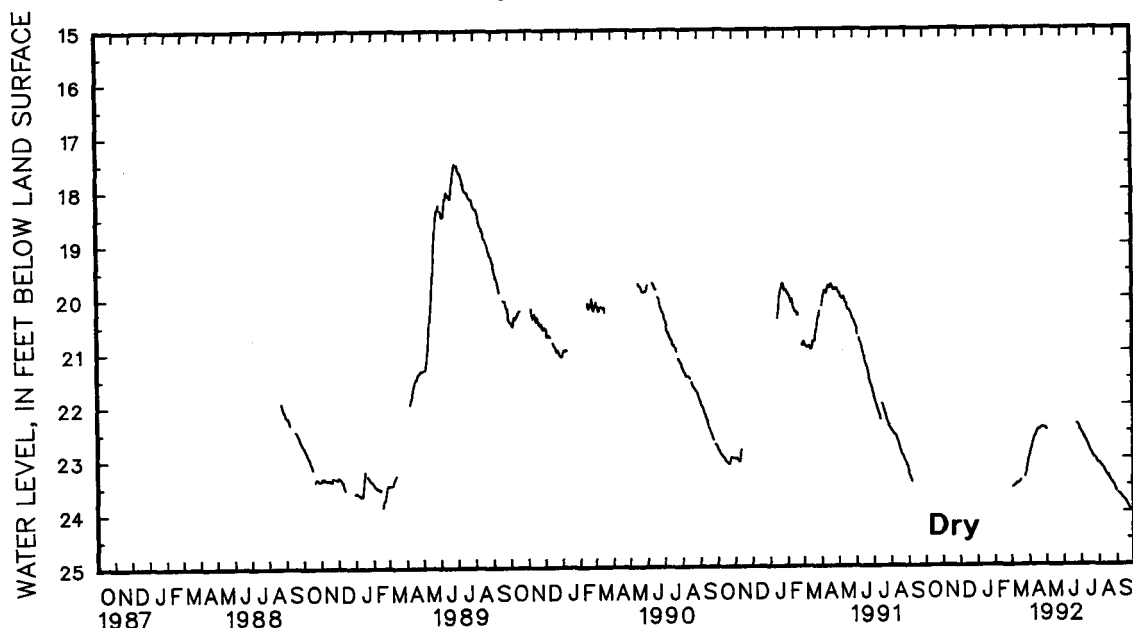
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

GROUND-WATER LEVELS
MARYLAND--Continued
HOWARD COUNTY--Continued
HO Cd 342--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	23.01	22.98	---	---	---	---	22.49	22.47	23.10	23.10	23.63	23.60
2	22.98	22.95	22.47	22.44	---	---	22.51	22.49	23.10	23.10	---	---
3	22.95	22.90	22.48	22.47	---	---	22.52	22.51	23.10	23.10	---	---
4	22.90	22.86	---	---	---	---	22.55	22.52	23.12	23.10	23.68	23.68
5	22.86	22.83	---	---	---	---	22.55	22.55	23.15	23.12	23.68	23.68
6	22.83	22.79	---	---	---	---	22.58	22.55	23.16	23.15	23.69	23.68
7	22.79	22.73	---	---	---	---	22.61	22.58	23.18	23.17	23.69	23.69
8	22.73	22.70	---	---	---	---	22.62	22.61	23.18	23.18	23.70	23.69
9	22.70	22.66	---	---	---	---	22.65	22.62	23.20	23.18	23.72	23.70
10	22.66	22.63	---	---	---	---	22.66	22.65	23.22	23.20	23.73	23.72
11	22.63	22.60	---	---	---	---	22.69	22.66	23.24	23.22	23.75	23.73
12	22.60	22.59	---	---	---	---	22.70	22.69	23.27	23.24	23.77	23.75
13	22.59	22.57	---	---	---	---	22.74	22.70	23.29	23.27	23.78	23.77
14	22.57	22.53	---	---	---	---	22.76	22.74	23.31	23.29	23.79	23.78
15	22.53	22.52	---	---	---	---	22.79	22.76	23.32	23.31	23.80	23.79
16	22.52	22.49	---	---	---	---	22.82	22.79	23.33	23.32	23.81	23.80
17	22.49	22.48	---	---	---	---	22.85	22.83	23.34	23.33	23.83	23.81
18	22.48	22.48	---	---	---	---	22.88	22.85	23.34	23.34	23.84	23.83
19	22.48	22.48	---	---	---	---	22.90	22.88	23.36	23.34	23.86	23.84
20	22.48	22.46	---	---	---	---	22.92	22.90	23.38	23.36	23.89	23.86
21	22.46	22.45	---	---	---	---	22.94	22.92	23.40	23.38	23.91	23.89
22	22.45	22.44	---	---	---	---	22.98	22.95	23.42	23.40	23.93	23.91
23	22.44	22.44	---	---	---	---	22.99	22.98	23.44	23.43	23.95	23.93
24	22.44	22.42	---	---	22.37	22.37	23.01	22.99	23.45	23.44	23.98	23.95
25	22.43	22.42	---	---	22.38	22.37	23.01	23.01	23.46	23.45	23.99	23.98
26	22.44	22.40	---	---	22.38	22.38	23.01	23.00	23.49	23.46	23.99	23.99
27	22.44	22.44	---	---	22.39	22.38	23.02	23.01	23.50	23.49	23.99	23.99
28	22.44	22.44	---	---	22.42	22.39	23.05	23.02	23.51	23.50	23.99	23.99
29	22.44	22.44	---	---	22.44	22.42	23.06	23.05	23.54	23.51	24.00	23.99
30	22.44	22.43	---	---	22.47	22.44	23.08	23.06	23.57	23.55	24.01	24.00
31	---	---	---	---	---	---	23.10	23.08	23.60	23.57	---	---
MONTH	23.01	22.40	22.48	22.44	22.47	22.37	23.10	22.47	23.60	23.10	24.01	23.60

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Bc 50. SITE ID.--391751076061101. PERMIT NUMBER.--KE-67-0020.
 LOCATION.--Lat 39°17'51", long 76°06'11", Hydrologic Unit 02060002, 0.25 mi southeast of Smithville,
 at Chari-Vale Farms.
 Owner: Robert S Brink
 AQUIFER.--Matawan Formation of Upper Cretaceous age. Aquifer code: 211MTWN.
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 160 ft; casing diameter 4 in., to 90 ft;
 screened from 90 to 140 ft; screened from 100 to 160 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with
 digital water-level recorder--60-minute recorder interval from April 1991 to current year.
 DATUM.--Elevation of land surface is 91.7 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 1.7 ft above land surface.
 REMARKS.--Kent County project observation well.
 PERIOD OF RECORD.--April 1991 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.03 ft above sea level, April 22, 1991;
 lowest measured, 53.94 above sea level, Sept. 23, 24, and 25, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	55.61	55.59	55.32	55.32	55.02	55.01	54.70	54.70	54.51	54.49	54.14	54.13
2	55.61	55.59	55.33	55.28	55.04	55.01	54.70	54.70	---	---	54.14	54.14
3	55.61	55.59	55.28	55.26	55.07	55.04	54.71	54.70	---	---	54.16	54.14
4	55.60	55.55	55.27	55.27	55.05	54.99	54.77	54.70	---	---	54.14	54.13
5	55.57	55.55	55.27	55.27	54.99	54.97	54.70	54.67	---	---	54.15	54.13
6	55.58	55.56	55.27	55.27	55.00	54.98	54.67	54.66	---	---	54.14	54.12
7	55.56	55.53	55.27	55.26	54.99	54.98	54.66	54.63	---	---	54.23	54.13
8	55.53	55.50	55.26	55.24	54.98	54.97	54.63	54.63	54.36	54.35	54.21	54.13
9	55.52	55.50	55.24	55.24	54.99	54.97	54.66	54.63	54.35	54.27	54.13	54.11
10	55.54	55.52	55.29	55.24	54.99	54.95	54.66	54.65	54.28	54.28	54.21	54.12
11	55.55	55.53	55.29	55.23	54.95	54.95	54.65	54.63	54.34	54.28	54.26	54.13
12	55.54	55.50	55.23	55.20	54.95	54.95	54.63	54.62	54.34	54.29	54.13	54.10
13	55.50	55.48	55.20	55.20	54.96	54.95	54.63	54.62	54.34	54.29	54.10	54.10
14	55.48	55.47	55.20	55.17	54.97	54.94	54.69	54.60	54.36	54.29	54.10	54.10
15	55.50	55.48	55.17	55.16	54.94	54.87	54.60	54.58	54.37	54.29	54.10	54.08
16	55.50	55.47	55.16	55.12	54.87	54.87	54.60	54.58	54.37	54.24	54.08	54.04
17	55.54	55.47	55.12	55.10	54.88	54.87	54.60	54.60	54.24	54.22	54.12	54.04
18	55.50	55.46	55.12	55.10	54.88	54.84	54.60	54.58	54.30	54.22	54.12	54.05
19	55.47	55.44	55.11	55.09	54.84	54.80	54.58	54.56	54.31	54.30	54.20	54.09
20	55.44	55.43	55.10	55.08	54.80	54.80	54.56	54.56	54.31	54.25	54.09	54.06
21	55.43	55.43	55.09	55.06	54.84	54.80	54.56	54.56	54.25	54.23	54.06	54.06
22	55.43	55.41	55.11	55.06	54.84	54.82	54.56	54.52	54.23	54.23	54.18	54.06
23	55.41	55.31	55.09	55.07	54.83	54.82	54.64	54.52	54.24	54.23	54.18	54.09
24	55.36	55.34	55.11	55.06	54.83	54.80	54.63	54.52	54.25	54.24	54.09	54.05
25	55.36	55.35	55.06	55.04	54.80	54.75	54.52	54.51	54.25	54.25	54.06	54.05
26	55.35	55.35	55.04	55.02	54.75	54.75	54.51	54.50	54.33	54.25	54.30	54.06
27	55.35	55.35	55.02	55.02	54.75	54.75	54.50	54.50	54.27	54.24	54.30	54.15
28	55.35	55.32	55.03	55.02	54.77	54.75	54.50	54.50	54.24	54.24	54.15	54.12
29	55.32	55.29	55.03	55.01	54.80	54.77	54.50	54.50	54.27	54.13	54.13	54.12
30	55.34	55.29	55.02	55.01	54.83	54.70	54.51	54.50	---	---	54.19	54.13
31	55.34	55.32	---	---	54.70	54.70	54.52	54.51	---	---	54.22	54.19
MONTH	55.61	55.29	55.33	55.01	55.07	54.70	54.77	54.50	54.51	54.13	54.30	54.04

GROUND-WATER LEVELS

357

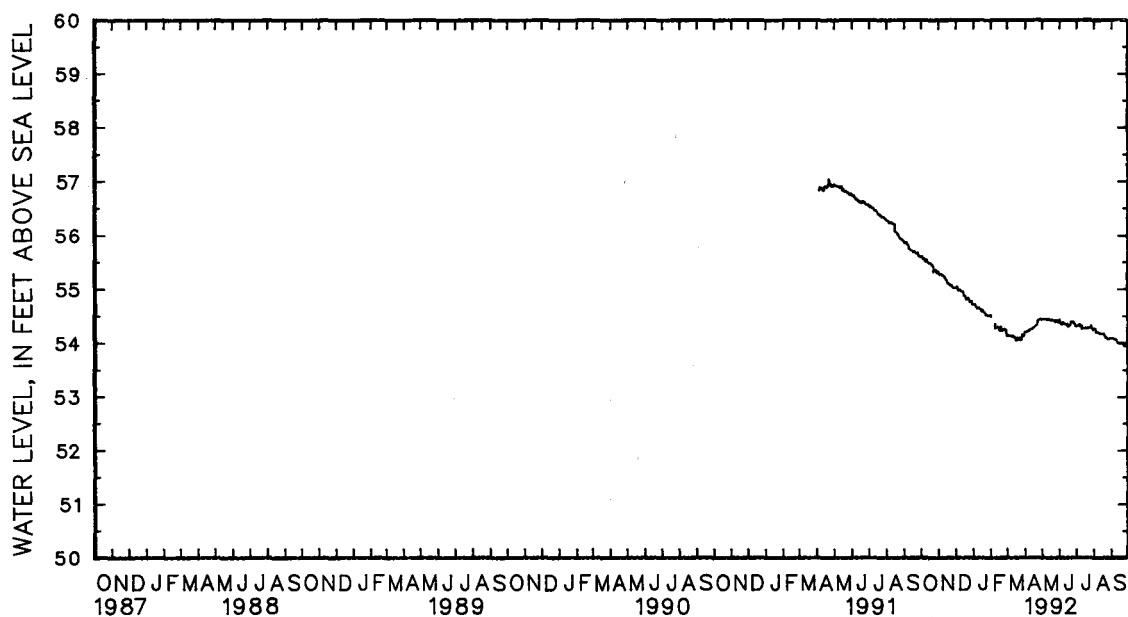
MARYLAND--Continued

KENT COUNTY--Continued

KE Bc 50--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	54.20	54.20	54.45	54.44	54.44	54.39	54.34	54.32	54.27	54.26	54.08	54.08
2	54.20	54.20	54.46	54.44	54.39	54.36	54.34	54.31	54.26	54.26	54.08	54.08
3	54.20	54.20	54.46	54.44	54.36	54.35	54.32	54.31	54.26	54.26	54.11	54.08
4	54.22	54.20	54.44	54.44	54.35	54.34	54.34	54.32	54.26	54.25	54.11	54.08
5	54.22	54.21	54.45	54.44	54.41	54.34	54.34	54.34	54.25	54.19	54.08	54.07
6	54.21	54.21	54.45	54.45	54.41	54.38	54.34	54.34	54.19	54.19	54.07	54.07
7	54.23	54.21	54.45	54.44	54.38	54.37	54.34	54.31	54.19	54.19	54.07	54.07
8	54.23	54.23	54.48	54.44	54.37	54.36	54.32	54.31	54.19	54.19	54.07	54.06
9	54.24	54.23	54.48	54.43	54.37	54.36	54.34	54.32	54.19	54.19	54.06	54.06
10	54.25	54.24	54.47	54.45	54.37	54.35	54.34	54.32	54.19	54.17	54.06	54.05
11	54.25	54.25	54.45	54.44	54.35	54.34	54.32	54.26	54.17	54.17	54.05	54.02
12	54.26	54.25	54.44	54.44	54.34	54.34	54.26	54.26	54.17	54.17	54.02	54.00
13	54.27	54.26	54.44	54.44	54.35	54.34	54.27	54.26	54.17	54.17	54.00	54.00
14	54.28	54.26	54.44	54.43	54.35	54.35	54.27	54.27	54.17	54.17	54.00	54.00
15	54.28	54.28	54.43	54.42	54.35	54.33	54.29	54.27	54.17	54.17	54.00	54.00
16	54.28	54.28	54.43	54.42	54.33	54.30	54.29	54.27	54.17	54.17	54.00	54.00
17	54.31	54.28	54.43	54.43	54.31	54.30	54.27	54.27	54.17	54.17	54.00	54.00
18	54.31	54.31	54.44	54.43	54.34	54.31	54.27	54.27	54.19	54.17	54.00	54.00
19	54.31	54.31	54.44	54.42	54.40	54.34	54.27	54.27	54.19	54.17	54.00	53.99
20	54.34	54.31	54.42	54.42	54.40	54.39	54.27	54.27	54.17	54.14	53.99	53.99
21	54.39	54.34	54.42	54.42	54.39	54.38	54.27	54.27	54.14	54.10	53.99	53.99
22	54.42	54.39	54.42	54.42	54.38	54.38	54.27	54.27	54.10	54.10	53.99	53.99
23	54.43	54.42	54.42	54.39	54.39	54.38	54.28	54.27	54.10	54.10	53.99	53.94
24	54.43	54.42	54.41	54.39	54.40	54.39	54.28	54.28	54.10	54.08	53.94	53.94
25	54.43	54.43	54.41	54.41	54.40	54.39	54.32	54.28	54.08	54.07	54.04	53.94
26	54.44	54.43	54.42	54.41	54.39	54.36	54.32	54.32	54.07	54.07	54.04	53.99
27	54.44	54.44	54.42	54.42	54.37	54.35	54.33	54.30	54.07	54.07	53.99	53.99
28	54.44	54.44	54.42	54.41	54.35	54.33	54.31	54.27	54.12	54.07	53.99	53.99
29	54.44	54.44	54.41	54.38	54.33	54.31	54.27	54.27	54.12	54.08	53.99	53.99
30	54.45	54.44	54.43	54.38	54.32	54.31	54.27	54.24	54.09	54.08	53.99	53.99
31	---	---	54.45	54.43	---	---	54.27	54.24	54.10	54.08	---	---
MONTH	54.45	54.20	54.48	54.38	54.44	54.30	54.34	54.24	54.27	54.07	54.11	53.94

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

[illegible]

GROUND-WATER LEVELS

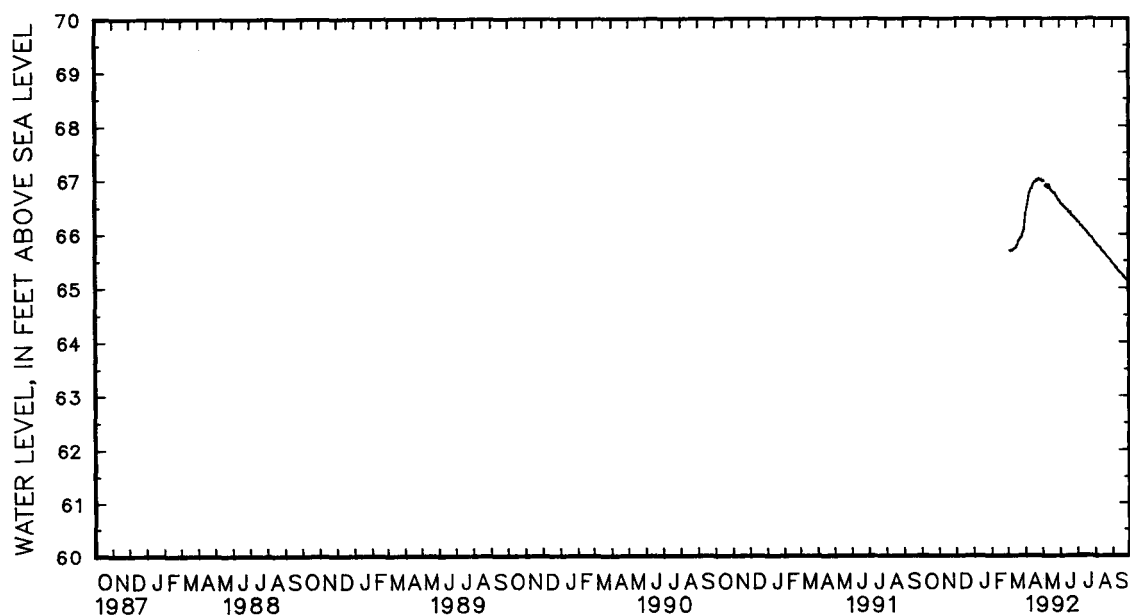
MARYLAND--Continued

KENT COUNTY--Continued

KE Bc 185--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	66.36	66.27	66.98	66.96	66.60	66.56	66.27	66.22	65.82	65.80	65.42	65.40
2	66.44	66.36	67.03	66.98	66.56	66.55	66.22	66.20	65.80	65.79	65.40	65.39
3	66.50	66.44	67.02	66.98	66.55	66.53	66.20	66.19	65.79	65.79	65.40	65.38
4	66.57	66.50	66.98	66.96	66.54	66.53	66.20	66.18	65.79	65.76	65.38	65.37
5	66.60	66.57	---	---	66.56	66.53	66.19	66.17	65.76	65.74	65.37	65.35
6	66.66	66.60	66.90	66.88	66.53	66.50	---	---	65.74	65.73	65.35	65.35
7	66.73	66.67	66.90	66.86	66.50	66.49	66.15	66.13	65.73	65.72	65.35	65.34
8	66.75	66.73	66.94	66.90	66.50	66.48	66.15	66.12	65.72	65.72	65.34	65.32
9	66.79	66.75	66.92	66.89	66.49	66.47	66.15	66.12	65.72	65.71	65.33	65.32
10	66.83	66.79	66.89	66.85	66.47	66.46	66.12	66.10	65.71	65.70	65.32	65.30
11	66.85	66.82	66.90	66.83	66.46	66.44	66.10	66.08	65.70	65.67	65.30	65.29
12	66.86	66.83	66.92	66.89	66.44	66.43	66.09	66.08	65.68	65.65	65.29	65.27
13	66.87	66.82	66.92	66.90	66.44	66.43	66.09	66.06	65.65	65.65	65.27	65.26
14	66.91	66.87	66.90	66.85	66.43	66.42	66.07	66.05	65.65	65.63	65.26	65.25
15	66.92	66.90	66.85	66.82	66.42	66.39	66.07	66.04	65.63	65.62	65.25	65.24
16	66.95	66.92	66.82	66.79	66.39	66.38	66.04	66.02	65.62	65.61	65.24	65.23
17	66.97	66.94	66.81	66.79	66.38	66.37	66.03	66.01	65.61	65.60	65.23	65.23
18	66.95	66.94	66.82	66.78	66.39	66.37	66.01	65.99	65.60	65.59	65.23	65.22
19	66.96	66.94	66.78	66.75	66.41	66.39	65.99	65.98	65.59	65.57	65.22	65.20
20	66.98	66.96	66.75	66.74	66.39	66.35	65.98	65.97	65.57	65.56	65.20	65.18
21	67.00	66.98	66.75	66.73	66.36	66.33	65.97	65.95	65.56	65.54	65.18	65.18
22	67.00	66.96	66.75	66.73	66.33	66.32	65.95	65.93	65.54	65.53	65.18	65.17
23	66.99	66.97	66.75	66.74	66.33	66.32	65.94	65.92	65.53	65.52	65.17	65.14
24	67.04	66.99	66.75	66.71	66.33	66.30	65.92	65.91	65.52	65.51	65.14	65.13
25	67.02	67.00	66.71	66.68	66.32	66.29	65.92	65.90	65.51	65.50	65.14	65.12
26	67.00	66.99	66.69	66.67	66.29	66.29	65.91	65.90	65.50	65.49	65.14	65.11
27	66.99	66.99	66.68	66.65	66.29	66.26	65.91	65.88	65.49	65.48	65.11	65.10
28	66.99	66.97	66.65	66.62	66.26	66.25	65.88	65.86	65.50	65.46	65.10	65.09
29	66.99	66.97	66.62	66.60	66.26	66.24	65.86	65.85	65.46	65.44	65.09	65.07
30	67.00	66.98	66.62	66.60	66.25	66.23	65.85	65.83	65.44	65.44	65.07	65.07
31	---	---	66.63	66.60	---	---	65.85	65.82	65.44	65.42	---	---
MONTH	67.04	66.27	67.03	66.60	66.60	66.23	66.27	65.82	65.82	65.42	65.42	65.07

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Bc 186. SITE ID.--391650076050403. PERMIT NUMBER.--KE-88-0286.
 LOCATION.--Lat 39°16'50", long 76°05'04", Hydrologic Unit 02060002, at Worton Regional Park, Worton
 Owner: Maryland Geological Survey.
 AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 275 ft; casing diameter 4 in., to 255 ft;
 screen diameter 4 in. from 255 to 265 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to current year.
 DATUM.--Elevation of land surface is 82.00 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.75 ft above land surface.
 REMARKS.--Kent County project observation well. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--February 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.37 ft above sea level, March 11, 1992;
 lowest measured, 31.53 ft above sea level, Sept. 24, and 25, 1992.

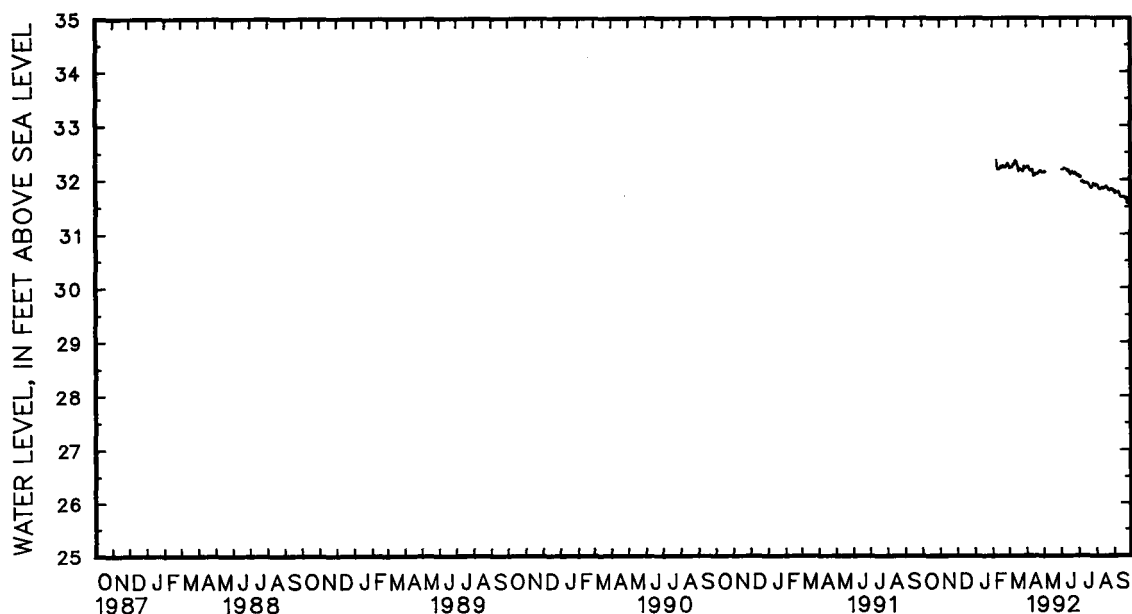
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	32.25	32.23
2	---	---	---	---	---	---	---	---	---	---	32.24	32.18
3	---	---	---	---	---	---	---	---	---	---	32.22	32.20
4	---	---	---	---	---	---	---	---	---	---	32.20	32.19
5	---	---	---	---	---	---	---	---	---	---	32.20	32.19
6	---	---	---	---	---	---	---	---	---	---	32.20	32.19
7	---	---	---	---	---	---	---	---	---	---	32.26	32.20
8	---	---	---	---	---	---	---	---	32.36	32.33	32.26	32.25
9	---	---	---	---	---	---	---	---	32.33	32.19	32.25	32.24
10	---	---	---	---	---	---	---	---	32.19	32.15	32.31	32.24
11	---	---	---	---	---	---	---	---	32.19	32.17	32.37	32.31
12	---	---	---	---	---	---	---	---	32.19	32.16	32.34	32.32
13	---	---	---	---	---	---	---	---	32.22	32.16	32.32	32.30
14	---	---	---	---	---	---	---	---	32.22	32.19	32.30	32.30
15	---	---	---	---	---	---	---	---	32.26	32.19	32.30	32.26
16	---	---	---	---	---	---	---	---	32.27	32.22	32.26	32.23
17	---	---	---	---	---	---	---	---	32.22	32.19	32.24	32.16
18	---	---	---	---	---	---	---	---	32.23	32.20	32.16	32.12
19	---	---	---	---	---	---	---	---	32.25	32.23	32.20	32.16
20	---	---	---	---	---	---	---	---	32.24	32.22	32.18	32.17
21	---	---	---	---	---	---	---	---	32.22	32.20	32.17	32.15
22	---	---	---	---	---	---	---	---	32.21	32.19	32.20	32.15
23	---	---	---	---	---	---	---	---	32.21	32.21	32.20	32.15
24	---	---	---	---	---	---	---	---	32.21	32.20	32.15	32.12
25	---	---	---	---	---	---	---	---	32.23	32.20	32.13	32.12
26	---	---	---	---	---	---	---	---	32.28	32.24	32.26	32.13
27	---	---	---	---	---	---	---	---	32.28	32.27	32.26	32.22
28	---	---	---	---	---	---	---	---	32.29	32.27	32.22	32.20
29	---	---	---	---	---	---	---	---	32.31	32.23	32.20	32.18
30	---	---	---	---	---	---	---	---	---	---	32.21	32.18
31	---	---	---	---	---	---	---	---	---	---	32.22	32.20
MONTH	---	---	---	---	---	---	---	---	32.36	32.15	32.37	32.12

GROUND-WATER LEVELS
 MARYLAND--Continued
 KENT COUNTY--Continued
 KE Bc 186--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	32.22	32.20	32.10	32.09	---	---	32.06	32.05	31.89	31.88	31.78	31.75
2	32.22	32.21	32.13	32.10	32.17	32.15	32.06	32.03	31.88	31.87	31.75	31.72
3	32.21	32.21	32.13	32.11	32.16	32.15	32.03	32.01	31.87	31.87	31.77	31.72
4	32.21	32.21	32.11	32.10	32.16	32.15	32.03	32.03	31.87	31.87	31.77	31.75
5	32.21	32.17	---	---	32.19	32.16	32.03	32.02	31.87	31.83	31.75	31.73
6	32.17	32.14	---	---	32.19	32.18	---	---	31.83	31.80	31.73	31.73
7	32.17	32.15	---	---	32.18	32.18	31.97	31.93	31.80	31.79	31.73	31.73
8	32.17	32.14	---	---	32.18	32.17	31.94	31.92	31.80	31.79	31.74	31.73
9	32.15	32.14	---	---	32.17	32.17	31.95	31.94	31.81	31.80	31.74	31.74
10	32.15	32.14	---	---	32.17	32.16	31.95	31.93	31.82	31.81	31.74	31.74
11	32.15	32.15	---	---	32.16	32.14	31.94	31.92	31.84	31.82	31.74	31.71
12	32.15	32.09	---	---	32.14	32.13	31.92	31.90	31.84	31.82	31.71	31.66
13	32.09	32.03	---	---	32.15	32.14	31.93	31.91	31.82	31.81	31.66	31.65
14	32.07	32.04	---	---	32.15	32.14	31.92	31.90	31.82	31.81	31.65	31.65
15	32.07	32.05	---	---	32.15	32.12	31.94	31.91	31.82	31.81	31.65	31.64
16	32.08	32.05	---	---	32.12	32.07	31.93	31.91	31.83	31.82	31.65	31.64
17	32.10	32.08	---	---	32.07	32.06	31.91	31.90	31.84	31.83	31.65	31.65
18	32.09	32.07	---	---	32.09	32.07	31.91	31.89	31.85	31.84	31.67	31.65
19	32.08	32.07	---	---	32.12	32.09	31.89	31.88	31.85	31.85	31.67	31.65
20	32.08	32.07	---	---	32.12	32.11	31.88	31.86	31.85	31.84	31.65	31.63
21	32.10	32.09	---	---	32.11	32.09	31.86	31.85	31.84	31.81	31.63	31.62
22	32.11	32.10	---	---	32.09	32.08	31.85	31.82	31.81	31.80	31.66	31.63
23	32.11	32.10	---	---	32.08	32.07	31.84	31.82	31.80	31.78	31.66	31.59
24	32.14	32.10	---	---	32.10	32.09	31.84	31.82	31.78	31.77	31.59	31.53
25	32.14	32.13	---	---	32.11	32.10	31.85	31.83	31.78	31.77	31.61	31.53
26	32.13	32.12	---	---	32.10	32.08	31.89	31.85	31.79	31.78	31.62	31.61
27	32.12	32.11	---	---	32.09	32.08	31.90	31.89	31.80	31.79	31.62	31.62
28	32.11	32.10	---	---	32.08	32.05	31.89	31.89	31.84	31.80	31.62	31.62
29	32.11	32.09	---	---	32.05	32.04	31.89	31.88	31.83	31.79	31.62	31.62
30	32.11	32.10	---	---	32.05	32.04	31.88	31.86	31.79	31.78	31.62	31.61
31	---	---	---	---	---	---	31.89	31.86	31.78	31.78	---	---
MONTH	32.22	32.03	32.13	32.09	32.19	32.04	32.06	31.82	31.89	31.77	31.78	31.53

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Be 43. SITE ID.--391823075594701. PERMIT NUMBER.--KE-73-0659.

LOCATION.--Lat 39°18'23", long 75°59'47", Hydrologic Unit 02060002, at Kennedyville.

Owner: U.S. Geological Survey.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 297 ft; casing diameter 10 in., to 171 ft; casing diameter 4 in to 275 ft and 285 to 297 ft; screen diameter 4 in. from 275 to 285 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Twice yearly measurements from October 1986 to April 1991.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.73 ft above land surface.

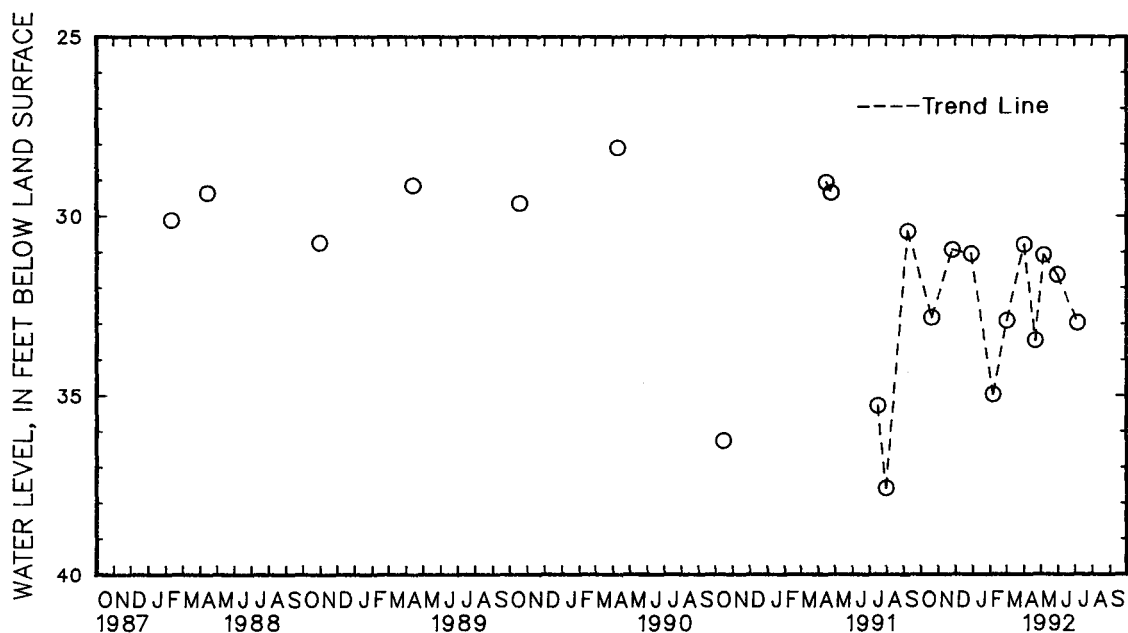
REMARKS.--Maryland Water-Level Network and Kent Co. project observation well.

PERIOD OF RECORD.--February 1979 to July 1979, December 1985, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.31 ft below land surface, June 5, 1979; lowest measured, 37.59 ft below land surface, July 31, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	32.83	DEC 30	31.05	MAR 2	32.92	APR 22	33.47	JUN 1	31.64
NOV 26	30.94	FEB 7	34.98	APR 2	30.79	MAY 7	31.08	JUL 6	32.98
WATER YEAR 1992		HIGHEST	30.79	APR 2, 1992	LOWEST	34.98	FEB 7, 1992		



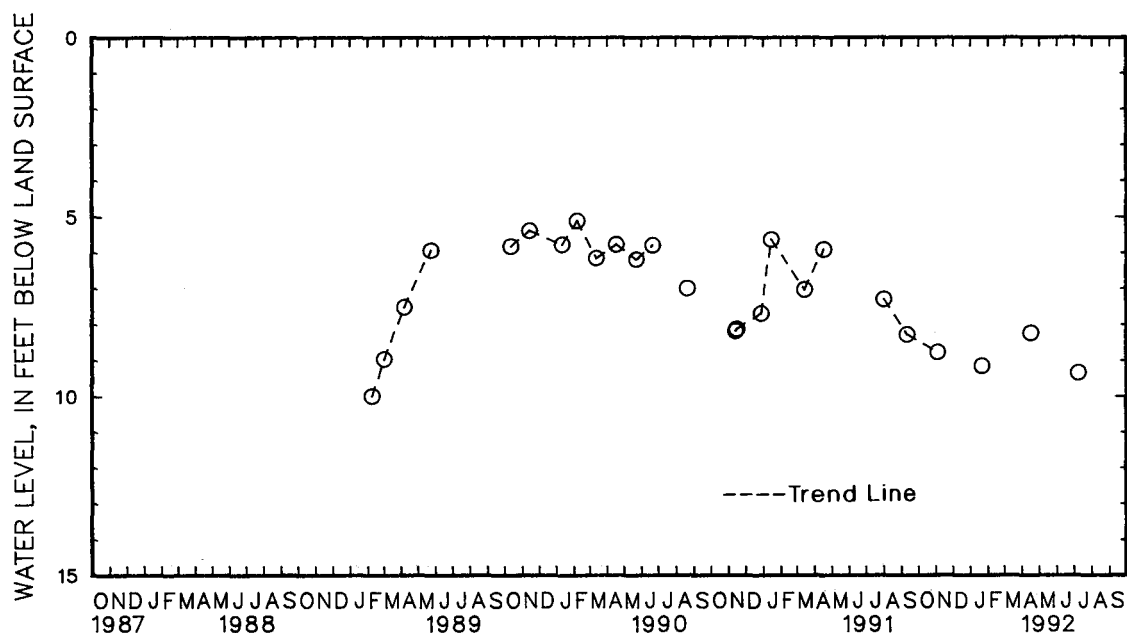
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued

WELL NUMBER.--Ke Be 55. SITE ID.-- 391846075561701. PERMIT NUMBER.--KE-81-1228.
LOCATION.--Lat 39°18'46", long 75°56'17", Hydrologic Unit 0206002, near Locust Grove.
Owner: U. S. Geological Survey.
AQUIFER.--Pleistocene-Pliocene Formation. Aquifer code: 112PCPC.
WELL CHARACTERISTICS.--Driven, observation, water-table well, depth 20.0 ft, casing diameter 2 in., to 17 ft; screen diameter 2 in. from 17 ft to 20 ft.
INSTRUMENTATION.--Measurements with chalked steel tape by U.S. Geological Survey personnel.
Equipped with water-level recorder Januray 26, 1989 to current year.
DATUM.--Elevation of land surface is 66.45 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.89 ft above land surface.
REMARKS.--National Water Quality Assessment project observation well.
PERIOD OF RECORD.--January 1989 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.52 ft below land surface, June 25, 1989; lowest measured, 10.26 ft below land surface, Feb. 14, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 4	8.79	JAN 21	9.17	APR 17	8.25	JUL 8	9.36
WATER YEAR 1992		HIGHEST	8.25	APR 17, 1992		LOWEST	9.36 JUL 8, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Bf 93. SITE ID.--391752075523901.
 LOCATION.--Lat 39°17'52", long 75°52'39", Hydrologic Unit 02060002, 3.5 mi northeast of Millington,
 off Lambson Millington Forest Rd.; at Locust Hill Farm.
 Owner: Fritchey, Clayton.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 86.6 ft; casing diameter 4 in.;
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital
 water-level recorder--60-minute recorder interval from December 1990 to current year.
 DATUM.--Elevation of land surface is 37.00 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 4.0 ft below land surface.
 REMARKS.--Kent County Observation well.
 PERIOD OF RECORD.--December 1990 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.61 ft above sea level, Jan. 12, 1991;
 lowest measured, 19.27 ft above sea level, July 15, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.97	19.94	19.88	19.84	19.88	19.79	19.93	19.91	19.89	19.82	20.15	20.03
2	19.95	19.95	19.90	19.87	19.99	19.85	19.95	19.93	19.82	19.80	20.11	20.04
3	19.97	19.95	19.87	19.86	20.17	19.99	19.97	19.95	19.81	19.80	20.12	20.05
4	19.95	19.92	19.87	19.73	20.17	19.99	20.04	19.97	19.88	19.80	20.09	20.04
5	19.94	19.92	19.80	19.73	19.99	19.94	20.01	20.00	19.83	19.78	20.10	20.05
6	19.94	19.92	19.83	19.80	20.01	19.95	20.01	19.98	19.81	19.79	20.09	20.04
7	19.92	19.87	19.84	19.75	19.97	19.95	19.98	19.96	19.85	19.81	20.30	20.09
8	19.87	19.87	19.75	19.65	19.97	19.94	19.96	19.94	19.85	19.81	20.30	20.19
9	19.88	19.87	19.77	19.65	20.04	19.94	20.01	19.96	19.81	19.73	20.21	20.17
10	19.93	19.88	19.87	19.78	20.17	20.05	20.01	19.99	19.76	19.71	20.43	20.19
11	19.88	19.69	19.88	19.85	20.11	20.07	19.99	19.92	19.81	19.76	20.57	20.39
12	19.80	19.69	19.85	19.73	20.07	20.04	19.95	19.90	19.80	19.71	20.42	20.34
13	19.82	19.74	19.79	19.73	20.09	20.07	20.00	19.95	19.84	19.74	20.37	20.28
14	19.83	19.78	19.79	19.79	20.12	20.07	20.09	19.91	19.84	19.75	20.33	20.27
15	19.83	19.77	19.83	19.79	20.07	20.03	19.92	19.89	20.00	19.77	20.30	20.23
16	19.78	19.70	19.83	19.80	20.03	20.00	19.95	19.85	20.00	19.84	20.26	20.20
17	19.95	19.71	19.80	19.79	20.06	20.00	19.91	19.85	19.90	19.82	20.29	20.22
18	19.95	19.92	19.80	19.79	20.03	19.94	19.88	19.80	19.99	19.88	20.32	20.18
19	19.96	19.91	19.80	19.80	19.94	19.91	19.81	19.77	20.02	19.95	20.49	20.33
20	19.92	19.91	19.82	19.80	19.96	19.90	19.87	19.81	20.04	19.94	20.43	20.38
21	19.99	19.83	19.82	19.82	20.02	19.97	19.85	19.80	20.02	19.93	20.40	20.30
22	19.85	19.76	19.88	19.81	19.98	19.98	19.81	19.79	20.02	19.95	20.46	20.32
23	19.83	19.76	19.88	19.84	20.01	19.98	20.00	19.81	20.03	19.96	20.44	20.32
24	19.86	19.82	19.88	19.83	20.01	19.94	19.97	19.81	20.02	19.97	20.34	20.27
25	19.89	19.84	19.83	19.80	19.94	19.91	19.86	19.79	20.09	19.97	20.32	20.28
26	19.86	19.81	19.80	19.69	19.91	19.90	19.87	19.77	20.28	20.11	---	---
27	19.90	19.86	19.78	19.75	19.90	19.90	19.81	19.78	20.21	20.15	---	---
28	19.90	19.85	19.80	19.77	19.92	19.89	19.81	19.81	20.24	20.15	---	---
29	19.86	19.83	19.80	19.76	20.05	19.92	19.85	19.81	20.24	20.03	---	---
30	19.91	19.83	19.79	19.76	20.02	19.91	19.88	19.84	---	---	---	---
31	19.84	19.83	---	---	19.91	19.90	19.89	19.88	---	---	---	---
MONTH	19.99	19.69	19.90	19.65	20.17	19.79	20.09	19.77	20.28	19.71	20.57	20.03

GROUND-WATER LEVELS

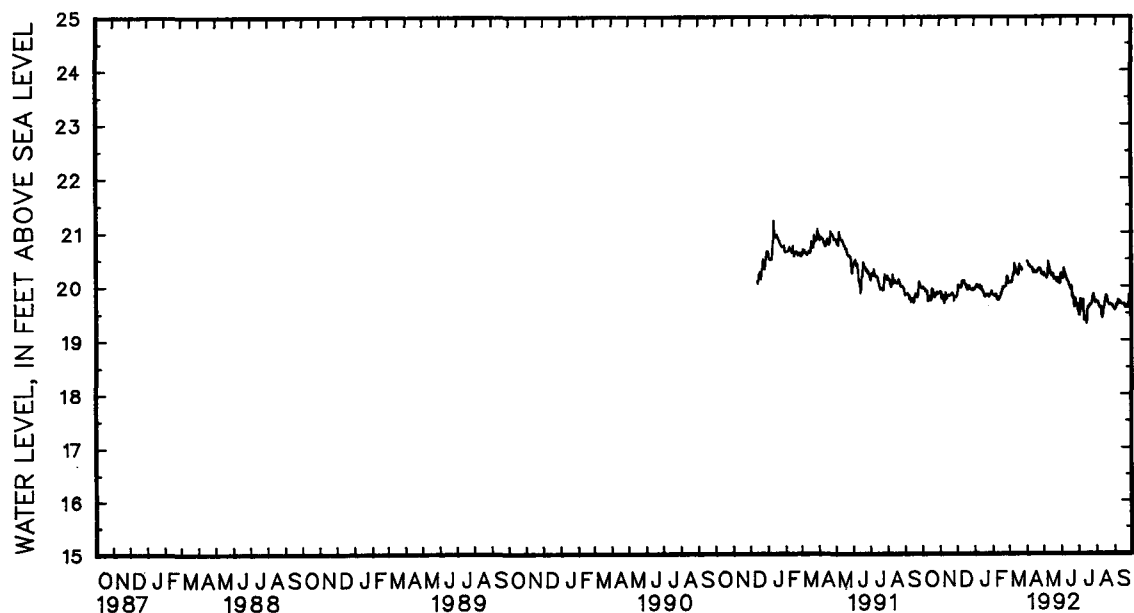
MARYLAND--Continued

KENT COUNTY--Continued

KE Bf 93--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	20.24	20.17	20.31	20.21	19.59	19.51	19.76	19.69	19.58	19.52
2	---	---	20.27	20.22	20.23	20.15	19.55	19.42	19.72	19.68	19.58	19.52
3	20.49	20.44	20.26	20.18	20.17	20.12	19.52	19.41	19.72	19.68	19.69	19.55
4	20.46	20.40	20.21	20.16	20.16	20.12	19.73	19.52	19.71	19.66	19.70	19.62
5	20.43	20.36	20.20	20.15	20.49	20.12	19.79	19.72	19.67	19.62	19.67	19.60
6	20.39	20.34	20.18	20.12	20.44	20.31	---	---	19.63	19.58	19.74	19.64
7	20.42	20.37	20.16	20.13	20.33	20.23	19.70	19.53	19.61	19.57	19.76	19.71
8	20.42	20.32	20.57	20.17	20.29	20.22	19.73	19.61	19.60	19.56	19.76	19.71
9	20.37	20.32	20.58	20.44	20.26	20.18	19.77	19.71	19.62	19.58	19.74	19.70
10	20.38	20.32	20.52	20.38	20.21	20.13	19.73	19.54	19.61	19.40	19.74	19.64
11	20.39	20.32	20.42	20.33	20.16	20.10	19.54	19.32	19.43	19.37	19.75	19.67
12	20.37	20.25	20.37	20.31	20.12	20.07	19.50	19.37	19.54	19.42	19.71	19.64
13	20.29	20.22	20.36	20.21	20.11	20.06	19.57	19.39	19.60	19.53	19.70	19.64
14	20.32	20.27	20.33	20.22	20.10	20.04	19.43	19.34	19.65	19.57	19.69	19.63
15	20.31	20.23	20.25	20.17	20.08	19.98	19.34	19.27	19.74	19.62	19.68	19.63
16	20.32	20.25	20.23	20.17	20.01	19.96	19.53	19.32	19.80	19.72	19.68	19.63
17	20.35	20.23	20.25	20.19	19.97	19.92	19.58	19.54	19.85	19.77	19.69	19.62
18	20.27	20.23	20.26	20.20	19.97	19.93	19.62	19.58	19.88	19.80	19.68	19.63
19	20.28	20.23	20.22	20.10	20.04	19.97	19.64	19.57	19.85	19.78	19.65	19.58
20	20.31	20.26	20.18	20.13	20.00	19.76	19.65	19.59	19.80	19.72	19.61	19.56
21	20.32	20.29	20.16	20.12	19.90	19.82	19.66	19.62	19.74	19.65	19.62	19.58
22	20.35	20.31	20.16	20.10	19.92	19.77	19.63	19.62	19.72	19.64	19.66	19.61
23	20.32	20.29	20.15	20.12	19.86	19.71	19.70	19.62	19.71	19.62	19.65	19.57
24	20.38	20.31	20.15	20.05	19.71	19.57	19.74	19.67	19.69	19.62	19.59	19.56
25	20.36	20.27	20.12	20.08	19.72	19.58	19.80	19.74	19.70	19.63	19.88	19.58
26	20.32	20.29	20.17	20.10	19.83	19.73	19.84	19.79	19.70	19.62	19.94	19.81
27	20.32	20.19	20.17	20.12	19.78	19.64	19.86	19.82	19.68	19.62	19.85	19.81
28	20.28	20.21	20.13	20.03	19.73	19.62	19.83	19.75	19.72	19.62	19.84	19.79
29	20.27	20.21	20.08	20.03	19.74	19.63	19.78	19.70	19.66	19.58	19.90	19.80
30	20.27	20.21	20.19	20.01	19.63	19.52	19.73	19.66	19.62	19.57	19.83	19.79
31	---	---	20.34	20.19	---	---	19.74	19.66	19.63	19.54	---	---
MONTH	20.49	20.19	20.58	20.01	20.49	19.52	19.86	19.27	19.88	19.37	19.94	19.52

Daily Low Water Levels



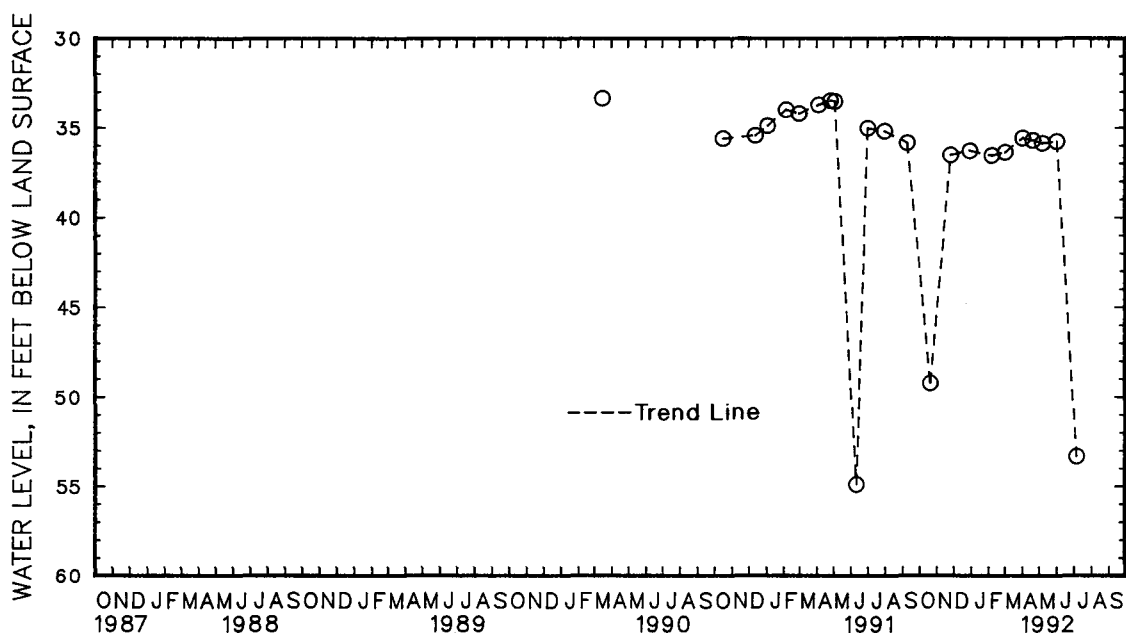
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued

WELL NUMBER.--KE Bf 154. SITE ID.--391755075532701. PERMIT NUMBER.--KE-81-0551
LOCATION.--Lat 39°17'55", long 75°53'27", Hydrologic Unit 02060002, 2.25 mi. northeast of Chesterville,
off MD Rt. 290, at Angelica Nurseries.
Owner: Angelica Nurseries.
AQUIFER.--Monmouth Formation of the Upper Cretaceous age. Aquifer code: 211MNT.
WELL CHARACTERISTICS.--Drilled, observation well, depth 190 ft; casing diameter 6 in., to 121 ft;
screen diameter 6 in. from 121 to 181 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
Equipped with digital water-level recorder--60-minute recorder interval from December 1992 to current year.
DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of recorder platform, 2.7 ft above land surface.
REMARKS.--Kent County project observation well. Water levels may be affected by nearby pumping.
PERIOD OF RECORD.--March 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.35 ft below land surface March 15, 1990;
lowest measured, 53.34 ft below land surface, July 6, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	49.25	DEC 30	36.28	MAR 2	36.36	APR 20	35.69	JUN 1	35.75
NOV 26	36.51	FEB 7	36.54	APR 2	35.56	MAY 7	35.85	JUL 6	53.34
WATER YEAR 1992		HIGHEST	35.56	APR 2, 1992	LOWEST	53.34	JUL 6, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Bg 33. SITE ID.--391815075472101. PERMIT NUMBER.--KE-73-0670.

LOCATION.--Lat 39°18'15", long 75°47'21", Hydrologic Unit 02060002, 2 mi west of Massey at Millington Wildlife Management Area.

Owner: U.S. Geological Survey.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 705 ft; casing diameter 4 in., to 695 ft; screen diameter 4 in. from 695 to 705 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.50 ft above land surface.

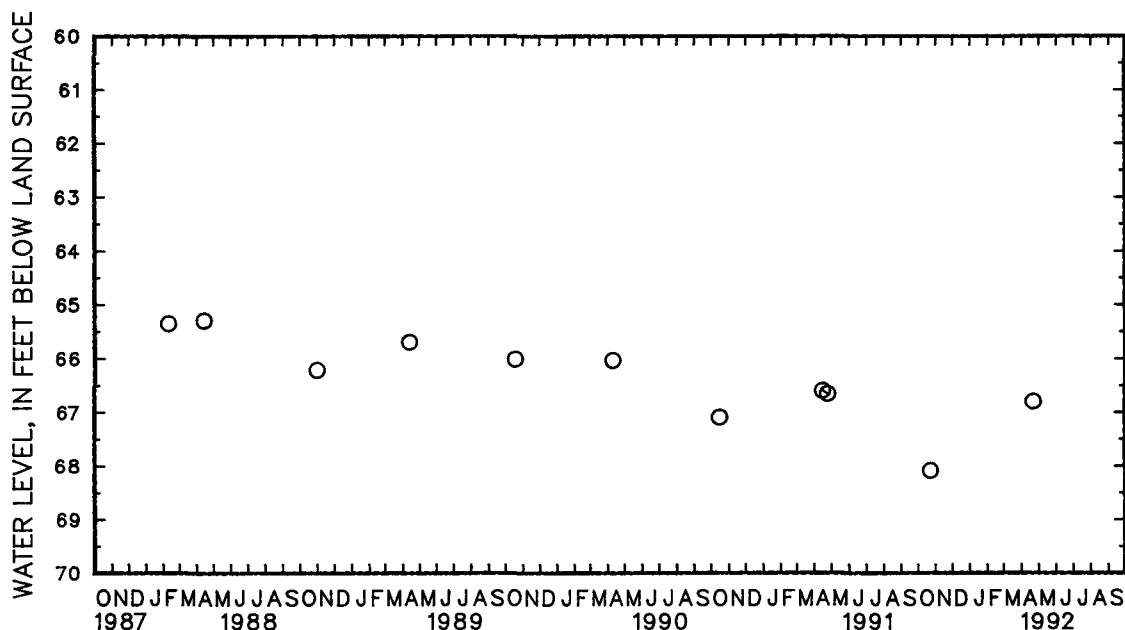
REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly beginning October 1986.

PERIOD OF RECORD.--March 1979 to July 1979, December 1985, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.62 ft below land surface, June 5, 1979; lowest measured, 68.09 ft below land surface, Oct. 23, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	68.09	APR 22	66.80
WATER YEAR 1992 HIGHEST 66.80 APR 22, 1992 LOWEST 68.09 OCT 23, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

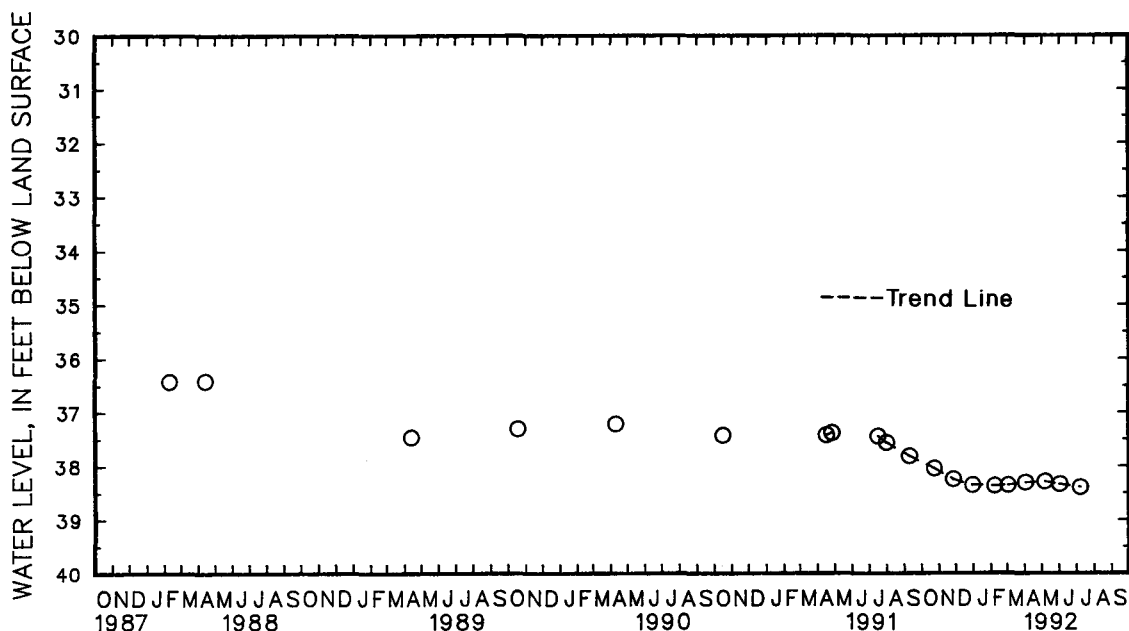
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued

WELL NUMBER.--KE Cb 36. SITE ID.--391400076101401. PERMIT NUMBER.--KE-73-0660.
LOCATION.--Lat 39°14'00", long 76°10'14", Hydrologic Unit 02060002, north of Fairlee, at sewage treatment facility.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 650 ft; casing diameter 10 in., to 114 ft; casing diameter 4 in., to 595 ft and 605 to 650 ft; screen diameter 4 in. from 595 to 605 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Measured twice yearly from October 1986 to April 1991. Equipped with digital water-level recorder--30-minute recorder interval from July 16, 1991 to current year.
DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 4.15 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly beginning October 1986.
PERIOD OF RECORD.--June 1978 to July 1979, December 1985, October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.84 ft below land surface, Sept. 15, 1982; lowest measured, 38.36 ft below land surface, Dec. 30, 1991, and Feb. 7, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	38.05	DEC 30	38.36	MAR 2	38.35	MAY 6	38.29	JUL 7	38.40
NOV 26	38.25	FEB 7	38.36	APR 2	38.31	JUN 1	38.34		
WATER YEAR 1992		HIGHEST	38.05	OCT 23, 1991	LOWEST	38.36	DEC 30, 1991	FEB 7, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued

WELL NUMBER.--KE Cb 97. SITE ID.--391124076101001. PERMIT NUMBER.--KE-88-0251.
LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner,
at Remington Farms.
Owner: Maryland Geological Survey.
AQUIFER.--Magothy Formation of the Upper Cretaceous age. Aquifer code: 211MGTY.
WELL CHARACTERISTICS.--Drilled, observation well, depth 285 ft; casing diameter 4 in., to 270 ft;
screen diameter 4 in. from 270 to 280 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-
level recorder--60-minute recorder interval from February 1992 to current year.
DATUM.--Elevation of land surface is 65.84 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 2.35 ft above land surface.
REMARKS.--Kent County project observation well.
PERIOD OF RECORD.--February 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.07 ft above sea level, March 26, 1992;
lowest measured, 7.23 ft. above sea level, May 7, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	8.82	8.79
2	---	---	---	---	---	---	---	---	---	---	8.81	8.72
3	---	---	---	---	---	---	---	---	---	---	8.79	8.77
4	---	---	---	---	---	---	---	---	---	---	8.77	8.75
5	---	---	---	---	---	---	---	---	---	---	8.76	8.75
6	---	---	---	---	---	---	---	---	---	---	8.76	8.76
7	---	---	---	---	---	---	---	---	8.87	8.85	8.88	8.76
8	---	---	---	---	---	---	---	---	8.87	8.83	8.88	8.85
9	---	---	---	---	---	---	---	---	8.83	8.71	8.85	8.84
10	---	---	---	---	---	---	---	---	8.71	8.68	8.98	8.84
11	---	---	---	---	---	---	---	---	8.77	8.70	9.04	8.95
12	---	---	---	---	---	---	---	---	8.76	8.69	8.95	8.90
13	---	---	---	---	---	---	---	---	8.79	8.69	8.90	8.87
14	---	---	---	---	---	---	---	---	8.80	8.76	8.88	8.87
15	---	---	---	---	---	---	---	---	8.87	8.76	8.87	8.85
16	---	---	---	---	---	---	---	---	8.88	8.80	8.85	8.81
17	---	---	---	---	---	---	---	---	8.80	8.77	8.86	8.82
18	---	---	---	---	---	---	---	---	8.84	8.78	8.85	8.81
19	---	---	---	---	---	---	---	---	8.86	8.84	8.96	8.86
20	---	---	---	---	---	---	---	---	8.85	8.80	8.91	8.89
21	---	---	---	---	---	---	---	---	8.80	8.77	8.89	8.86
22	---	---	---	---	---	---	---	---	8.79	8.77	8.96	8.86
23	---	---	---	---	---	---	---	---	8.80	8.79	8.96	8.87
24	---	---	---	---	---	---	---	---	8.80	8.79	8.86	8.82
25	---	---	---	---	---	---	---	---	8.84	8.79	8.83	8.82
26	---	---	---	---	---	---	---	---	8.88	8.85	9.07	8.83
27	---	---	---	---	---	---	---	---	8.87	8.86	9.07	9.00
28	---	---	---	---	---	---	---	---	8.89	8.86	8.99	8.96
29	---	---	---	---	---	---	---	---	8.90	8.79	8.96	8.93
30	---	---	---	---	---	---	---	---	---	---	8.98	8.93
31	---	---	---	---	---	---	---	---	---	---	9.00	8.97
MONTH	---	---	---	---	---	---	---	---	8.90	8.68	9.07	8.72

GROUND-WATER LEVELS

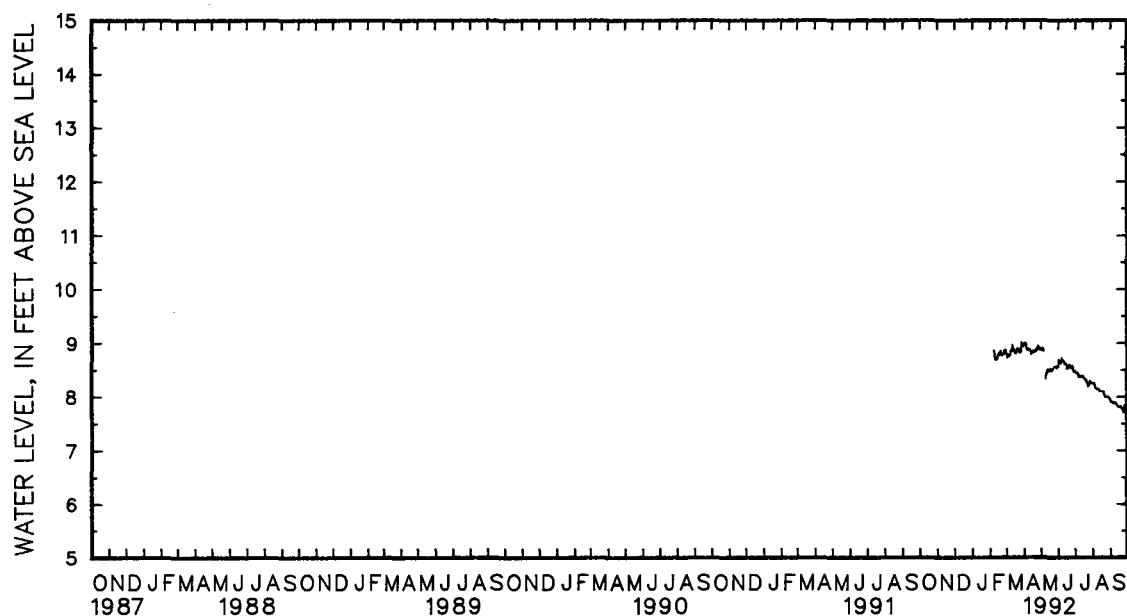
MARYLAND--Continued

KENT COUNTY--Continued

KE Cb 97--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.00	8.97	8.89	8.86	8.70	8.68	8.48	8.47	8.25	8.25	7.95	7.92
2	9.00	8.99	8.94	8.87	8.68	8.64	8.48	8.45	8.25	8.25	7.92	7.90
3	8.99	8.97	8.94	8.89	8.64	8.62	8.45	8.44	8.25	8.25	7.90	7.90
4	8.98	8.98	8.90	8.88	8.63	8.63	8.44	8.44	8.25	8.25	7.90	7.90
5	8.98	8.90	8.88	8.85	8.73	8.63	8.45	8.44	8.25	8.19	7.90	7.88
6	8.90	8.87	---	---	8.73	8.71	8.45	8.44	8.19	8.16	7.88	7.87
7	8.91	8.87	---	---	8.71	8.68	8.44	8.38	8.16	8.14	7.87	7.87
8	8.91	8.88	8.33	8.10	8.68	8.67	8.38	8.36	8.14	8.14	7.88	7.87
9	8.88	8.87	8.41	8.33	8.67	8.67	8.41	8.38	8.14	8.14	7.88	7.88
10	8.88	8.87	8.44	8.41	8.67	8.65	8.41	8.38	8.14	8.14	7.88	7.88
11	8.88	8.87	8.44	8.44	8.65	8.62	8.40	8.38	8.14	8.14	7.88	7.86
12	8.88	8.84	8.49	8.44	8.62	8.60	8.38	8.37	8.14	8.12	7.86	7.84
13	8.83	8.79	8.51	8.49	8.61	8.60	8.40	8.38	8.12	8.09	7.84	7.83
14	8.84	8.80	8.52	8.50	8.61	8.61	8.38	8.38	8.09	8.09	7.83	7.81
15	8.84	8.81	8.50	8.48	8.61	8.58	8.38	8.38	8.09	8.09	7.81	7.80
16	8.85	8.82	8.50	8.48	8.58	8.53	8.38	8.34	8.09	8.09	7.80	7.80
17	8.87	8.85	8.51	8.49	8.53	8.52	8.34	8.34	8.09	8.09	7.80	7.80
18	8.87	8.84	8.53	8.51	8.56	8.52	8.34	8.33	8.09	8.09	7.82	7.80
19	8.84	8.83	8.52	8.49	8.61	8.56	8.33	8.31	8.09	8.09	7.82	7.81
20	8.85	8.83	8.49	8.48	8.61	8.59	8.31	8.30	8.09	8.09	7.81	7.78
21	8.87	8.85	8.50	8.49	8.59	8.56	8.30	8.30	8.09	8.04	7.78	7.78
22	8.88	8.88	8.53	8.50	8.56	8.55	8.30	8.26	8.04	8.02	7.82	7.78
23	8.88	8.87	8.55	8.53	8.55	8.53	8.26	8.22	8.02	7.99	7.82	7.74
24	8.96	8.87	8.57	8.55	8.57	8.54	8.22	8.19	7.99	7.99	7.74	7.70
25	8.96	8.94	8.57	8.55	8.58	8.57	8.23	8.20	7.99	7.99	7.82	7.70
26	8.94	8.92	8.56	8.55	8.57	8.54	8.30	8.23	7.99	7.99	7.85	7.82
27	8.92	8.90	8.57	8.56	8.55	8.53	8.32	8.29	7.99	7.99	7.85	7.83
28	8.90	8.88	8.57	8.54	8.53	8.48	8.29	8.27	7.99	7.99	7.85	7.84
29	8.88	8.87	8.55	8.53	8.48	8.46	8.27	8.26	7.99	7.97	7.85	7.83
30	8.89	8.88	8.57	8.53	8.47	8.46	8.26	8.25	7.97	7.97	7.83	7.82
31	---	---	8.69	8.58	---	---	8.25	8.25	7.97	7.95	---	---
MONTH	9.00	8.79	8.94	7.23	8.73	8.46	8.48	8.19	8.25	7.95	7.95	7.70

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Cb 98. SITE ID.--391124076101002. PERMIT NUMBER.--KE-88-0254.
 LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner,
 at Remington Farms.
 Owner: Maryland Geological Survey.
 AQUIFER.--Monmouth Formation of the Upper Cretaceous age. Aquifer code: 211MNMNT.
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 225 ft; casing diameter 4 in., to 210 ft;
 screen diameter 4 in. from 210 to 220 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-
 level recorder--60-minute recorder interval from February 1992 to current year.
 DATUM.--Elevation of land surface is 68.38 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.6 ft above land surface.
 REMARKS.--Kent County project observation well.
 PERIOD OF RECORD.--February 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.35 ft above sea level, March 26 and 27, 1992;
 lowest measured, 21.92 ft above sea level, Sept. 24, and 25, 1992.

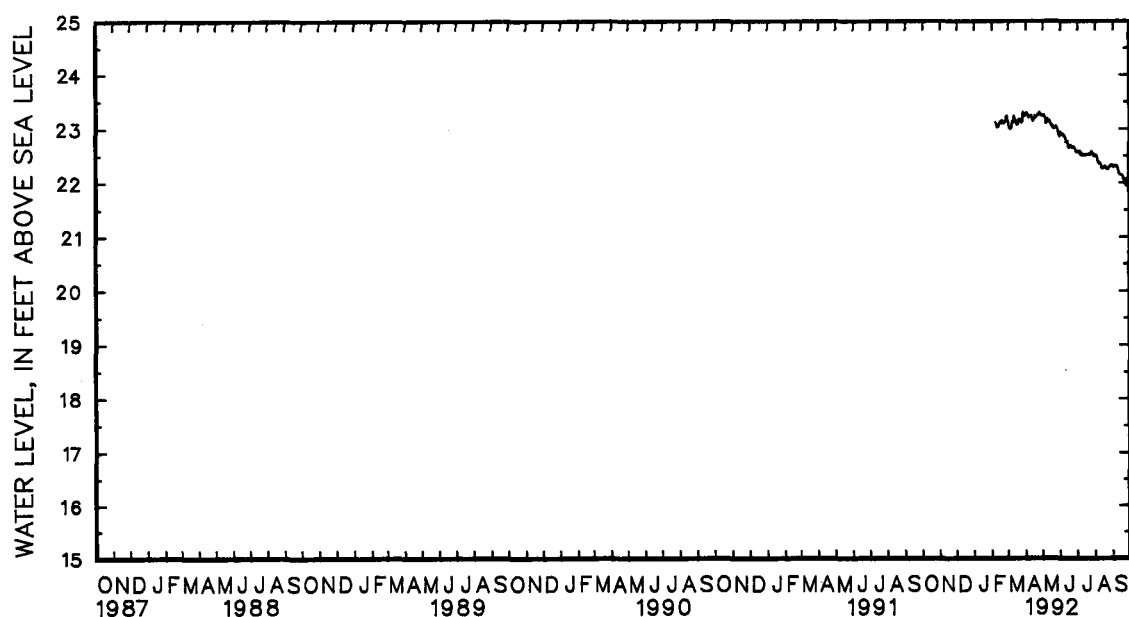
WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	23.14	23.11
2	---	---	---	---	---	---	---	---	---	---	23.13	23.00
3	---	---	---	---	---	---	---	---	---	---	23.01	22.98
4	---	---	---	---	---	---	---	---	---	---	22.98	22.97
5	---	---	---	---	---	---	---	---	---	---	22.99	22.97
6	---	---	---	---	---	---	---	---	---	---	23.01	22.99
7	---	---	---	---	---	---	---	---	23.11	23.09	23.14	23.01
8	---	---	---	---	---	---	---	---	23.11	23.08	23.14	23.11
9	---	---	---	---	---	---	---	---	23.08	23.01	23.11	23.09
10	---	---	---	---	---	---	---	---	23.02	23.00	23.24	23.10
11	---	---	---	---	---	---	---	---	23.07	23.03	23.29	23.21
12	---	---	---	---	---	---	---	---	23.05	23.01	23.21	23.17
13	---	---	---	---	---	---	---	---	23.10	23.02	23.17	23.13
14	---	---	---	---	---	---	---	---	23.11	23.07	23.15	23.13
15	---	---	---	---	---	---	---	---	23.19	23.07	23.14	23.09
16	---	---	---	---	---	---	---	---	23.20	23.11	23.09	23.05
17	---	---	---	---	---	---	---	---	23.11	23.07	23.12	23.06
18	---	---	---	---	---	---	---	---	23.14	23.08	23.12	23.06
19	---	---	---	---	---	---	---	---	23.16	23.13	23.20	23.13
20	---	---	---	---	---	---	---	---	23.15	23.10	23.16	23.15
21	---	---	---	---	---	---	---	---	23.11	23.08	23.15	23.12
22	---	---	---	---	---	---	---	---	23.10	23.07	23.21	23.13
23	---	---	---	---	---	---	---	---	23.11	23.10	23.20	23.14
24	---	---	---	---	---	---	---	---	23.11	23.10	23.14	23.09
25	---	---	---	---	---	---	---	---	23.17	23.10	23.11	23.09
26	---	---	---	---	---	---	---	---	23.24	23.18	23.35	23.11
27	---	---	---	---	---	---	---	---	23.23	23.21	23.35	23.28
28	---	---	---	---	---	---	---	---	23.25	23.21	23.28	23.24
29	---	---	---	---	---	---	---	---	23.26	23.11	23.23	23.21
30	---	---	---	---	---	---	---	---	---	---	23.26	23.22
31	---	---	---	---	---	---	---	---	---	---	23.28	23.25
MONTH	---	---	---	---	---	---	---	---	23.26	23.00	23.35	22.97

GROUND-WATER LEVELS
 MARYLAND--Continued
 KENT COUNTY--Continued
 KE Cb 98--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	23.28	23.25	23.23	23.21	22.93	22.91	22.58	22.56	22.53	22.49	22.30	22.27
2	23.28	23.27	23.27	23.22	22.92	22.89	22.58	22.55	22.49	22.48	22.27	22.26
3	23.27	23.26	23.26	23.23	22.89	22.86	22.55	22.53	22.48	22.48	22.31	22.27
4	23.27	23.26	23.24	23.21	22.87	22.86	22.55	22.54	22.48	22.46	22.31	22.29
5	23.26	23.21	23.21	23.17	22.92	22.86	22.56	22.54	22.46	22.39	22.29	22.27
6	23.21	23.18	23.17	23.08	22.92	22.88	22.57	22.55	22.39	22.35	22.28	22.27
7	23.23	23.20	23.10	23.08	22.88	22.84	22.58	22.49	22.35	22.33	22.29	22.28
8	23.24	23.21	23.17	23.10	22.85	22.84	22.51	22.48	22.34	22.32	22.29	22.28
9	23.21	23.20	23.17	23.16	22.84	22.82	22.52	22.51	22.35	22.34	22.28	22.27
10	23.22	23.21	23.16	23.13	22.82	22.78	22.51	22.48	22.34	22.33	22.27	22.26
11	23.23	23.22	23.13	23.10	22.78	22.74	22.51	22.49	22.33	22.32	22.26	22.20
12	23.23	23.17	23.13	23.10	22.74	22.72	22.49	22.48	22.32	22.25	22.20	22.15
13	23.17	23.12	23.15	23.13	22.75	22.73	22.51	22.48	22.25	22.23	22.15	22.13
14	23.18	23.14	23.14	23.10	22.74	22.73	22.50	22.48	22.25	22.23	22.13	22.12
15	23.18	23.16	23.10	23.06	22.74	22.69	22.51	22.49	22.25	22.23	22.12	22.11
16	23.21	23.16	23.06	23.03	22.69	22.62	22.50	22.48	22.25	22.25	22.11	22.11
17	23.24	23.21	23.05	23.02	22.63	22.62	22.50	22.48	22.27	22.25	22.12	22.11
18	23.22	23.20	23.06	23.04	22.66	22.63	22.50	22.49	22.28	22.27	22.13	22.11
19	23.20	23.19	23.04	22.99	22.71	22.66	22.49	22.49	22.27	22.27	22.13	22.09
20	23.22	23.20	22.99	22.98	22.71	22.67	22.50	22.49	22.27	22.25	22.09	22.03
21	23.25	23.22	22.99	22.98	22.67	22.64	22.50	22.50	22.25	22.23	22.04	22.03
22	23.25	23.24	23.01	22.99	22.64	22.63	22.50	22.49	22.24	22.23	22.07	22.04
23	23.25	23.23	23.03	23.01	22.63	22.62	22.52	22.49	22.24	22.22	22.06	21.97
24	23.30	23.23	23.04	23.02	22.66	22.63	22.52	22.49	22.24	22.22	21.97	21.92
25	23.30	23.28	23.02	22.99	22.66	22.64	22.55	22.52	22.26	22.24	22.04	21.92
26	23.28	23.26	23.00	22.99	22.65	22.63	22.61	22.55	22.28	22.26	22.06	22.04
27	23.26	23.25	23.00	22.96	22.64	22.61	22.63	22.53	22.30	22.27	22.05	22.04
28	23.25	23.22	22.96	22.90	22.61	22.57	22.54	22.50	22.38	22.29	22.05	22.04
29	23.23	23.22	22.90	22.85	22.57	22.54	22.50	22.48	22.35	22.30	22.05	22.01
30	23.24	23.23	22.89	22.84	22.57	22.55	22.49	22.46	22.31	22.30	22.01	22.00
31	---	---	22.94	22.89	---	---	22.54	22.46	22.31	22.30	---	---
MONTH	23.30	23.12	23.27	22.84	22.93	22.54	22.63	22.46	22.53	22.22	22.31	21.92

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Cb 99. SITE ID.--391124076101003. PERMIT NUMBER.--KE-88-0252.
 LOCATION.--Lat 39°11'24", Long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner,
 at Remington Farms.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of the Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 134 ft; casing diameter 4 in.,
 to 118 ft; screen diameter 4 in. from 118 to 128 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to current year.
 DATUM.--Elevation of land surface is 68.38 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.6 ft above land surface.
 REMARKS.--Kent County project observation wells.
 PERIOD OF RECORD.--February 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.40 ft above sea level, March 26, and 27, 1992;
 lowest measured, 22.00 ft above sea level, Sept. 23, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	23.04	23.03
4	---	---	---	---	---	---	---	---	---	---	23.03	23.01
5	---	---	---	---	---	---	---	---	---	---	23.04	23.01
6	---	---	---	---	---	---	---	---	---	---	23.04	23.03
7	---	---	---	---	---	---	---	---	23.11	23.10	23.18	23.05
8	---	---	---	---	---	---	---	---	23.11	23.08	23.18	23.15
9	---	---	---	---	---	---	---	---	23.07	22.98	23.15	23.12
10	---	---	---	---	---	---	---	---	23.00	22.96	23.27	23.12
11	---	---	---	---	---	---	---	---	23.05	23.01	23.34	23.22
12	---	---	---	---	---	---	---	---	23.04	22.99	23.22	23.16
13	---	---	---	---	---	---	---	---	23.08	22.99	23.16	23.12
14	---	---	---	---	---	---	---	---	23.09	23.02	23.12	23.12
15	---	---	---	---	---	---	---	---	23.14	23.02	23.12	23.10
16	---	---	---	---	---	---	---	---	23.14	23.04	23.10	23.07
17	---	---	---	---	---	---	---	---	23.04	23.00	23.15	23.09
18	---	---	---	---	---	---	---	---	23.10	23.01	23.16	23.09
19	---	---	---	---	---	---	---	---	23.13	23.10	23.26	23.17
20	---	---	---	---	---	---	---	---	23.12	23.05	23.19	23.16
21	---	---	---	---	---	---	---	---	23.05	23.02	23.17	23.14
22	---	---	---	---	---	---	---	---	23.06	23.01	23.27	23.14
23	---	---	---	---	---	---	---	---	23.07	23.06	23.27	23.16
24	---	---	---	---	---	---	---	---	23.07	23.06	23.16	23.10
25	---	---	---	---	---	---	---	---	23.13	23.04	23.12	23.10
26	---	---	---	---	---	---	---	---	---	---	23.40	23.12
27	---	---	---	---	---	---	---	---	---	---	23.40	23.34
28	---	---	---	---	---	---	---	---	---	---	23.34	23.29
29	---	---	---	---	---	---	---	---	---	---	23.29	23.26
30	---	---	---	---	---	---	---	---	---	---	23.33	23.26
31	---	---	---	---	---	---	---	---	---	---	23.36	23.33
MONTH	---	---	---	---	---	---	---	---	23.14	22.96	23.40	23.01

GROUND-WATER LEVELS

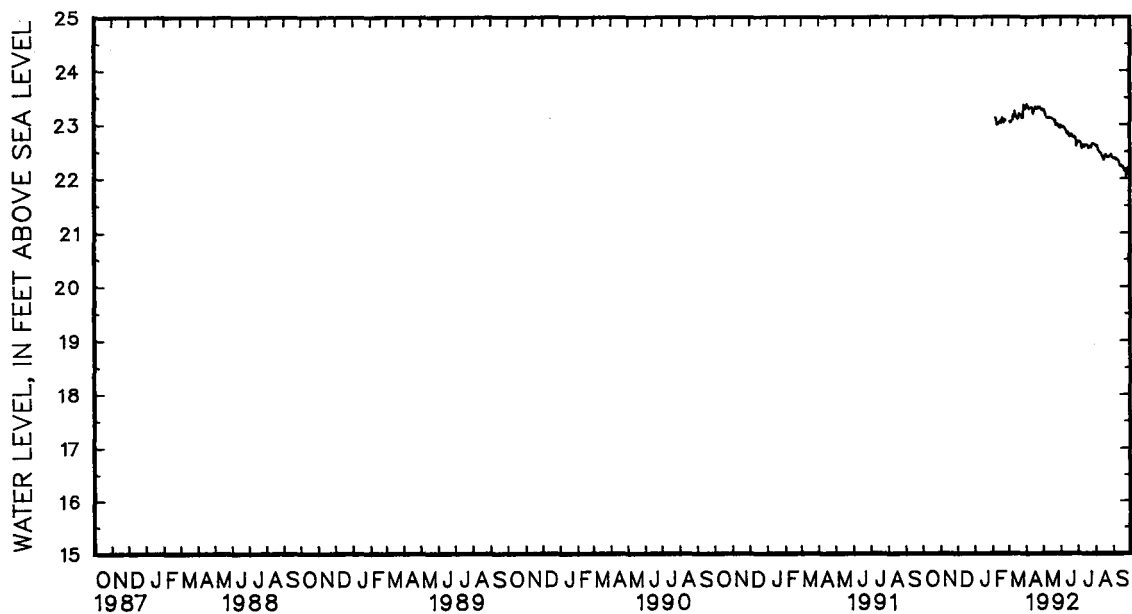
MARYLAND--Continued

KENT COUNTY--Continued

KE Cb 99--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	23.35	23.33	23.27	23.23	22.99	22.96	22.69	22.66	22.64	22.58	22.36	22.34
2	23.37	23.35	23.30	23.25	22.98	22.94	22.68	22.64	22.58	22.58	22.35	22.34
3	23.34	23.32	23.29	23.22	22.95	22.92	22.66	22.64	22.58	22.58	22.40	22.34
4	23.33	23.32	23.25	23.18	22.93	22.92	22.67	22.65	22.58	22.55	22.40	22.35
5	23.32	23.28	23.19	23.15	23.00	22.93	22.65	22.64	22.55	22.50	22.35	22.32
6	23.28	23.26	---	---	23.00	22.93	22.66	22.62	22.50	22.48	22.35	22.32
7	23.32	23.28	23.10	23.10	22.93	22.91	22.62	22.53	22.48	22.46	22.35	22.33
8	23.32	23.28	23.10	23.10	22.91	22.90	22.60	22.59	22.46	22.45	22.34	22.32
9	23.29	23.28	23.10	23.10	22.91	22.88	22.62	22.59	22.45	22.45	22.33	22.31
10	23.30	23.29	23.10	23.10	22.90	22.86	22.62	22.57	22.45	22.44	22.32	22.30
11	23.30	23.29	23.10	23.10	22.86	22.83	22.62	22.59	22.44	22.41	22.31	22.27
12	23.30	23.25	23.10	23.10	22.83	22.80	22.59	22.56	22.42	22.37	22.27	22.22
13	23.24	23.17	23.10	23.10	22.85	22.83	22.62	22.59	22.37	22.36	22.23	22.20
14	23.29	23.20	23.10	23.10	22.85	22.82	22.61	22.59	22.38	22.32	22.21	22.21
15	23.29	23.26	23.10	23.10	22.84	22.78	22.61	22.59	22.39	22.32	22.21	22.20
16	23.30	23.26	23.10	23.08	22.78	22.75	22.61	22.59	22.39	22.39	22.28	22.18
17	23.32	23.30	23.09	23.08	22.77	22.75	22.61	22.59	22.41	22.38	22.21	22.19
18	23.30	23.28	23.09	23.08	22.79	22.76	22.61	22.58	22.42	22.41	22.21	22.19
19	23.28	23.27	23.08	23.06	22.83	22.79	22.58	22.54	22.42	22.42	22.21	22.16
20	23.28	23.27	23.06	23.06	22.83	22.78	22.58	22.54	22.42	22.39	22.16	22.11
21	23.30	23.28	23.06	23.06	22.77	22.75	22.58	22.57	22.39	22.37	22.15	22.12
22	23.31	23.30	23.06	23.02	22.75	22.74	22.58	22.57	22.37	22.37	22.17	22.14
23	23.30	23.28	23.02	23.02	22.74	22.73	22.60	22.57	22.37	22.36	22.17	22.00
24	23.34	23.28	23.02	22.96	22.77	22.74	22.59	22.55	22.38	22.37	22.07	22.03
25	23.34	23.30	22.96	22.96	22.78	22.75	22.62	22.59	22.40	22.38	22.21	22.06
26	23.30	23.28	22.98	22.96	22.75	22.73	22.64	22.62	22.40	22.39	22.23	22.16
27	23.28	23.27	22.98	22.98	22.74	22.71	22.64	22.62	22.42	22.40	22.18	22.15
28	23.27	23.25	22.98	22.94	22.71	22.57	22.62	22.62	22.49	22.42	22.17	22.12
29	23.26	23.24	22.94	22.92	22.68	22.64	22.62	22.61	22.46	22.37	22.16	22.12
30	23.28	23.26	22.94	22.91	22.68	22.66	22.61	22.60	22.38	22.37	22.13	22.11
31	---	---	22.96	22.94	---	---	22.64	22.60	22.37	22.36	---	---
MONTH	23.37	23.17	23.30	22.91	23.00	22.57	22.69	22.53	22.64	22.32	22.40	22.00

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Cb 100. SITE ID.--391124076101004. PERMIT NUMBER.--KE-88-0252.
 LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corners,
 at Remington Farms.

Owner: Maryland Geological Survey.

AQUIFER.--Aquia Formation of the Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 67 ft; casing diameter 4 in., to 52 ft;
 screen diameter 4 in. from 52 to 62 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-
 level recorder--60-minute recorder interval from February 1992 to current year.

DATUM.--Elevation of land surface is 68.29 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 2.6 ft above land surface.

REMARKS.--Kent County project observation well.

PERIOD OF RECORD.--February 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.40 ft above sea level,
 April 2, 3, 4, and 5, 1992; lowest measured, 24.52 ft above sea level, Sept. 29, and 30, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	25.10	25.10
2	---	---	---	---	---	---	---	---	---	---	25.12	25.07
3	---	---	---	---	---	---	---	---	---	---	25.12	25.11
4	---	---	---	---	---	---	---	---	---	---	25.11	25.11
5	---	---	---	---	---	---	---	---	---	---	25.12	25.11
6	---	---	---	---	---	---	---	---	---	---	25.12	25.12
7	---	---	---	---	---	---	---	---	25.25	25.25	25.14	25.12
8	---	---	---	---	---	---	---	---	25.25	25.24	25.14	25.14
9	---	---	---	---	---	---	---	---	25.24	25.20	25.14	25.14
10	---	---	---	---	---	---	---	---	25.20	25.20	25.20	25.14
11	---	---	---	---	---	---	---	---	25.20	25.20	25.21	25.18
12	---	---	---	---	---	---	---	---	25.20	25.19	25.18	25.18
13	---	---	---	---	---	---	---	---	25.19	25.19	25.18	25.18
14	---	---	---	---	---	---	---	---	25.19	25.19	25.18	25.18
15	---	---	---	---	---	---	---	---	25.19	25.18	25.19	25.18
16	---	---	---	---	---	---	---	---	25.18	25.16	25.19	25.19
17	---	---	---	---	---	---	---	---	25.16	25.15	25.19	25.19
18	---	---	---	---	---	---	---	---	25.15	25.15	25.20	25.19
19	---	---	---	---	---	---	---	---	25.15	25.15	25.21	25.20
20	---	---	---	---	---	---	---	---	25.15	25.15	25.22	25.21
21	---	---	---	---	---	---	---	---	25.15	25.14	25.22	25.22
22	---	---	---	---	---	---	---	---	25.14	25.13	25.23	25.22
23	---	---	---	---	---	---	---	---	25.13	25.13	25.23	25.22
24	---	---	---	---	---	---	---	---	25.13	25.12	25.22	25.21
25	---	---	---	---	---	---	---	---	25.14	25.12	25.22	25.21
26	---	---	---	---	---	---	---	---	25.15	25.14	25.35	25.22
27	---	---	---	---	---	---	---	---	25.15	25.15	25.32	25.27
28	---	---	---	---	---	---	---	---	25.15	25.14	25.28	25.27
29	---	---	---	---	---	---	---	---	25.14	25.10	25.28	25.28
30	---	---	---	---	---	---	---	---	---	---	25.31	25.28
31	---	---	---	---	---	---	---	---	---	---	25.33	25.31
MONTH	---	---	---	---	---	---	---	---	25.25	25.10	25.35	25.07

GROUND-WATER LEVELS

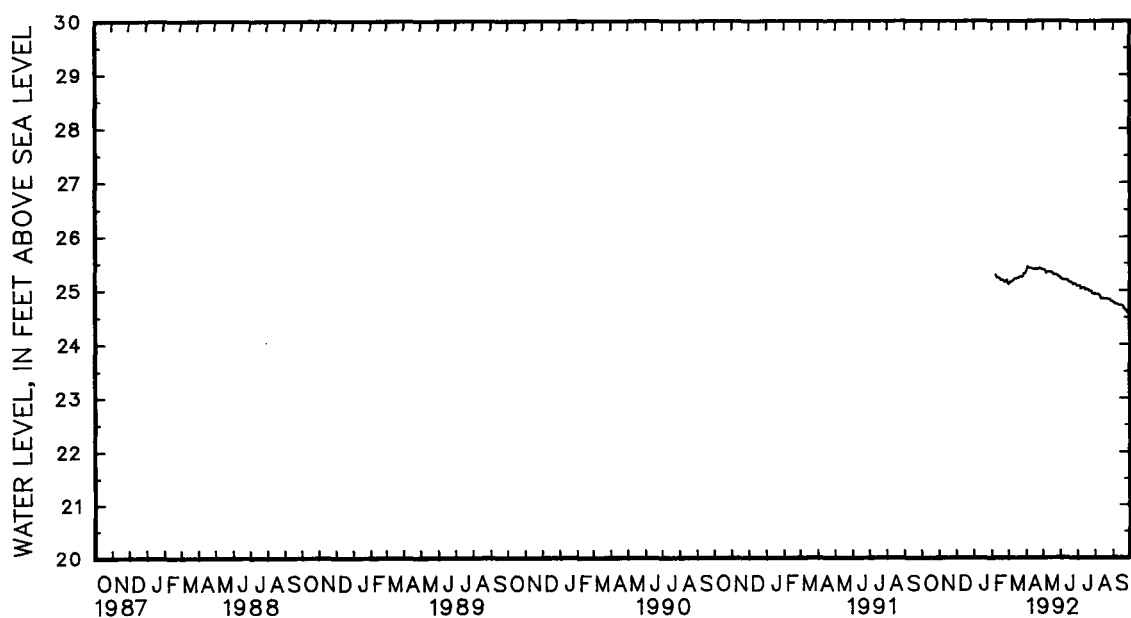
MARYLAND--Continued

KENT COUNTY--Continued

KE Cb 100--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	25.36	25.33	25.36	25.35	25.21	25.18	25.05	25.05	24.89	24.89	24.75	24.74
2	25.40	25.36	25.35	25.35	25.19	25.18	25.05	25.05	24.89	24.89	24.74	24.73
3	25.40	25.40	25.35	25.34	25.18	25.17	25.05	25.05	24.89	24.89	24.73	24.73
4	25.40	25.40	25.34	25.34	25.17	25.17	25.05	25.05	24.89	24.89	24.73	24.72
5	25.40	25.39	25.34	25.32	25.17	25.17	25.05	25.05	24.89	24.89	24.72	24.71
6	25.39	25.38	25.32	25.28	25.17	25.16	25.05	25.05	24.89	24.88	24.71	24.71
7	25.38	25.38	25.30	25.30	25.16	25.16	25.05	25.00	24.88	24.88	24.71	24.70
8	25.38	25.38	25.31	25.30	25.16	25.16	25.00	25.00	24.88	24.88	24.70	24.70
9	25.38	25.38	25.31	25.31	25.16	25.16	25.00	25.00	24.88	24.86	24.70	24.70
10	25.38	25.38	25.31	25.31	25.16	25.15	25.01	25.00	24.86	24.86	24.70	24.69
11	25.38	25.38	25.31	25.31	25.15	25.15	25.01	25.01	24.86	24.81	24.69	24.69
12	25.38	25.37	25.31	25.31	25.15	25.15	25.01	25.01	24.81	24.81	24.69	24.68
13	25.37	25.36	25.31	25.31	25.15	25.15	25.01	25.01	24.81	24.81	24.68	24.68
14	25.36	25.36	25.31	25.31	25.15	25.15	25.01	25.01	24.81	24.81	24.68	24.68
15	25.36	25.36	25.31	25.30	25.15	25.13	25.01	24.98	24.81	24.81	24.68	24.68
16	25.37	25.36	25.30	25.30	25.13	25.12	24.98	24.98	24.81	24.81	24.68	24.67
17	25.37	25.37	25.30	25.30	25.12	25.12	24.98	24.98	24.81	24.80	24.67	24.67
18	25.37	25.37	25.30	25.30	25.12	25.12	24.98	24.98	24.80	24.80	24.67	24.67
19	25.37	25.36	25.30	25.26	25.12	25.12	24.98	24.98	24.80	24.80	24.67	24.66
20	25.36	25.36	25.26	25.26	25.12	25.12	24.98	24.97	24.80	24.80	24.66	24.62
21	25.38	25.36	25.26	25.26	25.12	25.11	24.97	24.96	24.80	24.80	24.62	24.62
22	25.38	25.37	25.26	25.26	25.11	25.11	24.96	24.95	24.80	24.80	24.62	24.60
23	25.37	25.37	25.26	25.26	25.11	25.10	24.95	24.95	24.80	24.80	24.60	24.59
24	25.38	25.37	25.26	25.26	25.10	25.07	24.95	24.94	24.80	24.79	24.59	24.58
25	25.38	25.38	25.26	25.25	25.08	25.08	24.94	24.94	24.79	24.79	24.58	24.58
26	25.38	25.37	25.25	25.25	25.08	25.08	24.94	24.94	24.79	24.79	24.58	24.57
27	25.37	25.37	25.25	25.24	25.08	25.08	24.94	24.90	24.79	24.79	24.57	24.54
28	25.37	25.36	25.23	25.22	25.08	25.08	24.90	24.90	24.79	24.77	24.54	24.53
29	25.36	25.36	25.22	25.21	25.08	25.07	24.90	24.90	24.77	24.76	24.53	24.52
30	25.36	25.36	25.21	25.21	25.07	25.05	24.90	24.90	24.76	24.75	24.52	24.52
31	---	---	25.21	25.21	---	---	24.90	24.89	24.75	24.75	---	---
MONTH	25.40	25.33	25.36	25.21	25.21	25.05	25.05	24.89	24.89	24.75	24.75	24.52

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued

WELL NUMBER.--KE Ch 101. SITE ID.--391251076142201. PERMIT NUMBER.--KE-88-0250.
LOCATION.--Lat 39°12'48", long 76°14'22", Hydrologic Unit 02060002, 0.4 mi east of Tolchester Beach,
south of MD Rt. 21.
Owner: Maryland Geological Survey.
AQUIFER.--Columbia Group of Pleistocene age. Aquifer code: 112CLMB.
WELL CHARACTERISTICS.--Drilled, observation well, depth 73 ft; casing diameter 4 in., to 58 ft;
screen diameter 4 in. from 58 to 68 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-
level recorder--60-minute recorder interval from February 1992 to current year.
DATUM.--Elevation of land surface is 31.12 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 2.8 ft above land surface.
REMARKS.--Kent County project observation well.
PERIOD OF RECORD.--February 1992 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.58 ft above sea level, May 2, 1992;
lowest measured, 1.94 ft above sea level, Sept. 23, and 24, 1992.

WATER LEVEL, IN FEET ABOVE SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	2.21	2.01
2	---	---	---	---	---	---	---	---	---	---	2.11	2.03
3	---	---	---	---	---	---	---	---	---	---	2.06	2.02
4	---	---	---	---	---	---	---	---	---	---	2.16	2.06
5	---	---	---	---	---	---	---	---	---	---	2.17	2.15
6	---	---	---	---	---	---	---	---	---	---	2.17	2.13
7	---	---	---	---	---	---	---	---	---	---	2.30	2.14
8	---	---	---	---	---	---	---	---	2.34	2.31	2.30	2.24
9	---	---	---	---	---	---	---	---	2.34	2.29	2.30	2.23
10	---	---	---	---	---	---	---	---	2.31	2.25	2.52	2.30
11	---	---	---	---	---	---	---	---	2.25	2.12	2.56	2.31
12	---	---	---	---	---	---	---	---	2.12	2.03	2.36	2.26
13	---	---	---	---	---	---	---	---	2.18	2.06	2.26	2.10
14	---	---	---	---	---	---	---	---	2.13	2.05	2.22	2.10
15	---	---	---	---	---	---	---	---	2.23	2.09	2.18	2.04
16	---	---	---	---	---	---	---	---	2.21	2.13	2.06	1.99
17	---	---	---	---	---	---	---	---	2.19	2.11	2.21	2.05
18	---	---	---	---	---	---	---	---	2.20	2.15	2.22	2.03
19	---	---	---	---	---	---	---	---	2.23	2.20	2.24	2.02
20	---	---	---	---	---	---	---	---	2.23	2.19	2.16	2.01
21	---	---	---	---	---	---	---	---	2.23	2.16	2.20	2.15
22	---	---	---	---	---	---	---	---	2.24	2.16	2.45	2.17
23	---	---	---	---	---	---	---	---	2.22	2.15	2.32	2.17
24	---	---	---	---	---	---	---	---	2.21	2.11	2.28	2.17
25	---	---	---	---	---	---	---	---	2.34	2.19	2.37	2.25
26	---	---	---	---	---	---	---	---	2.37	2.27	2.55	2.31
27	---	---	---	---	---	---	---	---	2.34	2.28	2.37	2.26
28	---	---	---	---	---	---	---	---	2.35	2.27	2.27	2.15
29	---	---	---	---	---	---	---	---	2.33	2.00	2.21	2.14
30	---	---	---	---	---	---	---	---	---	---	2.26	2.15
31	---	---	---	---	---	---	---	---	---	---	2.26	2.19
MONTH	---	---	---	---	---	---	---	---	2.37	2.00	2.56	1.99

GROUND-WATER LEVELS

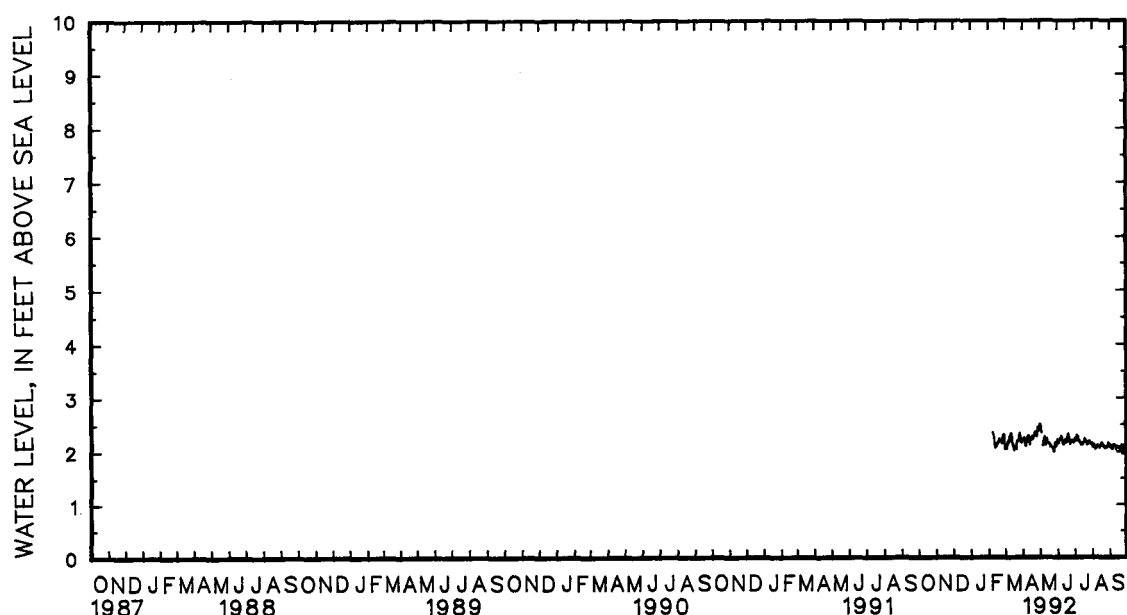
MARYLAND--Continued

KENT COUNTY--Continued

KE Cb 101--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.32	2.20	2.51	2.48	2.25	2.17	2.29	2.24	2.19	2.07	2.13	2.07
2	---	---	2.58	2.46	2.18	2.15	2.24	2.19	2.11	2.07	2.10	2.07
3	2.27	2.22	2.51	2.35	2.24	2.16	2.32	2.21	2.12	2.11	2.16	2.10
4	2.27	2.21	2.38	2.33	2.27	2.21	2.33	2.29	2.14	2.11	2.14	2.04
5	2.24	2.09	---	---	2.29	2.23	2.32	2.25	2.13	2.05	2.06	2.03
6	2.17	2.07	2.18	2.10	2.30	2.23	2.33	2.26	2.10	2.03	2.12	2.04
7	2.28	2.14	2.27	2.18	2.32	2.28	2.29	2.18	2.08	2.04	2.15	2.11
8	2.26	2.20	2.32	2.22	2.32	2.25	2.24	2.19	2.10	2.04	2.13	2.11
9	2.34	2.22	2.32	2.26	2.29	2.17	2.29	2.18	2.15	2.09	2.12	2.11
10	2.34	2.25	2.31	2.14	2.22	2.12	2.21	2.16	2.12	2.10	2.16	2.11
11	2.36	2.26	2.18	2.11	2.20	2.12	2.18	2.12	2.14	2.10	2.14	2.07
12	2.32	2.16	2.30	2.13	2.23	2.15	2.16	2.11	2.12	2.07	2.07	2.03
13	2.21	2.10	2.31	2.23	2.25	2.20	2.18	2.14	2.10	2.06	2.08	2.04
14	2.33	2.19	2.27	2.17	2.26	2.21	2.16	2.12	2.11	2.07	2.09	2.08
15	2.27	2.22	2.20	2.15	2.24	2.18	2.19	2.13	2.13	2.11	2.09	2.07
16	2.33	2.20	2.18	2.14	2.23	2.16	2.17	2.14	2.17	2.12	2.09	2.07
17	2.32	2.24	2.18	2.12	2.31	2.23	2.26	2.17	2.18	2.15	2.09	2.06
18	2.24	2.20	2.20	2.13	2.32	2.29	2.26	2.23	2.17	2.13	2.09	2.07
19	2.29	2.23	2.13	2.07	2.34	2.32	2.24	2.20	2.17	2.13	2.10	2.01
20	2.34	2.26	2.12	2.08	2.33	2.26	2.24	2.19	2.15	2.09	2.05	1.99
21	2.37	2.29	2.15	2.08	2.28	2.20	2.25	2.18	2.12	2.10	2.11	2.05
22	2.41	2.33	2.09	2.06	2.24	2.13	2.22	2.12	2.12	2.07	2.17	2.11
23	2.36	2.29	2.09	2.05	2.19	2.14	2.23	2.14	2.10	2.05	2.13	1.94
24	2.50	2.33	2.08	1.99	2.31	2.19	2.22	2.13	2.10	2.05	1.99	1.94
25	2.35	2.26	2.06	1.99	2.28	2.20	2.23	2.16	2.12	2.07	2.10	1.99
26	2.42	2.27	2.18	2.06	2.26	2.20	2.29	2.18	2.10	2.06	2.11	2.03
27	2.48	2.42	2.20	2.15	2.28	2.19	2.29	2.17	2.10	2.06	2.14	2.11
28	2.45	2.35	2.18	2.09	2.23	2.16	2.18	2.13	2.22	2.10	2.14	2.11
29	2.50	2.36	2.13	2.09	2.23	2.16	2.16	2.13	2.19	2.15	2.12	2.03
30	2.55	2.46	2.21	2.11	2.27	2.21	2.16	2.14	2.17	2.13	2.05	1.99
31	---	---	2.29	2.21	---	---	2.22	2.14	2.18	2.12	---	---
MONTH	2.55	2.07	2.58	1.99	2.34	2.12	2.33	2.11	2.22	2.03	2.17	1.94

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Cb 103. SITE ID.--391124076101005. PERMIT NUMBER.--KE-88-0288.

LOCATION.--Lat 39°11'24", long 76°10'10", Hydrologic Unit 02060002, 1.3 mi southeast of McCleans Corner, at Remington Farms.

Owner: Maryland Geological Survey.

AQUIFER.--Potomac Group of the Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation well, depth 404 ft; casing diameter 4 in., to 389 ft; screen diameter 4 in. from 389 to 399 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to current year.

DATUM.--Elevation of land surface is 65.60 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 2.65 ft above land surface.

REMARKS.--Kent County project observation well.

PERIOD OF RECORD.--February 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, .08 ft above sea level, March 11, 1992; lowest measured, 1.57 ft below sea level, Aug. 24, to 27, 1992.

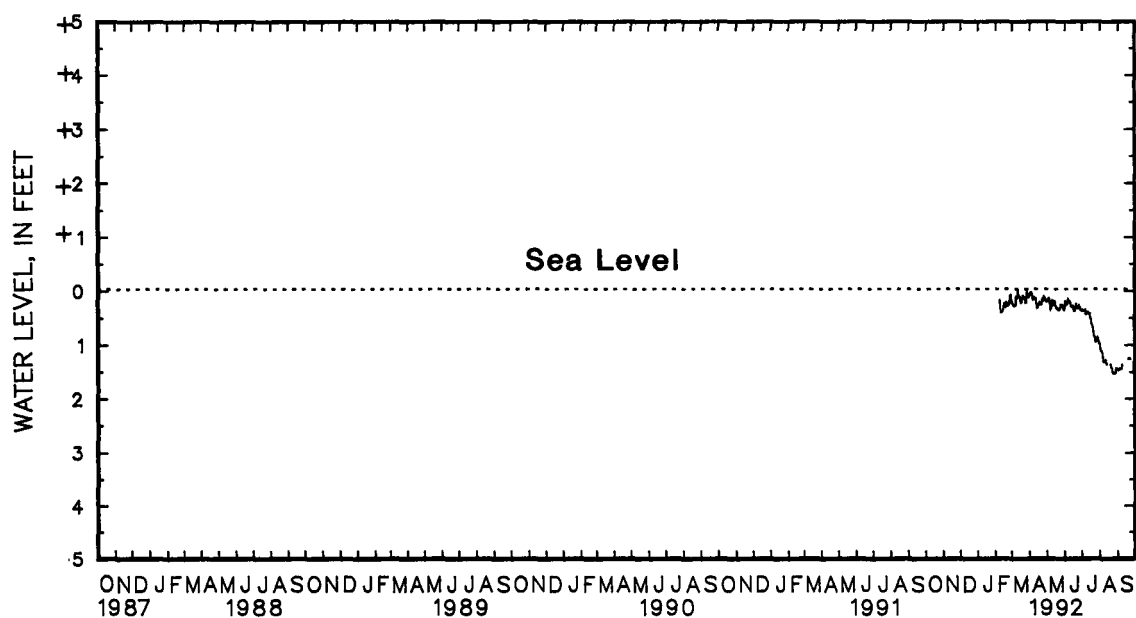
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	.21	.24
2	---	---	---	---	---	---	---	---	---	---	.21	.29
3	---	---	---	---	---	---	---	---	---	---	.28	.30
4	---	---	---	---	---	---	---	---	---	---	.30	.32
5	---	---	---	---	---	---	---	---	---	---	.31	.32
6	---	---	---	---	---	---	---	---	---	---	.31	.31
7	---	---	---	---	---	---	---	---	.17	.26	.13	.31
8	---	---	---	---	---	---	---	---	.17	.21	.13	.14
9	---	---	---	---	---	---	---	---	.22	.41	.14	.17
10	---	---	---	---	---	---	---	---	.41	.44	.01	.17
11	---	---	---	---	---	---	---	---	.35	.44	+.08	.02
12	---	---	---	---	---	---	---	---	.35	.43	.02	.10
13	---	---	---	---	---	---	---	---	.30	.43	.10	.14
14	---	---	---	---	---	---	---	---	.28	.33	.14	.14
15	---	---	---	---	---	---	---	---	.16	.33	.14	.18
16	---	---	---	---	---	---	---	---	.13	.27	.18	.25
17	---	---	---	---	---	---	---	---	.27	.33	.15	.25
18	---	---	---	---	---	---	---	---	.24	.33	.16	.25
19	---	---	---	---	---	---	---	---	.18	.24	.10	.16
20	---	---	---	---	---	---	---	---	.18	.27	.11	.12
21	---	---	---	---	---	---	---	---	.27	.30	.12	.16
22	---	---	---	---	---	---	---	---	.29	.31	.08	.16
23	---	---	---	---	---	---	---	---	.27	.29	.08	.15
24	---	---	---	---	---	---	---	---	.27	.27	.15	.25
25	---	---	---	---	---	---	---	---	.13	.27	.25	.25
26	---	---	---	---	---	---	---	---	.09	.13	+.04	.25
27	---	---	---	---	---	---	---	---	.09	.10	+.04	.03
28	---	---	---	---	---	---	---	---	.04	.10	.03	.12
29	---	---	---	---	---	---	---	---	.04	.24	.12	.14
30	---	---	---	---	---	---	---	---	---	---	.11	.14
31	---	---	---	---	---	---	---	---	---	---	.09	.11
MONTH	---	---	---	---	---	---	---	---	.04	.44	+.08	.32

GROUND-WATER LEVELS
MARYLAND--Continued
KENT COUNTY--Continued
KE Cb 103--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.07	.09	.18	.22	.20	.22	.36	.39	.98	1.04	1.48	1.49
2	.03	.07	.14	.22	.21	.26	.36	.40	1.04	1.15	1.49	1.50
3	.03	.06	.14	.17	.26	.27	.40	.40	1.15	1.15	1.48	1.50
4	.06	.06	.17	.18	.27	.27	.40	.40	1.15	1.17	1.48	1.48
5	.06	.13	.18	.26	.17	.27	.39	.40	1.17	1.21	1.48	1.48
6	.13	.19	.26	.40	.17	.18	.37	.39	1.21	1.31	1.48	1.48
7	.13	.19	.34	.36	.18	.21	.38	.46	1.31	1.34	1.47	1.48
8	.13	.15	.21	.34	.21	.22	.45	.47	1.34	1.35	1.41	1.47
9	.15	.17	.19	.21	.22	.22	.40	.45	1.33	1.35	1.41	1.41
10	.17	.17	.19	.23	.22	.26	.40	.44	1.33	1.33	1.34	1.41
11	.16	.17	.23	.30	.26	.31	.40	.43	1.33	1.33	1.34	1.34
12	.16	.28	.23	.30	.31	.33	.43	.45	1.33	1.38	1.34	1.34
13	.28	.35	.18	.23	.31	.32	.40	.45	1.38	1.40	1.34	1.34
14	.28	.35	.18	.23	.30	.31	.44	.46	---	---	1.34	1.34
15	.28	.30	.23	.32	.30	.33	.46	.47	---	---	1.34	1.34
16	.25	.30	.32	.35	.33	.40	.47	.55	---	---	1.34	1.34
17	.18	.25	.35	.36	.40	.40	.55	.56	---	---	1.34	1.34
18	.18	.25	.32	.35	.35	.40	.56	.66	---	---	1.29	1.34
19	.25	.28	.32	.38	.26	.35	.66	.69	---	---	1.29	1.29
20	.28	.28	.38	.39	.26	.27	.69	.72	---	---	1.29	1.29
21	.19	.28	.38	.39	.27	.33	.72	.81	---	---	1.29	1.29
22	.18	.19	.35	.38	.33	.35	.81	.89	1.46	1.48	1.27	1.29
23	.18	.21	.29	.35	.35	.36	.89	.89	1.48	1.54	1.27	1.28
24	.13	.21	.23	.29	.29	.35	.89	.98	1.54	1.57	1.28	1.32
25	.13	.13	.24	.29	.29	.30	.98	.98	1.57	1.57	1.32	1.32
26	.13	.15	.29	.29	.30	.33	.92	.98	1.57	1.57	1.32	1.32
27	.15	.16	.28	.29	.33	.34	.86	.92	1.55	1.57	1.32	1.32
28	.16	.21	.28	.35	.34	.39	.87	.90	1.42	1.55	1.32	1.32
29	.21	.23	.35	.39	.39	.40	.90	.94	1.42	1.47	1.32	1.32
30	.18	.21	.32	.39	.39	.40	.94	1.01	1.47	1.48	1.32	1.32
31	---	---	.20	.32	---	---	.98	1.01	1.48	1.48	---	---
MONTH	.03	.35	.14	.40	.17	.40	.36	1.01	.98	1.57	1.27	1.50

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Cd 44. SITE ID.--391432076015501. PERMIT NUMBER.--KE-03-6139.

LOCATION.--Lat 39°14'32", long 76°01'55", Hydrologic Unit 02060002, MD Rt. 291, 2.6 mi northeast of Chestertown.

Owner: Campbell Soup Co.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 84 ft; casing diameter 4 in., to 79 ft; screen diameter 5 in. from 79 to 84 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.20 ft above land-surface datum.

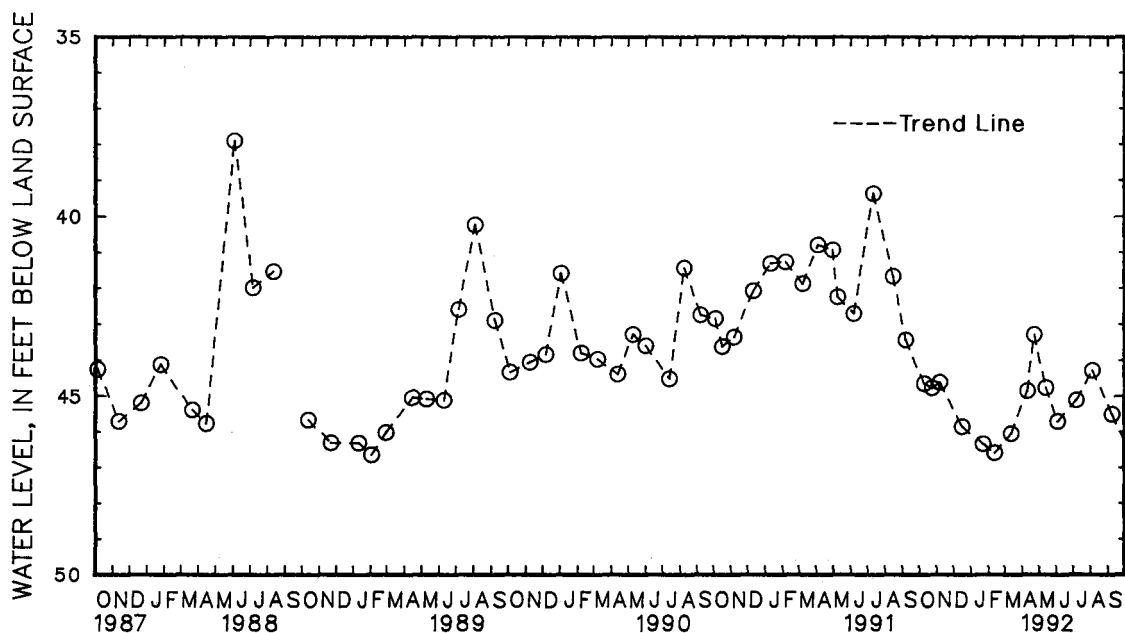
REMARKS.--Maryland Water-Level Network observation well. Water levels measured by plant personnel with an electric tape, Sept. 18, 1959 to April 18, 1963.

PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.00 ft below land surface, Sept. 18, 1959; lowest measured, 54.46 ft below land surface, Aug. 4, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 9	44.68	DEC 17	45.87	MAR 12	46.06	MAY 13	44.77	AUG 5	44.29
23	44.79	JAN 22	46.35	APR 10	44.86	JUN 4	45.72	SEP 9	45.52
NOV 6	44.63	FEB 12	46.60	22	43.29	JUL 7	45.12		
WATER YEAR 1992		HIGHEST	43.29	APR 22, 1992	LOWEST	46.60	FEB 12, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Db 40. SITE ID.--390837076140401. PERMIT NUMBER.--KE-73-0805.

LOCATION.--Lat 39°08'37", long 76°14'04", Hydrologic Unit 02070002, nr Rock Hall.

Owner: U.S. Geological Survey.

AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,030 ft; casing diameter 4 in., to 1,018 ft; screen diameter 4 in. from 1,018 to 1,030 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 31.65 ft above land surface.

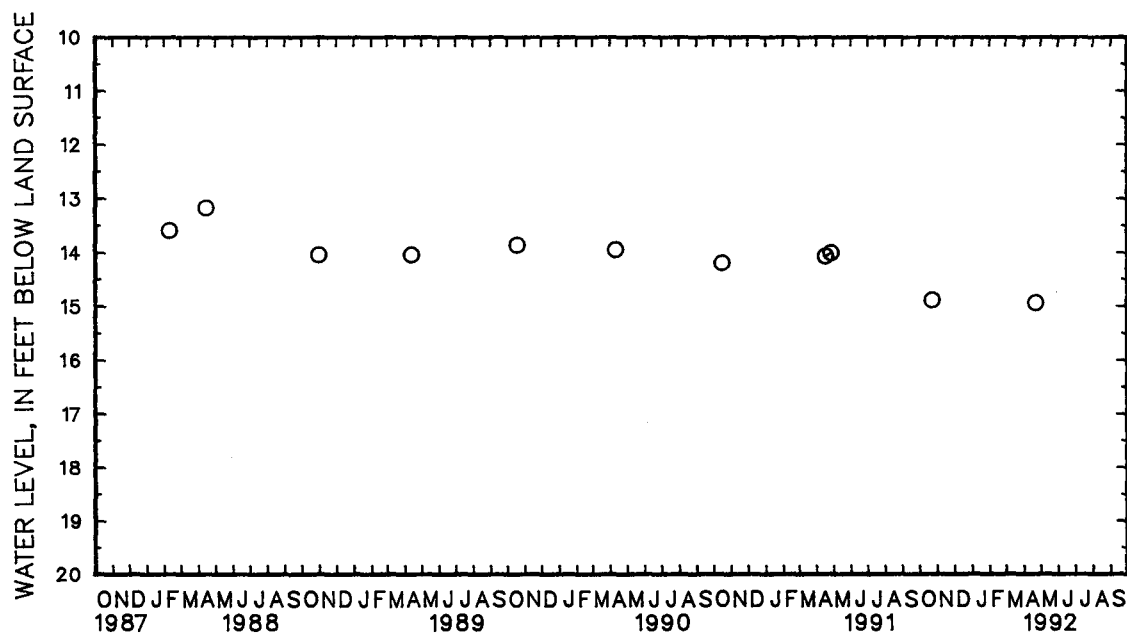
REMARKS.--Maryland Water-Level Network observation well. Measured twice yearly since October 1986.

PERIOD OF RECORD.--December 1978 to July 1979, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.39 ft below land surface, Jan. 19, 1982; lowest measured, 14.95 ft below land surface, April 22, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	14.90	APR 22	14.95
WATER YEAR 1992	HIGHEST 14.90	OCT 23, 1991	LOWEST 14.95
		APR 22, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Dc 89. SITE ID.--390626076083301. PERMIT NUMBER.--KE-88-0246.

LOCATION.--Lat 39°06'26", long 76°08'33", Hydrologic Unit 02060002, at the end of Cliffs City Rd.

Owner: Maryland Geological Survey.

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

WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 29 ft; casing diameter 4 in., to 14 ft; screen diameter 4 in. from 14 to 24 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to current year.

DATUM.--Elevation of land surface is 4.52 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder platform, 2.5 ft above land surface.

REMARKS.--Kent County project observation well.

PERIOD OF RECORD.--February 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.73 ft above sea level, March 11, 1992; lowest measured, 0.28 ft below sea level, Feb. 29, and, March 1, 1992.

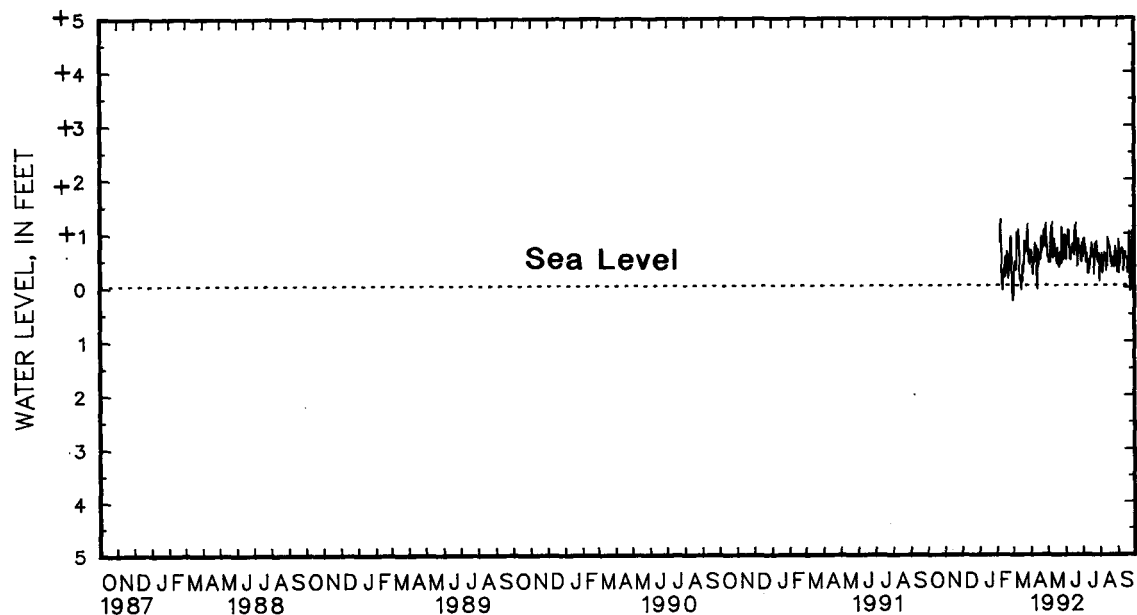
WATER LEVEL, IN FEET ABOVE AND BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
(READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	+1.15	.28
2	---	---	---	---	---	---	---	---	---	---	+ .46	.15
3	---	---	---	---	---	---	---	---	---	---	+ .83	.01
4	---	---	---	---	---	---	---	---	---	---	+1.25	+.45
5	---	---	---	---	---	---	---	---	---	---	+1.07	+.43
6	---	---	---	---	---	---	---	---	---	---	+1.10	+.35
7	---	---	---	---	---	---	---	---	+1.76	+.80	+1.89	+.30
8	---	---	---	---	---	---	---	---	+2.18	+1.23	+1.85	+1.00
9	---	---	---	---	---	---	---	---	+1.69	+.77	+1.49	+.75
10	---	---	---	---	---	---	---	---	+.87	+.17	+2.03	+.75
11	---	---	---	---	---	---	---	---	+.63	.08	+2.73	+1.07
12	---	---	---	---	---	---	---	---	+.64	.09	+1.27	+.68
13	---	---	---	---	---	---	---	---	+.97	+.14	+.82	+.13
14	---	---	---	---	---	---	---	---	+1.02	+.31	+1.04	+.09
15	---	---	---	---	---	---	---	---	+1.24	+.15	+1.03	+.18
16	---	---	---	---	---	---	---	---	+1.54	+.54	+.56	.08
17	---	---	---	---	---	---	---	---	+1.02	+.18	+1.34	+.13
18	---	---	---	---	---	---	---	---	+1.28	+.29	+.90	+.08
19	---	---	---	---	---	---	---	---	+1.62	+.64	+1.39	+.41
20	---	---	---	---	---	---	---	---	+1.48	+.59	+1.70	+.25
21	---	---	---	---	---	---	---	---	+1.19	+.42	+1.60	+.84
22	---	---	---	---	---	---	---	---	+.89	+.13	+2.00	+.60
23	---	---	---	---	---	---	---	---	+1.11	+.32	+1.77	+.78
24	---	---	---	---	---	---	---	---	+1.04	+.27	+1.35	+.65
25	---	---	---	---	---	---	---	---	+1.51	+.67	+1.60	+.85
26	---	---	---	---	---	---	---	---	+1.59	+.90	+1.47	+.76
27	---	---	---	---	---	---	---	---	+1.81	+.93	+1.92	+1.16
28	---	---	---	---	---	---	---	---	+1.09	+.42	+1.30	+.56
29	---	---	---	---	---	---	---	---	+1.16	.28	+.87	+.44
30	---	---	---	---	---	---	---	---	---	---	+1.15	+.40
31	---	---	---	---	---	---	---	---	---	---	+1.54	+.66
MONTH	---	---	---	---	---	---	---	---	+2.18	.28	+2.73	.28

GROUND-WATER LEVELS
 MARYLAND--Continued
 KENT COUNTY--Continued
 KE Dc 89--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+1.78	+ .67	+1.65	+ .54	+1.78	+ .73	+1.87	+ .81	+1.36	+ .08	+1.25	+ .25
2	+1.28	+ .65	+1.41	+ .52	+1.50	+ .49	+1.45	+ .54	+1.35	+ .34	+1.55	+ .54
3	+1.11	+ .45	+1.49	+ .43	+1.87	+ .76	+2.12	+ .87	+1.54	+ .55	+1.61	+ .87
4	+1.28	+ .50	+1.73	+ .52	+1.83	+ .87	+2.02	+ .89	+1.58	+ .60	+1.44	+ .23
5	+1.09	+ .32	+1.49	+ .43	+1.87	+ .80	+1.79	+ .77	+1.48	+ .32	+1.05	+ .41
6	+ .95	+ .21	+1.73	+ .81	+1.97	+1.04	+1.83	+ .70	+1.28	+ .24	+1.68	+ .67
7	+1.39	+ .44	+1.68	+1.01	+2.00	+1.05	+1.55	+ .43	+1.15	+ .35	+1.70	+ .64
8	+1.63	+ .59	+1.94	+ .92	+1.79	+ .75	+1.27	+ .61	+1.20	+ .52	+1.40	+ .66
9	+1.54	+ .80	+2.10	+1.20	+1.55	+ .50	+1.91	+ .47	+1.74	+ .62	+1.44	+ .70
10	+1.49	+ .71	+1.62	+ .53	+1.45	+ .48	+1.29	+ .45	+1.31	+ .58	+1.59	+ .68
11	+1.48	+ .73	+1.18	+ .56	+1.58	+ .60	+1.40	+ .23	+1.57	+ .59	+1.37	+ .51
12	+1.31	+ .22	+1.72	+ .81	+1.76	+ .64	+1.20	+ .23	+1.23	+ .43	+1.04	+ .27
13	+1.59	+ .07	+2.07	+ .88	+1.80	+ .75	+1.60	+ .49	+1.26	+ .28	+1.39	+ .61
14	+1.51	+ .68	+1.92	+ .58	+1.80	+ .78	+1.19	+ .31	+1.48	+ .57	+1.39	+ .63
15	+1.38	+ .34	+1.58	+ .56	+1.73	+ .72	+1.55	+ .53	+1.54	+ .91	+1.24	+ .52
16	+1.52	+ .59	+1.50	+ .53	+1.54	+ .57	+1.28	+ .55	+1.76	+ .83	+1.36	+ .53
17	+1.50	+ .49	+1.47	+ .42	+2.01	+1.03	+1.74	+ .79	+1.53	+ .78	+1.33	+ .50
18	+1.55	+ .49	+1.72	+ .71	+1.75	+ .91	+1.60	+ .72	+1.51	+ .71	+1.45	+ .51
19	+1.57	+ .62	+1.19	+ .39	+2.01	+1.18	+1.46	+ .62	+1.51	+ .72	+1.51	+ .24
20	+1.94	+ .92	+1.32	+ .55	+1.77	+ .77	+1.46	+ .52	+1.40	+ .44	+1.35	+ .28
21	+1.30	+ .67	+1.32	+ .59	+1.25	+ .67	+1.35	+ .60	+1.38	+ .55	+1.66	+ .83
22	+1.53	+ .82	+ .96	+ .34	+1.23	+ .36	+1.25	+ .21	+1.42	+ .39	+1.70	+1.02
23	+1.32	+ .73	+1.16	+ .56	+1.37	+ .75	+1.45	+ .79	+1.21	+ .36	+1.76	+ .10
24	+2.08	+ .84	+1.18	+ .63	+1.82	+ .88	+1.53	+ .54	+1.37	+ .46	+ .98	+ .10
25	+2.20	+1.05	+1.41	+ .41	+1.62	+ .73	+1.75	+ .72	+1.55	+ .52	+1.63	+ .59
26	+1.55	+ .77	+1.76	+1.10	+1.69	+ .74	+1.80	+ .83	+1.44	+ .37	+2.09	+ .60
27	+1.69	+ .75	+1.65	+ .93	+1.83	+ .62	+1.93	+ .50	+1.48	+ .35	+2.01	+1.03
28	+2.28	+1.17	+1.65	+ .48	+1.55	+ .45	+1.54	+ .45	+2.61	+ .74	+1.57	+ .58
29	+2.05	+ .89	+1.43	+ .52	+1.60	+ .44	+1.58	+ .43	+1.81	+ .66	+1.35	+ .33
30	+1.94	+ .74	+1.66	+ .67	+1.88	+ .74	+1.65	+ .60	+1.82	+ .52	+1.11	+ .38
31	---	---	+2.45	+ .95	---	---	+1.81	+ .44	+1.68	+ .54	---	---
MONTH	+2.28	.07	+2.45	+ .34	+2.01	+ .36	+2.12	+ .21	+2.61	+ .08	+2.09	.10

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

KENT COUNTY--Continued

WELL NUMBER.--KE Dc 91. SITE ID.--390626076083302. PERMIT NUMBER.--KE-88-0247.
 LOCATION.--Lat 39°06'26", long 76°08'33", Hydrologic Unit 02060002, 1.0 mi south of Cliffs City, at Cliffs Wharf.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of the Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation well, artesian well, depth 155 ft; casing diameter 4 in., to 140 ft; screen diameter 4 in. from 140 to 150 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from February 1992 to current year.
 DATUM.--Elevation of land surface is 7.14 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder platform, 2.5 ft above land surface.
 REMARKS.--Kent County project observation wells.
 PERIOD OF RECORD.--February 1992 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.52 ft above sea level, Sept. 23, 1992; lowest measured, 1.08 ft below sea level, Aug. 28, 1992.

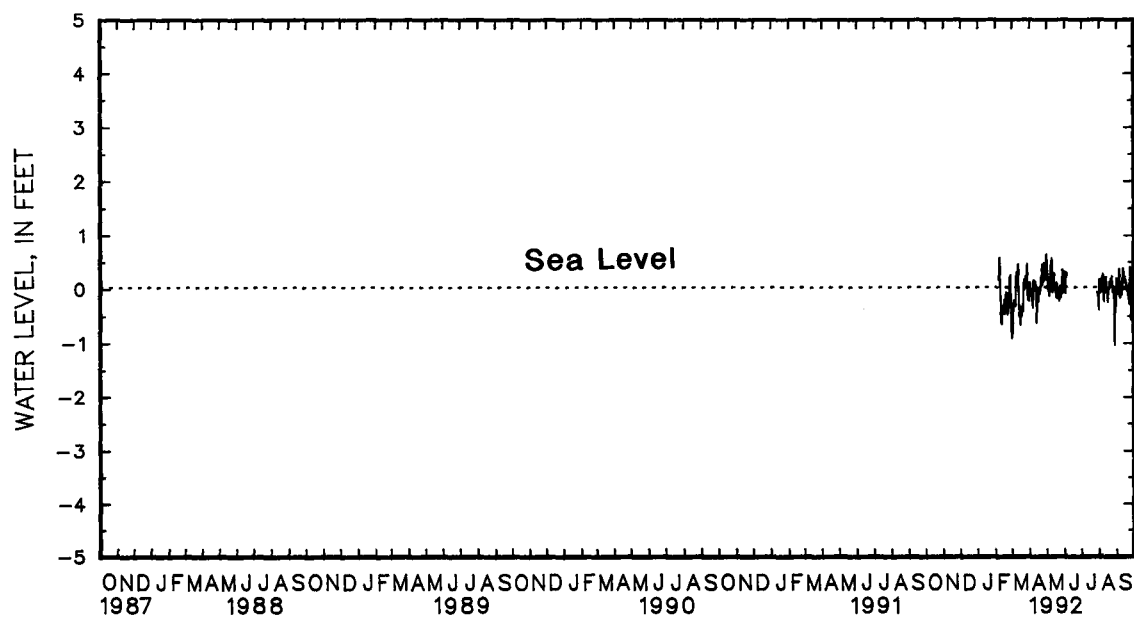
WATER LEVEL, IN FEET ABOVE AND BELOW SEA SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE SEA LEVEL INDICATED BY "+")

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	+.47	.94
2	---	---	---	---	---	---	---	---	---	---	.18	.83
3	---	---	---	---	---	---	---	---	---	---	+.17	.68
4	---	---	---	---	---	---	---	---	---	---	+.57	.24
5	---	---	---	---	---	---	---	---	---	---	+.42	.23
6	---	---	---	---	---	---	---	---	---	---	+.45	.29
7	---	---	---	---	---	---	---	---	+1.08	+.14	+1.14	.34
8	---	---	---	---	---	---	---	---	+1.46	+.56	+1.13	+.29
9	---	---	---	---	---	---	---	---	+.99	+.14	+.74	+.07
10	---	---	---	---	---	---	---	---	+.24	.42	+.78	+.08
11	---	---	---	---	---	---	---	---	+.01	.68	+.78	+.45
12	---	---	---	---	---	---	---	---	+.02	.70	+.61	+.02
13	---	---	---	---	---	---	---	---	+.31	.48	+.18	.53
14	---	---	---	---	---	---	---	---	+.38	.33	+.39	.54
15	---	---	---	---	---	---	---	---	+.54	.49	+.40	.44
16	---	---	---	---	---	---	---	---	+.82	.23	.06	.71
17	---	---	---	---	---	---	---	---	+.34	.50	+.68	.36
18	---	---	---	---	---	---	---	---	+.57	.40	+.28	.54
19	---	---	---	---	---	---	---	---	+.93	.09	+.69	.44
20	---	---	---	---	---	---	---	---	+.79	.09	+.98	.45
21	---	---	---	---	---	---	---	---	+.52	.26	+.79	+.09
22	---	---	---	---	---	---	---	---	+.23	.51	+.80	.04
23	---	---	---	---	---	---	---	---	+.47	.34	+.80	+.16
24	---	---	---	---	---	---	---	---	+.41	.37	+.68	+.03
25	---	---	---	---	---	---	---	---	+.79	.02	+.80	+.22
26	---	---	---	---	---	---	---	---	+.78	+.19	+.80	+.15
27	---	---	---	---	---	---	---	---	+1.10	+.24	+1.12	+.46
28	---	---	---	---	---	---	---	---	+.46	.23	+.63	.13
29	---	---	---	---	---	---	---	---	+.53	.96	+.21	.22
30	---	---	---	---	---	---	---	---	---	---	+.53	.25
31	---	---	---	---	---	---	---	---	---	---	+.81	+.04
MONTH	---	---	---	---	---	---	---	---	+1.46	.96	+1.14	.94

GROUND-WATER LEVELS
 MARYLAND--Continued
 KENT COUNTY--Continued
 KE Dc 91--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	+ .86	+ .10	+ .83	+ .19	+ .83	+ .07	---	---	+1.33	+ .15	+1.12	+ .19
2	+ .67	+ .03	+ .83	+ .16	+ .84	+ .11	---	---	+1.09	+ .15	+ .87	+ .10
3	+ .53	.15	+ .83	.03	+ .85	+ .16	---	---	+ .86	.09	+ .51	.11
4	+ .67	.10	+ .77	.05	+ .85	+ .27	---	---	+ .82	.09	+1.15	+ .04
5	+ .50	.26	+ .83	.15	---	---	---	---	+1.08	.01	+1.02	+ .36
6	+ .30	.37	+ .88	+ .22	---	---	---	---	+1.12	+ .18	+ .69	.16
7	+ .72	.16	+ .88	+ .42	---	---	---	---	+1.05	+ .26	+ .73	.19
8	+ .89	+ .15	+ .87	+ .34	---	---	---	---	+ .87	+ .22	+ .72	+ .10
9	+ .84	.01	+ .83	+ .56	---	---	---	---	+ .72	.26	+ .67	+ .03
10	+ .82	+ .13	+ .83	.08	---	---	---	---	+ .81	+ .14	+ .68	.13
11	+ .81	+ .12	+ .59	.06	---	---	---	---	+ .81	.09	+ .91	+ .13
12	+ .71	+ .01	+ .84	+ .27	---	---	---	---	+1.02	+ .20	+1.12	+ .37
13	+ .37	.67	+ .83	+ .27	---	---	---	---	+1.10	+ .18	+ .83	+ .11
14	+ .85	+ .01	+ .92	.04	---	---	---	---	+ .83	.01	+ .75	+ .10
15	+ .82	.24	+ .83	.04	---	---	---	---	+ .47	.07	+ .88	+ .20
16	+ .74	.26	+ .83	.09	---	---	---	---	+ .53	.27	+ .87	+ .12
17	+ .84	.01	+ .79	.19	---	---	---	---	+ .61	.03	+ .89	+ .14
18	+ .71	.11	+ .83	+ .09	---	---	---	---	+ .65	.02	+ .88	.02
19	+ .84	.04	+ .59	.20	---	---	---	---	+ .63	.02	+1.12	.06
20	+ .83	+ .02	+ .68	.06	---	---	---	---	+ .97	+ .11	+1.10	+ .04
21	+ .84	+ .09	+ .69	.01	---	---	---	---	+ .84	+ .12	+ .53	.15
22	+ .86	+ .44	+ .38	.25	---	---	---	---	+1.02	+ .09	+ .35	.23
23	+ .67	+ .06	+ .57	.04	---	---	---	---	+1.05	+ .22	+1.52	.30
24	+ .84	+ .23	+ .58	+ .03	---	---	---	---	+ .96	+ .12	+1.51	+ .39
25	+ .69	+ .12	+ .78	.18	---	---	---	---	+ .89	.08	+ .82	.13
26	+ .83	+ .47	---	---	---	---	---	---	+1.05	+ .02	+ .84	.61
27	+ .84	+ .46	+ .86	+ .34	---	---	---	---	+1.06	.02	+ .35	.56
28	+ .86	+ .16	+ .83	.11	---	---	+1.00	.09	+ .62	1.08	+ .84	.09
29	+ .86	+ .27	+ .78	.02	---	---	+1.01	.10	+ .70	.27	+1.09	+ .13
30	+ .83	+ .63	+ .84	+ .08	---	---	+ .82	.18	+ .91	.35	+1.05	+ .32
31	---	---	+ .83	+ .30	---	---	+1.00	.42	+ .85	.15	---	---
MONTH	+ .89	.67	+ .92	.25	+ .85	.11	+1.01	.42	+1.33	1.08	+1.52	.61

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

MONTGOMERY COUNTY

WELL NUMBER.--MO Cc 14. SITE ID.--391314077224201.

LOCATION.--Lat 39°13'14", long 77°22'42", Hydrologic Unit 02070008, at Barnesville.

Owner: Shirley Hayes.

AQUIFER.--Ijamsville Formation of Paleozoic age. Aquifer code: 300IJMV.

WELL CHARACTERISTICS.--Dug, stone-lined, unused, water-table well, depth 46 ft; casing diameter 60 to 24 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of wooden well cover, 3.00 ft above land surface.

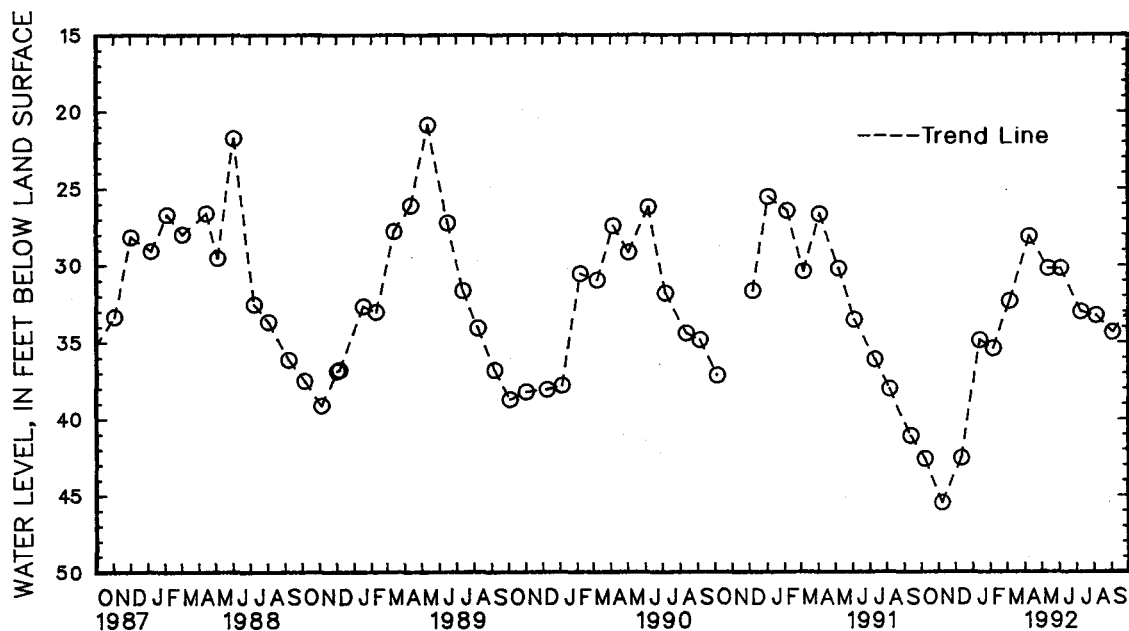
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--November 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.92 ft below land surface, April 2, 1984;
lowest measured, dry, on Dec. 2, 1957, Dec. 7, 1964, Dec. 6, 1965, Jan. 3, 1966, Feb. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	42.63	DEC 11	42.56	FEB 6	35.39	APR 9	28.11	JUN 3	30.22	AUG 4	33.27
NOV 7	45.48	JAN 13	34.85	MAR 5	32.32	MAY 12	30.21	JUL 8	33.02	SEP 3	34.37
WATER YEAR 1992		HIGHEST	28.11	APR 9, 1992		LOWEST	45.48	NOV 7, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

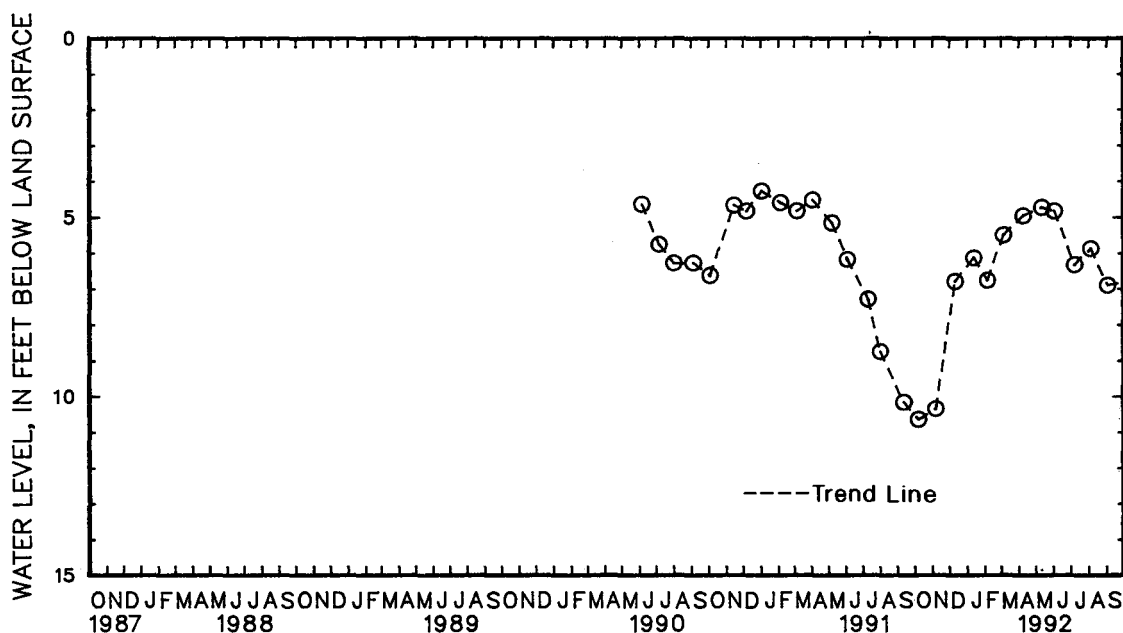
MARYLAND--Continued

MONTGOMERY COUNTY--Continued

WELL NUMBER.--MO Dc 59. SITE ID.--390917077244401. PERMIT NUMBER.--MO-73-1896.
LOCATION.--Lat 39°09'17", long 77°24'44", Hydrologic Unit 02070008, 1 mi north of Poolesville,
nr Jerusalem Rd.
Owner: U.S. Geological Survey.
AQUIFER.--Ijamsville Formation of Paleozoic age. Aquifer code: 300IJMV.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 260 ft; casing diameter 6 in., to 42 ft;
open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 270 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of recorder platform, 0.65 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--June 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.27 ft below land surface, Jan. 3, 1991;
lowest measured, 10.65 ft below land surface, Oct. 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 7	10.65	DEC 11	6.79	FEB 6	6.76	APR 9	4.95	JUN 3	4.82	AUG 4	5.87				
NOV 7	10.35	JAN 13	6.13	MAR 5	5.49	MAY 12	4.72	JUL 8	6.34	SEP 3	6.90				
WATER YEAR 1992		HIGHEST 4.72		MAY 12, 1992		LOWEST 10.65		OCT 7, 1991							



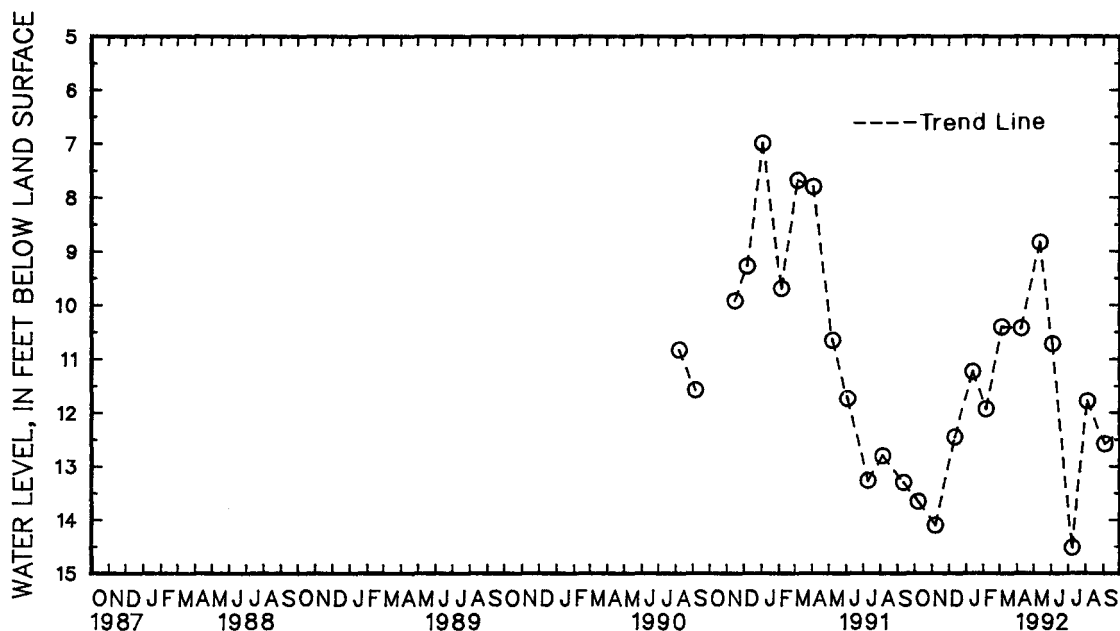
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
MONTGOMERY COUNTY--Continued

WELL NUMBER.--MO Ec 10. SITE ID.--390451077245901. PERMIT NUMBER.--MO-73-2833.
LOCATION.--Lat 39°04'51", long 77°24'59", Hydrologic Unit 02070008, 3 mi southeast of Poolesville nr Sycamore
Landing Road at McKee Beshler Wildlife Management Area.
Owner: U.S. Geological Survey.
AQUIFER.--New Oxford Formation of Triassic age. Aquifer code: 231NOXF.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 857.5 ft; casing diameter 8 in., to 26 ft;
open hole.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 200 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 1.70 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well,
PERIOD OF RECORD.--August 1990 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.99 ft below land surface, Jan. 3, 1991;
lowest measured, 14.52 ft below land surface, July 8, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	13.66	DEC 11	12.45	FEB 6	11.93	APR 9	10.41	JUN 3	10.72	AUG 4	11.78
NOV 7	14.10	JAN 13	11.23	MAR 5	10.40	MAY 12	8.83	JUL 8	14.52	SEP 3	12.58
WATER YEAR 1992		HIGHEST	8.83	MAY 12, 1992		LOWEST	14.52	JUL 8, 1992			



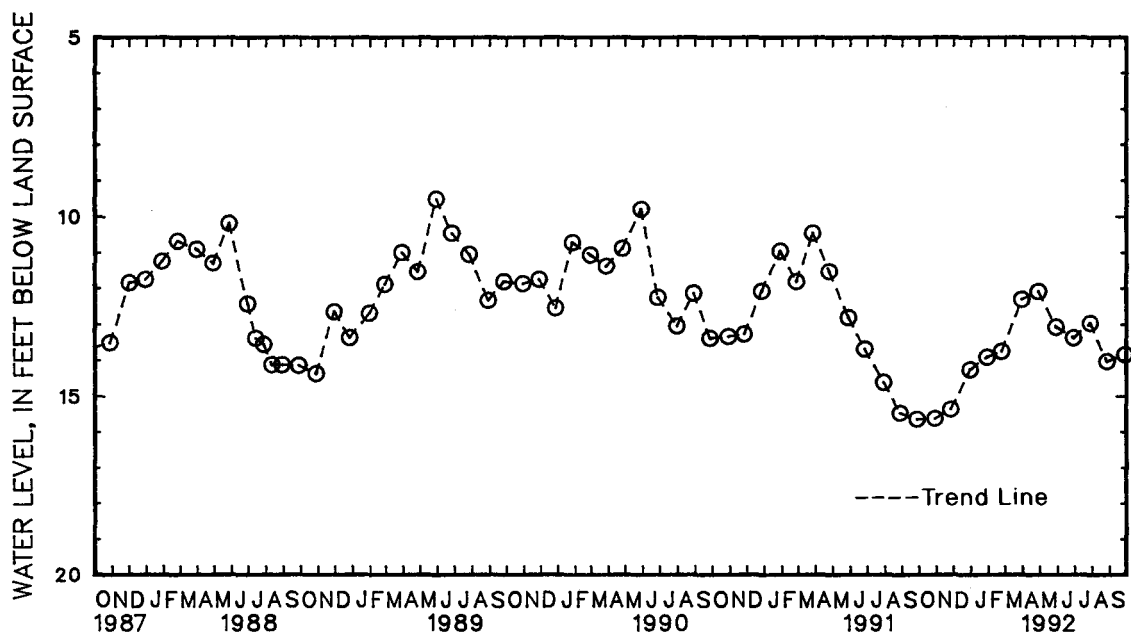
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
MONTGOMERY COUNTY--Continued

WELL NUMBER.--MO Eh 20. SITE ID.--390434076573002.
LOCATION.--Lat 39°04'34", long 76°57'30", Hydrologic Unit 02070010, at MD Rt. 196 and Fairland Rd., Fairland.
Owner: Cities Service Oil Co.
AQUIFER.--Wissahickon Formation (lower pelitic schist) of Paleozoic age. Aquifer code: 300WSCK.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 102.9 ft; casing diameter 6 in., to 50 ft; open hole.
DATUM.--Elevation of land surface is 410 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing at land-surface datum.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--March 1955 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.39 ft below land surface, June 25, 1972; lowest measured, 16.36 ft below land surface, Oct. 29, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	15.63	DEC 30	14.27	FEB 24	13.76	APR 28	12.08	JUN 29	13.38	AUG 27	14.04
NOV 26	15.37	JAN 29	13.92	MAR 30	12.29	MAY 28	13.08	JUL 28	12.97	SEP 28	13.85
WATER YEAR 1992		HIGHEST	12.08	APR 28, 1992		LOWEST	15.63	OCT 29, 1991			



GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY

WELL NUMBER.--PG Bc 16. SITE ID.--390151076561501.

LOCATION.--Lat 39°01'51", long 76°56'15", Hydrologic Unit 02070010, at National Agricultural Research Center, Beltsville.

Owner: U.S. Department of Agriculture.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Dug brick-lined, unused, water-table well, measured depth 27.4 ft; casing diameter 40 in.

INSTRUMENTATION.-- Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder from Oct. 31, 1962 to Feb. 9, 1965.

DATUM.--Elevation of land surface is 190 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of steel cover, 0.10 ft above land surface.

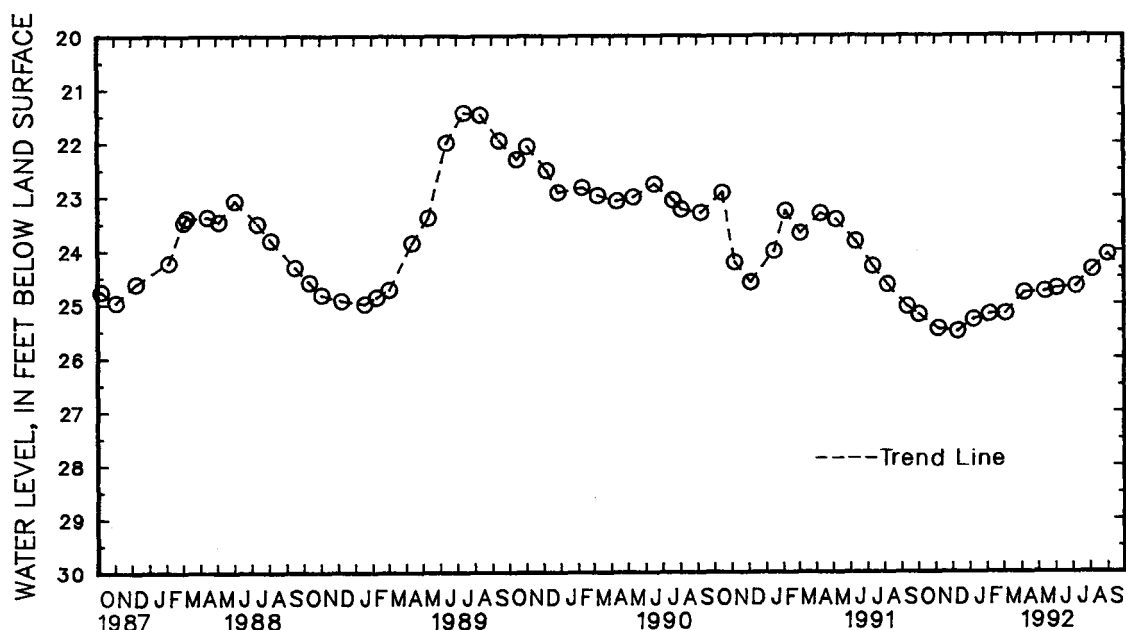
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--September 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.26 ft below land surface, July 6, 1972; lowest measured, 26.46 ft below land surface, July 8, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	25.21	DEC 11	25.52	FEB 5	25.20	APR 7	24.80	JUN 3	24.72	AUG 5	24.37
NOV 6	25.47	JAN 8	25.30	MAR 4	25.19	MAY 13	24.78	JUL 8	24.68	SEP 1	24.08
WATER YEAR 1992		HIGHEST	24.08	SEP 1, 1992	LOWEST	25.52	DEC 11, 1991				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

MARYLAND--Continued

PRINCE GEORGES COUNTY

WELL NUMBER.--PG De 21. SITE ID.--385130076465501. PERMIT NUMBER.--PG-02-2875.

LOCATION.--Lat 38°51'30", long 76°46'55", Hydrologic Unit 02060006, Agricultural Experiment Station
Southern Maryland Research and Educational Facility, at Oak Grove.

Owner: University of Maryland.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 155 ft; casing diameter 6 in., to 150 ft; screen diameter 6 in. from 150 to 155 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder from May 26, 1958 to Jan. 27, 1965.

DATUM.--Elevation of land surface is 96 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 0.90 ft above land surface.

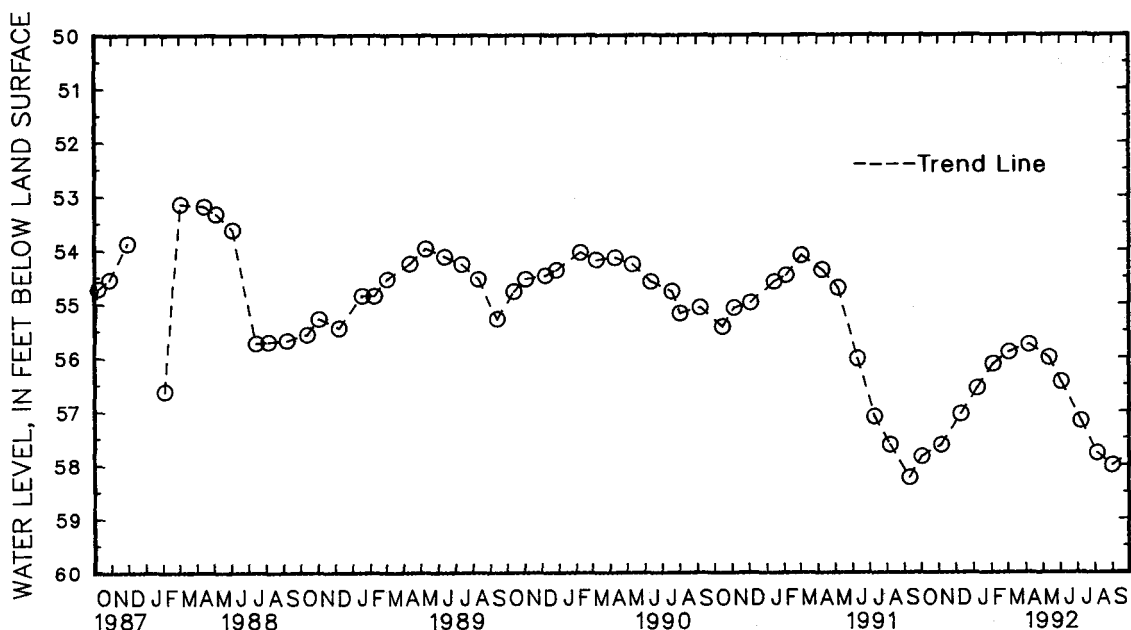
REMARKS.--Maryland Water-Level Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.39 ft below land surface, May 26, and 29, 1958; lowest measured, 58.24 ft below land surface, Sept. 11, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	57.85	DEC 11	57.05	FEB 5	56.12	APR 7	55.76	JUN 3	56.45	AUG 5	57.78
NOV 6	57.63	JAN 8	56.57	MAR 4	55.90	MAY 13	56.00	JUL 8	57.18	SEP 1	58.01
WATER YEAR 1992		HIGHEST	55.76	APR 7, 1992		LOWEST	58.01	SEP 1, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Df 2. SITE ID.--385152076431301.

LOCATION.--Lat 38°51'52", long 76°43'13", Hydrologic Unit 02060006, near Leeland.

Owner: A. R. Rogers.

AQUIFER.--Nanjemoy Formation of Eocene age. Aquifer code: 124NNJM.

WELL CHARACTERISTICS.--Dug, unused, artesian well, depth 81.5 ft; diameter of concrete-ring lining 48 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 145 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Edge of steel cover, 3.00 ft below land surface.

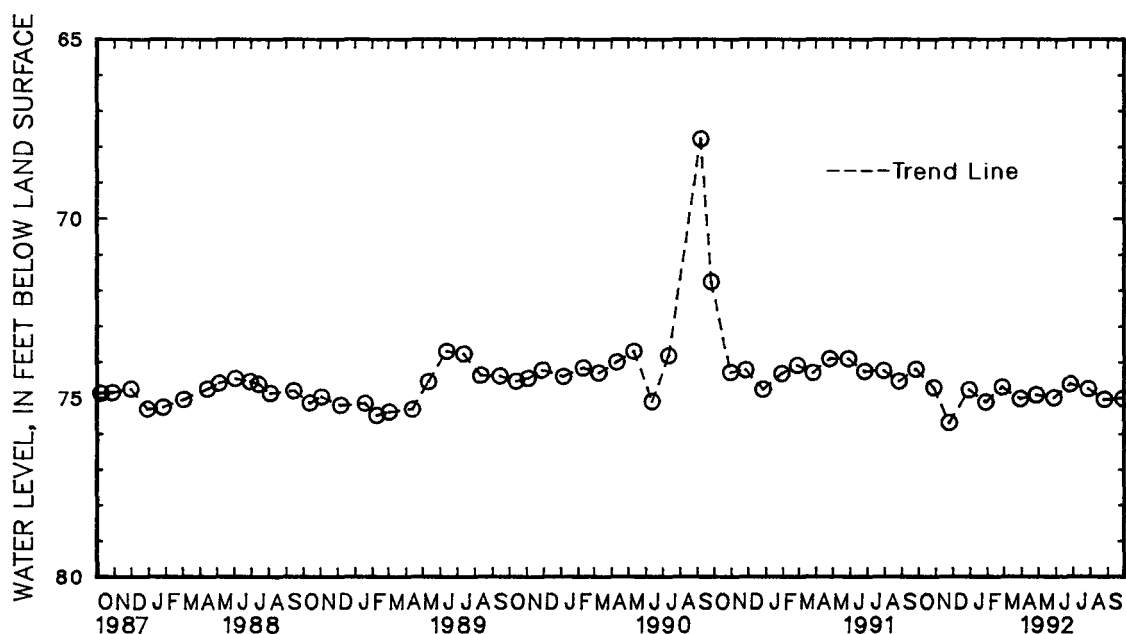
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--November 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 67.78 ft below land surface, Sept. 7, 1990;
lowest measured, 75.96 ft below land surface, Nov. 19, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	74.72	DEC 30	74.78	FEB 27	74.71	APR 27	74.92	JUN 26	74.62	AUG 26	75.05
NOV 25	75.70	JAN 29	75.12	MAR 30	75.03	MAY 28	75.00	JUL 28	74.75	SEP 28	75.02
WATER YEAR 1992		HIGHEST	74.62	JUN 26, 1992		LOWEST	75.70	NOV 25, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Fb '36. SITE ID.--384423077004501. PERMIT NUMBER.--PG-02-4834.

LOCATION.--Lat 38°44'23", long 77°00'45", Hydrologic Unit 02070010, at Broadwater Estates.

Owner: Broadwater Citizens Association.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PFSC.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 284 ft; casing diameter 8 in., to 271.5 ft; screen diameter 8 in. from 267.5 to 284 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 78 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 3.50 ft above land surface.

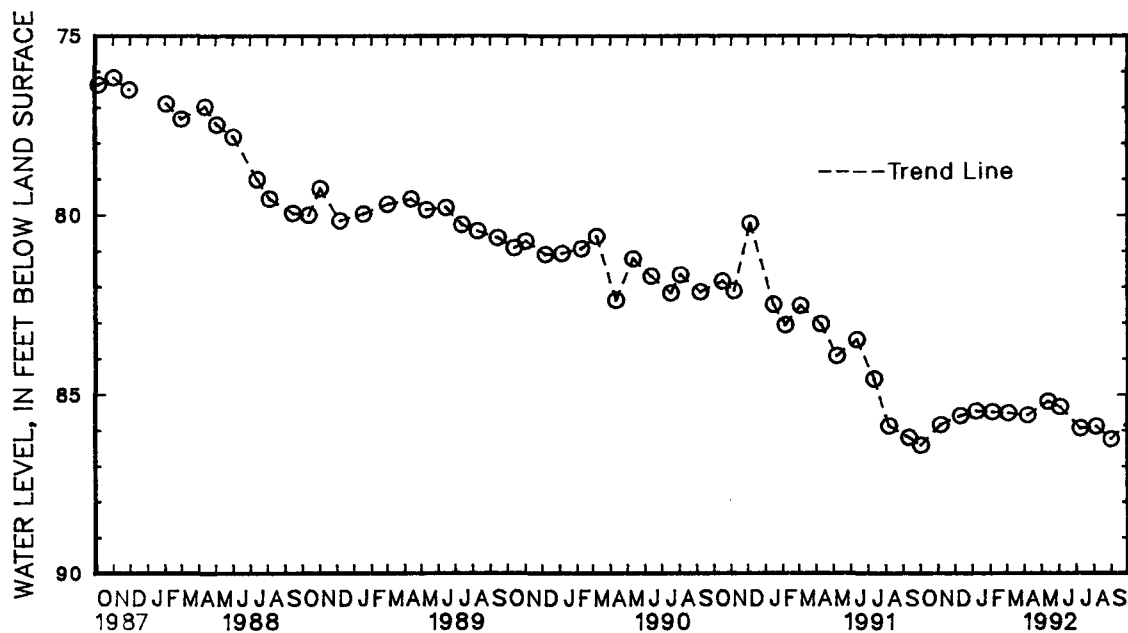
REMARKS.--Maryland Water-Level Network observation well. Water level reported 62 ft below land surface, May 29, 1957; measured 84 ft below land surface, July 7, 1961. Water levels may be affected by nearby pumping.

PERIOD OF RECORD.--July 1961, March 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level reported, 62 ft below land surface, May 29, 1957; highest measured, 68.99 ft below land surface, Oct. 3, 1979; lowest measured, 86.42 ft below land surface, Oct. 2, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	86.42	DEC 11	85.59	FEB 5	85.48	APR 7	85.57	JUN 3	85.34	AUG 5	85.89
NOV 6	85.84	JAN 8	85.46	MAR 4	85.51	MAY 13	85.19	JUL 8	85.94	SEP 1	86.25
WATER YEAR 1992		HIGHEST	85.19	MAY 13, 1992		LOWEST	86.42	OCT 2, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Fc 17. SITE ID.--384230076555601.

LOCATION.--Lat 38°42'30", long 76°55'56", Hydrologic Unit 02070010, south of Floral Park Rd. and west of MD Rt. 5, Piscataway.

Owner: Potomac Edison Power Company, formerly Washington Gas Light Co.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 750 ft; casing diameter 6 in.; casing perforated from 712 to 716 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with water-level recorder from Oct. 27, 1955 to Sept. 4, 1956.

DATUM.--Elevation of land surface is 58.6 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 0.50 ft above land surface.

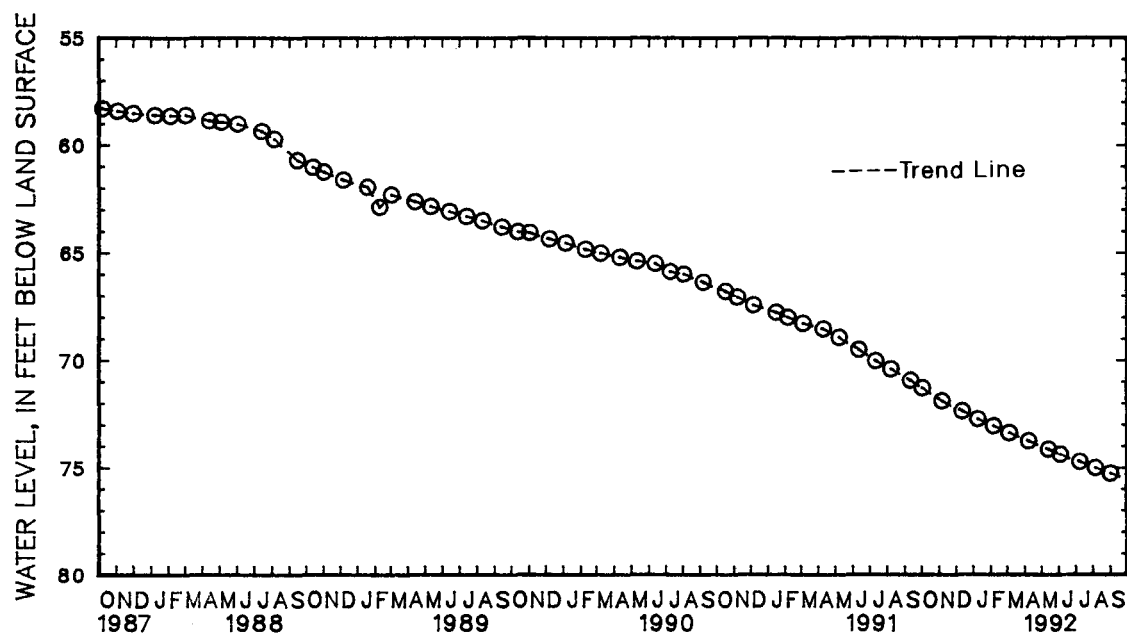
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.62 ft below land surface, Oct. 27, 1955; lowest measured, 75.29 ft below land surface, Sept 1, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	71.30	DEC 11	72.38	FEB 5	73.08	APR 7	73.77	JUN 3	74.39	AUG 5	75.03
NOV 6	71.90	JAN 8	72.75	MAR 4	73.40	MAY 13	74.16	JUL 8	74.75	SEP 1	75.29
WATER YEAR 1992		HIGHEST	71.30	OCT 2, 1991	LOWEST	75.29	SEP 1, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

399

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Fd 41. SITE ID.--384131076533301. PERMIT NUMBER.--PG-01-8058.

LOCATION.--Lat 38°41'31", long. 76°53'33", Hydrologic Unit 02070010, south side of MD Rt. 373, 1.14 mi west of intersection with MD Rt. 5, near T.B.

Owner: Colonial Investment Corp.

AQUIFER.--Magothy Formation of Upper Cretaceous age. Aquifer code: 211MGTY.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 362 ft; casing diameter 4 in., to 352 ft; screen diameter 2.5 in. from 352 to 362 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 198 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 2.80 ft above land surface.

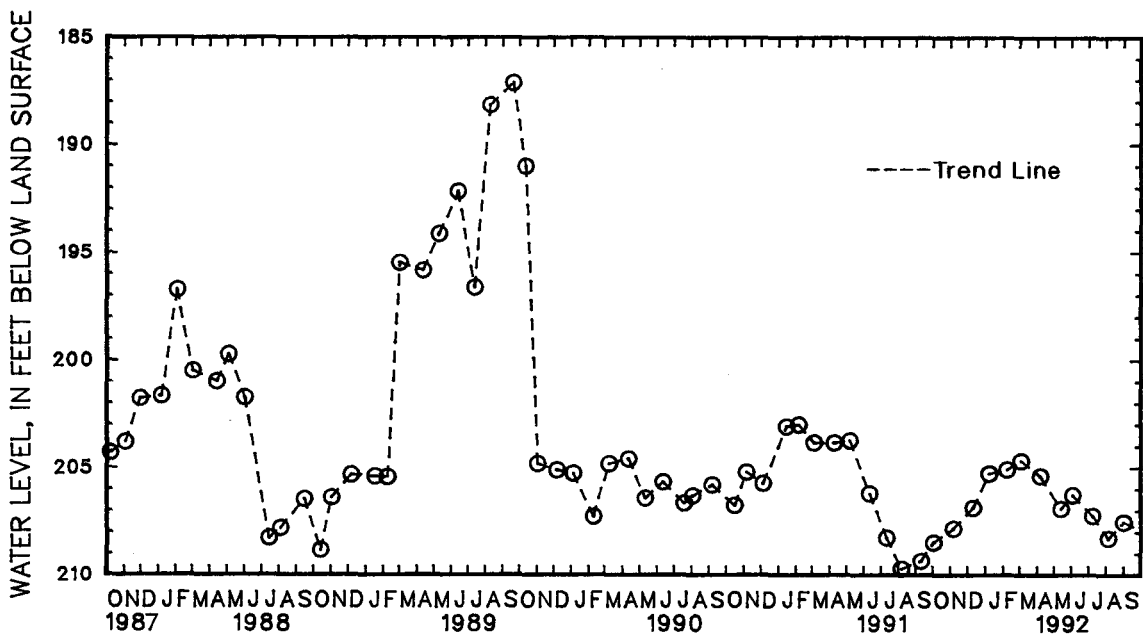
REMARKS.--Maryland Water-Level Network observation well. Water level reported 146 ft below land surface, March 11, 1955.

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 157.24 ft below land surface, March 4, 1968; lowest measured, 209.72 ft below land surface, August 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	208.47	DEC 11	206.86	FEB 8	205.07	APR 7	205.38	JUN 3	206.26	AUG 5	208.28
NOV 6	207.83	JAN 8	205.26	MAR 4	204.70	MAY 13	206.90	JUL 8	207.23	SEP 1	207.52
WATER YEAR 1992		HIGHEST	204.70	MAR 4, 1992		LOWEST	208.47	OCT 2, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 35. SITE ID.--383228076410601. PERMIT NUMBER.--PG-72-0086.
 LOCATION.--Lat 38°32'28", long 76°41'06", Hydrologic Unit 02060006, at Chalk Point Power Plant,
 1.8 mi. south of Eagle Harbor.
 Owner: Potomac Electric Power Co.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 430 ft; casing diameter 6 in., to 401 ft;
 casing diameter 4 in. from 389 to 399 ft; screen diameter 4 in. from 399 to 430 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from May 1, 1974 to July 8, 1976. Equipped with digital water-level recorder
 --60-minute recorder interval from July 8, 1976 to current year.
 DATUM.--Elevation of land surface is 11.22 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.22 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network. Water levels affected by nearby pumping.
 PERIOD OF RECORD.--May 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.70 ft below sea level, July 1, 1975;
 lowest measured, 29.50 ft below sea level, Sept. 23, 1992.

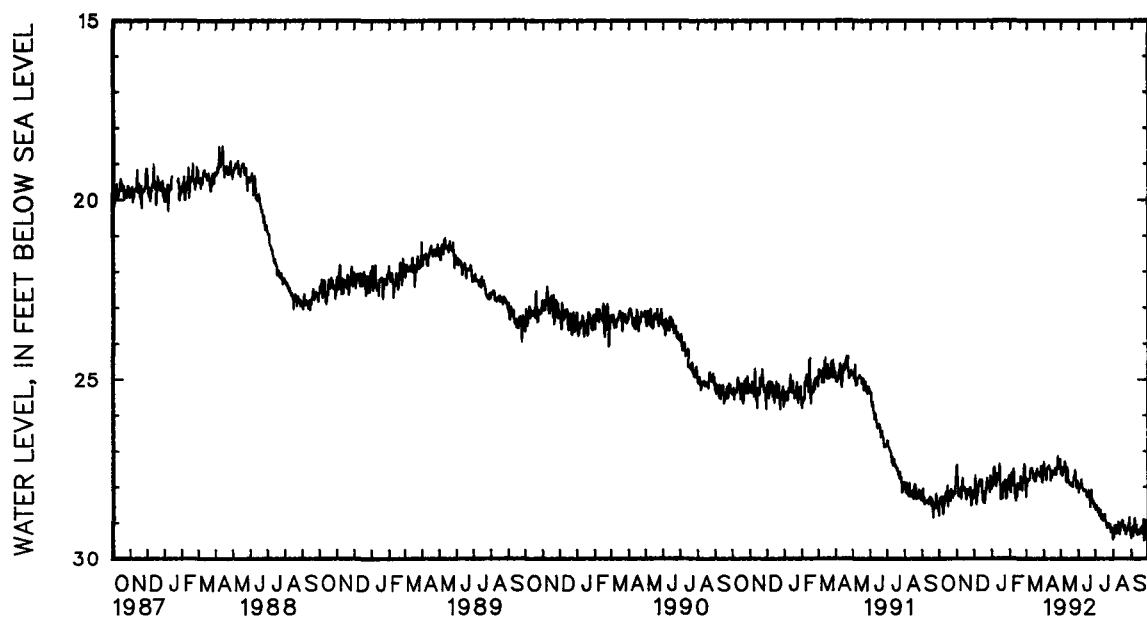
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	27.91	28.38	26.81	27.38	27.56	28.15	27.38	27.86	27.35	28.02	27.34	27.91
2	27.82	28.30	27.02	27.74	27.51	28.10	27.41	27.97	27.64	28.15	27.42	27.96
3	27.77	28.30	27.47	28.23	27.06	27.68	27.07	27.77	27.23	27.79	27.23	27.78
4	27.72	28.30	27.65	28.20	27.20	28.19	26.47	27.48	26.98	27.60	27.13	27.76
5	27.66	28.26	27.61	28.26	27.90	28.49	26.78	27.44	27.26	27.96	27.31	27.82
6	27.70	28.51	27.44	28.10	27.67	28.24	26.93	27.56	27.24	27.79	27.20	27.80
7	28.09	28.76	27.41	28.02	27.59	28.22	27.21	27.93	26.87	27.49	26.82	27.74
8	27.97	28.55	27.60	28.33	27.49	28.03	27.40	27.97	26.87	27.58	26.71	27.47
9	27.86	28.48	27.67	28.23	27.49	27.86	27.16	27.85	27.36	28.02	27.04	27.59
10	27.76	28.42	27.00	27.84	27.41	27.97	27.05	27.62	27.86	28.27	26.64	27.50
11	27.58	28.22	27.06	27.75	27.35	27.80	27.26	27.77	27.73	28.39	26.49	27.46
12	27.69	28.14	27.68	28.09	27.53	27.95	27.22	27.73	27.77	28.28	27.26	27.58
13	27.89	28.36	27.68	28.09	27.45	27.89	27.16	27.62	27.39	28.26	27.38	27.75
14	27.76	28.28	27.65	28.01	27.38	27.80	26.70	27.35	27.42	27.88	27.02	27.79
15	27.61	27.96	27.67	28.10	27.80	28.17	27.42	27.95	27.13	27.98	27.01	27.65
16	27.88	28.54	27.70	28.20	27.97	28.42	27.51	28.35	27.11	27.96	27.32	27.84
17	27.90	28.21	27.84	28.34	27.26	28.13	27.34	28.04	27.46	28.05	26.99	27.60
18	27.86	28.24	27.61	28.29	27.35	28.19	27.39	28.08	27.25	27.94	27.07	27.80
19	27.77	28.25	27.52	28.06	27.92	28.46	27.78	28.32	27.04	27.68	26.92	27.53
20	27.94	28.39	27.64	28.22	27.64	28.34	27.23	27.88	27.10	27.91	26.91	27.48
21	27.55	28.06	27.61	28.22	27.34	28.03	27.23	27.86	27.39	28.06	26.90	27.63
22	27.58	28.11	27.45	28.16	27.39	28.07	27.30	27.89	27.45	28.09	26.77	27.61
23	27.61	28.28	27.48	28.10	26.96	27.75	26.76	27.81	27.32	27.90	26.93	27.58
24	27.68	28.30	27.35	28.01	27.12	27.83	26.80	28.06	27.31	27.79	27.23	27.67
25	27.55	28.15	27.67	28.25	27.36	27.96	27.76	28.33	27.05	27.63	27.14	27.69
26	27.60	28.12	28.00	28.51	27.42	28.02	27.83	28.29	26.93	27.35	27.08	27.57
27	27.50	28.19	27.91	28.48	27.45	27.98	27.45	28.09	26.99	27.40	26.96	27.41
28	27.45	28.19	27.60	28.10	27.45	28.14	27.37	27.80	27.14	27.71	27.37	27.84
29	27.24	27.94	27.71	28.16	27.14	27.68	27.36	27.83	27.12	28.28	27.41	27.86
30	27.22	27.79	27.71	28.32	27.35	27.98	27.26	27.71	---	---	27.01	27.74
31	26.82	27.43	---	---	27.57	28.05	27.20	27.67	---	---	26.86	27.42
MONTH	26.82	28.76	26.81	28.51	26.96	28.49	26.47	28.35	26.87	28.39	26.49	27.96

GROUND-WATER LEVELS
 MARYLAND--Continued
 PRINCE GEORGES COUNTY--Continued
 PG Hf 35--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	26.75	27.29	26.85	27.63	27.41	28.14	27.84	28.63	28.60	29.47	28.84	29.43
2	26.96	27.54	26.88	27.44	27.52	28.06	28.00	28.58	28.64	29.40	28.68	29.26
3	27.11	27.64	26.96	27.67	27.42	27.97	27.86	28.51	28.53	29.14	28.68	29.10
4	26.96	27.49	26.99	27.65	27.40	28.00	27.91	28.57	28.53	29.06	28.81	29.38
5	27.06	27.80	26.96	27.55	27.17	27.93	28.00	28.69	28.68	29.28	28.72	29.29
6	27.19	27.74	26.92	27.43	27.26	27.79	28.02	28.59	28.70	29.29	28.42	28.87
7	26.93	27.47	26.89	27.44	27.32	27.90	28.25	28.78	28.75	29.29	28.47	29.11
8	26.81	27.43	26.72	27.28	27.51	28.02	28.19	28.81	28.66	29.12	28.70	29.14
9	26.93	27.47	26.85	27.45	27.55	28.07	28.16	28.63	28.50	28.97	28.66	29.19
10	26.95	27.39	27.29	27.84	27.55	28.11	28.25	28.82	28.59	29.13	28.56	29.06
11	27.00	27.46	27.12	27.86	27.51	28.12	28.23	28.88	28.50	29.02	28.56	29.33
12	26.97	27.51	26.91	27.43	27.57	28.07	28.34	28.76	28.63	29.32	28.86	29.34
13	27.11	27.82	26.85	27.50	27.52	28.08	28.19	28.89	28.61	29.21	28.69	29.26
14	27.02	27.59	26.99	27.79	27.53	28.10	28.36	28.93	28.59	29.08	28.72	29.19
15	27.06	27.72	27.19	27.84	27.56	28.26	28.20	28.82	28.42	28.92	28.82	29.33
16	27.04	27.53	27.28	27.91	27.74	28.17	28.29	28.88	28.47	28.93	28.72	29.25
17	26.91	27.57	27.35	27.88	27.66	28.27	28.20	28.75	28.57	29.04	28.70	29.23
18	26.99	27.64	27.21	27.95	27.82	28.27	28.34	28.93	28.61	29.10	28.62	29.13
19	26.97	27.64	27.44	27.95	27.64	28.08	28.52	28.98	28.61	29.06	28.61	29.13
20	27.00	27.51	27.37	27.88	27.80	28.30	28.55	29.04	28.66	29.20	28.57	29.29
21	26.87	27.47	27.40	27.88	28.01	28.35	28.62	29.07	28.66	29.08	28.46	28.91
22	26.78	27.47	27.50	27.99	28.15	28.55	28.70	29.13	28.69	29.23	28.45	28.90
23	27.21	27.64	27.35	27.78	27.87	28.35	28.62	29.01	28.74	29.31	28.43	29.50
24	26.96	27.49	27.29	27.67	27.73	28.07	28.59	29.09	28.73	29.24	28.79	29.21
25	27.00	27.39	27.24	27.73	27.73	28.32	28.54	29.08	28.62	29.15	28.29	28.94
26	26.58	27.13	27.20	27.52	27.84	28.38	28.49	29.04	28.60	29.18	28.41	29.12
27	26.60	27.37	27.26	27.72	27.87	28.38	28.43	29.10	28.50	29.04	28.37	29.04
28	27.03	27.47	27.36	28.02	27.91	28.54	28.53	29.26	28.07	28.84	28.56	29.16
29	26.89	27.32	27.58	27.97	28.00	28.46	28.52	29.12	28.38	29.15	28.64	29.28
30	26.69	27.22	27.37	27.83	27.89	28.47	28.47	29.19	28.54	29.21	28.77	29.29
31	---	---	27.20	27.88	---	---	28.35	29.19	28.58	29.28	---	---
MONTH	26.58	27.82	26.72	28.02	27.17	28.55	27.84	29.26	28.07	29.47	28.29	29.50

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 40. SITE ID.--383348076411301. PERMIT NUMBER.--PG-73-0298.
 LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant,
 0.4 mi. south of Eagle Harbor.
 Owner: Potomac Electric Power Co.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 870 ft; casing diameter 6 in., to 150 ft;
 casing diameter 4 in. from 150 to 860 ft; screen diameter 4 in. from 860 to 870 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic
 water-level recorder from Dec. 16, 1974 to July 8, 1976. Equipped with digital water-level
 recorder--30- minute recorder interval from July 8, 1976 to current year.
 DATUM.--Elevation of land surface is 27.98 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.46 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network. Water levels are affected by nearby pumping.
 Missing data due to recorder malfunction.
 PERIOD OF RECORD.--December 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.64 ft above sea level, Jan. 11, 1975;
 lowest measured, 25.72 ft below sea level, Oct. 20, 1990.

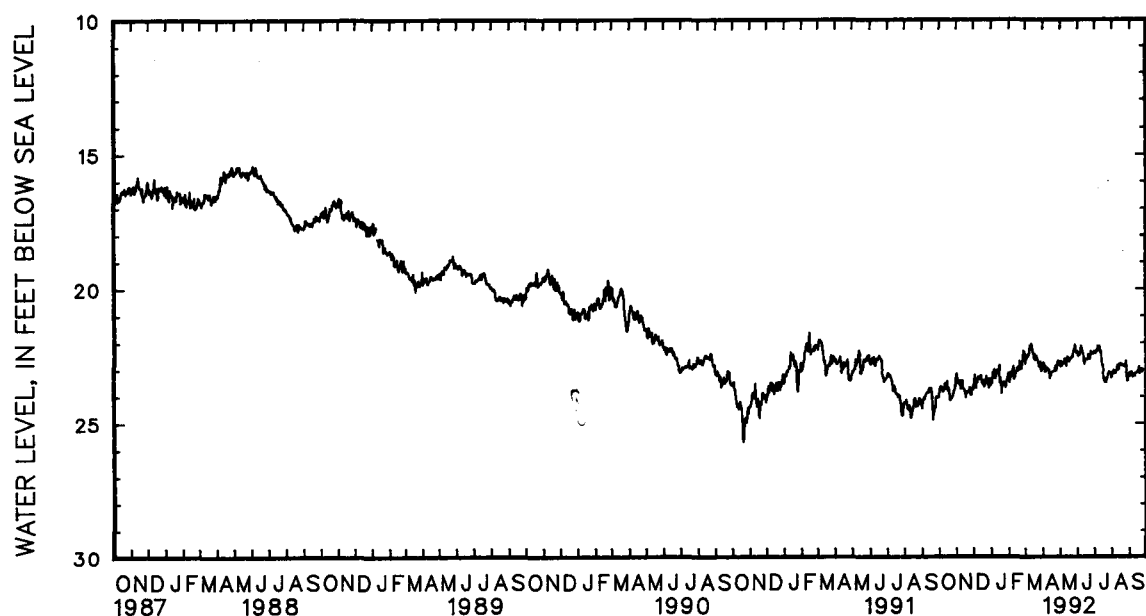
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.43	23.82	22.88	23.17	23.32	23.60	23.29	23.53	23.01	23.38	22.32	22.65
2	23.41	23.72	22.93	23.32	23.18	23.54	23.25	23.53	23.24	23.49	22.35	22.64
3	23.37	23.65	23.19	23.52	22.81	23.22	22.97	23.33	22.97	23.29	22.27	22.54
4	23.35	23.69	23.22	23.51	22.88	23.47	22.51	23.11	22.72	23.13	22.19	22.48
5	23.30	23.66	23.25	23.54	23.40	23.71	22.68	23.02	22.89	23.28	22.21	22.52
6	23.25	23.80	23.12	23.50	23.20	23.50	22.72	23.07	22.83	23.23	22.19	22.49
7	23.48	23.85	23.10	23.43	23.11	23.50	22.89	23.25	22.58	22.99	21.79	22.39
8	23.45	23.83	23.23	23.73	23.11	23.41	23.03	23.35	22.52	22.91	21.73	22.15
9	23.42	23.80	23.38	23.73	22.97	23.31	22.82	23.24	22.81	23.29	21.92	22.26
10	23.36	23.76	22.98	23.47	23.08	23.35	22.73	23.04	23.19	23.38	21.59	22.15
11	23.23	23.58	23.01	23.44	23.05	23.29	22.89	23.14	22.98	23.35	21.48	22.07
12	23.28	23.52	23.44	23.71	23.19	23.39	22.91	23.15	23.08	23.29	22.00	22.16
13	23.41	23.72	23.47	23.74	23.05	23.32	22.78	23.07	22.73	23.17	22.15	22.36
14	23.38	23.73	23.50	23.76	23.00	23.24	22.40	22.86	22.73	23.00	22.05	22.40
15	23.27	23.46	23.51	23.81	23.25	23.42	22.90	23.28	22.47	23.02	22.05	22.46
16	23.41	23.81	23.55	23.90	23.29	23.56	23.04	23.50	22.45	22.95	22.30	22.62
17	23.45	23.70	23.78	24.07	22.98	23.42	22.93	23.34	22.71	23.08	22.18	22.46
18	23.49	23.77	23.60	23.94	22.98	23.43	23.08	23.53	22.56	22.94	22.26	22.65
19	23.46	23.91	23.52	23.85	23.35	23.67	23.52	23.92	22.35	22.73	22.10	22.54
20	23.83	24.18	23.54	23.89	23.27	23.62	23.31	23.65	22.42	22.92	22.20	22.52
21	23.88	24.16	23.48	23.86	23.08	23.44	23.23	23.58	22.59	22.97	22.23	22.66
22	23.80	24.10	23.44	23.87	23.10	23.50	23.27	23.58	22.60	22.98	22.18	22.66
23	23.77	24.10	23.43	23.81	22.88	23.28	22.72	23.49	22.46	22.84	22.30	22.76
24	23.72	24.07	23.30	23.69	22.97	23.36	22.76	23.51	22.42	22.71	22.63	22.88
25	23.59	24.00	23.47	23.81	23.19	23.49	23.35	23.63	22.22	22.60	22.68	22.92
26	23.52	23.90	23.73	23.97	23.30	23.55	23.43	23.68	22.18	22.32	22.50	22.86
27	23.41	23.82	23.58	23.98	23.35	23.60	23.25	23.59	22.18	22.34	22.50	22.74
28	23.43	23.78	23.42	23.80	23.28	23.70	23.23	23.41	22.18	22.44	22.74	23.04
29	23.34	23.70	23.44	23.70	23.07	23.36	23.12	23.37	22.18	22.80	22.88	23.08
30	23.17	23.54	23.40	23.76	23.13	23.55	23.01	23.28	---	---	22.60	23.03
31	22.92	23.26	---	---	23.39	23.60	22.93	23.16	---	---	22.54	22.86
MONTH	22.92	24.18	22.88	24.07	22.81	23.71	22.40	23.92	22.18	23.49	21.48	23.08

GROUND-WATER LEVELS
 MARYLAND--Continued
 PRINCE GEORGES COUNTY--Continued
 PG Hf 40--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	22.46	22.77	22.46	22.90	22.08	22.51	21.98	22.37	22.98	23.31	23.03	23.27
2	22.57	22.91	22.43	22.74	22.19	22.50	22.04	22.41	22.87	23.18	22.93	23.27
3	22.66	22.96	22.43	22.86	22.17	22.49	21.93	22.35	22.77	23.05	22.79	23.12
4	22.57	22.89	22.51	22.81	22.09	22.45	21.91	22.31	22.72	23.16	22.88	23.16
5	22.65	23.10	22.46	22.81	21.89	22.36	21.88	22.33	22.84	23.16	22.85	23.16
6	22.81	23.10	22.45	22.75	21.91	22.16	21.87	22.15	22.91	23.16	22.81	23.17
7	22.63	23.02	22.42	22.72	22.00	22.16	21.98	22.29	22.86	23.16	22.98	23.30
8	22.59	22.96	22.31	22.62	22.06	22.31	21.92	22.29	22.65	23.04	22.98	23.28
9	22.75	23.00	22.36	22.67	22.07	22.40	21.90	22.16	22.66	22.93	22.92	23.22
10	22.77	23.03	22.52	22.86	22.10	22.42	21.97	22.27	22.52	22.86	22.92	23.19
11	22.82	23.06	22.51	22.88	22.11	22.73	22.00	22.39	22.54	22.94	22.95	23.26
12	22.81	23.14	22.32	22.67	22.47	22.81	22.12	22.37	22.65	23.03	22.90	23.17
13	23.01	23.34	22.27	22.56	22.47	22.73	22.06	22.73	22.62	22.90	22.86	23.16
14	22.91	23.24	22.24	22.68	22.36	22.64	22.53	22.88	22.52	22.81	22.76	23.10
15	22.90	23.23	22.36	22.67	22.32	22.65	22.53	22.86	22.56	22.84	22.91	23.14
16	22.83	23.12	22.37	22.72	22.37	22.65	22.59	23.04	22.54	22.81	22.70	23.04
17	22.71	23.09	22.36	22.65	22.34	22.64	22.86	23.29	22.58	22.87	22.64	22.92
18	22.75	23.10	22.22	22.59	22.32	22.64	23.10	23.43	22.57	22.82	22.58	23.10
19	22.74	23.07	22.31	22.61	22.17	22.46	23.11	23.48	22.62	22.86	22.96	23.16
20	22.72	23.07	22.25	22.57	22.17	22.46	23.10	23.37	22.61	22.89	22.75	23.12
21	22.55	22.95	22.26	22.53	22.35	22.54	23.11	23.37	22.54	22.86	22.64	23.05
22	22.50	22.88	22.24	22.54	22.38	22.62	23.24	23.51	22.51	22.86	22.64	23.00
23	22.75	23.06	22.10	22.38	22.18	22.53	23.05	23.35	22.57	22.92	22.63	23.10
24	22.59	22.98	22.05	22.28	22.17	22.35	22.99	23.34	22.41	22.85	---	---
25	22.64	22.84	22.00	22.31	22.17	22.41	22.92	23.22	22.22	22.71	---	---
26	22.44	22.70	21.95	22.11	22.17	22.39	22.74	23.11	22.59	23.12	---	---
27	22.43	22.79	21.94	22.16	22.08	22.39	22.76	23.14	22.94	23.29	---	---
28	22.62	22.85	21.98	22.38	22.10	22.43	22.75	23.15	23.16	23.44	---	---
29	22.50	22.80	22.14	22.41	22.10	22.38	22.73	23.13	23.08	23.44	---	---
30	22.41	22.71	22.07	22.36	22.02	22.35	22.70	23.18	22.95	23.31	22.78	23.12
31	---	---	21.92	22.36	---	---	22.69	23.32	22.90	23.16	---	---
MONTH	22.41	23.34	21.92	22.90	21.89	22.81	21.87	23.51	22.22	23.44	22.58	23.30

Daily Low Water Levels



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 41. SITE ID.--383348076411302. PERMIT NUMBER.--PG-73-0297.
 LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant,
 0.4 mi. south of Eagle Harbor.
 Owner: Potomac Electric Power Co.
 AQUIFER.--Magothy Formation of Lower Cretaceous age. Aquifer code: 211MGTY.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 665 ft; casing diameter 6 in., to 150 ft;
 casing diameter 4 in. from 150 to 644 ft, and 654 to 665 ft; screen diameter 4 in. from 644 to 654 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-
 level recorder from Dec. 16, 1974 to July 8, 1976. Equipped with digital water-level recorder--60-minute
 recorder interval from July 8, 1976 to current year.
 DATUM.--Elevation of land surface is 28.30 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.60 ft above land surface.
 REMARKS.--Southern Maryland Observation Network. Water levels are affected by nearby pumping.
 PERIOD OF RECORD.--December 1974 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.27 ft below sea level, Dec. 24, 1974;
 lowest measured, 38.10 ft below sea level, Jan. 11, and 14, 1984.

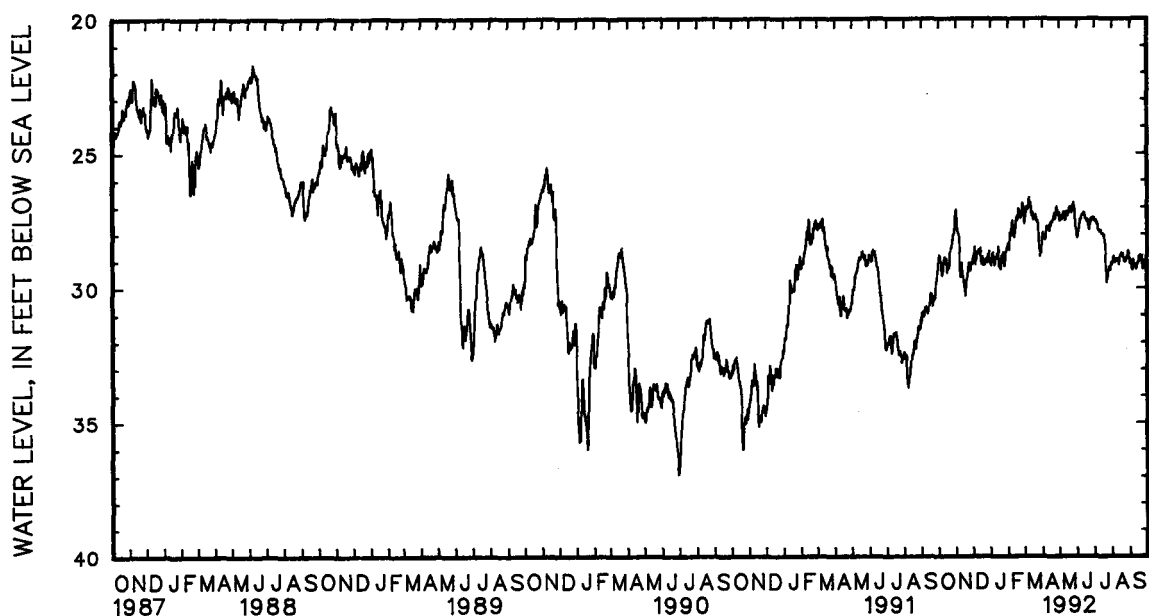
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	28.56	28.97	26.73	27.10	28.53	28.87	28.76	29.07	28.11	28.53	26.89	27.42
2	28.50	28.80	26.91	27.48	28.48	28.81	28.82	29.17	28.21	28.59	26.94	27.29
3	28.49	28.85	27.39	27.85	28.00	28.48	28.54	29.00	27.80	28.20	26.78	27.10
4	28.57	29.01	27.54	27.94	28.13	28.89	28.06	28.75	27.47	27.97	26.63	26.99
5	28.72	29.06	27.68	28.01	28.78	29.14	28.21	28.69	27.61	28.07	26.69	27.04
6	28.73	29.36	27.73	28.10	28.52	28.92	28.40	28.81	27.49	27.99	26.65	27.07
7	29.16	29.55	27.90	28.55	28.46	28.91	28.58	29.03	27.18	27.69	26.30	27.04
8	29.02	29.45	28.47	29.43	28.42	28.78	28.80	29.17	27.11	27.51	26.18	26.65
9	28.80	29.29	29.30	29.60	28.24	28.67	28.61	29.10	27.43	27.88	26.40	26.79
10	28.71	29.11	28.79	29.42	28.36	28.69	28.47	28.88	27.77	28.06	26.21	26.82
11	28.61	28.99	28.77	29.08	28.33	28.60	28.61	28.92	27.69	28.12	26.16	26.84
12	28.60	28.89	29.14	29.40	28.43	28.73	28.50	28.85	27.73	28.00	26.80	27.02
13	28.74	29.05	29.28	29.56	28.23	28.62	28.37	28.71	27.28	27.86	26.99	27.31
14	28.83	29.11	29.41	29.71	28.23	28.54	27.95	28.49	27.23	27.53	26.78	27.32
15	28.74	28.94	29.67	29.93	28.58	28.86	28.41	28.91	26.91	27.52	26.77	27.21
16	28.87	29.45	29.74	30.06	28.72	29.11	28.62	29.24	26.82	27.35	27.02	27.47
17	29.10	29.28	29.98	30.31	28.26	28.88	28.56	29.08	27.07	27.47	26.89	27.31
18	29.09	29.28	29.65	30.10	28.25	28.86	28.70	29.08	26.86	27.31	26.99	27.43
19	28.88	29.23	29.35	29.75	28.76	29.16	28.96	29.32	26.61	27.07	26.79	27.31
20	28.82	29.27	29.31	29.72	28.64	29.08	28.49	28.96	26.65	27.20	26.89	27.29
21	28.34	28.75	29.17	29.58	28.53	29.01	28.38	28.82	26.85	27.33	26.95	27.51
22	28.19	28.54	28.93	29.46	28.69	29.14	28.41	28.82	27.05	27.40	26.93	27.53
23	28.11	28.52	28.81	29.24	28.43	28.95	27.95	28.70	26.98	27.35	27.06	27.50
24	27.95	28.40	28.65	29.08	28.55	29.02	28.06	28.99	26.95	27.30	27.33	27.60
25	27.71	28.23	28.83	29.15	28.69	29.03	28.87	29.19	26.69	27.15	27.48	28.03
26	27.69	28.07	29.03	29.37	28.62	29.07	28.90	29.19	26.57	26.84	28.11	28.56
27	27.58	28.01	28.82	29.29	28.53	28.87	28.31	28.99	26.64	26.90	28.35	28.63
28	27.57	27.93	28.68	29.07	28.51	28.91	28.25	28.54	26.82	27.19	28.56	28.84
29	27.23	27.72	28.73	29.04	28.26	28.65	28.24	28.59	26.79	27.60	28.35	28.73
30	27.07	27.47	28.64	29.12	28.36	28.98	28.12	28.47	---	---	27.89	28.45
31	26.77	27.17	---	---	28.79	29.08	28.06	28.37	---	---	27.75	28.12
MONTH	26.77	29.55	26.73	-30.31	28.00	29.16	27.95	29.32	26.57	28.59	26.16	28.84

GROUND-WATER LEVELS
MARYLAND--Continued
PRINCE GEORGES COUNTY--Continued
PG Hf 41--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	27.58	27.97	26.90	27.50	27.76	28.15	26.98	27.47	28.43	29.13	28.57	29.10
2	27.69	28.09	26.98	27.35	27.64	28.10	27.12	27.54	28.65	29.08	28.69	29.02
3	27.78	28.11	26.99	27.47	27.49	27.93	27.03	27.50	28.53	28.88	28.66	28.99
4	27.72	28.09	27.03	27.42	27.34	27.80	27.04	27.52	28.46	28.84	28.75	29.27
5	27.78	28.22	26.94	27.43	27.09	27.64	27.22	27.62	28.49	28.99	29.03	29.34
6	27.78	28.20	26.92	27.29	27.10	27.45	27.24	27.61	28.64	29.05	28.68	29.28
7	27.47	28.01	26.91	27.26	27.12	27.46	27.37	27.86	28.70	29.02	28.67	28.96
8	27.38	27.75	26.77	27.17	27.02	27.42	27.50	27.90	28.68	28.94	28.81	29.11
9	27.40	27.81	26.81	27.20	26.94	27.31	27.45	27.85	28.51	28.92	28.79	29.13
10	27.39	27.71	26.99	27.48	26.89	27.28	27.53	27.90	28.61	28.97	28.77	29.15
11	27.35	27.70	27.04	27.47	26.89	27.28	27.52	27.94	28.57	28.95	28.75	29.17
12	27.30	27.69	26.88	27.21	26.88	27.20	27.58	27.86	28.67	29.04	28.96	29.31
13	27.39	27.89	26.73	27.15	26.81	27.20	27.49	28.00	28.67	29.14	28.80	29.21
14	27.21	27.62	26.77	27.31	26.83	27.28	27.67	28.02	28.59	28.96	28.79	29.11
15	27.22	27.69	26.92	27.31	26.92	27.42	27.59	28.00	28.45	28.81	28.77	29.11
16	27.18	27.55	26.90	27.25	27.10	27.42	27.66	28.07	28.39	28.73	28.71	29.03
17	27.07	27.53	26.77	27.19	27.07	27.49	27.69	28.04	28.36	28.79	28.53	28.82
18	27.12	27.56	26.59	27.03	27.23	27.54	27.81	28.22	28.44	28.77	28.47	28.80
19	27.11	27.47	26.64	27.00	27.14	27.47	28.03	28.35	28.42	28.74	28.44	28.85
20	27.04	27.45	26.66	27.01	27.27	27.67	28.10	28.74	28.45	28.87	28.71	29.00
21	26.85	27.33	26.78	27.12	27.54	27.78	28.56	29.27	28.54	28.87	28.49	28.89
22	26.78	27.23	26.87	27.19	27.52	27.85	29.10	29.82	28.56	29.01	28.50	28.82
23	27.14	27.44	26.71	27.04	27.20	27.65	29.36	29.66	28.71	29.04	28.52	29.32
24	26.93	27.37	26.65	26.91	27.18	27.46	29.27	29.58	28.69	29.02	28.86	29.30
25	26.93	27.20	26.63	26.96	27.21	27.53	29.09	29.39	28.58	29.01	28.53	29.08
26	26.65	26.99	26.59	26.83	27.14	27.41	29.01	29.36	28.51	28.91	28.64	29.10
27	26.63	27.11	26.64	27.03	27.02	27.39	28.79	29.23	28.31	28.91	28.59	29.01
28	26.90	27.28	26.78	27.43	27.05	27.46	28.79	29.25	27.89	28.64	28.69	29.14
29	26.95	27.24	27.18	27.73	27.05	27.40	28.81	29.33	27.90	28.68	28.70	29.14
30	26.85	27.20	27.47	27.82	27.00	27.40	28.68	29.16	28.40	28.90	28.74	29.15
31	---	---	27.52	28.10	---	---	28.44	29.07	28.43	28.89	---	---
MONTH	26.63	28.22	26.59	28.10	26.81	28.15	26.98	29.82	27.89	29.14	28.44	29.34

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

PRINCE GEORGES COUNTY--Continued

WELL NUMBER.--PG Hf 42. SITE ID.--383348076411303. PERMIT NUMBER.--PG-73-0294.
 LOCATION.--Lat 38°33'48", long 76°41'13", Hydrologic Unit 02060006, at Chalk Point Power Plant,
 0.4 mi. south of Eagle Harbor.
 Owner: Potomac Electric Power Co.
 AQUIFER.--Aquia Formation of Lower Cretaceous age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 386 ft; casing diameter 6 in., to 150 ft;
 casing diameter 4 in. from 150 to 366 ft and 376 to 386 ft; screen diameter 4 in. from 366 to 376 ft.
 INSTRUMENTATION.--Measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level
 recorder from Jan. 2, 1975 to July 8, 1976. Equipped with digital water-level recorder--60-minute recorder
 interval from July 8, 1976 to current year.
 DATUM.--Elevation of land surface is 27.76 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.65 ft above land surface.
 REMARKS.--Southern Maryland Observation Well Network.
 PERIOD OF RECORD.--January 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.84 ft above sea level, April 22, 1975;
 lowest measured, 27.60 ft below sea level, Sept. 12, 1992.

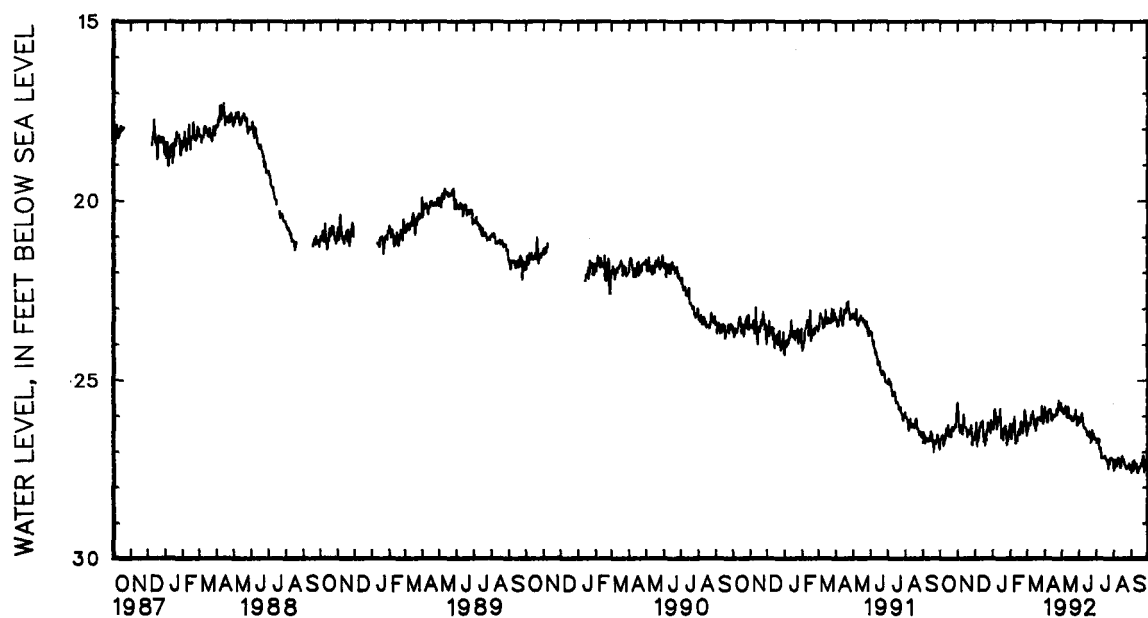
WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26.30	26.64	25.31	25.63	26.19	26.47	26.07	26.33	26.07	26.58	26.01	26.46
2	26.30	26.62	25.43	25.88	26.24	26.49	26.08	26.38	26.38	26.65	26.07	26.42
3	26.34	26.58	25.79	26.27	25.74	26.20	25.75	26.17	26.07	26.41	26.01	26.30
4	26.29	26.58	25.97	26.41	25.84	26.59	25.31	25.84	25.81	26.23	25.90	26.20
5	26.19	26.54	26.13	26.47	26.55	26.86	25.39	25.82	25.98	26.44	25.96	26.26
6	26.14	26.75	25.96	26.36	26.30	26.62	25.61	25.94	26.03	26.41	25.97	26.27
7	26.46	26.83	25.92	26.27	26.21	26.62	25.78	26.24	25.76	26.18	25.58	26.21
8	26.42	26.79	26.05	26.50	26.12	26.46	26.05	26.37	25.69	26.03	25.53	25.99
9	26.38	26.74	26.09	26.52	25.94	26.33	25.81	26.26	26.03	26.57	25.80	26.09
10	26.17	26.62	25.55	26.18	26.03	26.31	25.74	26.03	26.56	26.76	25.41	26.04
11	26.05	26.39	25.57	25.98	25.97	26.20	25.88	26.17	26.41	26.77	25.29	25.88
12	26.10	26.35	26.05	26.32	26.06	26.31	25.88	26.16	26.48	26.73	25.90	26.04
13	26.26	26.54	26.08	26.32	25.88	26.19	25.77	26.03	26.15	26.62	26.02	26.27
14	26.18	26.54	26.08	26.32	25.86	26.15	25.34	25.80	26.14	26.45	25.85	26.26
15	26.07	26.26	26.04	26.35	26.18	26.47	25.81	26.32	25.94	26.46	25.84	26.21
16	26.13	26.58	26.04	26.41	26.34	26.73	26.04	26.62	25.84	26.38	26.07	26.41
17	26.25	26.40	26.30	26.60	26.05	26.54	25.99	26.47	26.16	26.53	25.75	26.11
18	26.22	26.40	26.16	26.47	26.03	26.54	26.14	26.50	26.01	26.40	25.88	26.27
19	26.04	26.44	26.08	26.41	26.47	26.84	26.35	26.67	25.80	26.16	25.63	26.06
20	26.30	26.59	26.16	26.51	26.32	26.73	25.97	26.36	25.85	26.38	25.67	26.06
21	26.03	26.36	26.13	26.51	26.03	26.40	25.96	26.32	26.06	26.44	25.74	26.09
22	26.00	26.32	25.99	26.45	26.02	26.45	26.04	26.41	26.11	26.49	25.54	26.10
23	26.03	26.38	25.99	26.37	25.70	26.20	25.57	26.28	25.97	26.33	25.68	26.05
24	26.03	26.41	25.91	26.27	25.76	26.21	25.60	26.44	25.97	26.22	25.94	26.14
25	25.99	26.38	26.15	26.52	25.96	26.25	26.40	26.67	25.74	26.12	25.90	26.14
26	25.98	26.33	26.53	26.82	26.08	26.36	26.48	26.82	25.63	25.84	25.64	26.02
27	25.88	26.25	26.44	26.82	26.12	26.42	26.24	26.69	25.72	25.92	25.52	25.75
28	25.95	26.31	26.30	26.62	26.08	26.49	26.23	26.43	25.82	26.11	25.77	26.18
29	25.81	26.15	26.34	26.60	25.80	26.14	26.15	26.42	25.76	26.56	26.02	26.22
30	25.69	26.00	26.30	26.67	25.82	26.34	26.03	26.34	---	---	25.72	26.13
31	25.37	25.73	---	---	26.13	26.38	25.98	26.23	---	---	25.54	25.91
MONTH	25.37	26.83	25.31	26.82	25.70	26.86	25.31	26.82	25.63	26.77	25.29	26.46

GROUND-WATER LEVELS
MARYLAND--Continued
PRINCE GEORGES COUNTY--Continued
PG Hf 42--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	25.43	25.77	25.37	25.87	25.76	26.19	26.27	26.69	27.01	27.53	27.24	27.59
2	25.54	25.95	25.39	25.80	25.87	26.18	26.37	26.76	27.09	27.49	27.16	27.49
3	25.76	26.04	25.41	25.88	25.83	26.17	26.23	26.66	26.95	27.31	27.11	27.30
4	25.60	25.92	25.56	25.93	25.80	26.12	26.24	26.65	26.93	27.23	27.11	27.53
5	25.71	26.18	25.53	25.94	25.62	26.05	26.37	26.76	26.96	27.39	27.22	27.51
6	25.89	26.19	25.53	25.81	25.65	25.93	26.39	26.68	27.10	27.41	26.97	27.24
7	25.62	26.07	25.53	25.81	25.74	26.04	26.51	26.94	27.12	27.34	26.93	27.33
8	25.54	25.85	25.39	25.73	25.83	26.22	26.58	26.93	27.09	27.25	27.11	27.36
9	25.59	25.92	25.46	25.77	25.94	26.32	26.51	26.90	26.92	27.17	27.11	27.38
10	25.61	25.84	25.60	26.04	26.01	26.35	26.66	27.04	26.96	27.26	27.08	27.34
11	25.57	25.82	25.76	26.06	26.01	26.34	26.77	27.20	26.93	27.24	27.10	27.56
12	25.56	25.89	25.56	25.84	26.00	26.36	26.96	27.16	27.00	27.45	27.32	27.60
13	25.79	26.14	25.41	25.76	26.05	26.40	26.82	27.17	27.08	27.45	27.17	27.52
14	25.64	25.96	25.44	25.96	26.07	26.45	26.93	27.17	26.98	27.26	27.17	27.45
15	25.66	26.09	25.64	26.02	26.11	26.55	26.83	27.15	26.88	27.17	27.20	27.48
16	25.70	25.98	25.71	26.08	26.26	26.55	26.90	27.17	26.89	27.13	27.14	27.44
17	25.57	25.99	25.77	26.08	26.19	26.56	26.80	27.12	26.93	27.23	27.13	27.40
18	25.65	26.02	25.65	26.01	26.31	26.59	26.91	27.19	26.96	27.26	27.03	27.34
19	25.67	25.98	25.81	26.13	26.09	26.44	27.03	27.24	26.97	27.22	27.04	27.31
20	25.70	25.98	25.80	26.10	26.15	26.51	27.05	27.26	27.02	27.35	26.98	27.39
21	25.54	25.93	25.85	26.12	26.39	26.61	27.10	27.24	27.11	27.37	26.93	27.15
22	25.48	25.81	25.90	26.15	26.47	26.76	27.14	27.49	27.12	27.45	26.90	27.12
23	25.76	25.97	25.79	26.04	26.28	26.64	27.10	27.31	27.20	27.49	26.90	27.58
24	25.55	25.89	25.76	25.99	26.20	26.41	27.09	27.35	27.20	27.48	27.18	27.45
25	25.55	25.77	25.75	26.02	26.18	26.52	26.99	27.22	27.14	27.42	26.77	27.24
26	25.32	25.57	25.69	25.84	26.23	26.50	26.94	27.18	27.11	27.46	---	---
27	25.29	25.73	25.72	26.03	26.18	26.55	26.81	27.18	27.09	27.44	---	---
28	25.54	25.83	25.81	26.28	26.30	26.67	26.92	27.23	26.74	27.34	---	---
29	25.49	25.77	26.03	26.25	26.34	26.65	26.93	27.19	26.94	27.48	---	---
30	25.33	25.63	25.83	26.14	26.30	26.65	26.91	27.23	27.11	27.51	---	---
31	---	---	25.61	26.04	---	---	26.88	27.23	27.11	27.41	---	---
MONTH	25.29	26.19	25.37	26.28	25.62	26.76	26.23	27.49	26.74	27.53	26.77	27.60

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

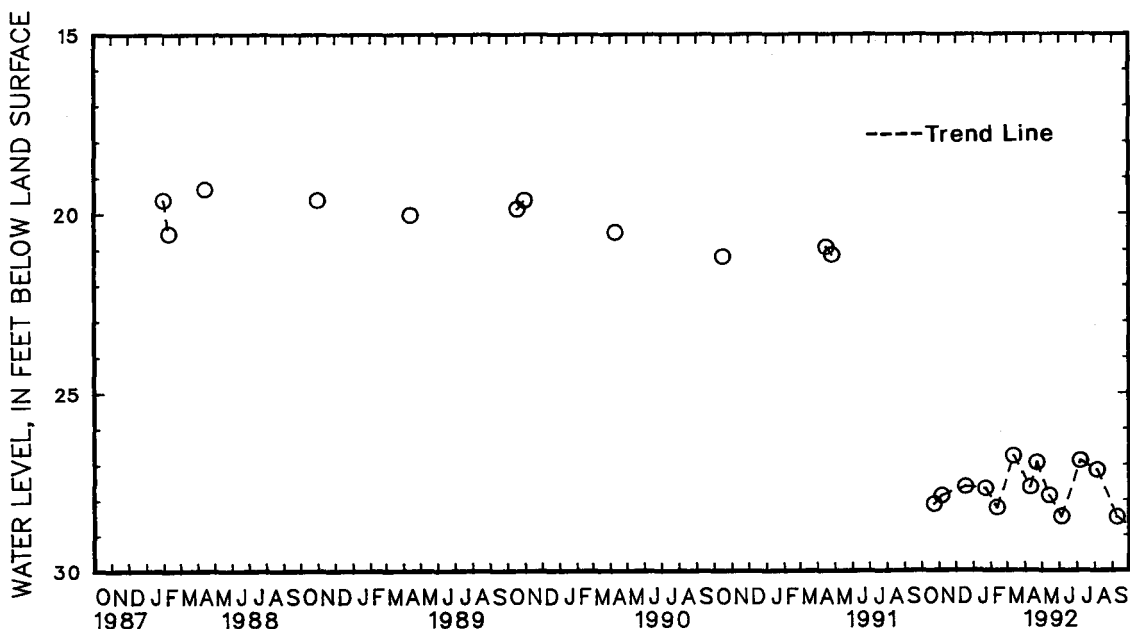
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Be 16. SITE ID.--391203076024302. PERMIT NUMBER.--QA-70-0130.
LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac Group of Lower Cretaceous age. Aquifer code: 217PTMC.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 498 ft; casing diameter 6 in., to 475 ft;
screen diameter 6 in. from 475 to 495 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
Measured twice yearly from February 1988 to April 1991.
DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of casing, 2.70 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Water levels may be affected by nearby pumping.
PERIOD OF RECORD.--March 1971 to September 1972, July 1977 to May 1979, October 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.41 ft below land surface, Sept. 11, 1971;
lowest measured, 28.50 ft below land surface, June 4, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	28.15	DEC 17	27.65	FEB 12	28.25	APR 10	27.66	MAY 13	27.90	JUL 7	26.90
NOV 6	27.91	JAN 22	27.70	MAR 12	26.77	APR 22	26.97	JUN 4	28.50	AUG 5	27.19
WATER YEAR 1992		HIGHEST	26.77	MAR 12, 1992		LOWEST	28.50	JUN 4, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Be 17. SITE ID.--391203076024303.

LOCATION.--Lat 39°12'03", long 76°02'43", Hydrologic Unit 02060002, at Kingstown off MD Rt. 213.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 120 ft; casing diameter 6 in., to 100 ft; screen diameter 6 in. from 100 to 120 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Measured twice yearly from February 1988 to April 1991.

DATUM.--Elevation of land surface is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 2.50 ft above land surface.

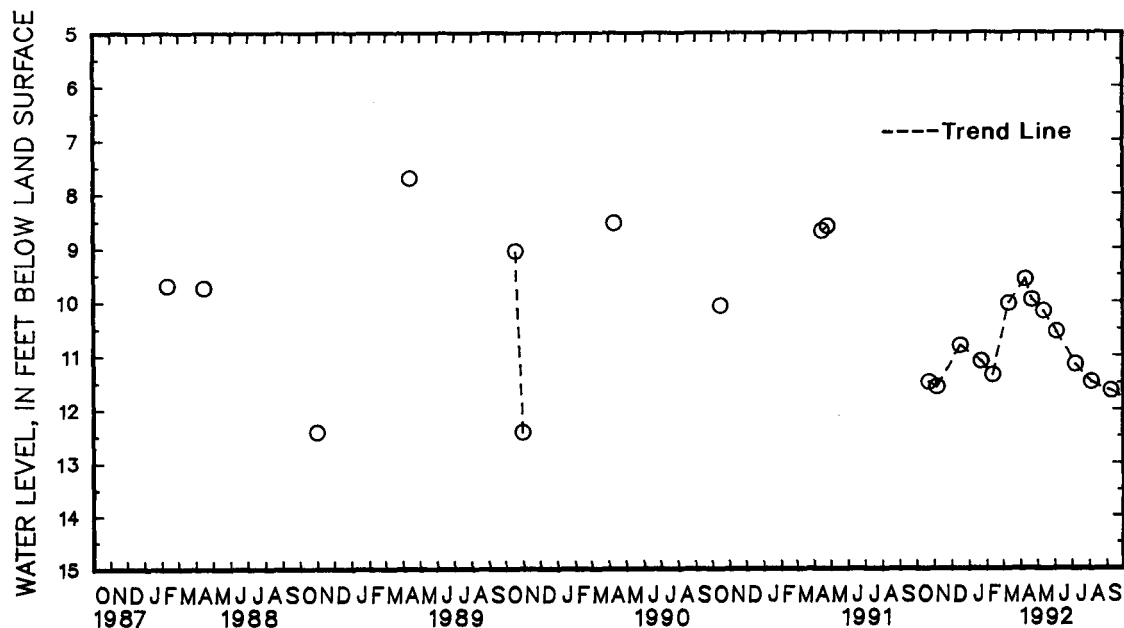
REMARKS.--Maryland Water-Level Network observation well. Water levels may be affected by nearby pumping.

PERIOD OF RECORD.--July 1977 to July 1979, October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.94 ft below land surface, March 6, 1979; lowest measured, 13.00 ft below land surface, Sept. 30, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	11.54	DEC 17	10.83	FEB 12	11.39	APR 10	9.59	MAY 13	10.20	JUL 7	11.20
NOV 6	11.62	JAN 22	11.13	MAR 12	10.04	APR 22	9.98	JUN 4	10.59	AUG 5	11.52
WATER YEAR 1992		HIGHEST 9.59		APR 10, 1992		LOWEST 11.62		NOV 6, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Cg 1. SITE ID.--390841075515201. PERMIT NUMBER.--QA-00-3949.

LOCATION.--Lat 39°08'41", long 75°51'52", Hydrologic Unit 02060002, at Barclay.

Owner: Town of Barclay.

AQUIFER.--Pensauken Formation of Miocene age. Aquifer code: 122PNSK.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, reported depth 60 ft, measured depth 44 ft; casing diameter 4 in., to 50 ft; screened from 50 to 60 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 69 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Lip of hose connector, 1.90 ft above land surface.

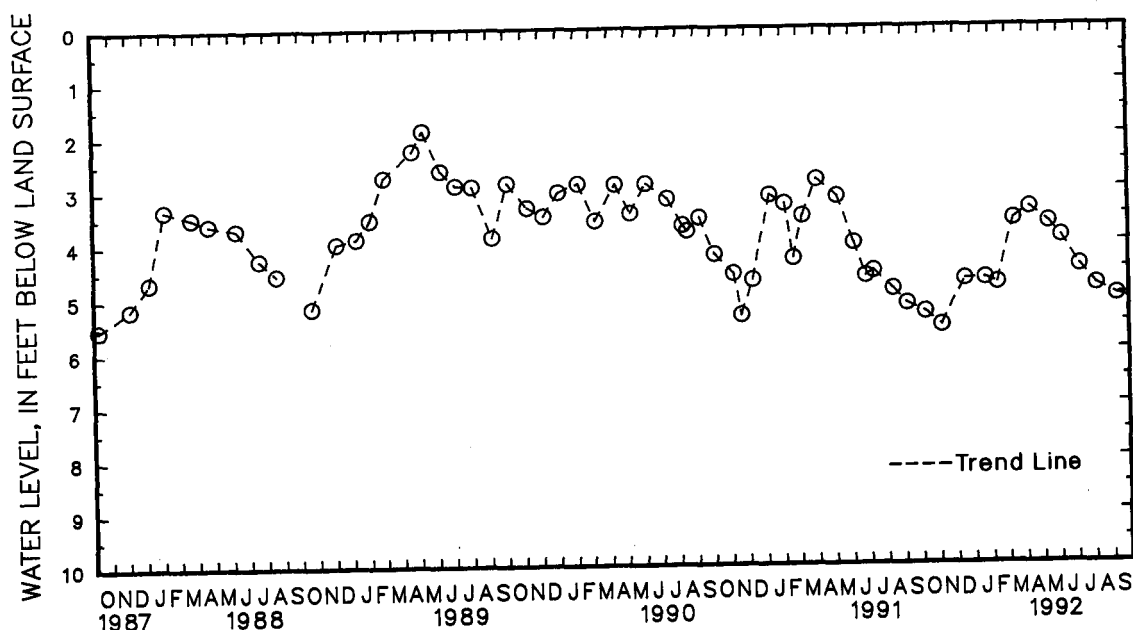
REMARKS.--Maryland Water-Level Network observation well. Reported water level 4.0 ft below land surface, June 10, 1949.

PERIOD OF RECORD.--July 1953, May 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.67 ft below land surface, Feb. 8, 1973;
lowest measured, 6.47 ft below land surface, Jan. 3, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 9	5.32	DEC 17	4.71	FEB 12	4.79	APR 10	3.40	JUN 4	3.93	AUG 5	4.83
NOV 6	5.57	JAN 22	4.70	MAR 12	3.60	MAY 13	3.66	JUL 7	4.48	SEP 9	5.03
WATER YEAR 1992		HIGHEST	3.40	APR 10, 1992		LOWEST	5.57	NOV 6, 1991.			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

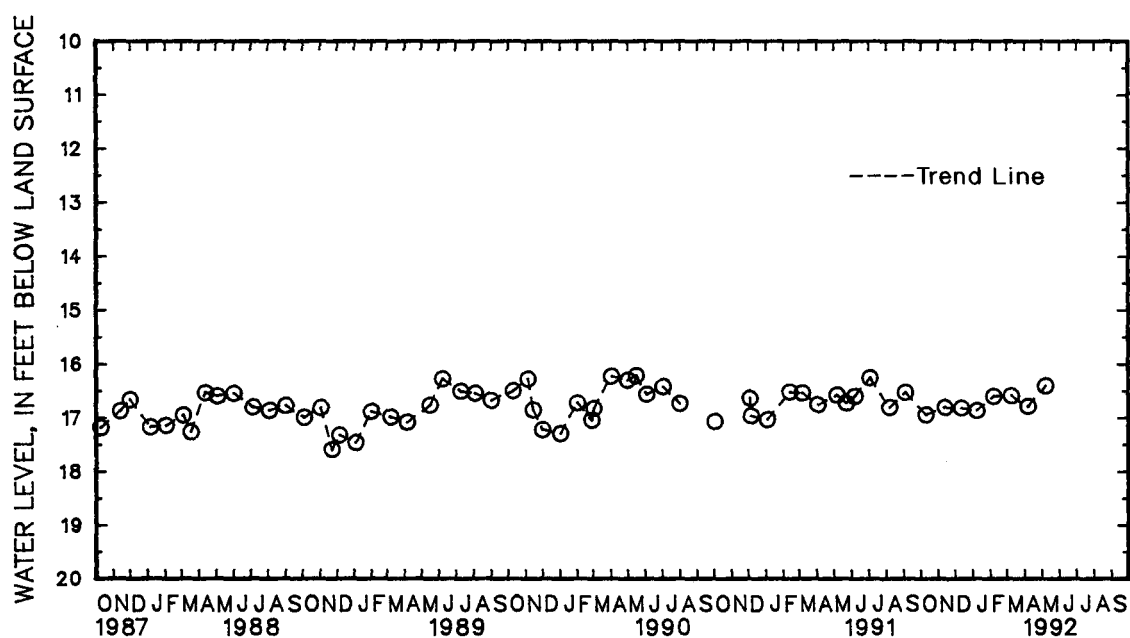
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 32, SITE ID.--390201076182703. PERMIT NUMBER.--QA-81-0473.
 LOCATION.--Lat 39°02'01", long 76°18'27", Hydrologic Unit 02060002, north side of Pier Avenue,
 0.5 mi south of Love Point.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 116 ft; casing diameter 4 in., to 106 ft;
 screen diameter 4 in. from 106 to 116 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 21.2 ft above National Geodetic Vertical Datum of 1929.
 Measuring point: Top of casing, 2.10 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well.
 PERIOD OF RECORD.--May 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.80 ft below land surface, Dec. 2, 1985;
 lowest measured, 17.60 ft below land surface, Nov. 22, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	16.95	DEC 12	16.82	FEB 7	16.60	APR 7	16.79
NOV 13	16.81	JAN 8	16.87	MAR 9	16.59	MAY 7	16.40
WATER YEAR 1992		HIGHEST	16.40	MAY 7, 1992	LOWEST	16.95	OCT 10, 1991



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

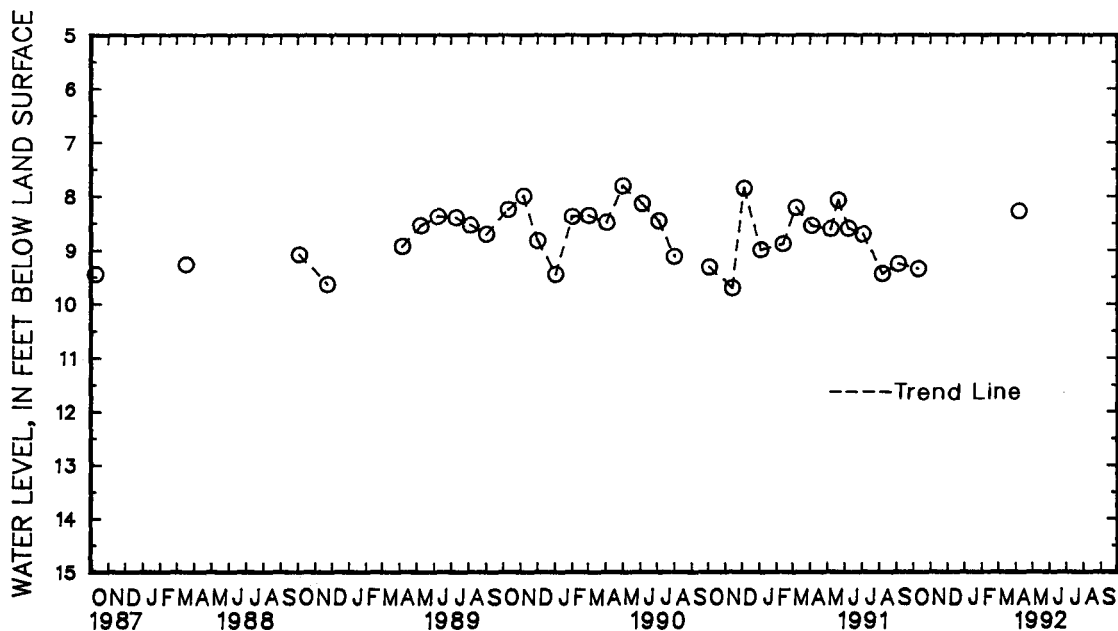
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 34. SITE ID.--390023076174301. PERMIT NUMBER.--QA-81-0471.
 LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, nr Cloverfields community park, Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 180 ft; casing diameter 4 in., to 170 ft;
 screen diameter 4 in. from 170 to 180 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 7.4 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.50 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from April 1986 to April 1989.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.25 ft below land surface, Dec. 2, 1985;
 lowest measured, 9.72 ft below land surface, Nov. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	9.36	APR 7	8.28
WATER YEAR 1992 HIGHEST 8.28 APR 7, 1992 LOWEST 9.36 OCT 10, 1991			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

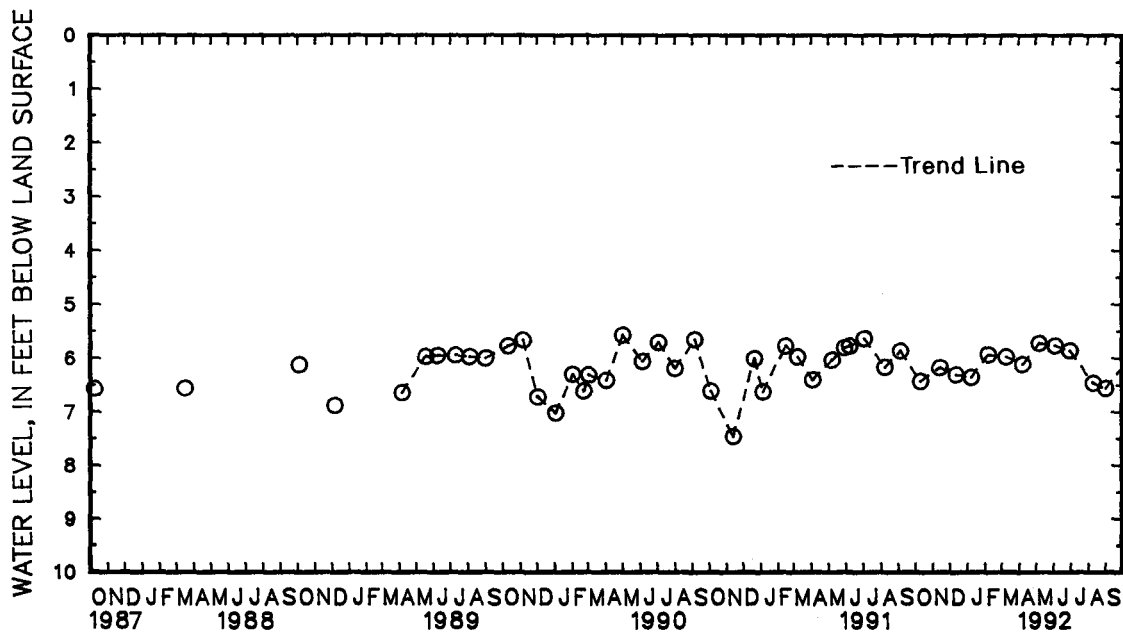
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 35. SITE ID.--390119076191001. PERMIT NUMBER.--QA-81-0472.
 LOCATION.--Lat 39°01'19", long 76°19'10", Hydrologic Unit 02060002, 0.5 mi west of MD Rt. 18 at Mylander Farms, Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in. from 190 to 200 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 7.5 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.20 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from April 1987 to April 1989.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land surface, Dec. 2, 1985; lowest measured, 7.47 ft below land surface, Nov. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	6.43	DEC 12	6.31	FEB 7	5.94	APR 7	6.12	JUN 4	5.77	AUG 10	6.47
NOV 13	6.18	JAN 8	6.36	MAR 9	5.98	MAY 7	5.73	JUN 30	5.87	SEP 1	6.57
WATER YEAR 1992		HIGHEST	5.73	MAY 7, 1992		LOWEST	6.57	SEP 1, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

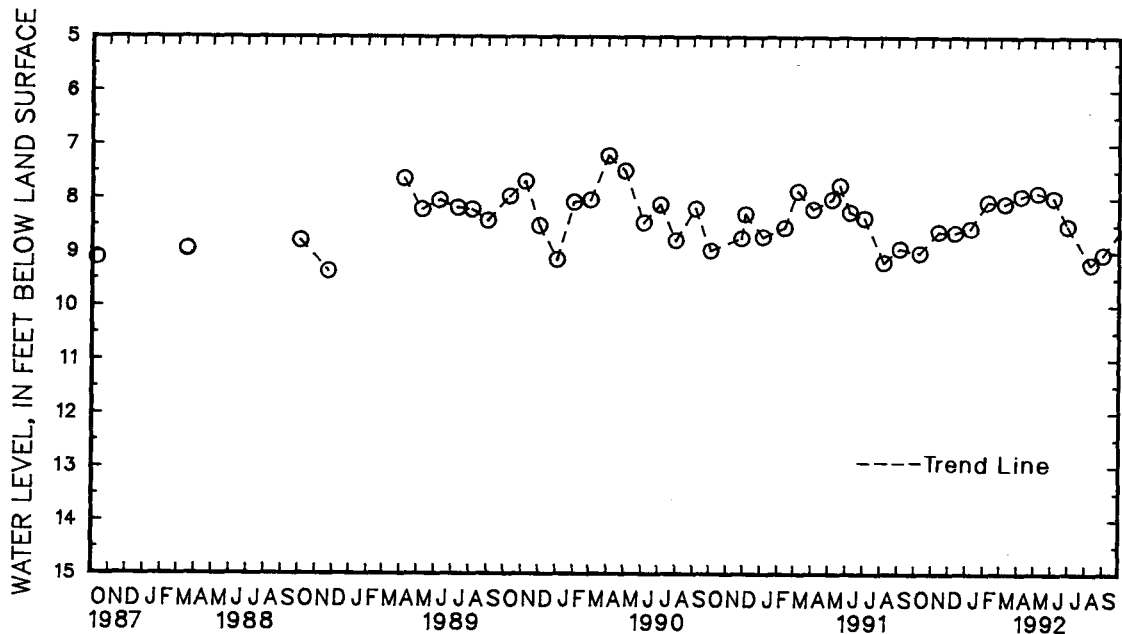
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Db 37. SITE ID.--390023076174302. PERMIT NUMBER.--QA-81-0471.
LOCATION.--Lat 39°00'23", long 76°17'43", Hydrologic Unit 02060002, nr Cloverfield community park,
Kent Island.
Owner: Maryland Geological Survey.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 250 ft; casing diameter 4 in., to 240 ft;
screen diameter 4 in. from 240 to 250 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 7.1 ft above National Geodetic Vertical Datum of 1929.
Measuring Point: Top of casing, 2.50 ft above land surface.
REMARKS.--Kent Island ground-water monitoring network well.
PERIOD OF RECORD.--April 1985 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.90 ft below land surface, Dec. 2, 1985;
lowest measured, 9.37 ft below land surface, Nov. 23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 10	9.03	DEC 12	8.64	FEB 7	8.07	APR 7	7.96	JUN 4	7.99	AUG 10	9.23	NOV 13	8.62	JAN 8	8.56
				MAR 9		8.10		MAY 7		7.90				SEP 1	
WATER YEAR 1992		HIGHEST		7.90		MAY 7, 1992		LOWEST		9.23		AUG 10, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

EXTREMES FOR PERIOD OF RECORD. --Highest water level measured, 11.07 ft below land surface, Dec. 2, 1985;
lowest measured, 13.71 ft below land surface, July 5, 1988.

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

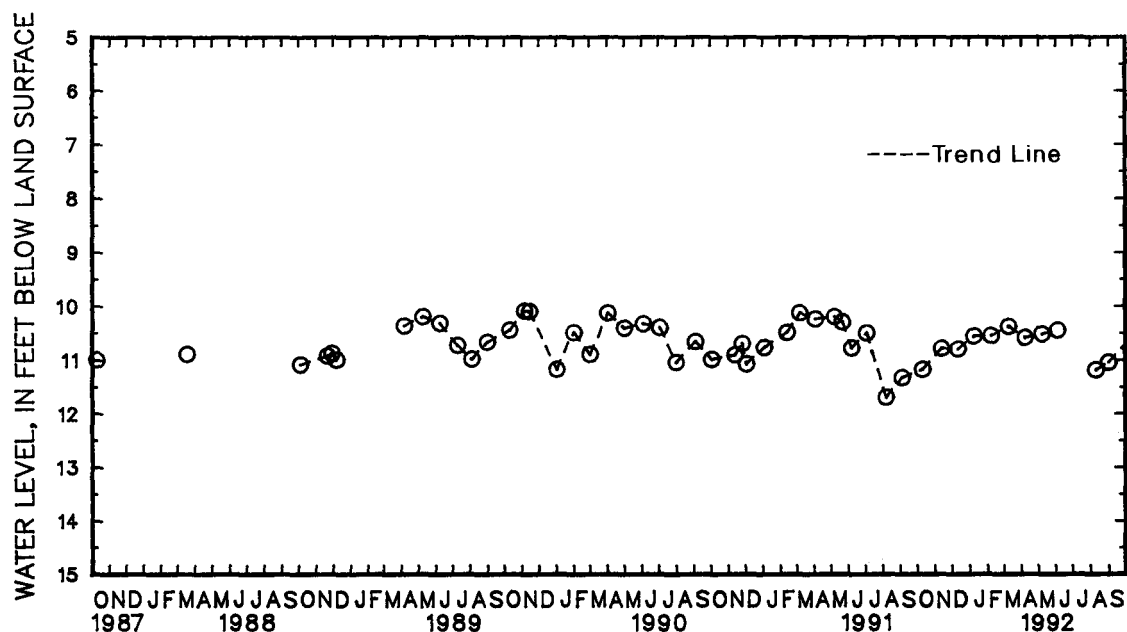
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ea 79. SITE ID.--385757076200101. PERMIT NUMBER.--QA-81-0469.
 LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 298 ft; casing diameter 4 in., to 288 ft; screen diameter 4 in. from 288 to 298 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 8.3 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.30 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from October 1986 to April 1989.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.30 ft below land surface, Dec. 2, 1985; lowest measured, 11.70 ft below land surface, Aug. 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 10	11.18	DEC 12	10.80	FEB 7	10.55	APR 7	10.59	JUN 4	10.45	SEP 1	11.05	
NOV 13	10.79	JAN 8	10.56	MAR 9	10.38	MAY 7	10.52	AUG 10	11.19			
WATER YEAR 1992		HIGHEST	10.38	MAR 9, 1992		LOWEST	11.19	AUG 10, 1992				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

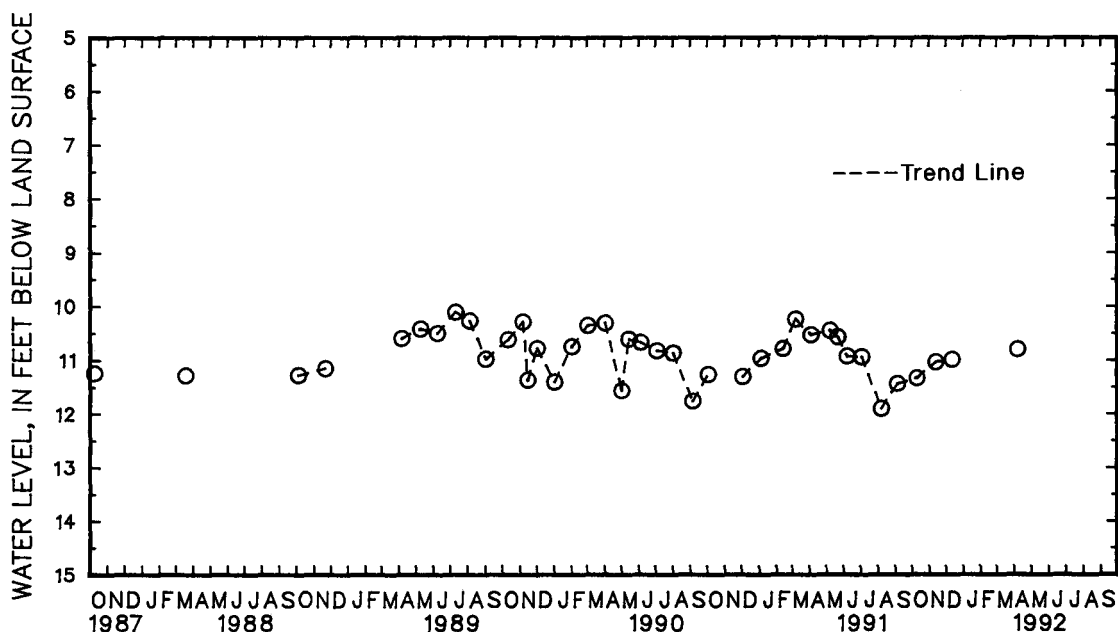
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ea 80. SITE ID.--385757076200102. PERMIT NUMBER.--QA-81-0469.
 LOCATION.--Lat 38°57'57", long 76°20'01", Hydrologic Unit 02060002, at Mowbray Park, Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 130 ft; casing diameter 4 in., to 120 ft; screen diameter 4 in. from 120 to 130 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 8.5 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.51 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from October 1986 to April 1989.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.45 ft below land surface, Dec. 2, 1985; lowest measured, 11.91 ft below land surface, Aug. 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	11.34	NOV 13	11.04	DEC 12	10.99	APR 7	10.80
WATER YEAR 1992		HIGHEST	10.80	APR 7, 1992		LOWEST	11.34
							OCT 10, 1991



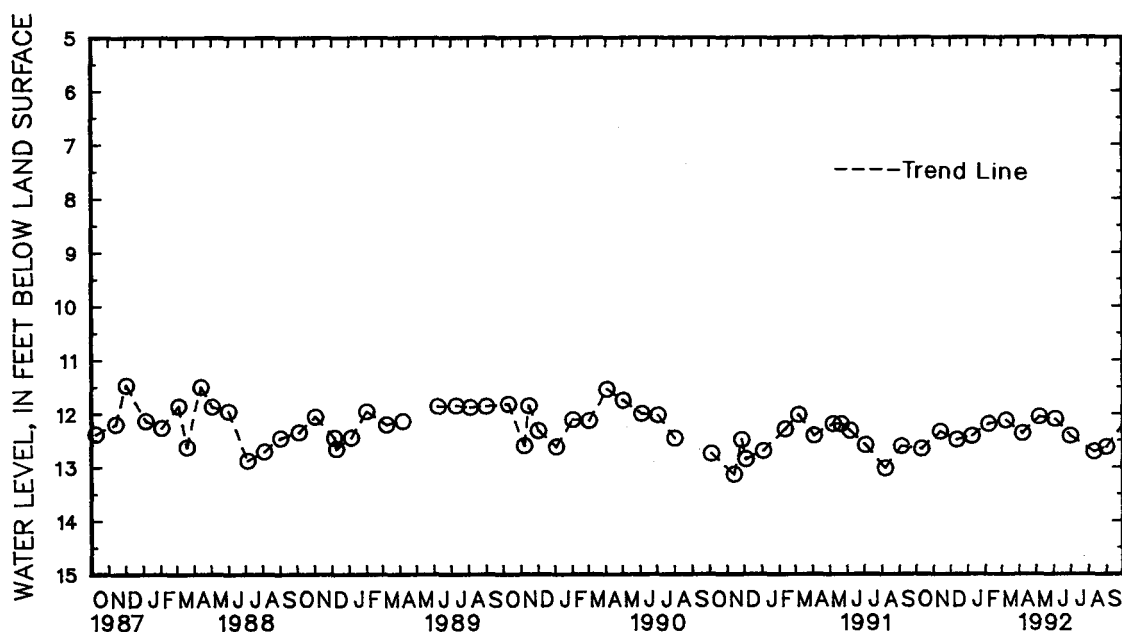
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ea 81. SITE ID.--385718076211503. PERMIT NUMBER.--QA-81-0474.
LOCATION.--Lat 38°57'18", long 76°21'15", Hydrologic Unit 02060002, at Matapeake State Park.
Owner: Maryland Geological Survey.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 4 in. from 300 to 310 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 2.63 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--April 1985 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.54 ft below land surface, Dec. 2, 1985; lowest measured, 13.14 ft below land surface, Nov. 13, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER LEVEL YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	12.66	DEC 12	12.49	FEB 7	12.19	APR 7	12.37	JUN 4	12.10	AUG 10	12.71
NOV 13	12.34	JAN 8	12.42	MAR 9	12.13	MAY 7	12.05	JUN 30	12.42	SEP 1	12.63
WATER YEAR 1992		HIGHEST	12.05	MAY 7, 1992		LOWEST	12.71	AUG 10, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 110. SITE ID.--385751076171603. PERMIT NUMBER.--QA-73-2979.

LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island.

Owner: U.S. Geological Survey.

AQUIFER.--Patuxent Formation of Lower Cretaceous age. Aquifer code: 217PTXN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 2,485 ft; casing diameter 6 in., to 2,413 ft, 2,423 to 2,465 ft and 2,475 to 2,485 ft; screen diameter 4 in., from 2,413 to 2,423 ft, and 2,465 to 2,475 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Measured twice yearly from January 1980 to October 1989.

DATUM.--Elevation of land surface is 14 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 3.36 ft above land surface.

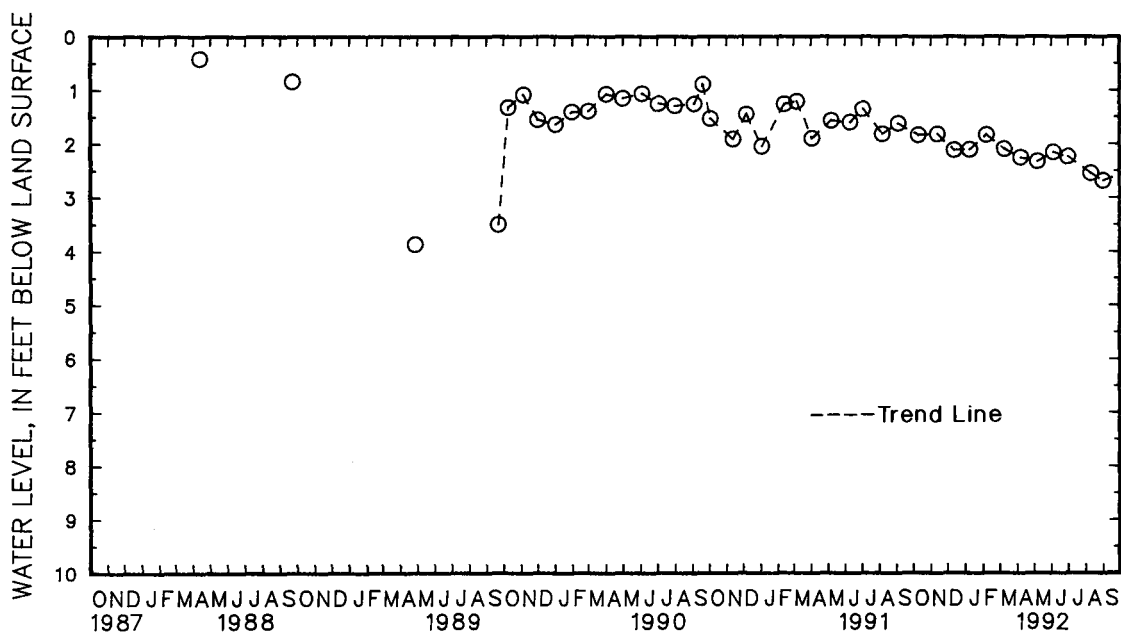
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--January 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.99 ft above land surface, Jan. 21, 1980; lowest measured, 3.88 ft below land surface, April 27, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	1.84	DEC 12	2.12	FEB 7	1.84	APR 7	2.26	JUN 4	2.16	AUG 10	2.55
NOV 13	1.82	JAN 8	2.11	MAR 9	2.10	MAY 7	2.33	JUN 30	2.24	SEP 1	2.69
WATER YEAR 1992		HIGHEST	1.82	NOV 13, 1991		LOWEST	2.69	SEP 1, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

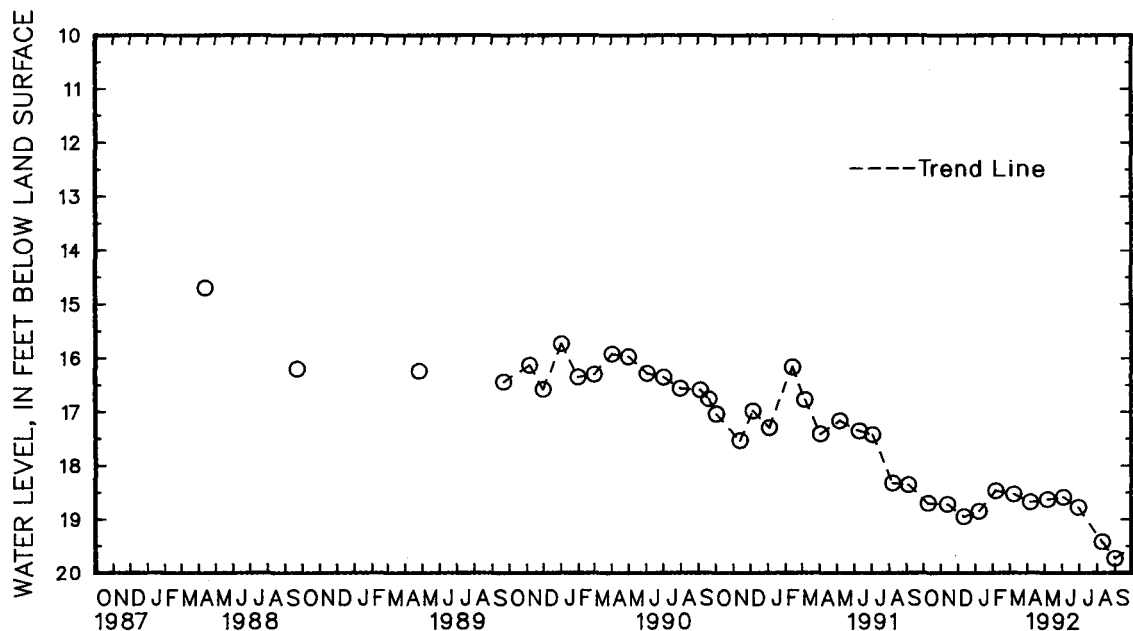
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 111. SITE ID.--385751076171601. PERMIT NUMBER.--QA-73-3122.
 LOCATION.--Lat 38°57'51", long 76°17'16", Hydrologic Unit 02060002, near Chester, Kent Island.
 Owner: U.S. Geological Survey.
 AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 985 ft; casing diameter 4 in., to 955 ft, and 965 to 975 ft; screen diameter 4 in., from 955 to 965 ft, and 975 to 985 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Twice yearly measurements from April 1984 to September 1980.
 DATUM.--Elevation of land surface is 14 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 1.41 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--December 1979, April 1984 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.02 ft below land surface, Jan. 21, 1980; lowest measured, 19.73 ft below land surface, Sept. 1, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	18.70	DEC 12	18.95	FEB 7	18.47	APR 7	18.68	JUN 4	18.60	AUG 10	19.42
NOV 13	18.72	JAN 8	18.85	MAR 9	18.53	MAY 7	18.64	JUN 30	18.79	SEP 1	19.73
WATER YEAR 1992		HIGHEST	18.47	FEB 7, 1992		LOWEST	19.73	SEP 1, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 113. SITE ID.--385748076172001. PERMIT NUMBER.--QA-73-3172.
LOCATION.--Lat 38°57'48", long 76°17'20", Hydrologic Unit 02060002, nr Chester, Kent Island.
Owner: U.S. Geological Survey.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 216 ft; casing diameter 6 in., to 176 ft; screen diameter 6 in. from 176 to 216 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from June 30, 1986 to current year.
DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of casing, 2.6 ft above land surface.
REMARKS.--Kent Island ground-water monitoring network well. Missing data due to recorder malfunction.
PERIOD OF RECORD.--April 1985 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.05 ft below land surface, April 18, 1989; lowest measured, 19.47 ft below land surface, Aug. 13 and 16, 1988.

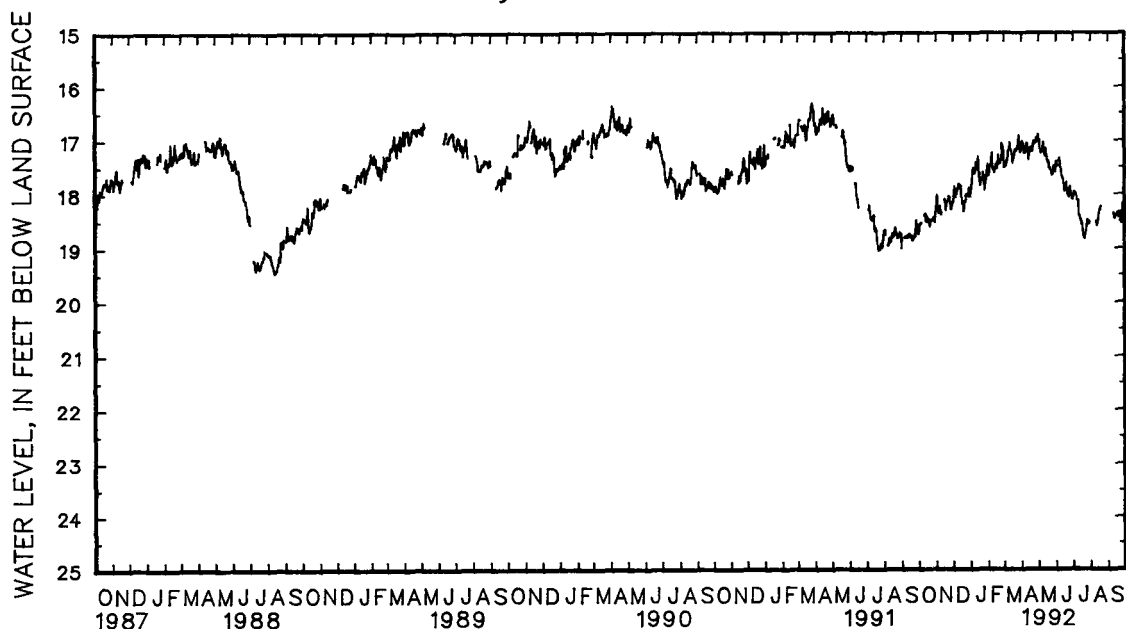
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.73	18.58	18.03	17.88	18.08	17.99	17.99	17.87	17.63	17.43	17.47	17.31
2	18.59	18.54	18.07	17.85	18.06	17.87	17.90	17.80	17.67	17.60	17.50	17.39
3	18.57	18.51	18.26	18.07	17.87	17.63	17.82	17.63	17.61	17.48	17.47	17.39
4	18.57	18.47	18.37	18.19	17.98	17.70	17.63	17.48	17.48	17.23	17.43	17.31
5	18.55	18.41	18.37	18.25	18.07	17.90	17.52	17.40	17.48	17.35	17.37	17.28
6	---	---	18.33	18.17	18.03	17.86	17.53	17.40	17.46	17.29	17.37	17.27
7	---	---	18.24	18.15	18.01	17.91	17.61	17.46	17.29	17.16	17.29	17.05
8	---	---	18.37	18.20	17.95	17.90	17.62	17.54	17.23	17.05	17.20	17.01
9	---	---	18.40	18.35	17.90	17.75	17.56	17.36	17.51	17.22	---	---
10	---	---	18.36	18.04	17.89	17.81	17.41	17.31	17.54	17.51	17.16	16.83
11	18.42	18.32	---	---	17.82	17.74	17.54	17.39	17.53	17.44	17.04	16.76
12	18.39	18.32	---	---	---	---	17.54	17.42	17.61	17.53	17.12	17.02
13	18.52	18.39	---	---	17.84	17.74	17.42	17.26	17.56	17.37	17.24	17.12
14	18.54	18.44	18.12	18.08	17.85	17.64	17.30	17.02	17.49	17.38	17.25	17.15
15	18.44	18.32	18.11	18.01	17.99	17.85	17.46	17.30	17.45	17.19	17.34	17.16
16	18.54	18.33	18.21	18.03	18.19	17.99	17.68	17.34	17.43	17.17	17.43	17.31
17	18.51	18.38	18.32	18.21	18.15	17.92	17.62	17.48	17.52	17.39	17.31	17.12
18	18.49	18.44	18.25	18.11	18.16	17.94	17.83	17.60	17.44	17.24	17.34	17.13
19	18.56	18.37	18.16	18.06	18.34	18.16	17.85	17.72	17.27	17.14	17.20	17.01
20	18.63	18.55	18.15	18.05	18.30	18.13	17.76	17.62	17.38	17.19	17.18	17.05
21	18.59	18.44	18.13	18.02	18.16	18.01	17.74	17.63	17.43	17.26	17.20	17.04
22	18.51	18.39	18.10	17.91	18.15	18.05	17.75	17.60	17.43	17.33	17.18	16.88
23	18.51	18.40	18.05	17.96	18.05	17.87	17.60	17.29	17.37	17.28	17.16	16.93
24	18.52	18.40	18.06	17.88	18.02	17.89	17.67	17.31	17.37	17.30	17.15	17.12
25	18.48	18.37	18.18	18.03	18.03	17.96	17.73	17.67	17.30	17.04	17.14	17.04
26	18.46	18.37	18.30	18.18	18.02	17.94	17.94	17.73	17.05	16.99	17.04	16.79
27	18.45	18.36	18.30	18.23	18.05	17.95	17.90	17.74	17.08	17.00	16.91	16.78
28	18.53	18.38	18.23	18.14	18.06	17.89	17.74	17.68	17.12	16.98	17.13	16.91
29	18.54	18.37	18.17	18.09	17.89	17.67	17.69	17.55	17.51	17.01	17.23	17.11
30	18.37	18.19	18.16	18.08	18.05	17.75	17.56	17.41	---	---	17.19	17.06
31	18.19	18.03	---	---	18.05	17.97	17.45	17.37	---	---	17.11	16.99
MONTH	18.73	18.03	18.40	17.85	18.34	17.63	17.99	17.02	17.67	16.98	17.50	16.76

GROUND-WATER LEVELS
MARYLAND--Continued
QUEEN ANNES COUNTY--Continued
QA Eb 113--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	17.04	16.89	17.02	16.79	17.49	17.28	18.03	17.91	---	---	---	---
2	17.02	16.91	16.99	16.85	17.48	17.37	18.05	17.94	---	---	---	---
3	17.04	16.95	17.21	16.91	17.47	17.36	17.97	17.87	---	---	---	---
4	17.06	16.92	17.24	17.14	---	---	17.99	17.85	---	---	---	---
5	17.24	17.03	17.22	17.12	17.38	17.19	17.99	17.90	---	---	---	---
6	17.24	17.19	17.21	17.13	17.33	17.19	18.02	17.89	---	---	---	---
7	17.24	17.05	17.21	17.11	17.42	17.28	18.13	18.02	---	---	---	---
8	17.12	17.00	17.11	16.95	17.51	17.40	18.14	17.95	---	---	---	---
9	17.12	17.03	17.04	16.92	17.55	17.49	18.14	17.99	---	---	---	---
10	17.06	17.02	17.21	17.02	17.67	17.51	18.23	18.13	---	---	18.37	18.21
11	17.06	17.00	17.29	17.20	17.70	17.58	18.42	18.19	18.53	18.44	18.40	18.21
12	17.23	17.03	17.23	17.07	17.69	17.59	18.42	18.25	18.61	18.49	18.47	18.37
13	17.37	17.20	17.15	17.04	17.74	17.57	18.49	18.33	18.54	18.42	18.47	18.36
14	17.21	17.10	17.30	17.05	17.81	17.62	18.50	18.37	18.50	18.33	18.44	18.35
15	17.22	17.08	17.35	17.20	17.95	17.69	18.53	18.38	18.38	18.29	18.42	18.35
16	17.15	17.00	17.41	17.25	17.95	17.84	18.59	18.43	18.31	18.24	18.40	18.34
17	17.14	16.96	17.39	17.30	17.91	17.77	18.58	18.42	18.32	18.25	18.38	18.33
18	17.21	17.06	17.44	17.24	17.90	17.76	18.69	18.58	18.28	18.23	18.35	18.27
19	17.18	17.09	17.53	17.39	17.78	17.62	18.79	18.68	18.25	18.19	18.41	18.24
20	17.14	17.04	17.52	17.44	17.91	17.69	18.84	18.77	---	---	18.45	18.41
21	17.10	16.96	17.55	17.45	17.95	17.86	18.86	18.82	---	---	18.43	18.33
22	17.02	16.86	17.56	17.51	18.06	17.95	18.86	18.68	---	---	18.35	18.20
23	17.06	17.02	17.61	17.50	18.07	18.00	18.72	18.67	---	---	18.52	18.22
24	17.04	16.89	17.66	17.53	18.00	17.82	18.72	18.53	---	---	18.56	18.44
25	17.05	16.91	17.66	17.58	17.88	17.80	18.61	18.46	---	---	18.51	18.21
26	17.01	16.86	17.58	17.42	17.87	17.79	18.50	18.36	---	---	18.22	18.12
27	16.96	16.86	17.48	17.41	17.98	17.75	18.54	18.41	---	---	18.19	18.04
28	17.03	16.89	17.58	17.43	18.09	17.89	18.57	18.42	---	---	18.19	18.10
29	17.00	16.87	17.59	17.50	18.11	17.97	18.53	18.39	---	---	18.20	18.08
30	16.89	16.77	17.52	17.30	18.12	17.96	18.55	18.24	---	---	18.25	18.19
31	---	---	17.39	17.20	---	---	---	---	---	---	---	---
MONTH	17.37	16.77	17.66	16.79	18.12	17.19	18.86	17.85	18.61	18.19	18.56	18.04

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

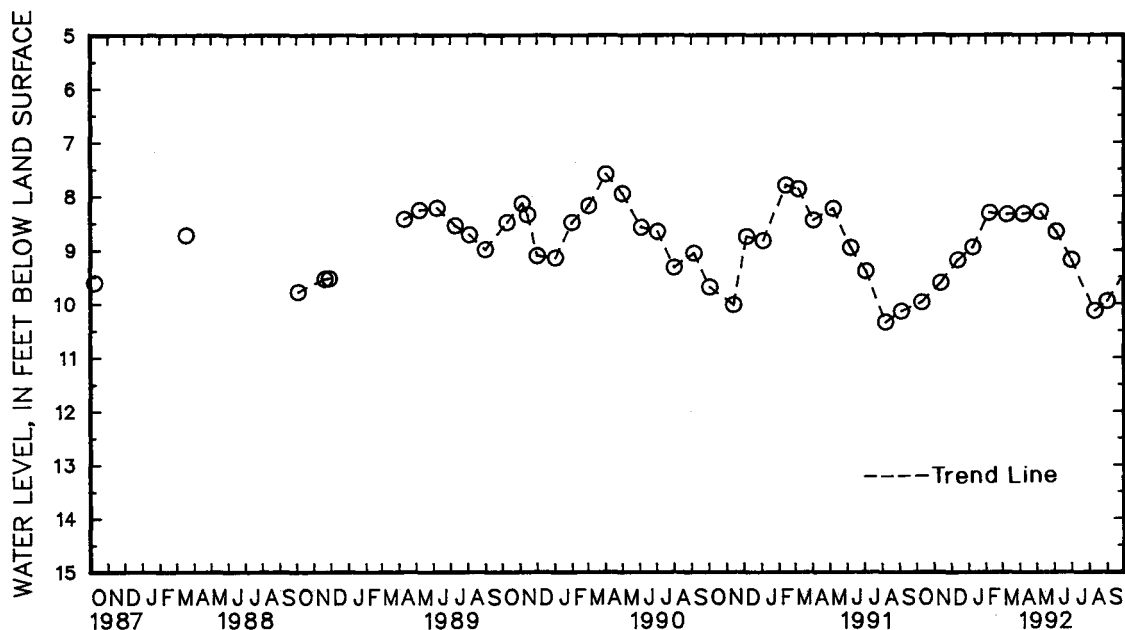
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 155. SITE ID.--385843076155302. PERMIT NUMBER.--QA-81-0470.
 LOCATION.--Lat 38°58'43", long 76°15'53", Hydrologic Unit 02060002, at north end of Piney Creek Rd., Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 245 ft; casing diameter 4 in., to 235 ft; screen diameter 4 in. from 235 to 245 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 3.9 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.50 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from June 1986 to April 1989.
 PERIOD OF RECORD.--April 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.60 ft below land surface, Dec. 2, 1985; lowest measured, 10.35 ft below land surface, Aug. 7 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	9.98	DEC 12	9.19	FEB 7	8.31	APR 7	8.33	JUN 4	8.66	AUG 10	10.14
NOV 13	9.62	JAN 8	8.95	MAR 9	8.34	MAY 7	8.29	JUN 30	9.19	SEP 1	9.96
WATER YEAR 1992		HIGHEST	8.29	MAY 7, 1992		LOWEST	10.14	AUG 10, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

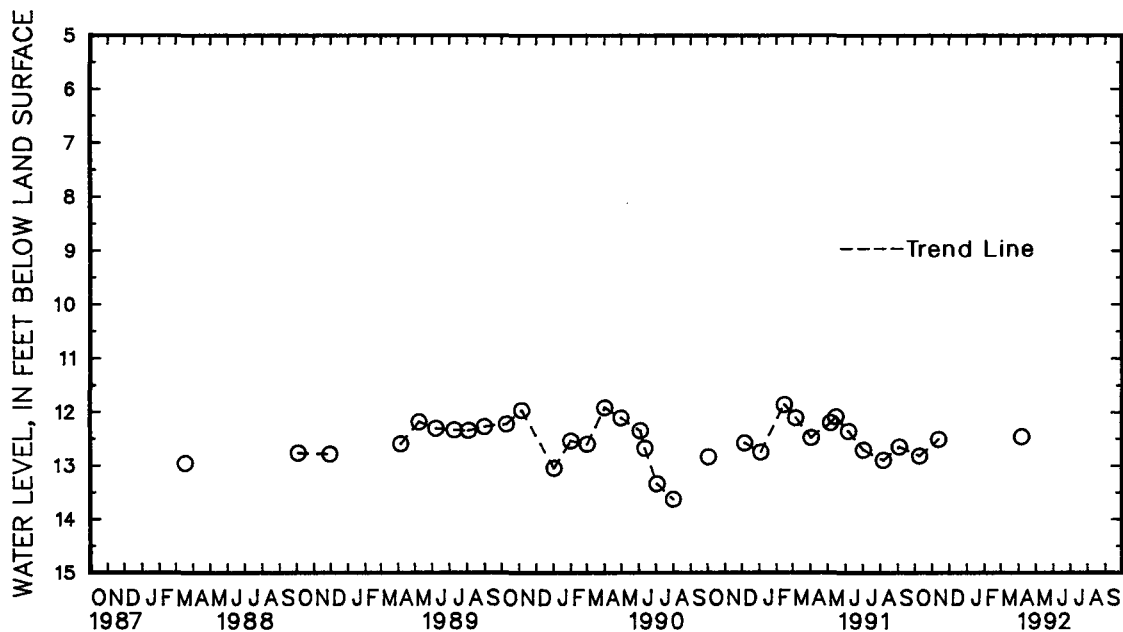
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Eb 157. SITE ID.--385852076195202. PERMIT NUMBER.--QA-81-0475.
 LOCATION.--Lat 38°58'52", long 76°19'52", Hydrologic Unit 02060002, north of US Rt. 50, 0.7 mi west of
 intersection with MD Rt. 8, Kent Island.
 Owner: Maryland Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 120 ft; casing diameter 4 in., to 110 ft;
 screen diameter 4 in. from 110 to 120 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of casing, 2.50 ft above land surface.
 REMARKS.--Kent Island ground-water monitoring network well. Measured twice yearly from March 1988 to April 1989.
 PERIOD OF RECORD.--April 1985 to June 1986, March 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.40 ft below land surface, Dec. 2, 1985;
 lowest measured, 13.63 ft below land surface, Aug. 1, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	12.82	NOV 13	12.51	APR 7	12.46
WATER YEAR 1992		HIGHEST	12.46	APR 7, 1992	LOWEST
					12.82 OCT 10, 1991



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ec 1. SITE ID.--385756076105301.

LOCATION.--Lat 38°57'56", long 76°10'53", Hydrologic Unit 02060002, near Grasonville, south side of old U.S. Rt. 50.

Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 21 ft; casing diameter 1.25 in., to 21 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of 2 in. sleeve at land surface.

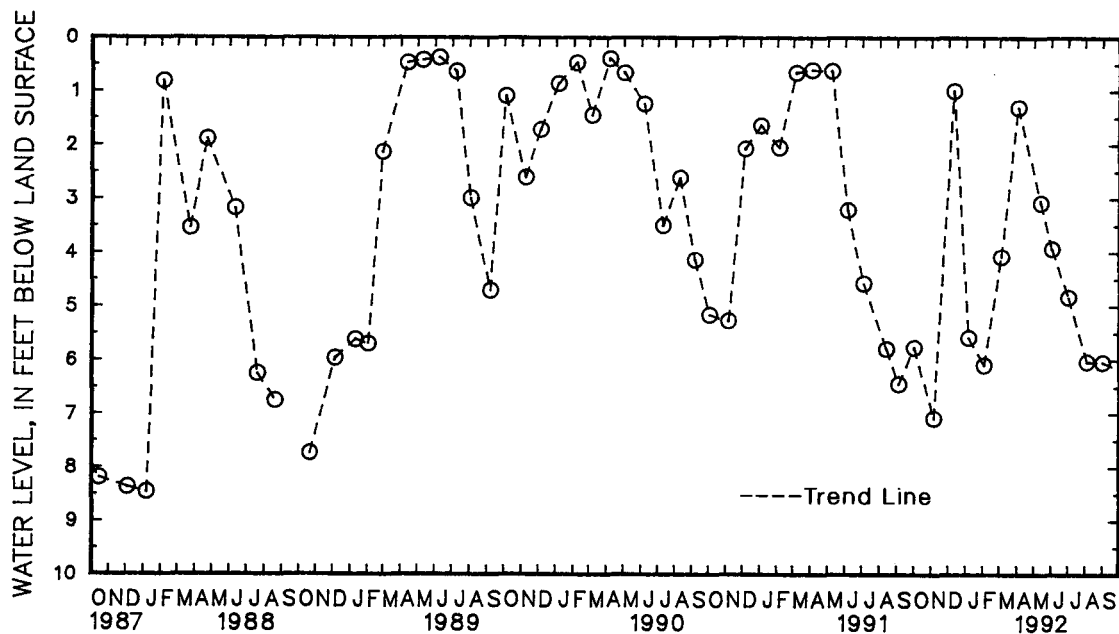
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--September 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land surface, May 8, 1958 and April 5, 1990; lowest measured, 8.46 ft below land surface, Jan. 7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	5.77	DEC 10	.99	FEB 3	6.10	APR 2	1.30	JUN 2	3.94	AUG 4	6.04
NOV 5	7.09	JAN 6	5.59	MAR 4	4.08	MAY 12	3.08	JUL 1	4.84	SEP 1	6.05
WATER YEAR 1992		HIGHEST	.99 DEC 10, 1991	LOWEST		7.09 NOV 5, 1991					



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Ef 29. SITE ID.--385534075573601. PERMIT NUMBER.--QA-81-1593.

LOCATION.--Lat 38°55'38", long 75°57'40", Hydrologic Unit 02060005, Tuckahoe State Park.

Owner: Md. Dept. of Natural Resources, Fisheries Division.

AQUIFER.--Patapsco Formation of Lower Cretaceous age. Aquifer code: 217PPSC.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 1,325 ft; casing diameter 14 in., to 500 ft, and 8 in. to 1,110 ft.; screen diameter 8 in., multiple screens from 1,110 to 1,315 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 61.69 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of 1 1/2 in. riser pipe, 2.70 ft above land surface.

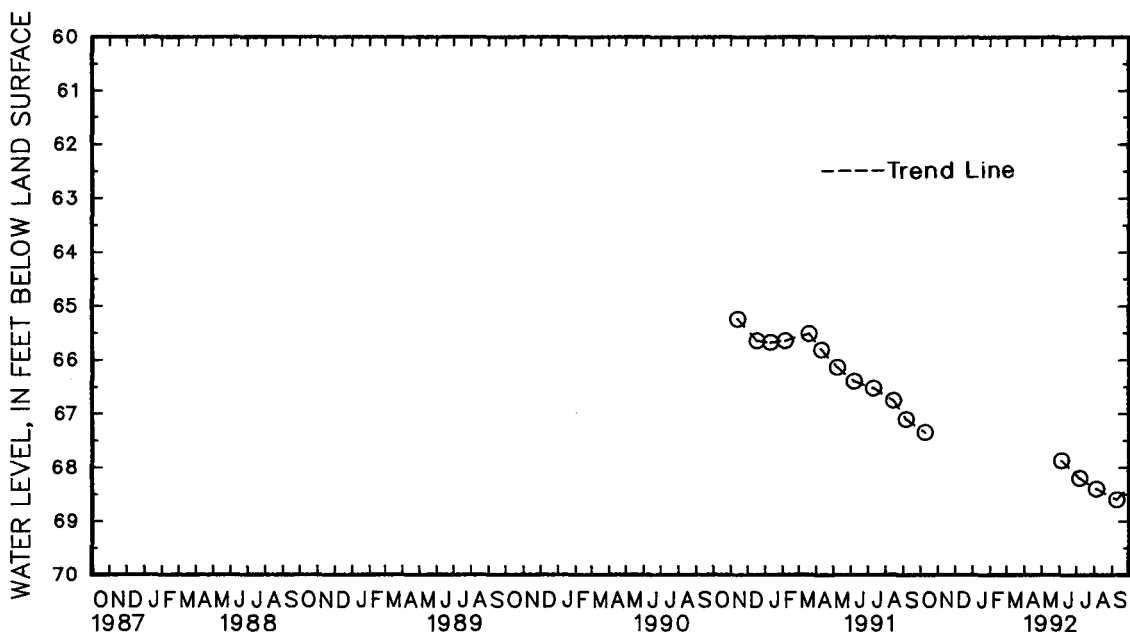
REMARKS.--Southern Maryland observation well network.

PERIOD OF RECORD.-- June 1986 to December 1986, November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.85 ft below land surface, July 11, 1986, lowest measured, 68.60 ft below land surface, Sept. 9, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 9	67.35	JUN 4	67.87	JUL 7	68.20	AUG 5	68.40	SEP 9	68.60
WATER YEAR 1992		HIGHEST	67.35	OCT 9, 1991		LOWEST	68.60	SEP 9, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

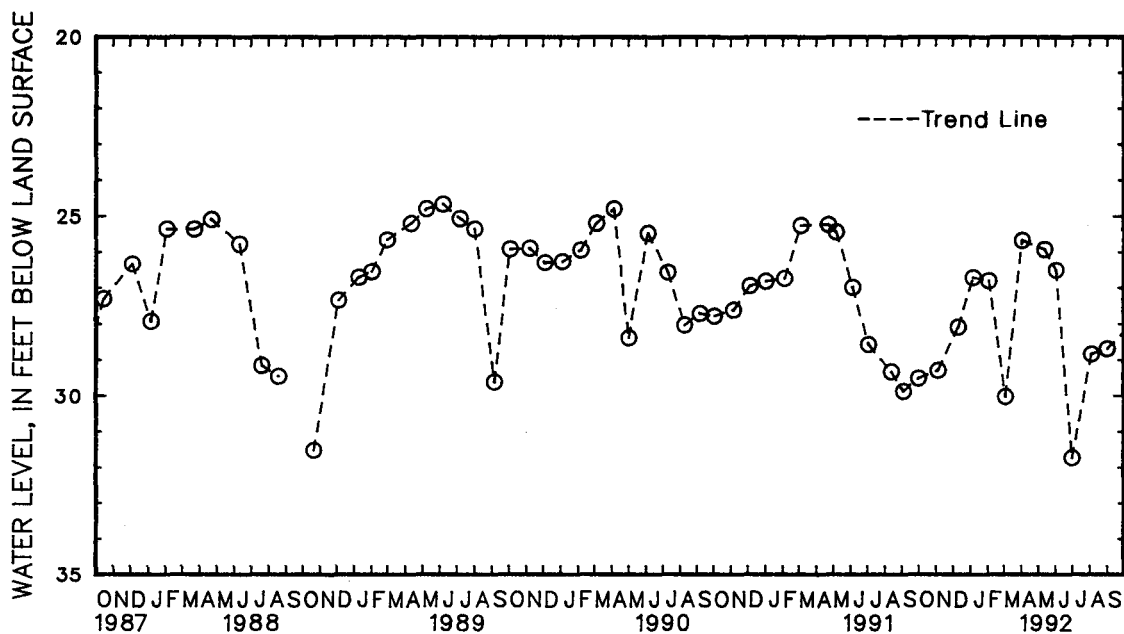
MARYLAND--Continued

QUEEN ANNES COUNTY--Continued

WELL NUMBER.--QA Fc 7. SITE ID.--385429076120201. PERMIT NUMBER.--QA-73-2191.
 LOCATION.--Lat 38°54'29", long 76°12'02", Hydrologic Unit 02060002, at Prospect Plantation.
 Owner: Maryland Community Developers Incorporated.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 356 ft; casing diameter 4 in., to 336 ft; screen diameter 2 in. from 336 to 356 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring point: Top of casing at land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--February 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.77 ft below land surface, March 3, 1983; lowest measured, 31.75 ft below land surface, July 1, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	29.52	DEC 10	28.09	FEB 3	26.79	APR 2	25.67	JUN 2	26.50	AUG 4	28.84
NOV 5	29.30	JAN 6	26.71	MAR 4	30.03	MAY 12	25.92	JUL 1	31.75	SEP 1	28.69
WATER YEAR 1992		HIGHEST	25.67	APR 2, 1992		LOWEST	31.75	JUL 1, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY

WELL NUMBER.--SM Bb 15. SITE ID.--382838076470101. PERMIT NUMBER.--SM-72-3430.

LOCATION.--Lat 38°28'38", long 76°47'01", Hydrologic Unit 02070011, at Charlotte Hall.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 460 ft; casing diameter 4 in., to 441 ft; casing diameter 2 in. from 441 to 450 ft; screen diameter 2 in. from 450 to 460 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 170 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 2.10 ft above land surface.

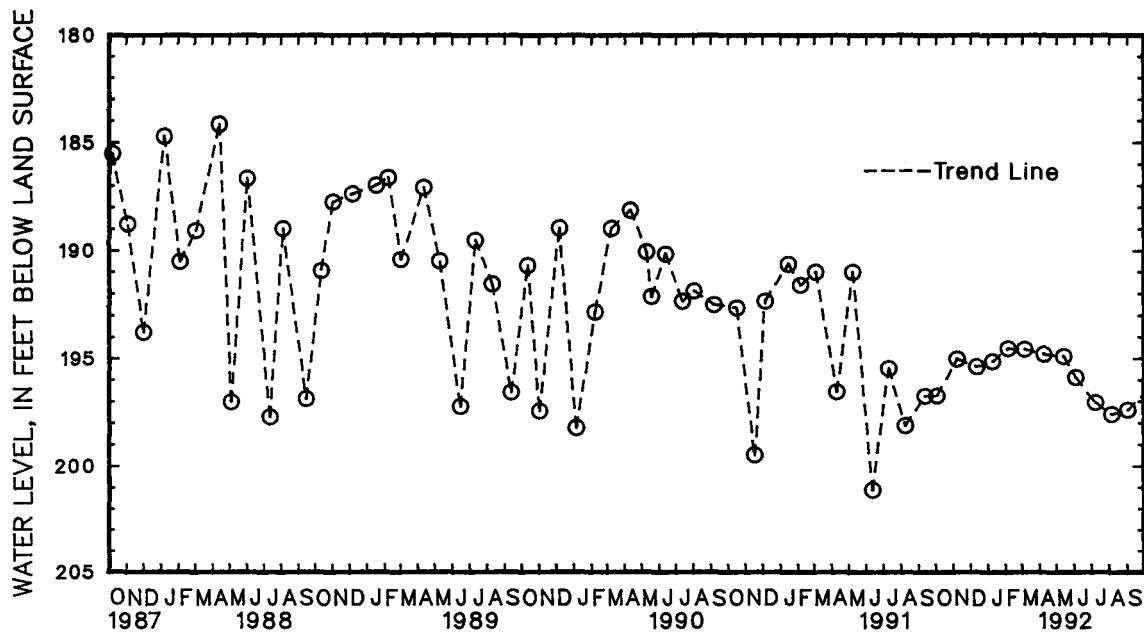
REMARKS.--Maryland Water-Level Network observation well. Water levels may be affected by nearby pumping.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 159.76 ft below land surface, Aug. 10, 1979, and Aug. 31, 1979; lowest measured, 207.55 ft below land surface, Dec. 12, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	196.77	DEC 11	195.40	FEB 5	194.55	APR 8	194.82	JUN 3	195.92	AUG 5	197.66
NOV 7	195.04	JAN 8	195.16	MAR 5	194.58	MAY 13	194.92	JUL 8	197.09	SEP 2	197.46
WATER YEAR 1992		HIGHEST	194.55	FEB 5, 1992		LOWEST	197.66	AUG 5, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

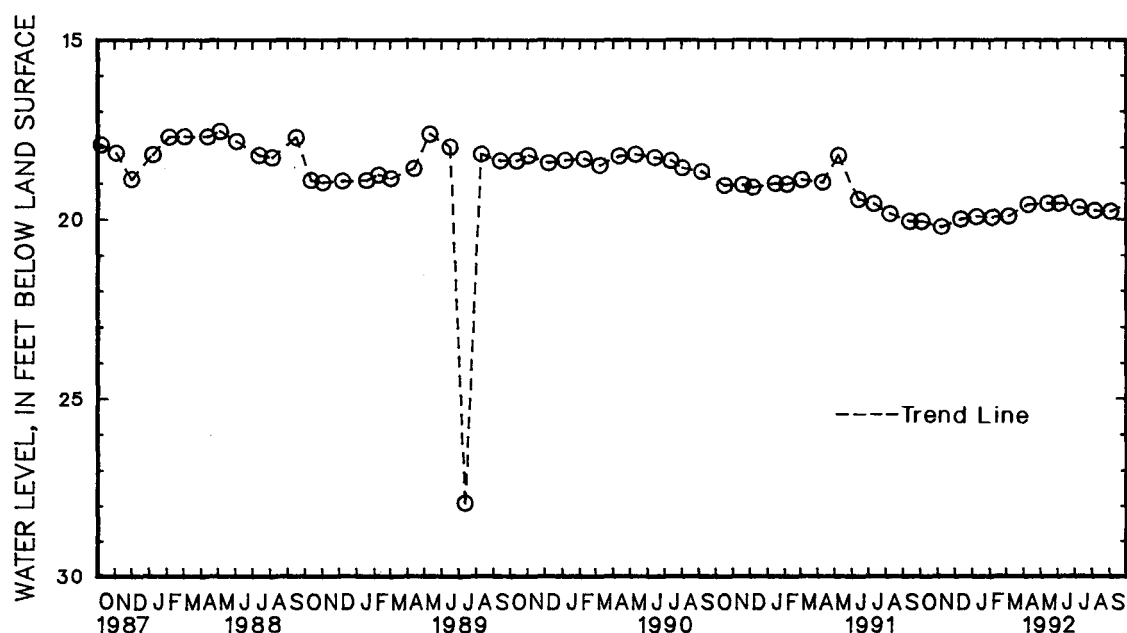
MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Bb 22. SITE ID.--382838076470102. PERMIT NUMBER.--SM-73-3787.
 LOCATION.--Lat 38°28'38", long 76°47'01", Hydrologic Unit 02070011, at Charlotte Hall Veterans Home.
 Owner: U.S. Geological Survey.
 AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 218 ft; casing diameter 4 in., to 210 ft; screen diameter 2 in. from 210 to 218 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 170 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring point: Top of casing, 1.55 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well. Water levels may be affected by nearby pumping.
 The July 12, 1989 water-level declined due to nearby pump test.
 PERIOD OF RECORD.--July 1980 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.27 ft below land surface, July 9, 1980; lowest measured, 27.95 ft below land surface, July 12, 1989--See Remarks.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	20.09	DEC 11	20.03	FEB 5	19.98	APR 8	19.62	JUN 3	19.58	AUG 5	19.79
NOV 7	20.23	JAN 8	19.96	MAR 5	19.95	MAY 13	19.58	JUL 8	19.70	SEP 2	19.81
WATER YEAR 1992		HIGHEST	19.58	MAY 13, 1992		JUN 3, 1992		LOWEST	20.23	NOV 7, 1991	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

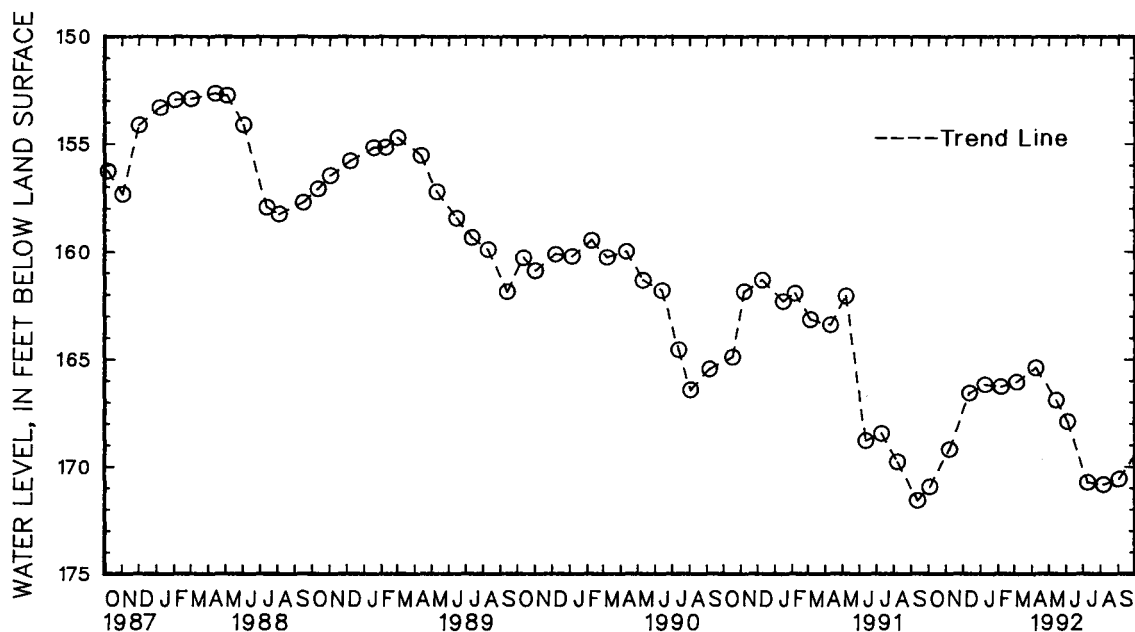
MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 49. SITE ID.--381616076364702. PERMIT NUMBER.--SM-73-3081.
 LOCATION.--Lat 38°16'16", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate.
 Owner: U.S. Geological Survey.
 AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 619 ft; casing diameter 4 in., to 279 ft; casing diameter 1.5 in. from 279 to 534 ft and 544 to 619 ft; screen diameter 3 in. from 534 to 544 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring point: Top of casing, 0.40 ft above land surface.
 REMARKS.--Maryland Water-Level Network observation well.
 PERIOD OF RECORD.--December 1978 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 138.95 ft below land surface, April 5, 1979;
 lowest measured, 171.58 ft below land surface, Sept 12, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	170.94	DEC 12	166.56	FEB 6	166.26	APR 8	165.39	JUN 4	167.88	AUG 6	170.83
NOV 7	169.19	JAN 9	166.16	MAR 5	166.04	MAY 14	166.89	JUL 9	170.73	SEP 2	170.58
WATER YEAR 1992		HIGHEST 165.39		APR 8, 1992		LOWEST 170.94		OCT 3, 1991			



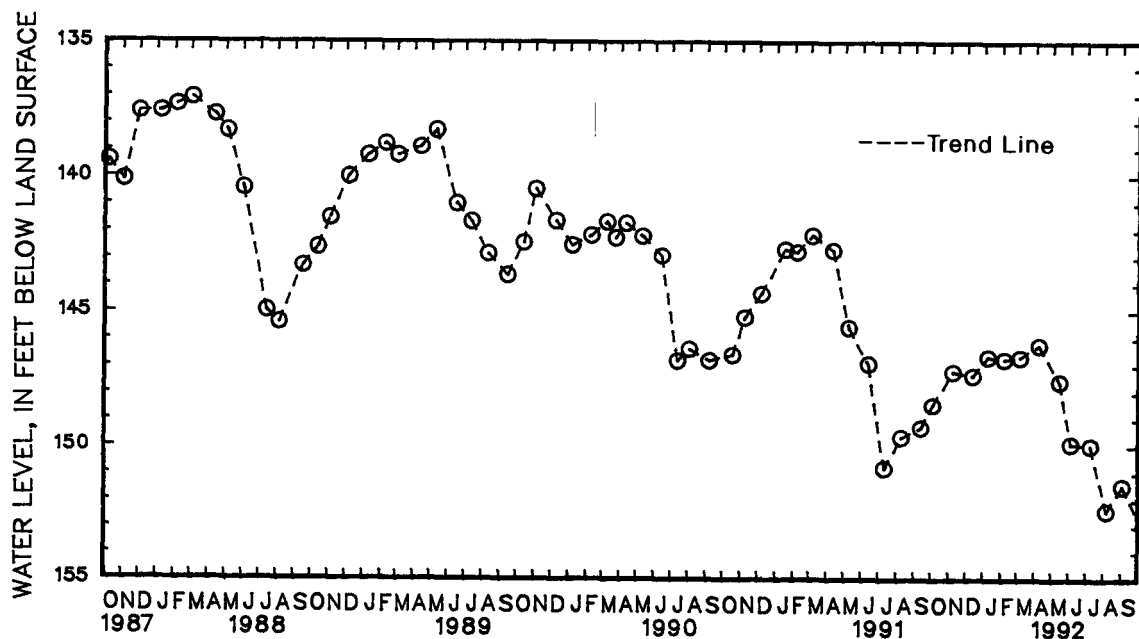
5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 50. SITE ID.--381807076380001. PERMIT NUMBER.--SM-73-3082.
LOCATION.--Lat 38°18'07", long 76°38'00", Hydrologic Unit 02070011, at Leonard Hall Junior Naval Academy, Leonardtown.
Owner: U.S. Geological Survey.
AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 579 ft; casing diameter 4 in., to 270 ft; casing diameter 2 in. from 270 to 505 ft; screen diameter 3 in. from 505 to 515 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 1.86 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--December 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 119.05 ft below land surface, Feb. 2, 1979;
lowest measured, 152.43 ft below land surface, Aug. 6, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	148.47	DEC 12	147.38	FEB 6	146.76	APR 8	146.22	JUN 4	149.96	AUG 6	152.43
NOV 7	147.23	JAN 8	146.66	MAR 5	146.69	MAY 14	147.61	JUL 9	150.03	SEP 2	151.49
WATER YEAR 1992		HIGHEST	146.22	APR 8, 1992		LOWEST	152.43	AUG 6, 1992			



GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 62. SITE ID.--381616076364703. PERMIT NUMBER.--SM-73-3786.

LOCATION.--Lat 38°16'16", 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate.
Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 358 ft; casing diameter 4 in., to 210 ft; casing diameter 2 in. from 210 to 348 ft; screen diameter 2 in. from 348 to 358 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.70 ft above land surface.

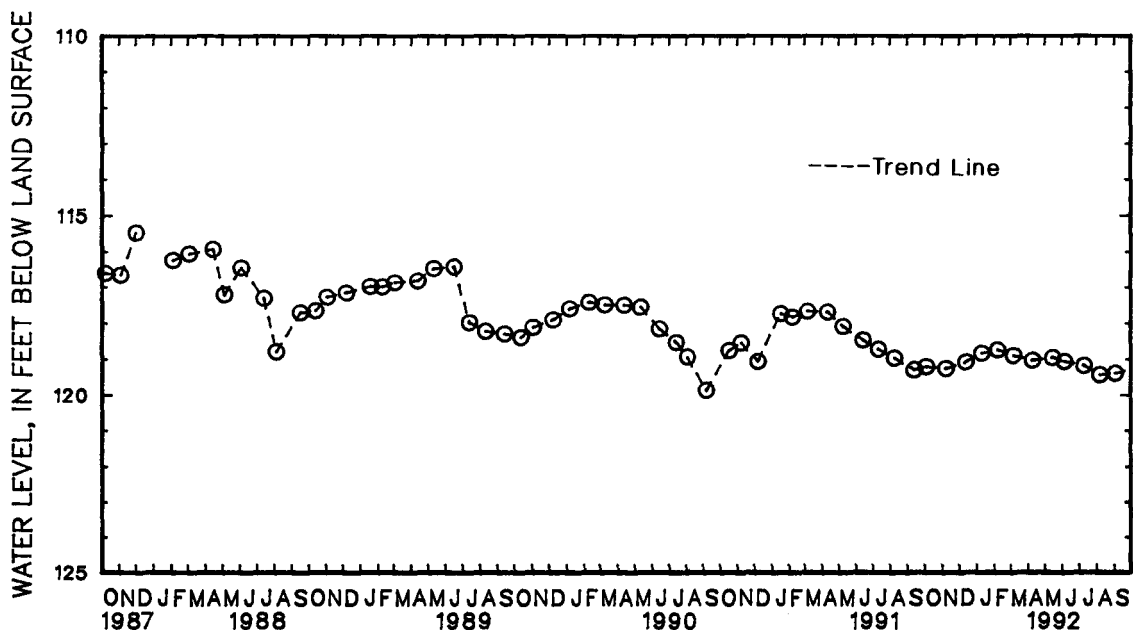
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 111.06 ft below land surface, Oct. 30, 1980; lowest measured, 120.39 ft below land surface, Nov. 12, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	119.27	DEC 12	119.13	FEB 6	118.79	APR 8	119.09	JUN 4	119.12	AUG 6	119.50
NOV 7	119.32	JAN 9	118.89	MAR 5	118.95	MAY 14	119.01	JUL 9	119.24	SEP 2	119.45
WATER YEAR 1992		HIGHEST	118.79	FEB 6, 1992		LOWEST	119.50	AUG 6, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Dd 63. SITE ID.--381615076364701. PERMIT NUMBER.--SM-73-3785.

LOCATION.--Lat 38°16'15", long 76°36'47", Hydrologic Unit 02070011, at Leonardtown Senior High School, Redgate.
Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 356 ft; casing diameter 4 in., to 327 ft;
casing diameter 2 in. from 327 to 346 ft; screen diameter 2 in. from 346 to 356 ft.

INSTRUMENTATION.--Twice yearly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 115 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.00 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Measured monthly from October 1977 to October 1986.

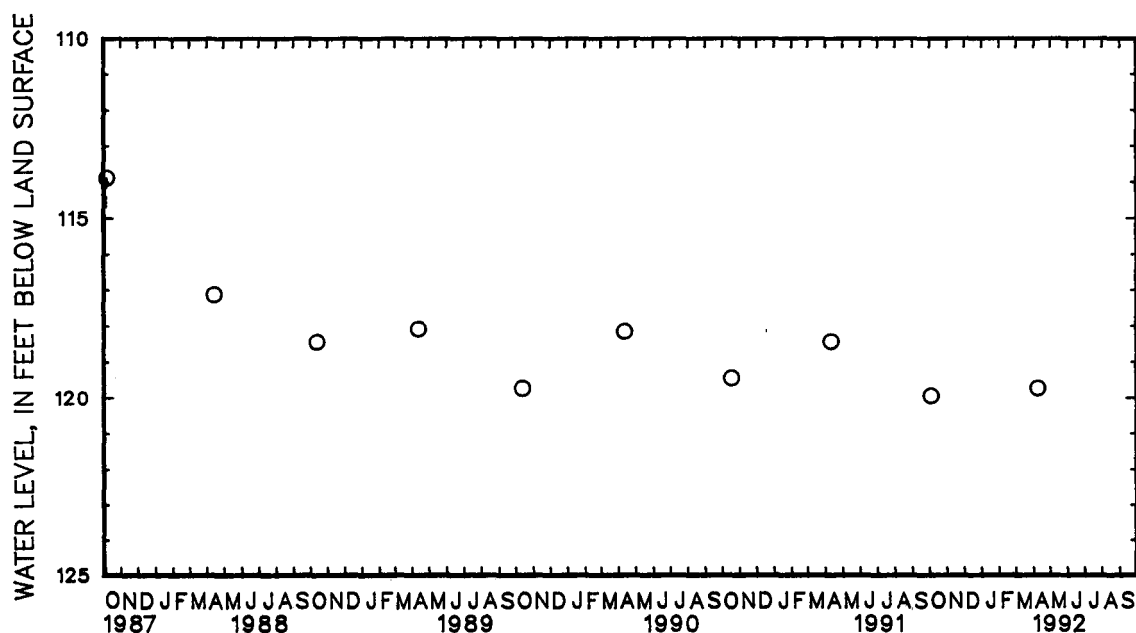
Measured twice yearly from April 1987 to current year.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.15 ft below land surface, March 2, 1981;
lowest measured, 120.01 ft below land surface, Oct. 3, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	120.01	APR 8	119.79
WATER YEAR 1992 HIGHEST 119.79 APR 8, 1992 LOWEST 120.01 OCT 3, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Df 71. SITE ID.--381527076283101. PERMIT NUMBER.--SM-73-3431.

LOCATION.--Lat 38°15'27", long 76°28'31", Hydrologic Unit 02070011, at Great Mills Rd., Lexington Park.

Owner: U.S. Geological Survey.

AQUIFER.--Aquia Formation of Paleocene age. Aquifer code: 125AQUI.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 560 ft; casing diameter 4 in., to 420 ft; casing diameter 2 in. from 420 to 550 ft; screen diameter 2 in. from 550 to 560 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.80 ft above land surface.

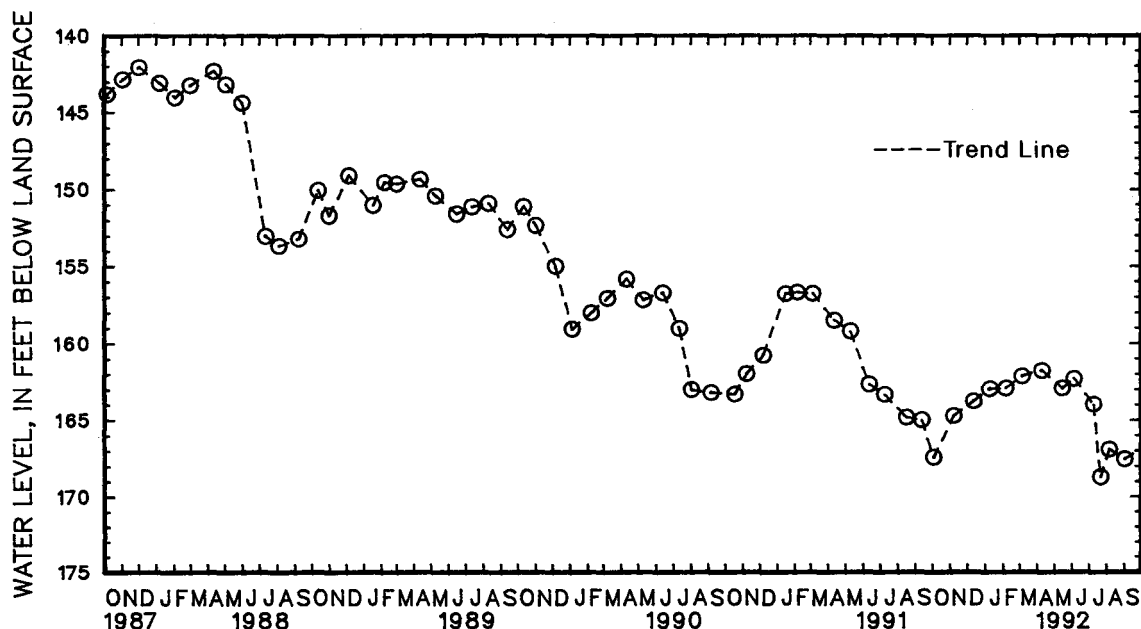
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 119.19 ft below land surface, May 1, 1980;
lowest measured, 168.82 ft below land surface, July 21, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	167.55	JAN 9	162.99	APR 9	161.80	JUL 9	164.05	SEP 2	167.64
NOV 7	164.79	FEB 6	162.96	MAY 14	162.98	JUL 21	168.82		
DEC 12	163.82	MAR 5	162.18	JUN 4	162.35	AUG 6	166.99		
WATER YEAR 1992		HIGHEST	161.80	APR 9, 1992		LOWEST	168.82	JUL 21, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Ef 80. SITE ID.--381052076253001.

LOCATION.--Lat 38°10'52", long 76°25'30", Hydrologic Unit 02070011, 0.1 mi south of intersection of MD Rt 5 and Rosecroft Rd.

Owner: St. Mary's College of Maryland.

AQUIFER.--Omar Formation of Pleistocene age. Aquifer code: 112OMAR.

WELL CHARACTERISTICS.--Dug, unused, water-table well, depth 20.70 ft; casing diameter 42 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.50 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well.

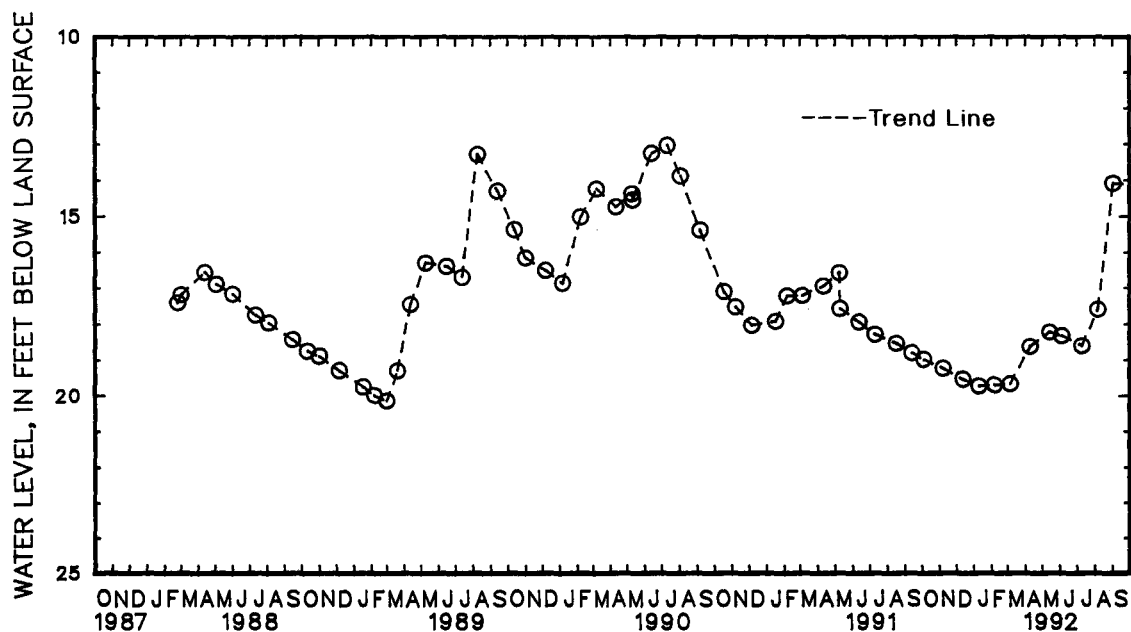
PERIOD OF RECORD.--February 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.05 ft below land surface, July 11, 1990;

lowest measured, 20.20 ft below land surface, March 1, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 3	19.05	DEC 12	19.60	FEB 6	19.75	APR 9	18.65	JUN 4	18.36	AUG 6	17.61				
NOV 7	19.30	JAN 9	19.79	MAR 5	19.72	MAY 14	18.25	JUL 9	18.64	SEP 2	14.09				
WATER YEAR 1992		HIGHEST		14.09		SEP 2, 1992		LOWEST		19.79		JAN 9, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

445

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Fe 30. SITE ID.--380834076303401. PERMIT NUMBER.--SM-73-1917.

LOCATION.--Lat 38°08'34", long 76°30'34", Hydrologic Unit 02070011, at water tower, Piney Point.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 270 ft; casing diameter 6 in., to 67 ft; casing diameter 2 in. from 67 to 260 ft; screen diameter 2 in. from 260 to 270 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with graphic water-level recorder from Oct. 12, 1988 to current year.

DATUM.--Elevation of land surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 3.8 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.24 ft below land surface, Oct. 6, 1976; lowest measured, 24.03 ft below land surface, Aug. 28, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	23.51	23.00	22.26	21.64	23.08	22.55	22.60	22.06	---	---	22.41	21.99
2	23.49	23.04	22.65	21.99	22.99	22.38	22.65	22.18	---	---	22.46	21.97
3	23.53	23.02	---	---	22.56	21.96	22.41	21.63	---	---	22.17	21.74
4	23.48	22.93	---	---	22.89	22.00	21.79	21.09	---	---	21.99	21.49
5	23.52	22.91	---	---	23.24	22.76	21.93	21.24	---	---	---	---
6	23.63	22.90	---	---	23.08	22.53	22.02	21.49	---	---	---	---
7	23.78	23.18	---	---	23.00	22.46	22.41	21.66	21.60	21.10	21.90	21.23
8	23.70	23.15	23.52	22.83	22.81	22.37	22.48	22.05	21.62	20.94	21.85	20.98
9	23.69	23.10	23.38	22.70	---	---	---	---	22.21	21.25	21.89	21.31
10	23.57	22.95	22.70	22.11	---	---	21.99	21.56	22.55	21.88	21.89	21.08
11	23.31	22.73	22.94	22.06	---	---	22.20	21.64	22.52	22.02	21.74	20.68
12	23.34	22.88	23.28	22.76	---	---	22.16	21.66	22.37	21.87	22.02	21.61
13	23.53	22.98	23.76	22.84	22.42	22.04	22.10	21.63	22.40	21.75	22.22	21.77
14	23.50	23.09	23.71	22.83	22.75	22.09	21.94	21.28	22.19	21.70	22.19	21.55
15	23.26	22.82	23.68	23.11	23.08	22.66	22.50	21.87	22.17	21.43	22.13	21.55
16	23.51	23.04	23.59	23.13	23.30	22.90	22.91	22.29	22.08	21.34	22.25	21.67
17	23.33	23.05	23.61	23.23	23.37	22.52	22.82	22.19	22.36	21.67	21.97	21.46
18	23.48	23.08	23.47	22.98	23.00	22.45	22.72	22.22	22.14	21.49	22.03	21.51
19	23.50	22.99	23.35	22.78	23.28	22.77	22.84	22.37	21.94	21.24	21.83	21.17
20	23.66	23.12	23.57	22.92	23.17	22.48	22.61	21.99	22.15	21.30	21.79	21.19
21	23.42	22.93	23.81	23.17	22.89	22.27	22.47	21.85	22.29	21.62	21.83	21.05
22	23.40	22.82	23.63	22.97	22.93	22.36	22.34	21.76	22.35	21.73	21.75	21.18
23	23.49	22.85	23.40	22.84	22.55	21.91	22.03	21.35	22.22	21.69	21.71	20.86
24	23.45	22.87	23.27	22.65	22.51	21.89	22.56	21.22	22.18	21.57	21.83	21.38
25	23.43	22.78	23.58	22.93	22.59	21.96	22.81	22.25	21.93	21.36	21.81	21.36
26	23.45	22.88	23.89	23.27	22.60	22.06	---	---	21.60	21.13	21.75	21.22
27	23.42	22.87	23.81	23.26	22.75	22.08	---	---	21.73	21.34	21.50	21.17
28	23.41	22.84	23.59	23.10	22.80	22.21	---	---	22.12	21.68	22.10	21.44
29	23.05	22.42	23.81	23.14	22.74	22.16	---	---	22.65	21.74	22.23	21.82
30	22.85	22.37	23.59	22.84	22.95	22.42	---	---	---	---	22.13	21.73
31	22.61	21.74	---	---	22.87	22.30	---	---	---	---	21.80	21.37
MONTH	23.78	21.74	23.89	21.64	23.37	21.89	22.91	21.09	22.65	20.94	22.46	20.68

GROUND-WATER LEVELS

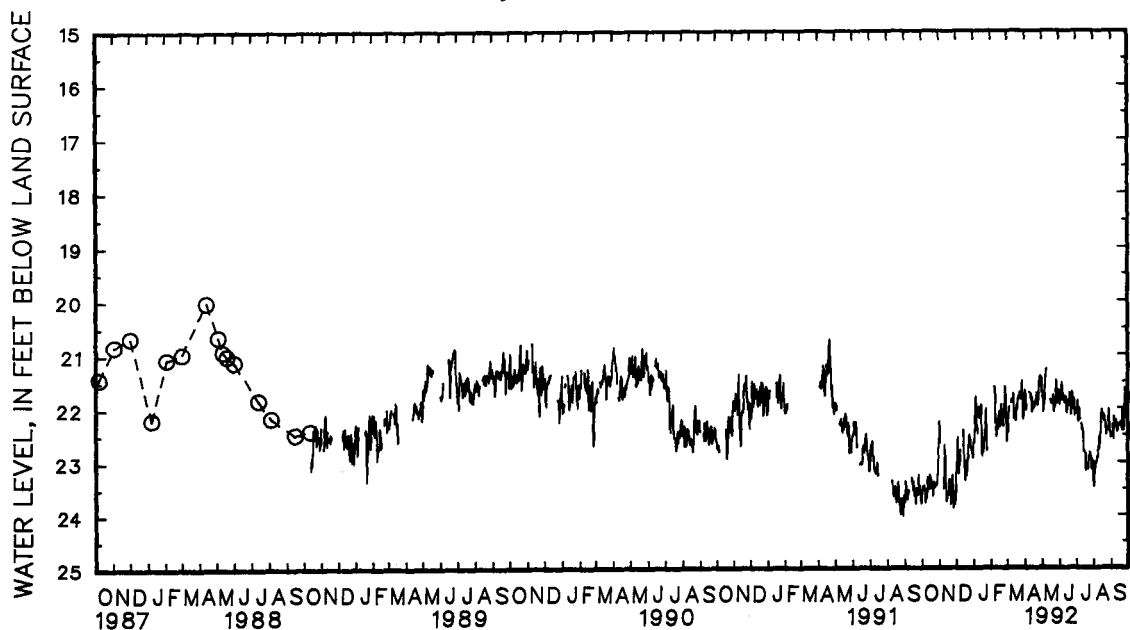
MARYLAND--Continued

ST. MARYS COUNTY--Continued

SM Fe 30--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21.68	21.20	21.83	20.89	21.95	21.27	22.13	21.42	23.49	22.49	22.56	22.00
2	21.86	21.22	21.73	21.19	21.83	21.14	22.07	21.41	23.43	22.87	---	---
3	22.06	21.60	22.09	21.18	21.86	21.13	21.88	21.18	23.24	22.73	22.33	21.86
4	21.97	21.51	21.95	21.30	21.72	20.97	22.10	21.17	23.14	22.70	22.52	22.14
5	---	---	21.87	21.35	21.54	20.97	22.27	21.56	23.04	22.59	22.59	22.08
6	---	---	21.62	20.99	21.62	20.96	22.03	21.48	23.02	22.57	22.18	21.63
7	---	---	21.36	20.77	21.77	21.13	22.17	21.66	22.94	22.45	22.35	21.81
8	---	---	21.28	20.55	21.87	21.31	22.24	21.75	22.94	22.42	22.33	21.90
9	21.72	21.29	---	---	---	---	---	---	22.81	22.30	22.33	21.81
10	21.73	21.20	---	---	21.92	21.36	22.33	21.81	22.79	22.22	22.25	21.74
11	21.85	21.36	---	---	21.81	21.24	22.44	21.89	22.54	22.03	22.45	21.80
12	21.81	21.30	---	---	21.81	21.25	22.42	21.90	22.76	22.05	22.44	21.86
13	22.09	21.52	---	---	21.91	21.25	22.49	21.89	22.47	21.79	22.33	21.83
14	21.90	21.35	---	---	22.11	21.35	22.77	21.95	22.30	21.59	22.34	21.78
15	22.03	21.40	21.86	21.23	22.01	21.38	22.85	22.18	22.04	21.47	22.31	21.81
16	21.91	21.36	21.88	21.31	21.87	21.28	22.84	22.29	22.05	21.44	22.33	21.83
17	22.00	21.29	21.93	21.31	21.93	21.19	22.89	22.21	22.14	21.57	22.34	21.85
18	21.95	21.39	21.91	21.30	21.91	21.38	23.19	22.48	22.22	21.72	22.28	21.84
19	21.89	21.27	21.90	21.24	21.73	21.30	23.18	22.62	22.13	21.70	22.39	21.80
20	21.83	21.26	21.77	21.22	21.97	21.22	23.16	22.64	22.25	21.80	22.42	21.76
21	21.73	21.25	22.07	21.29	21.97	21.55	23.11	22.67	22.19	21.78	22.01	21.54
22	21.81	21.05	22.09	21.64	22.14	21.77	23.16	22.70	22.36	21.89	22.00	21.50
23	21.96	21.42	21.98	21.55	22.06	21.55	22.92	22.44	22.51	21.97	22.43	21.60
24	21.85	21.38	21.97	21.55	21.71	21.34	22.98	22.40	22.41	21.85	22.12	21.38
25	21.72	21.38	21.82	21.38	21.87	21.42	22.86	22.35	22.40	21.85	21.63	20.98
26	21.45	20.88	21.49	21.14	21.84	21.32	22.93	22.39	22.43	21.84	21.95	21.24
27	21.41	20.91	21.61	21.22	21.87	21.38	22.95	22.49	22.32	21.54	22.02	21.24
28	21.59	21.16	21.92	21.50	22.16	21.50	23.15	22.48	22.04	21.39	22.15	21.44
29	21.43	20.99	21.91	21.39	22.07	21.41	23.08	22.49	22.42	21.42	22.31	21.57
30	21.45	20.90	21.68	21.02	22.08	21.37	23.18	22.44	22.46	21.87	22.26	21.73
31	---	---	21.69	21.16	---	---	23.02	22.46	22.56	21.77	---	---
MONTH	22.09	20.88	22.09	20.55	22.16	20.96	23.19	21.17	23.49	21.39	22.59	20.98

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Fg 45. SITE ID.--380711076222201. PERMIT NUMBER.--SM-04-5190.

LOCATION.--Lat 38°07'11", long 76°22'22", Hydrologic Unit 02070011, in fire pumphouse at Ridge.

Owner: Ridge Volunteer Fire Department.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 436 ft; casing diameter 6 in., to 386 ft; casing diameter 4 in. from 415 to 436 ft; screen diameter 5 in. from 386 to 415 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

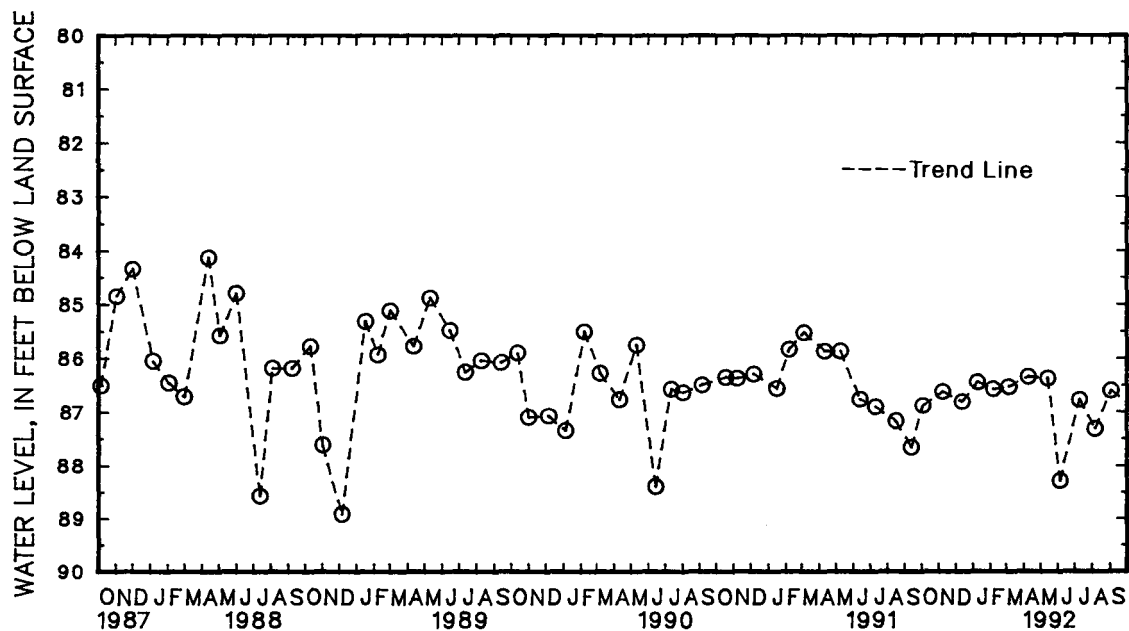
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--May 1966 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.83 ft below land surface, May 16, 1967;
lowest measured, 88.93 ft below land surface, Dec. 6, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL	DATE		WATER LEVEL	DATE		WATER LEVEL	DATE		WATER LEVEL
OCT 3	86.90	DEC 12	86.82	FEB 6	86.58	APR 9	86.35	JUN 4	88.31	AUG 6	87.33
NOV 7	86.63	JAN 9	86.45	MAR 5	86.54	MAY 14	86.38	JUL 9	86.78	SEP 2	86.61
WATER YEAR 1992		HIGHEST	86.35	APR 9, 1992		LOWEST	88.31	JUN 4, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

ST. MARYS COUNTY--Continued

WELL NUMBER.--SM Gh 11. SITE ID.--380347076200101.

LOCATION.--Lat 38°03'47", long 76°20'01", Hydrologic Unit 02006001, at Point Lookout State Park.

Owner: Maryland Forest, Park and Wildlife Service.

AQUIFER.--Holocene Series of Recent age. Aquifer code: 111HLCN.

WELL CHARACTERISTICS.--Drilled, unused domestic, water-table well, measured depth 22.4 ft; casing diameter, 2.0 in., screen length unknown.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.30 ft above land surface.

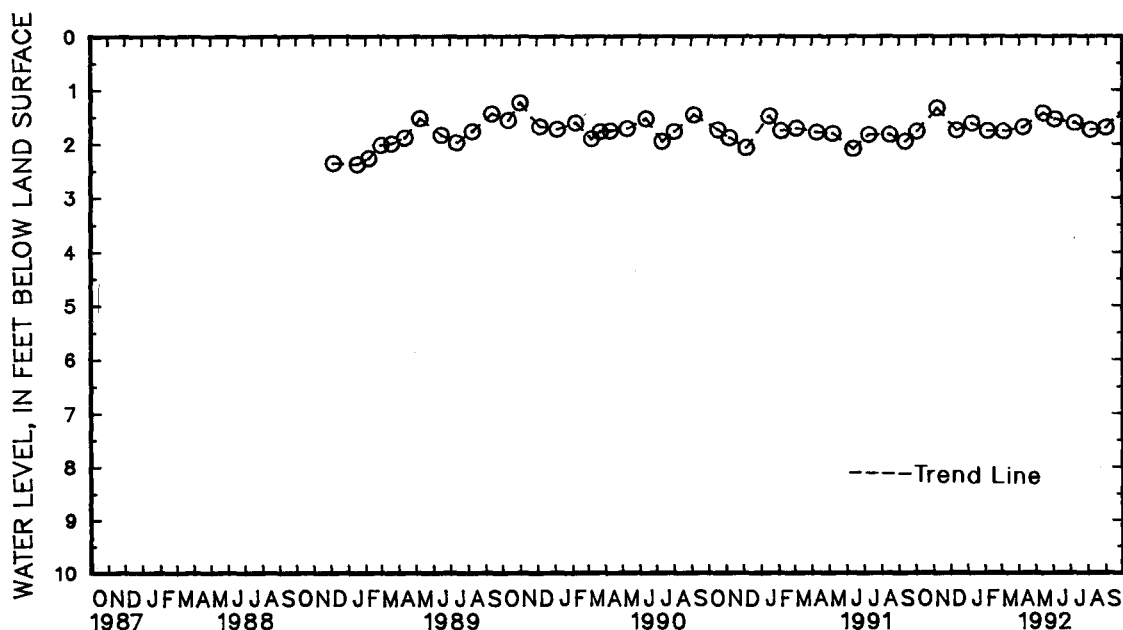
REMARKS.--Maryland Water-Level Network observation well.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.25 ft below land surface, Nov. 1, 1989;
lowest measured, 2.41 ft below land surface, Jan. 9, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE. WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 3	1.79	DEC 12	1.77	FEB 6	1.78	APR 9	1.71	JUN 4	1.56	AUG 6	1.76
NOV 7	1.35	JAN 9	1.64	MAR 5	1.79	MAY 14	1.45	JUL 9	1.63	SEP 2	1.72
WATER YEAR 1992		HIGHEST	1.35	NOV 7, 1991		LOWEST	1.79	OCT 3, 1991		MAR 5, 1992	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

SOMERSET COUNTY

WELL NUMBER.--SO Be 42. SITE ID.--381156075412501.

LOCATION.--Lat 38°11'56", long 75°41'25", Hydrologic Unit 02060009, 0.1 mi northeast of US Rt. 13 and Hampden Ave., Princess Anne.

Owner: E. Mace Smith.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, measured depth 184 ft; casing diameter 2 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 17 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of casing, 2.28ft above land surface.

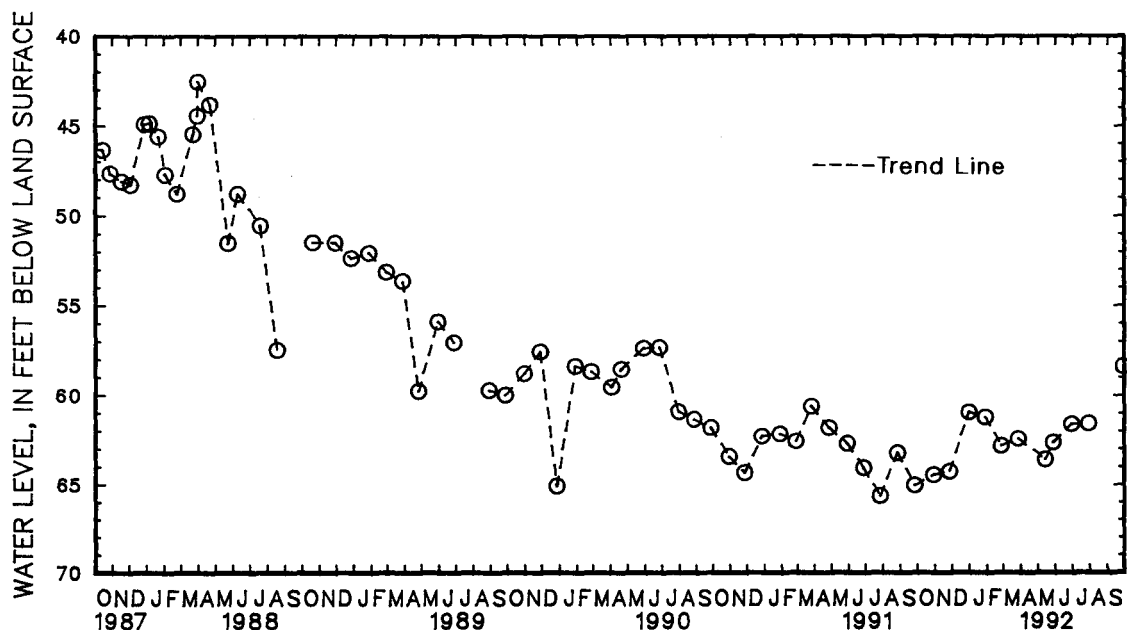
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.15 ft below land surface May 1, 1953; lowest measured 65.72 ft below land surface, July 26, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		
OCT 29	64.52	DEC 30	60.97	FEB 26	62.90	MAY 13	63.68	JUN 29	61.67	SEP 28	58.41		
NOV 26	64.31	JAN 28	61.25	MAR 27	62.49	MAY 27	62.70	JUL 29	61.61				
WATER YEAR 1992		HIGHEST	58.41	SEP 28, 1992	LOWEST	64.52	OCT 29, 1991						



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
SOMERSET COUNTY--Continued

WELL NUMBER.--SO Ce 42. SITE ID.--380927075423701. PERMIT NUMBER.--SO-81-0394.
LOCATION.--Lat 38°09'30", long 75°41'56", Hydrologic Unit 02060009, at Eastern Shore Correctional Institution.
Owner: Maryland Department of Correction.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 215 ft; casing diameter 4 in., to 185 ft; screen diameter 4 in. from 185 to 215 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recording interval, from Jan. 2, 1986 to current year.
DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of recorder shelf, 1.6 ft above land surface.
REMARKS.--Water levels affected by nearby pumping. No record from Oct. 1, 1989 to Jan. 24, 1990, due to the drilling of a nearby well. Missing data due to recorder malfunction.
PERIOD OF RECORD.--January 1986 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.97 ft below land surface, Feb. 21, 1986; lowest measured, 51.90 ft below land surface, Aug. 7, 1991.

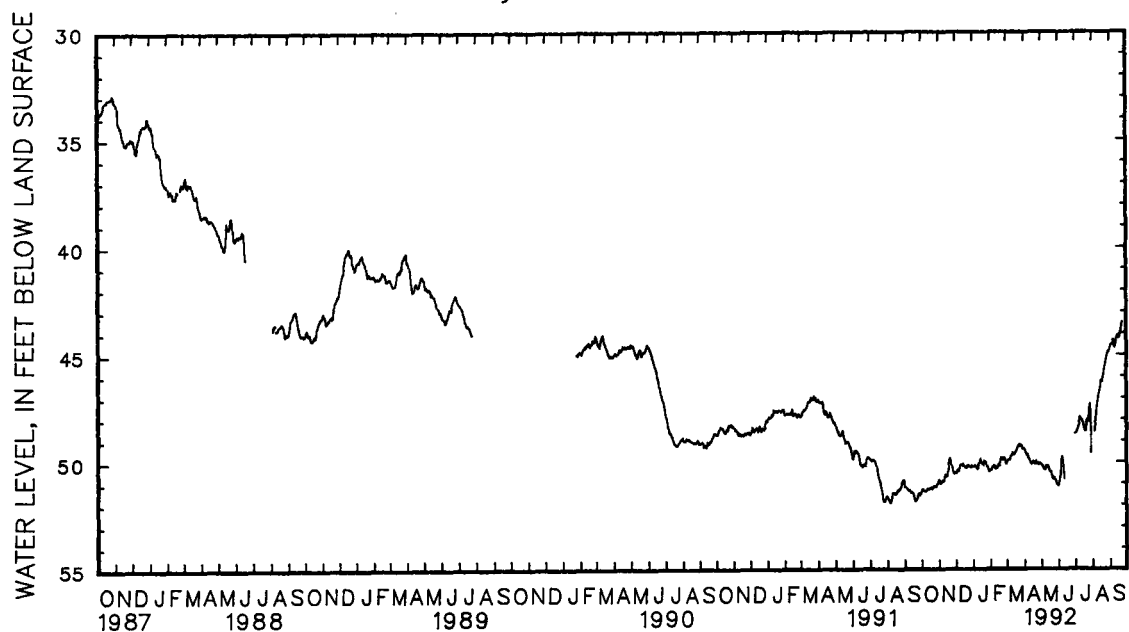
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	51.36	51.19	50.83	50.60	50.54	50.43	50.22	50.14	50.38	50.29	50.10	50.00
2	51.29	51.20	50.93	50.72	50.48	50.39	50.23	50.17	50.39	50.28	50.02	49.95
3	51.26	51.17	51.01	50.85	50.39	50.20	50.23	50.12	50.31	50.15	49.95	49.87
4	51.32	51.17	50.97	50.87	50.38	50.15	50.17	49.87	50.24	50.05	49.92	49.82
5	51.36	51.23	50.95	50.83	50.43	50.33	50.18	49.99	50.27	50.12	49.91	49.82
6	51.36	51.24	50.89	50.75	50.33	50.20	50.22	50.05	50.27	50.16	49.91	49.81
7	51.35	51.25	50.86	50.74	50.27	50.14	50.31	50.15	50.20	50.03	49.90	49.63
8	51.38	51.26	50.90	50.81	50.19	50.10	50.34	50.27	50.17	49.99	49.73	49.54
9	51.37	51.26	50.90	50.80	50.15	50.01	50.31	50.09	50.32	50.12	49.73	49.61
10	51.34	51.18	50.82	50.47	50.14	50.02	50.14	49.96	50.33	50.27	49.67	49.45
11	51.26	51.10	50.59	50.43	50.17	50.09	50.08	50.01	50.27	50.19	49.58	49.29
12	51.24	51.14	50.69	50.58	50.19	50.14	50.07	49.95	50.29	50.21	49.65	49.58
13	51.27	51.21	50.67	50.61	50.16	50.04	49.95	49.83	50.28	50.12	49.66	49.64
14	51.27	51.20	50.67	50.61	50.10	50.04	49.86	49.58	50.20	50.11	49.66	49.55
15	51.24	51.12	50.65	50.46	50.20	50.09	50.03	49.72	50.19	49.96	49.61	49.54
16	51.24	51.15	50.47	50.34	50.26	50.18	50.04	49.93	50.12	49.93	49.59	49.50
17	51.21	51.08	50.36	50.17	50.26	50.14	50.03	49.93	50.17	50.07	49.50	49.35
18	51.22	51.14	50.17	49.91	50.22	50.14	50.12	50.02	50.10	49.88	49.48	49.38
19	51.20	51.13	49.93	49.78	50.28	50.20	50.15	50.08	49.93	49.70	49.38	49.17
20	51.26	51.18	49.84	49.74	50.26	50.16	50.08	49.87	49.83	49.70	49.30	49.14
21	51.20	51.08	49.87	49.75	50.19	50.07	49.96	49.86	49.83	49.73	49.25	49.11
22	51.14	51.02	49.98	49.83	50.21	50.12	50.00	49.91	49.82	49.74	49.26	49.06
23	51.13	51.01	50.18	49.94	50.17	49.99	49.99	49.70	49.89	49.77	49.18	48.99
24	51.13	51.00	50.28	50.09	50.17	50.02	50.05	49.75	49.92	49.84	49.24	49.15
25	51.14	50.99	50.42	50.27	50.23	50.12	50.20	50.05	49.92	49.82	49.27	49.17
26	51.16	51.02	50.52	50.42	50.24	50.17	50.23	50.16	49.83	49.72	49.27	49.01
27	51.13	50.95	50.55	50.50	50.25	50.16	50.30	50.22	49.88	49.76	49.23	49.01
28	51.04	50.93	50.52	50.45	50.25	50.18	50.42	50.30	49.92	49.87	49.35	49.23
29	51.02	50.81	50.52	50.46	50.18	50.02	50.46	50.39	50.10	49.86	49.40	49.34
30	50.95	50.72	50.53	50.49	50.20	50.05	50.45	50.36	---	---	49.39	49.25
31	50.85	50.60	---	---	50.21	50.15	50.40	50.30	---	---	49.38	49.21
MONTH	51.38	50.60	51.01	49.74	50.54	49.99	50.46	49.58	50.39	49.70	50.10	48.99

GROUND-WATER LEVELS
MARYLAND--Continued
SOMERSET COUNTY--Continued
SO Ce 42--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	49.40	49.26	50.17	49.95	51.10	50.92	48.67	48.53	---	---	44.57	44.48
2	49.49	49.35	50.16	50.04	50.96	50.73	48.65	48.51	---	---	44.57	44.50
3	49.56	49.40	50.24	50.05	50.80	50.55	48.62	48.44	---	---	44.57	44.49
4	49.60	49.49	50.28	50.14	50.61	50.22	48.50	48.32	48.57	48.25	44.52	44.38
5	49.67	49.53	50.33	50.19	50.25	49.95	48.46	48.29	48.33	48.07	44.48	44.31
6	49.70	49.62	50.36	50.20	50.00	49.74	48.35	48.18	48.10	47.84	44.36	44.25
7	49.67	49.57	50.37	50.25	49.79	49.60	48.30	48.14	47.84	47.51	44.32	44.22
8	49.79	49.52	50.30	50.01	49.77	49.60	48.18	47.92	47.53	47.22	44.64	44.26
9	49.87	49.76	50.19	50.02	50.10	49.77	47.94	47.83	47.23	47.02	44.69	44.59
10	49.92	49.80	50.26	50.15	50.53	50.10	47.91	47.83	47.05	46.84	44.60	44.45
11	49.97	49.87	50.25	50.14	50.77	50.47	48.02	47.84	46.84	46.71	44.45	44.34
12	50.04	49.91	50.20	50.05	---	---	48.04	47.97	46.71	46.60	44.35	44.24
13	50.12	50.00	50.23	50.04	---	---	48.05	47.90	46.60	46.37	44.25	44.14
14	50.06	49.97	50.34	50.11	---	---	48.11	47.99	46.37	46.18	44.16	44.03
15	50.05	49.95	50.41	50.25	---	---	48.26	48.00	46.23	45.99	44.11	43.99
16	50.03	49.94	50.45	50.32	---	---	48.44	48.18	46.20	45.97	44.20	44.04
17	50.00	49.85	50.48	50.37	---	---	48.46	48.29	46.24	46.15	44.22	44.17
18	50.09	49.91	50.48	50.35	---	---	48.57	48.36	46.24	46.11	44.19	44.01
19	50.11	49.98	50.59	50.43	---	---	48.57	48.38	46.17	45.95	44.05	43.80
20	50.10	49.97	50.68	50.51	---	---	48.40	48.12	45.99	45.76	43.95	43.73
21	50.03	49.92	50.79	50.66	---	---	48.15	47.91	45.80	45.58	43.81	43.34
22	49.98	49.83	50.80	50.74	---	---	48.05	47.94	45.62	45.42	43.56	43.37
23	50.07	49.96	50.75	50.69	---	---	48.08	47.97	45.47	45.27	43.51	43.30
24	50.07	50.01	50.75	50.69	---	---	48.13	47.91	45.32	45.10	---	---
25	50.13	50.03	50.82	50.73	---	---	47.95	47.49	45.13	44.96	---	---
26	50.13	49.95	50.84	50.70	---	---	47.49	47.07	45.02	44.89	---	---
27	50.07	49.95	50.91	50.75	---	---	47.30	47.05	44.93	44.82	---	---
28	50.11	50.02	51.02	50.83	---	---	47.61	47.27	44.85	44.65	---	---
29	50.11	49.98	51.05	50.95	---	---	49.59	47.47	44.84	44.63	43.31	43.20
30	50.10	49.94	51.04	50.90	48.69	48.55	---	---	44.84	44.67	---	---
31	---	---	51.11	50.92	---	---	---	---	44.72	44.49	---	---
MONTH	50.13	49.26	51.11	49.95	51.10	48.55	49.59	47.05	48.57	44.49	44.69	43.20

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
SOMERSET COUNTY--Continued

WELL NUMBER.--SO Cf 2. SITE ID.--380616075380701.

LOCATION.--Lat 38°06'16", long 75°38'07", Hydrologic Unit 02060009, on U.S. Rt. 13, 4.5 mi west of intersection of U.S. Rt. 13 and MD Rt. 364, near Costen.

Owner: Maryland State Highway Administration.

AQUIFER.--Kent Island Formation of Pleistocene age. Aquifer code: 112KILD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 15 ft; casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of casing, 1.00 ft above land surface.

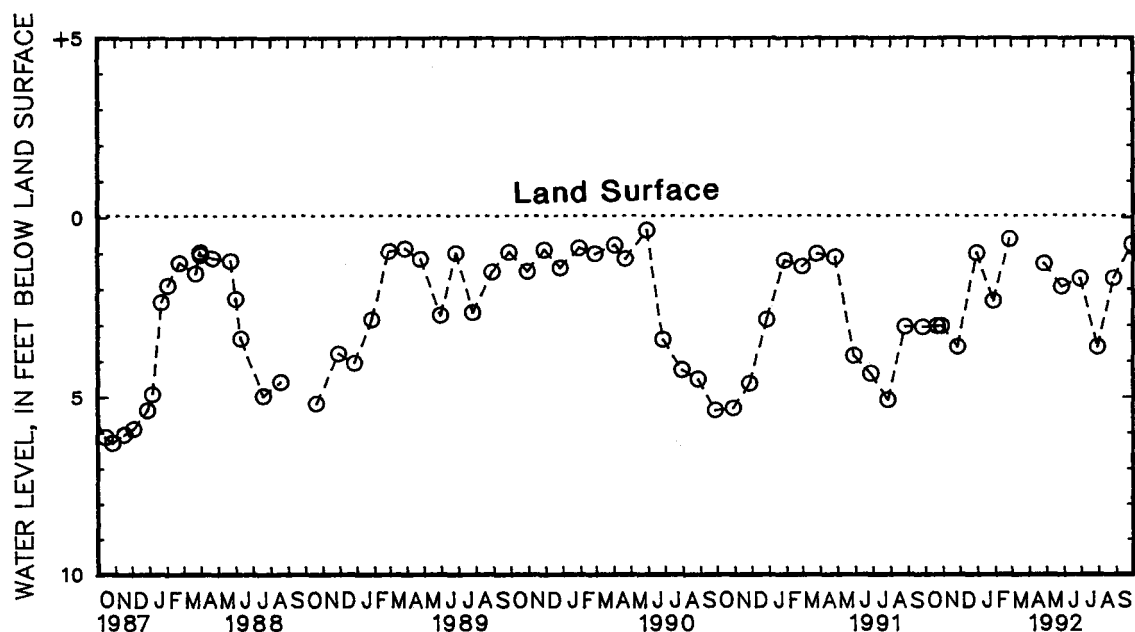
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.28 ft below land surface, May 9, 1958; lowest measured, 6.34 ft below land surface, Oct. 27, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	3.03	NOV 26	3.63	JAN 28	2.35	APR 27	1.30	JUN 29	1.73	AUG 27	1.70
29	3.03	DEC 30	.99	FEB 26	.59	MAY 27	1.95	JUL 29	3.66	SEP 28	.75
WATER YEAR 1992		HIGHEST	.59	FEB 26, 1992	LOWEST	3.66	JUL 29, 1992				



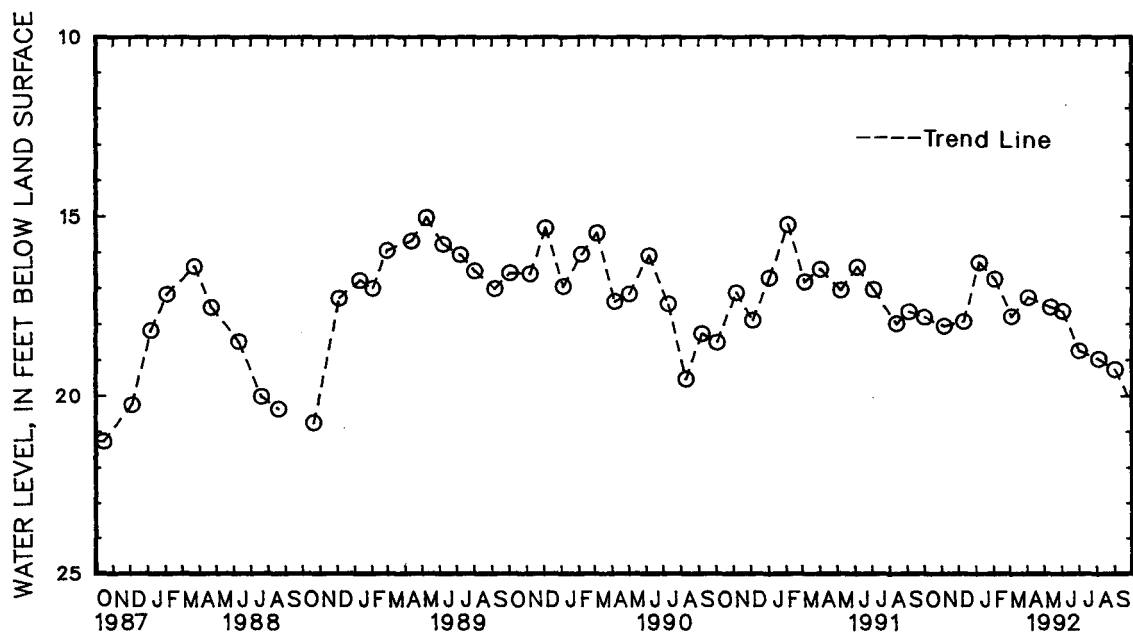
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
TALBOT COUNTY--Continued

WELL NUMBER.--TA Bf 74. SITE ID.--385242075593102. PERMIT NUMBER.--TA-02-1805.
LOCATION.--Lat 38°52'42", long 75°59'31", Hydrologic Unit 02060005, at Cordova.
Owner: William Schluderberg-T. J. Kurdle Co.
AQUIFER.--Wicomico Formation of Pleistocene age. Aquifer code: 112WCML.
WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 48.4 ft; casing diameter 4 in., to 42.5 ft; screen diameter 3 in. from 43.2 to 48.4 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 42 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing, 0.70 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--April 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.48 ft below land surface, Dec. 14, 1971; lowest measured, 21.32 ft below land surface, Oct. 15, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	17.85	DEC 10	17.97	FEB 3	16.77	APR 2	17.29	JUN 2	17.68	AUG 4	19.03
NOV 5	18.10	JAN 6	16.30	MAR 4	17.83	MAY 12	17.55	JUL 1	18.80	SEP 1	19.32
WATER YEAR 1992		HIGHEST	16.30	JAN 6, 1992		LOWEST	19.32	SEP 1, 1992			



GROUND-WATER LEVELS

MARYLAND--Continued

TALBOT COUNTY--Continued

WELL NUMBER.--TA Cc 35. SITE ID.--384923076100601. PERMIT NUMBER.--TA-73-0767.

LOCATION.--Lat 38°49'23", long 76°10'06", Hydrologic Unit 02060002, at Tunis Mills.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 220 ft; casing diameter 6 to 2 in.; screened from 170 to 180 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.80 ft above land surface.

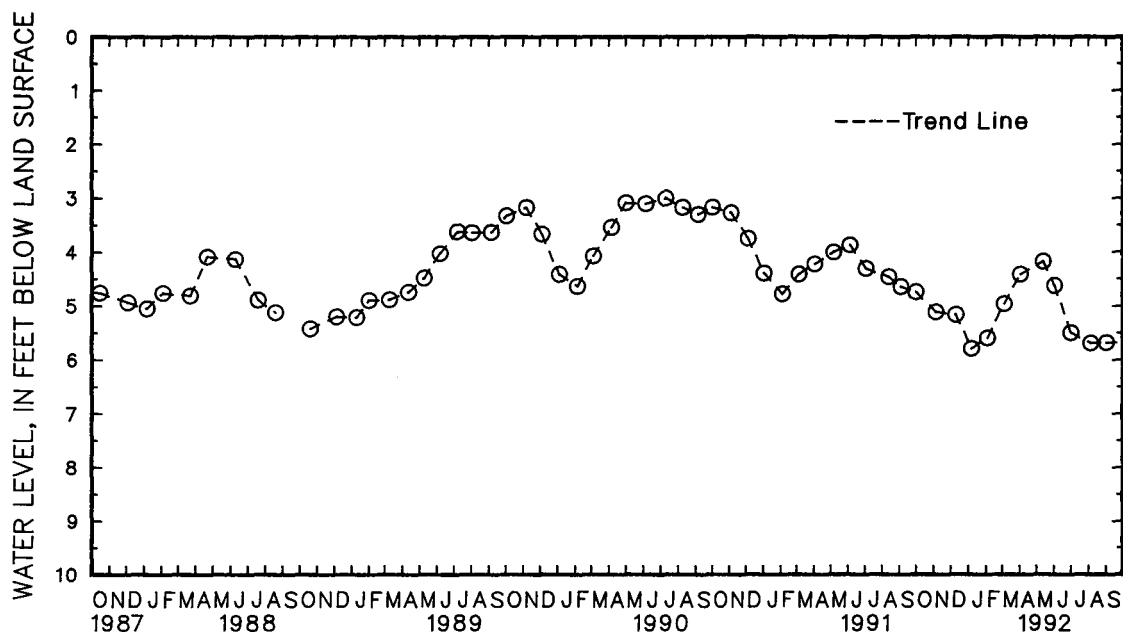
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, April 2, 1980; lowest measured, 5.80 ft below land surface, Jan 6, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 1	4.75	DEC 10	5.16	FEB 3	5.60	APR 2	4.42	JUN 2	4.63	AUG 4	5.70				
NOV 5	5.12	JAN 6	5.80	MAR 4	4.97	MAY 12	4.18	JUL 1	5.50	SEP 1	5.69				
WATER YEAR 1992		HIGHEST	4.18	MAY 12, 1992		LOWEST	5.80	JAN 6, 1992							



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
TALBOT COUNTY--Continued

WELL NUMBER.--TA Cc 36. SITE ID.--384514076103701. PERMIT NUMBER.--TA-73-0750.

LOCATION.--Lat 38°45'14", long 76°10'37", Hydrologic Unit 02060002, at Newcomb.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point Formation of Middle Eocene age. Aquifer code: 124PNPN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 241 ft; casing diameter 6 in., to 57 ft; casing diameter 2 in. from 51 to 231 ft; screen diameter 2 in. from 231 to 241 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical of 1929, from topographic map.

Measuring point: Top of casing, 1.40 ft above land surface.

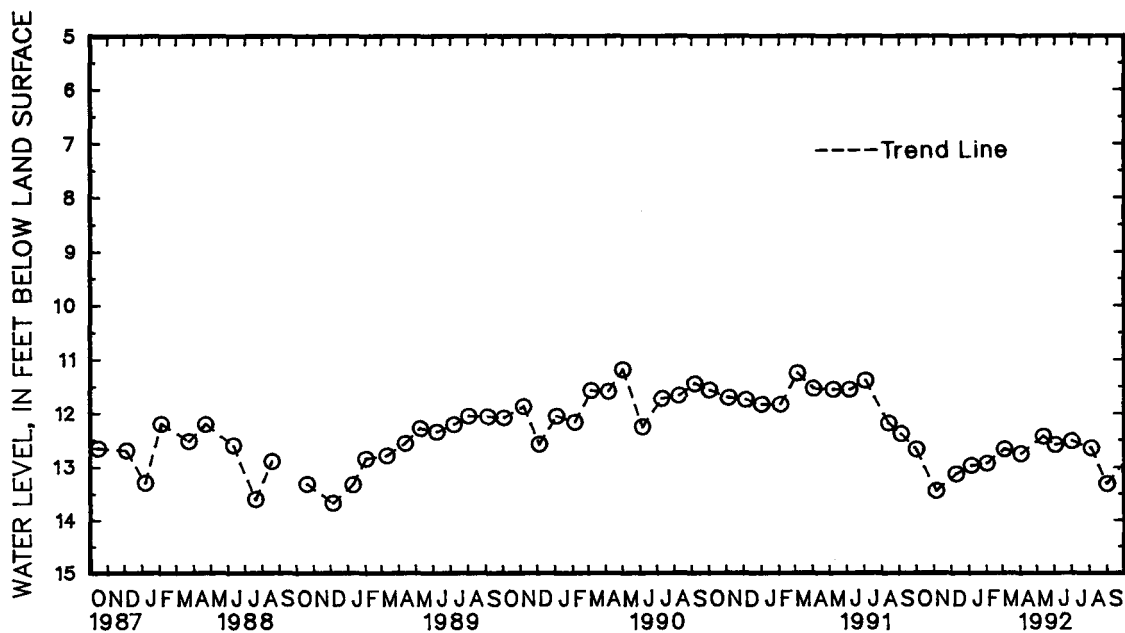
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.89 ft below land surface, April 2, 1980; lowest measured, 13.70 ft below land surface, Dec. 5, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	12.70	DEC 10	13.15	FEB 3	12.95	APR 2	12.77	JUN 2	12.60	AUG 4	12.66
NOV 5	13.47	JAN 6	12.99	MAR 4	12.67	MAY 12	12.44	JUL 1	12.53	SEP 1	13.34
WATER YEAR 1992		HIGHEST	12.44	MAY 12, 1992		LOWEST	13.47	NOV 5, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

TALBOT COUNTY--Continued

WELL NUMBER.--TA Ce 7. SITE ID.--384643076043801.

LOCATION.--Lat 38°46'43", long 76°04'38", Hydrologic Unit 02060005, in Easton.

Owner: Easton Utilities Commission.

AQUIFER.--Calvert Formation of Miocene age. Aquifer code: 122CLVR.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, measured depth 104 ft; casing diameter 4 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.40 ft above land surface.

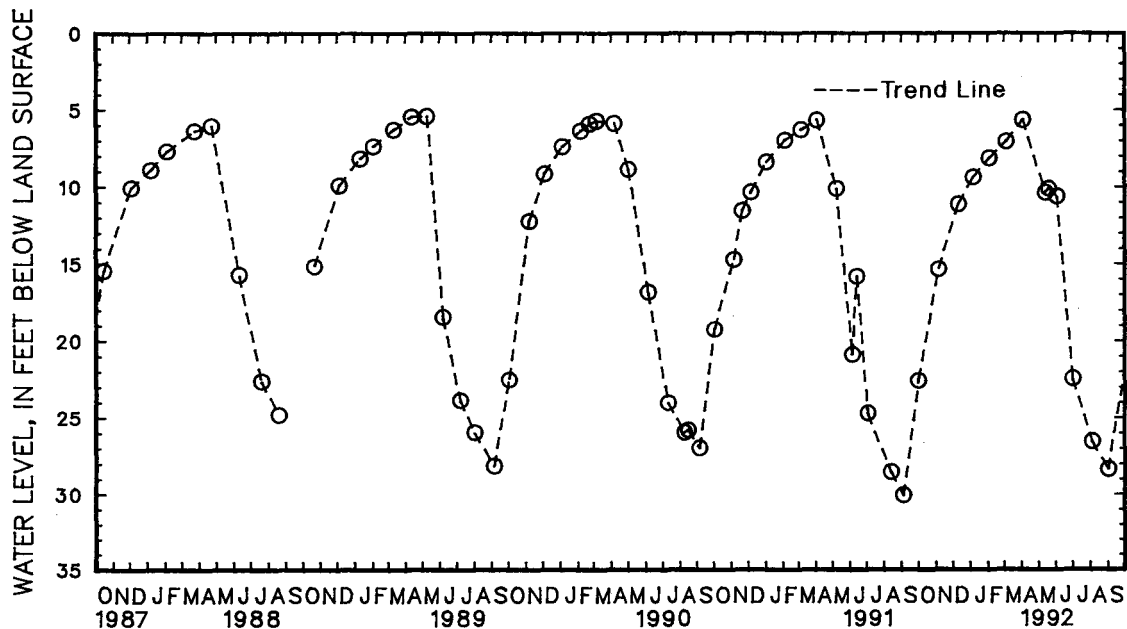
REMARKS.--Maryland Water-Level Network observation well. Water level measured 43.43 ft below land surface Oct. 7, 1948; water levels may be affected by nearby pumping.

PERIOD OF RECORDS.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.97 ft below land surface, April 16, 1984; lowest measured 75.36 ft below land surface, Aug. 2, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	22.61	JAN 6	9.40	APR 2	5.68	JUN 2	10.70	SEP 1	28.49
NOV 5	15.39	FEB 3	8.15	MAY 12	10.45	JUL 1	22.60		
DEC 10	11.15	MAR 4	7.07	MAY 18	10.20	AUG 4	26.69		
WATER YEAR 1992		HIGHEST 5.68 APR 2, 1992		LOWEST 28.49 SEP 1, 1992					



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WASHINGTON COUNTY

WELL NUMBER.--WA Ac 1. SITE ID.--394154078103501.

LOCATION.--Lat 39°41'54", long 78°10'35", Hydrologic Unit 02070004, at Hancock.

Owner: Susan Creager.

AQUIFER.--Romney Formation of Middle Devonian age. Aquifer code: 344RMNY.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 86.2 ft; casing diameter 4 in., to unknown depth; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of tile pipe, 0.20 ft above land surface.

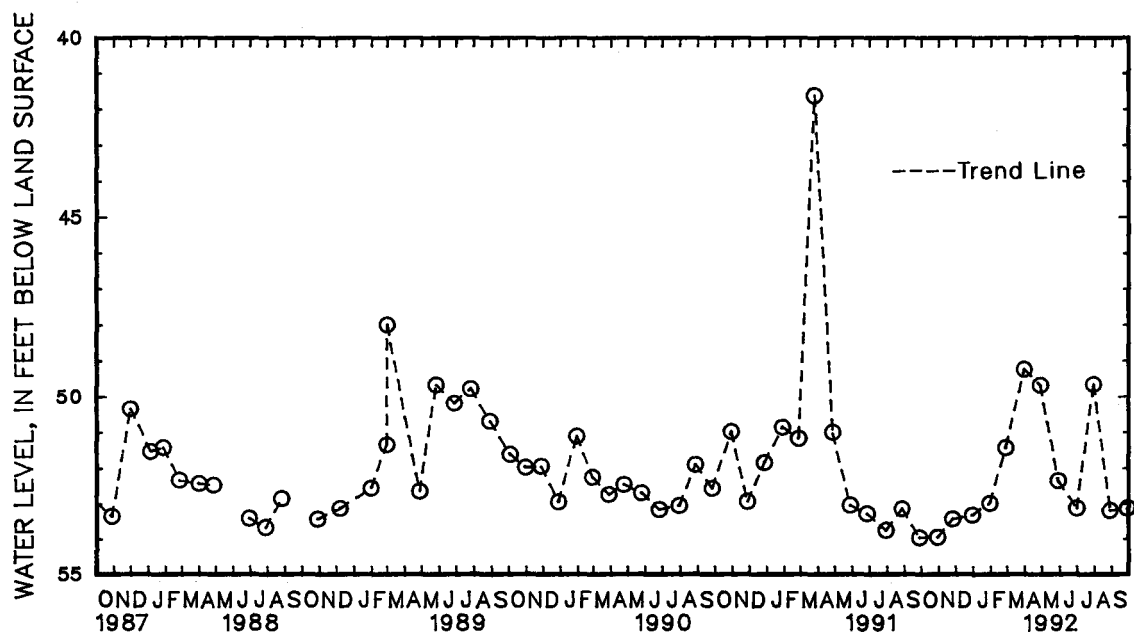
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.65 ft below land surface, Jan. 2, 1976;
lowest measured, 55.83 ft below land surface, Nov. 19, 1953.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	53.97	DEC 30	53.35	FEB 26	51.44	APR 27	49.69	JUN 29	53.16	AUG 28	53.22
NOV 25	53.45	JAN 29	53.00	MAR 30	49.25	MAY 28	52.39	JUL 29	49.66	SEP 28	53.15
WATER YEAR 1992		HIGHEST	49.25	MAR 30, 1992		LOWEST	53.97	OCT 29, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Be 2. SITE ID.--393638078001301.

LOCATION.--Lat 39°36'38", long 78°00'13", Hydrologic Unit 02070004, about 1.2 mi southeast of Big Pool.

Owner: Fort Frederick State Park.

AQUIFER.--Romney Formation of Middle Devonian age. Aquifer code: 344RMNY.

WELL CHARACTERISTICS.--Dug, stone-lined, unused, water-table well, depth 42.7 ft; casing diameter 42 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of stone sill, 0.80 ft above land surface.

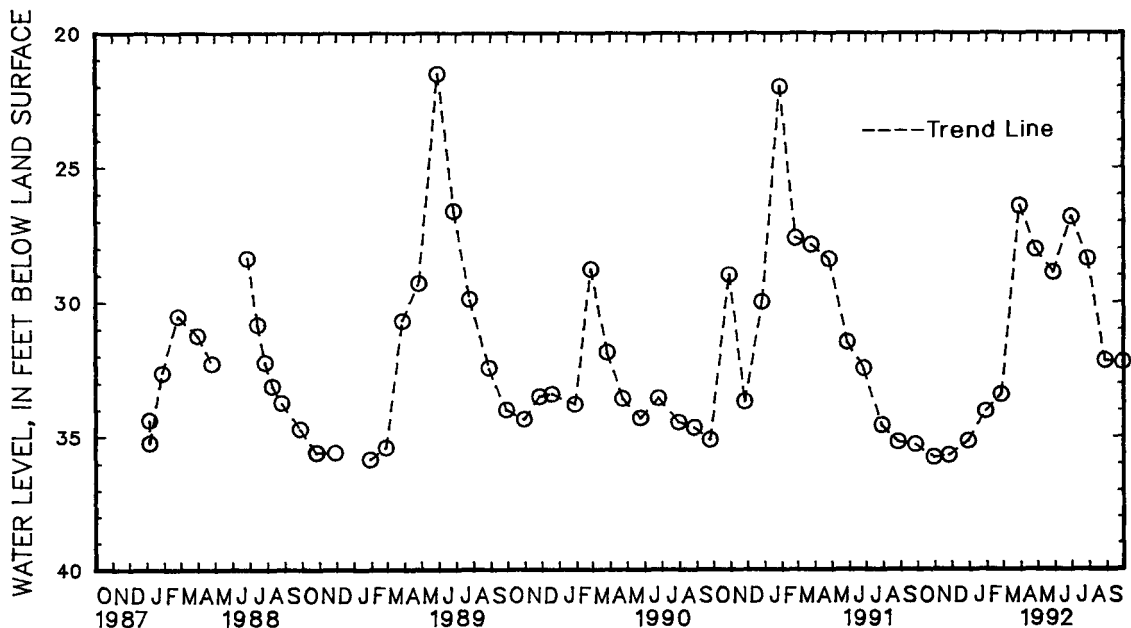
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--December 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.75 ft below land surface, April 26, 1984;
lowest measured, 36.92 ft below land surface, Jan. 11, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	35.85	DEC 30	35.22	FEB 26	33.45	APR 27	28.06	JUN 29	26.85	AUG 28	32.25
NOV 25	35.77	JAN 29	34.08	MAR 30	26.44	MAY 28	28.95	JUL 29	28.43	SEP 28	32.30
WATER YEAR 1992		HIGHEST	26.44	MAR 30, 1992	LOWEST	35.85	OCT 29, 1991				



GROUND-WATER LEVELS

461

MARYLAND--Continued

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Bk 25. SITE ID.--393851077343001. PERMIT NUMBER.--WA-70-0235.

LOCATION.--Lat 39°38'51", long 77°34'30", Hydrologic Unit 02070004, 0.5 mi south of Smithsburg at Hagerstown Water Supply Plant.

Owner: U.S. Geological Survey.

AQUIFER.--Tomstown Dolomite of Lower Cambrian age. Aquifer code: 377TMSN.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 200 ft; casing diameter 6 in., to 128 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with graphic water-level recorder from April 27, 1970 to current year.

DATUM.--Elevation of land surface is 790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of shelter shelf, 3.5 ft above land surface.

REMARKS.--Maryland Water-Level Network observation well. Missing data due to recorder malfunction.

PERIOD OF RECORD.--April 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.68 ft below land surface, April 6, 1984; lowest measured, 51.37 ft below land surface Jan. 31, 1981.

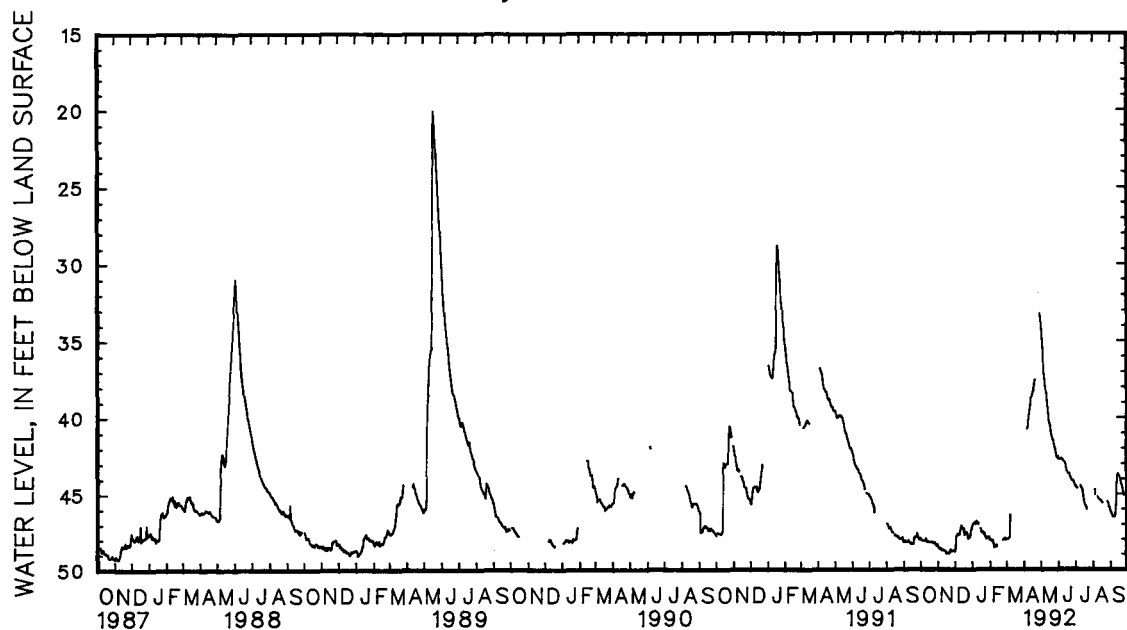
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	47.98	47.87	48.41	48.33	48.81	48.78	47.22	47.06	48.09	47.89	48.03	47.85
2	47.99	47.90	48.57	48.31	48.86	48.62	47.10	47.00	48.09	48.00	48.02	47.90
3	---	---	48.64	48.53	48.62	47.76	47.02	46.85	48.09	48.05	48.02	47.94
4	48.13	48.04	48.67	48.60	47.84	47.65	46.94	46.74	48.08	47.82	48.03	47.95
5	48.16	48.00	48.67	48.60	47.84	47.59	46.94	46.82	48.17	48.06	47.99	47.89
6	48.16	48.01	48.62	48.54	47.68	47.49	46.87	46.77	48.15	48.02	47.96	47.85
7	48.14	48.03	48.69	48.61	47.68	47.49	46.97	46.86	48.11	48.02	47.85	46.42
8	48.15	48.08	48.78	48.69	47.70	47.63	47.00	46.85	48.34	48.11	46.42	45.48
9	48.13	48.06	48.78	48.67	47.72	47.62	46.85	46.74	48.55	48.34	---	---
10	48.10	47.96	48.71	48.52	47.72	47.45	46.87	46.74	48.55	48.36	---	---
11	48.00	47.95	48.76	48.56	47.45	47.32	47.02	46.87	48.44	48.25	---	---
12	48.11	47.98	48.80	48.74	47.32	47.09	47.05	46.97	48.54	48.42	---	---
13	48.23	48.11	48.77	48.73	47.12	47.04	46.99	46.78	48.42	48.22	---	---
14	48.25	48.13	48.84	48.76	47.19	46.93	---	---	48.49	48.24	---	---
15	48.20	48.05	48.84	48.76	47.26	47.15	---	---	---	---	---	---
16	48.24	48.18	48.96	48.78	47.35	47.20	47.33	47.03	---	---	---	---
17	48.24	48.14	49.00	48.95	47.31	47.06	47.39	47.10	---	---	---	---
18	48.25	48.15	48.98	48.86	47.62	47.27	47.58	47.37	---	---	---	---
19	48.23	48.08	48.95	48.92	47.74	47.61	47.59	47.48	---	---	---	---
20	---	---	48.95	48.83	47.71	47.50	47.54	47.37	---	---	---	---
21	---	---	48.97	48.86	47.57	47.32	47.65	47.46	---	---	---	---
22	48.22	48.16	48.97	48.69	47.58	47.45	47.73	47.63	---	---	---	---
23	48.28	48.22	48.83	48.63	47.59	47.40	47.63	47.23	---	---	---	---
24	48.29	48.22	48.72	48.61	47.77	47.59	47.83	47.43	48.10	47.93	---	---
25	48.29	48.22	48.79	48.72	47.97	47.77	47.88	47.74	48.05	47.83	---	---
26	48.26	48.16	48.85	48.79	47.98	47.92	48.01	47.74	47.97	47.76	---	---
27	48.26	48.20	---	---	---	---	48.01	47.86	48.00	47.95	---	---
28	48.43	48.26	---	---	---	---	47.93	47.88	47.95	47.64	---	---
29	48.47	48.41	48.77	48.68	47.92	47.44	47.93	47.85	48.06	47.65	---	---
30	48.41	48.26	48.79	48.70	47.44	47.37	47.89	47.72	---	---	---	---
31	48.38	48.26	---	---	47.43	47.22	47.89	47.72	---	---	---	---
MONTH	48.47	47.87	49.00	48.31	48.86	46.93	48.01	46.74	48.55	47.64	48.03	45.48

GROUND-WATER LEVELS
MARYLAND--Continued
WASHINGTON COUNTY--Continued
WA Bk 25--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	33.96	33.62	42.65	42.62	44.58	44.55	---	---	46.23	46.10
2	---	---	34.36	33.96	42.85	42.62	44.67	44.55	---	---	46.31	46.23
3	---	---	34.95	34.36	42.85	42.85	44.72	44.67	---	---	46.37	46.26
4	---	---	35.50	34.95	42.85	42.84	44.73	44.72	44.79	44.64	46.47	46.37
5	---	---	36.20	35.50	42.84	42.82	---	---	45.09	44.79	46.56	46.47
6	---	---	36.87	36.20	42.82	42.80	---	---	---	---	46.58	46.56
7	40.76	40.62	37.32	36.87	42.80	42.80	---	---	---	---	46.58	46.58
8	40.62	40.15	37.61	37.32	42.85	42.80	---	---	---	---	46.58	46.52
9	40.15	39.84	38.02	37.61	42.90	42.85	44.55	44.44	45.27	45.21	46.53	46.37
10	39.84	39.48	38.47	38.02	42.97	42.90	44.62	44.55	45.32	45.27	46.37	45.56
11	39.58	39.27	38.80	38.47	43.01	42.97	44.69	44.62	45.42	45.32	45.56	44.15
12	39.27	38.71	39.04	38.80	43.04	43.01	44.77	44.67	45.43	45.42	44.15	43.81
13	38.71	38.55	39.42	39.04	43.07	43.03	44.85	44.75	45.45	45.43	43.81	43.67
14	38.67	38.52	39.86	39.42	43.22	43.06	45.10	44.85	45.50	45.45	43.70	43.68
15	38.58	38.35	40.32	39.86	43.47	43.22	45.36	45.09	45.52	45.50	43.79	43.70
16	38.36	38.23	40.44	40.32	43.63	43.47	45.56	45.36	45.59	45.51	43.84	43.79
17	38.28	37.97	40.56	40.44	43.76	43.63	45.73	45.56	45.63	45.59	43.95	43.84
18	37.97	37.71	40.80	40.55	43.78	43.76	45.85	45.73	45.66	45.63	43.98	43.95
19	37.71	37.54	41.07	40.80	43.78	43.78	45.90	45.85	---	---	44.27	43.97
20	37.54	37.44	41.30	41.07	43.78	43.78	46.00	45.90	---	---	44.42	44.27
21	---	---	41.41	41.30	43.95	43.78	46.09	46.00	---	---	44.53	44.42
22	---	---	41.54	41.41	44.06	43.95	---	---	---	---	44.70	44.52
23	---	---	41.59	41.54	44.10	44.06	---	---	---	---	44.93	44.70
24	---	---	41.83	41.59	44.21	44.10	---	---	---	---	45.12	44.92
25	---	---	41.98	41.83	44.21	44.20	---	---	---	---	45.15	45.10
26	---	---	42.12	41.97	44.20	44.14	---	---	45.58	45.52	45.12	45.06
27	---	---	42.34	42.12	44.24	44.14	---	---	45.62	45.58	45.11	44.90
28	---	---	42.57	42.34	44.39	44.23	---	---	45.73	45.49	45.07	44.92
29	33.24	32.99	42.72	42.57	44.43	44.35	---	---	45.93	45.73	45.21	45.07
30	33.62	33.24	42.76	42.71	44.58	44.43	---	---	45.94	45.93	45.23	45.17
31	---	---	42.76	42.65	---	---	---	---	46.10	45.94	---	---
MONTH	40.76	32.99	42.76	33.62	44.58	42.62	46.09	44.44	46.10	44.64	46.58	43.67

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

463

MARYLAND--Continued

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Ch 106. SITE ID.--393414077461801. PERMIT NUMBER.--WA-73-2095.

LOCATION.--Lat 39°34'14", long 77°46'18", Hydrologic Unit 02070004, at Fountain Rock School.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 69 ft; casing diameter 6 in., to 41 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with graphic water-level recorder from March 29, 1978 to June 19, 1981, Nov. 6, 1985 to May 3, 1987, and July 1, 1987 to current year.

DATUM.--Elevation of land surface is 520 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 1.45 ft above land surface.

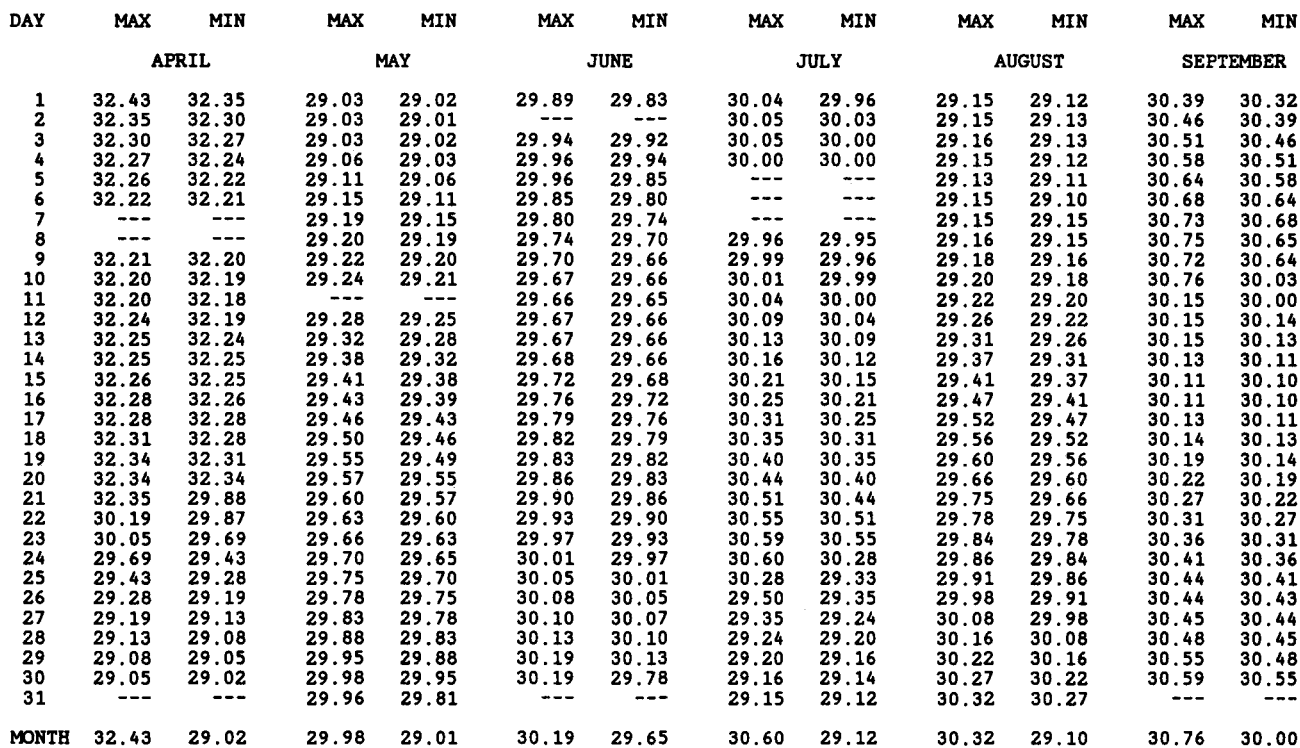
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--February 1978 to June 1981, April 1984 to current year.

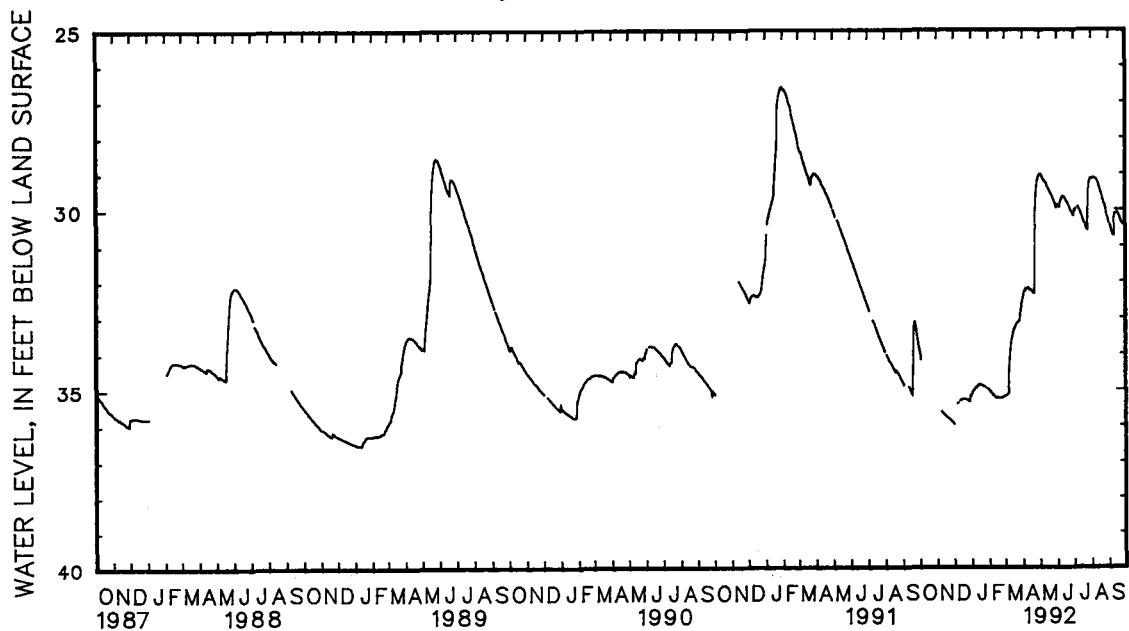
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.41 ft below land surface, April 23, 1984 and Apr. 23, 1987; lowest measured, 36.59 ft below land surface, Jan. 11, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	34.02	33.94	---	---	36.03	35.28	35.15	35.11	35.08	35.06	35.23	35.21
2	34.12	34.02	---	---	---	---	35.11	35.08	35.10	35.08	35.21	35.20
3	34.21	34.12	---	---	---	---	35.08	35.04	35.11	35.10	35.20	35.19
4	---	---	---	---	---	---	35.04	35.02	35.13	35.11	35.19	35.15
5	---	---	---	---	---	---	35.04	35.01	35.15	35.13	35.16	35.15
6	---	---	---	---	35.44	35.42	---	---	35.16	35.15	35.15	34.88
7	---	---	---	---	35.42	35.42	---	---	35.20	35.16	34.88	34.27
8	---	---	35.68	35.66	---	---	34.99	34.98	35.21	35.20	34.36	34.13
9	---	---	35.71	35.68	---	---	34.98	34.95	35.23	35.21	34.13	33.90
10	---	---	35.72	35.71	---	---	34.95	34.93	35.24	35.23	33.90	33.74
11	---	---	35.74	35.72	35.35	35.34	34.94	34.93	35.26	35.24	33.74	33.64
12	---	---	35.75	35.74	35.34	35.32	34.94	34.92	35.28	35.26	33.64	33.56
13	---	---	35.77	35.75	35.32	35.30	34.92	34.90	35.28	35.27	33.56	33.48
14	---	---	35.79	35.77	35.31	35.29	34.90	34.89	35.28	35.20	33.48	33.41
15	---	---	35.81	35.79	35.32	35.30	34.90	34.89	35.26	35.23	33.41	33.36
16	---	---	35.82	35.81	35.31	35.30	34.90	34.89	35.28	35.26	33.36	33.32
17	---	---	35.84	35.82	35.31	35.31	34.90	34.89	35.28	35.27	33.32	33.29
18	---	---	35.85	35.84	35.31	35.31	34.91	34.90	35.29	35.27	33.29	33.24
19	---	---	35.86	35.85	35.31	35.31	34.92	34.91	35.28	35.27	33.24	33.21
20	---	---	35.88	35.86	35.32	35.31	34.92	34.91	35.28	35.27	33.21	33.18
21	---	---	35.88	35.88	35.32	35.31	34.94	34.91	35.28	35.27	33.18	33.17
22	---	---	35.88	35.87	35.32	35.31	34.95	34.93	35.28	35.27	33.17	33.14
23	---	---	35.90	35.87	35.32	35.31	34.94	34.93	35.28	35.27	33.14	33.14
24	---	---	35.92	35.90	35.34	35.32	34.96	34.93	35.28	35.27	33.14	33.13
25	---	---	35.94	35.92	35.35	35.33	34.97	34.96	35.28	35.24	33.13	33.10
26	---	---	35.95	35.94	35.36	35.33	35.00	34.97	35.25	35.23	33.10	32.93
27	---	---	35.97	35.95	35.38	35.36	35.00	34.98	35.24	35.23	32.93	32.83
28	---	---	35.98	35.97	35.38	35.21	35.01	35.00	35.24	35.22	32.83	32.72
29	---	---	36.00	35.98	35.22	35.21	35.03	35.00	35.23	35.22	32.72	32.61
30	---	---	36.02	36.00	35.23	35.19	35.04	35.03	---	---	32.61	32.50
31	---	---	---	---	35.19	35.15	35.06	35.04	---	---	32.50	32.43
MONTH	34.21	33.94	36.02	35.66	36.03	35.15	35.15	34.89	35.29	35.06	35.23	32.43



Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA C1 82. SITE ID.--393402077434201. PERMIT NUMBER.--WA-73-2101.

LOCATION.--Lat 39°34'02", long 77°43'42", Hydrologic Unit 02070004, at Maryland Correction Institution, Hagerstown.

Owner: U.S. Geological Survey.

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

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 84 ft; casing diameter 6 in., to 32 ft; open hole.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel. Equipped with digital water-level recorder--60-minute recorder interval from April 25, 1978 to June 19, 1981.

DATUM.--Elevation of land surface is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of casing 2.30 ft above land surface.

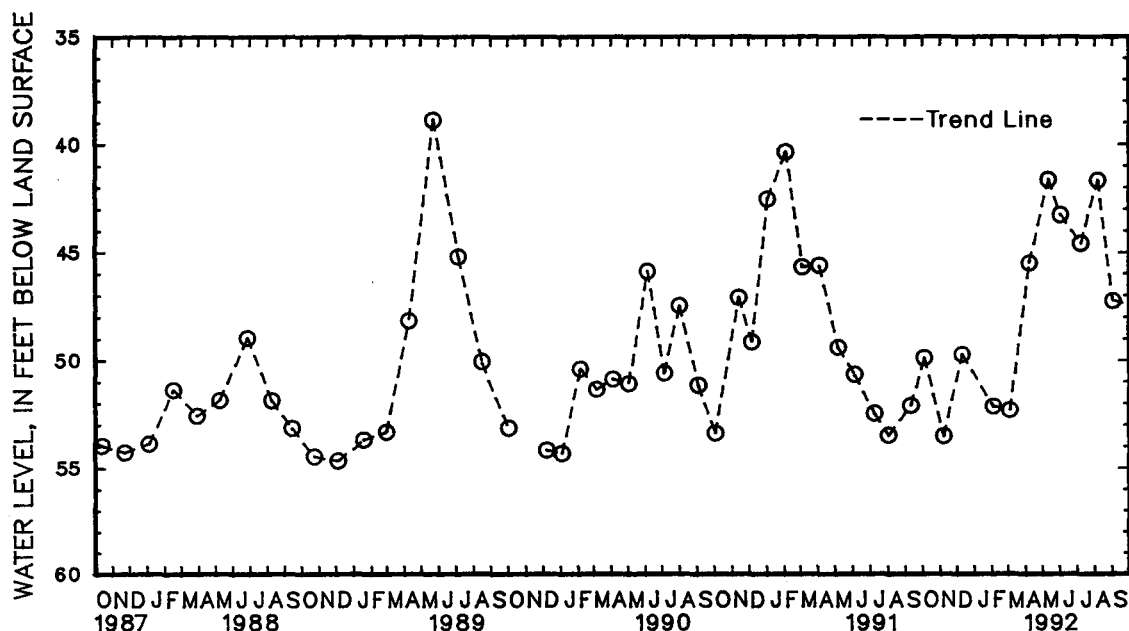
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--February 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.56 ft below land surface, Feb. 28, 1979;
lowest measured, 59.28 ft below land surface, Feb. 1, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 4	49.92	DEC 10	49.76	MAR 4	52.40	MAY 11	41.66	JUL 7	44.66	SEP 2	47.33
NOV 7	53.62	FEB 4	52.22	APR 8	45.52	JUN 2	43.31	AUG 6	41.70		
WATER YEAR 1992		HIGHEST	41.66	MAY 11, 1992		LOWEST	53.62	NOV 7, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WASHINGTON COUNTY--Continued

WELL NUMBER.--WA Dj 2. SITE ID.--392904077371501.

LOCATION.--Lat 39°29'04", long 77°37'15", Hydrologic Unit 02070004, at Turner's Gap on Alt. U.S. 40.

Owner: Russell Schwartz.

AQUIFER.--Weverton Formation of Lower Cambrian age. Aquifer code: 377WVRN.

WELL CHARACTERISTICS.--Dug, stone-lined, observation, water-table well, depth 61.3 ft; casing diameter 48 in.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 1,070 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of concrete cover, 0.25 ft above land surface.

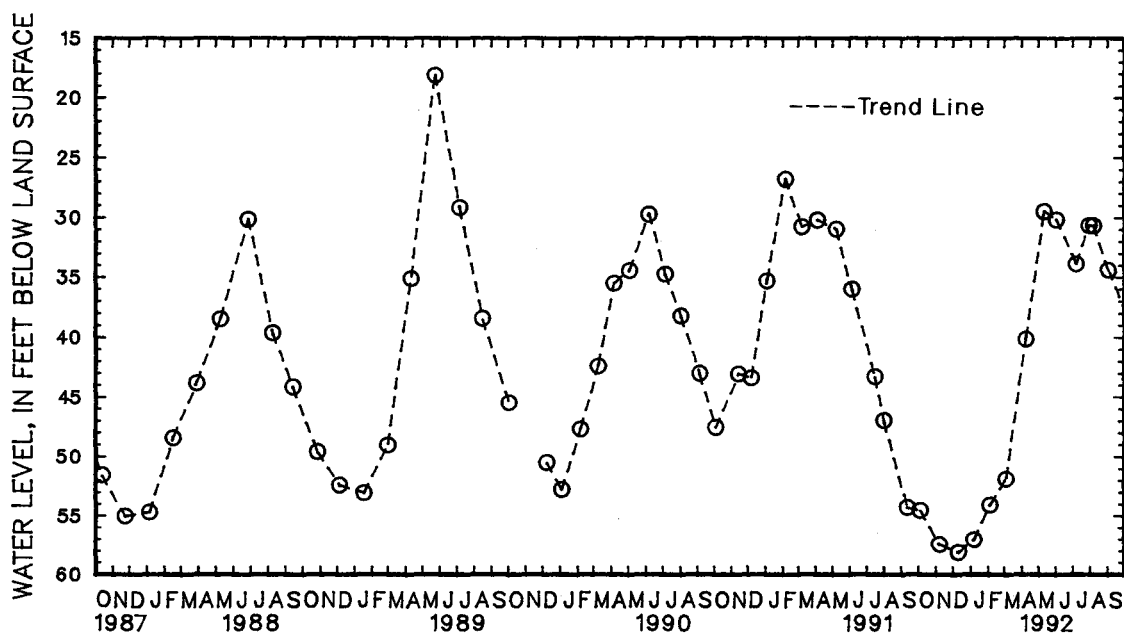
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--December 1956 to current year.

EXTREMES FOR PERIOD FOR RECORD.--Highest water level measured, 16.35 ft below land surface, April 23, 1984;
lowest measured, 58.88 ft below land surface, Oct. 5, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE. WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	54.64	JAN 7	57.07	APR 8	40.17	JUL 7	33.97	SEP 2	34.49
NOV 4	57.49	FEB 4	54.10	MAY 11	29.51	29	30.70		
DEC 10	58.15	MAR 4	51.89	JUN 2	30.20	AUG 6	30.72		
WATER YEAR 1992		HIGHEST	29.51	MAY 11, 1992		LOWEST	58.15	DEC 10, 1991	



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Ce 204. SITE ID.--382404075355401 PERMIT NUMBER.--WI-67-0191.

LOCATION.--Lat 38°24'04", long 75°35'54", Hydrologic Unit 02060007, north side of Naylor Mill Rd., near Salisbury.

Owner: City of Salisbury.

AQUIFER.--Beaverdam Sand of Pleistocene age. Aquifer code: 112BVDM.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 113 ft; casing diameter 8 in., to 109 ft; screen diameter 3 in. from 109 to 113 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 28 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 3.14 ft above land surface.

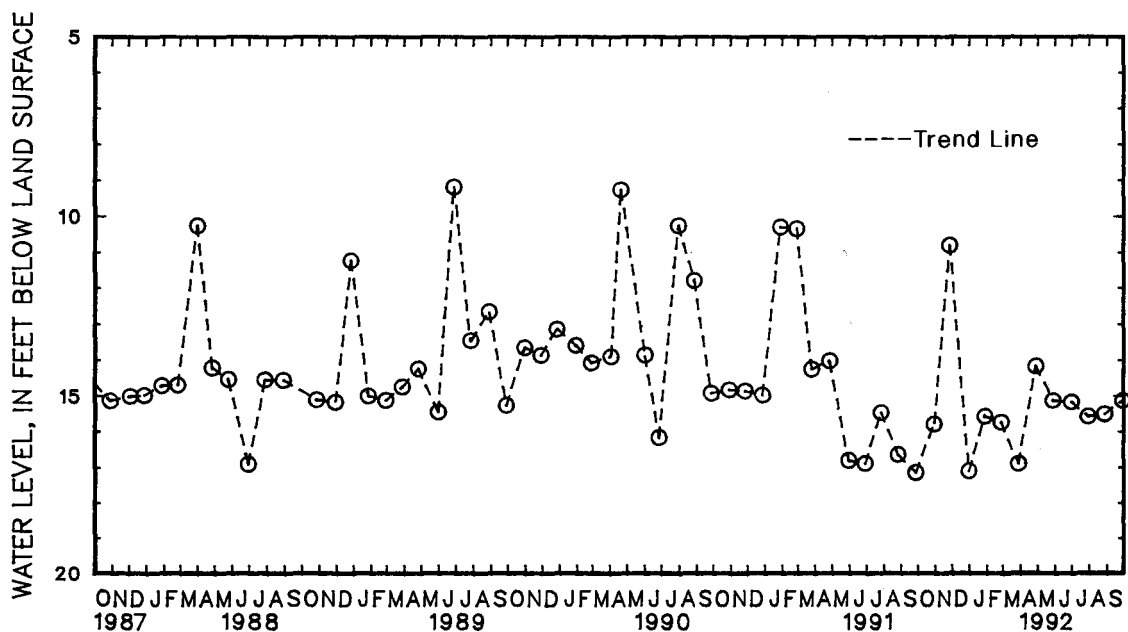
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--April 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.35 ft below land surface, April 27, 1967; lowest measured, 17.19 ft below land surface, Sept. 26, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	15.81	DEC 30	17.15	FEB 26	15.76	APR 27	14.18	JUN 29	15.20	AUG 27	15.55
NOV 26	10.81	JAN 28	15.60	MAR 27	16.94	MAY 27	15.16	JUL 29	15.62	SEP 28	15.16
WATER YEAR 1992		HIGHEST	10.81	NOV 26, 1991		LOWEST	17.15	DEC 30, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cf 3. SITE ID.--382037075310801.

LOCATION.--Lat 38°20'37", long 75°31'08", Hydrologic Unit 02060007, on Airport Rd., at Salisbury-Wicomico Airport.

Owner: Salisbury-Wicomico Airport.

AQUIFER.--Beaverdam Sand of Pleistocene age. Aquifer code: 112BVDM.

WELL CHARACTERISTICS.--Drilled, unused, water-table well, depth 109 ft; casing diameter 16 in., to 90 ft; screened from 90 to 110 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from March 24, 1948 to July 9, 1948, Aug. 2, 1949 to April 11, 1960, and Aug. 29, 1963 to Aug. 20, 1968.

DATUM.--Elevation of land surface is 44.79 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of casing, 2.00 ft above land surface.

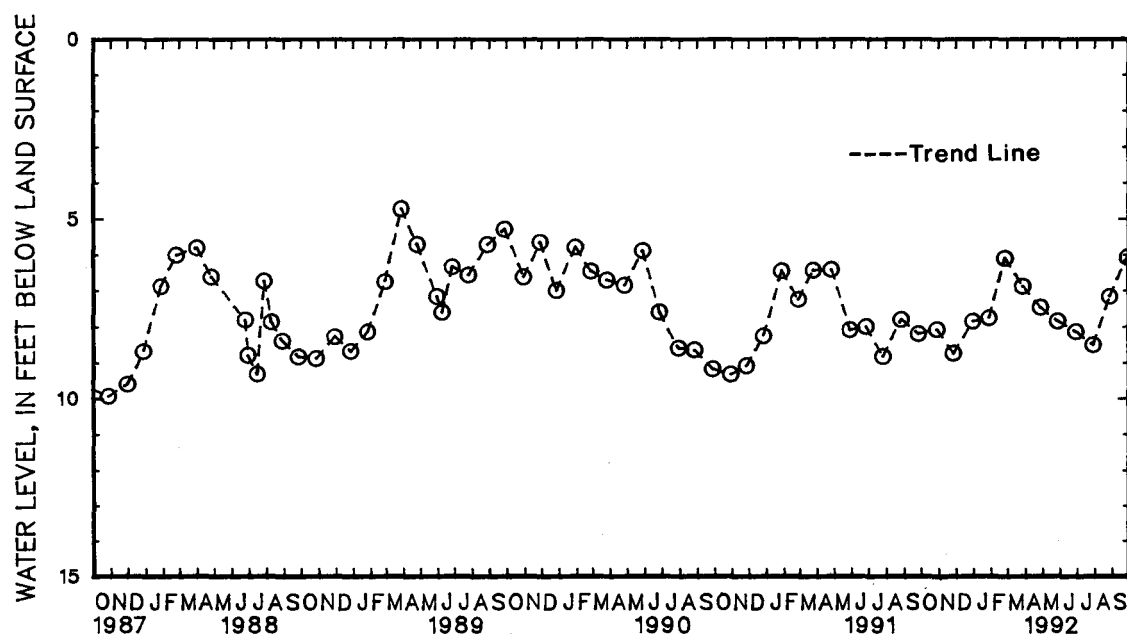
REMARKS.--Maryland Water-Level Network observation well. Water level reported 7.2 ft below land surface, Oct. 26, 1942.

PERIOD OF RECORD.--September 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.18 ft below land surface, May 8, 1958; lowest measured, 13.44 ft below land surface, Sept. 18, 1947.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.13	DEC 30	7.88	FEB 26	6.10	APR 27	7.50	JUN 29	8.18	AUG 27	7.18
NOV 26	8.79	JAN 28	7.79	MAR 27	6.90	MAY 27	7.89	JUL 29	8.55	SEP 28	6.07
WATER YEAR 1992		HIGHEST	6.07	SEP 28, 1992	LOWEST	8.79	NOV 26, 1991				



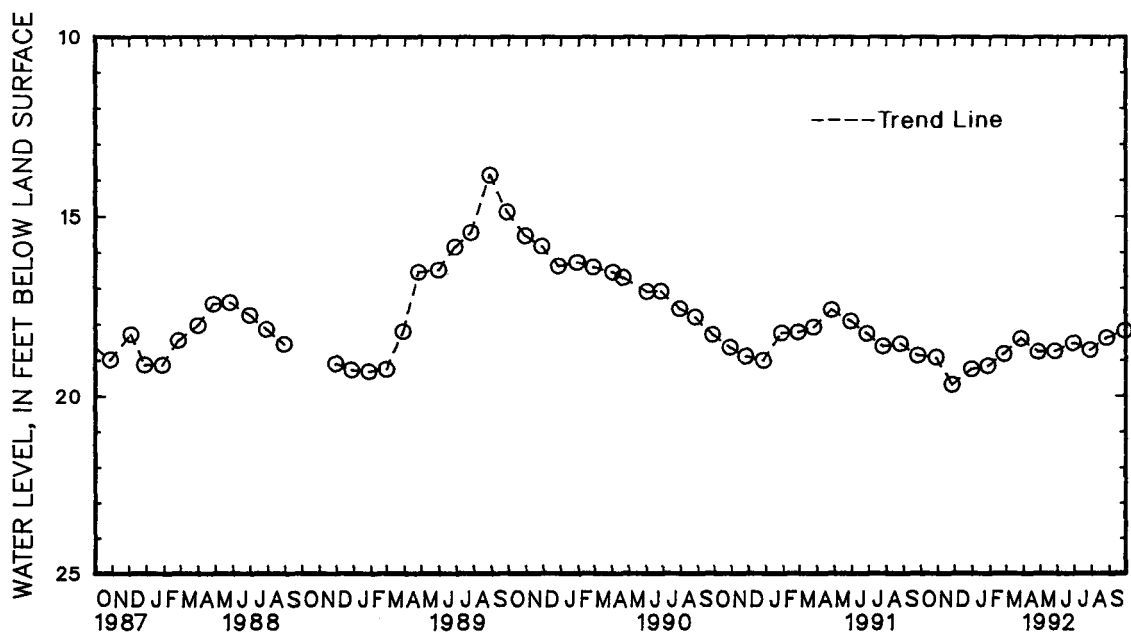
5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS
MARYLAND--Continued
WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cf 147. SITE ID.--382429075344501.
LOCATION.--Lat 38°24'29", long 75°34'45", Hydrologic Unit 02060007, south side of Naylor Mill Rd., near Salisbury.
Owner: A. S. Abell Co.
AQUIFER.--Beaverdam Sand of Pleistocene age. Aquifer code: 112BVDM.
WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 80 ft; casing diameter 2 in., to 80 ft; casing slotted from 60 to 80 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 41.83 ft above National Geodetic Vertical Datum of 1929.
Measuring point: Top of casing at land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--November 1964; March 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.78 ft below land surface, June 18, 1979; lowest measured, 19.74 ft below land surface, Nov. 26, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	18.98	DEC 30	19.29	FEB 26	18.86	APR 27	18.80	JUN 29	18.55	AUG 27	18.40
NOV 26	19.74	JAN 28	19.20	MAR 27	18.42	MAY 27	18.78	JUL 29	18.75	SEP 28	18.20
WATER YEAR 1992		HIGHEST	18.20	SEP 28, 1992	LOWEST	19.74	NOV 26, 1991				



GROUND-WATER LEVELS
MARYLAND--Continued
WICOMICO COUNTY--Continued

WELL NUMBER.--WI Cg 20. SITE ID.--382329075263701.

LOCATION.--Lat 38°23'29", long 75°26'37", Hydrologic Unit 02060009, 1.45 mi east of Parsonsburg on south side of MD Rt. 346.

Owner: Maryland State Highway Administration.

AQUIFER.--Parsonsburg Sand of Pleistocene age. Aquifer code: 112PRBG.

WELL CHARACTERISTICS.--Driven, unused, water-table well, depth 25 ft, casing diameter 1.25 in., to unknown depth.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 68 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of 2 in. sleeve, 0.17 ft above land surface.

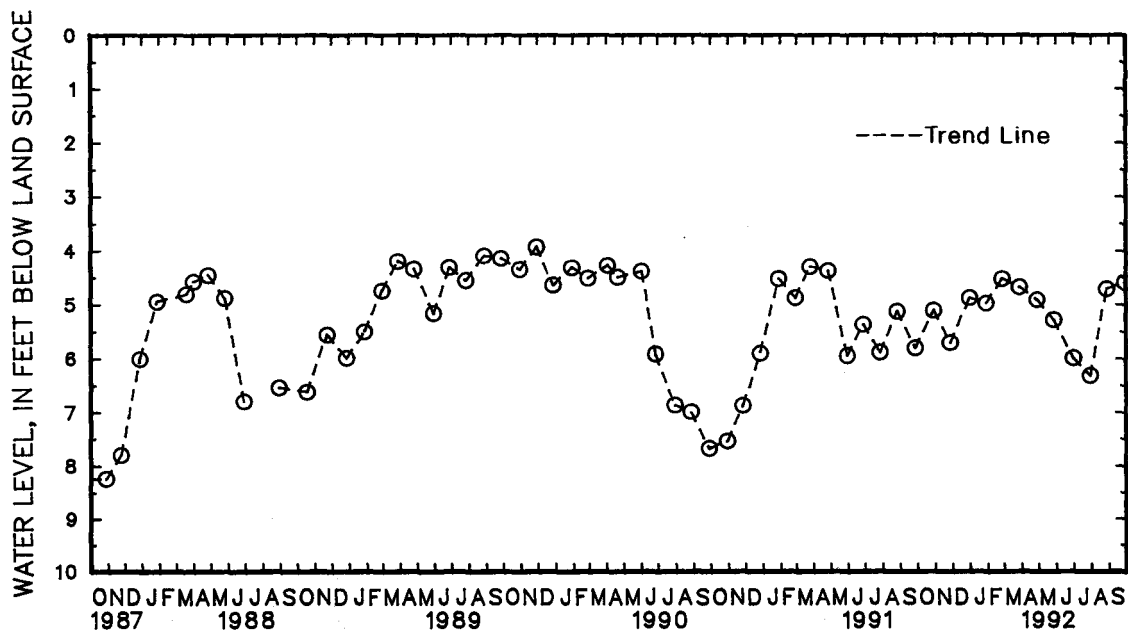
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.84 ft below land surface, Jan. 31, 1950;
lowest measured, 8.68 ft below land surface, Oct. 10, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	5.13	DEC 30	4.89	FEB 26	4.53	APR 27	4.93	JUN 29	6.03	AUG 27	4.72
NOV 26	5.74	JAN 28	5.00	MAR 27	4.69	MAY 27	5.31	JUL 29	6.35	SEP 28	4.60
WATER YEAR 1992		HIGHEST	4.53	FEB 26, 1992		LOWEST	6.35	JUL 29, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ae 24. SITE ID.--382621075174202. PERMIT NUMBER.--WO-73-0515.

LOCATION.--Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060010, 2.75 mi north of Whaleysville.

Owner: U.S. Geological Survey.

AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 122OCNC.

WELL CHARACTERISTICS. --Drilled, observation, artesian well, depth 200 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in. from 190 to 200 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of 4 in. coupling, 4.4 ft above land surface.

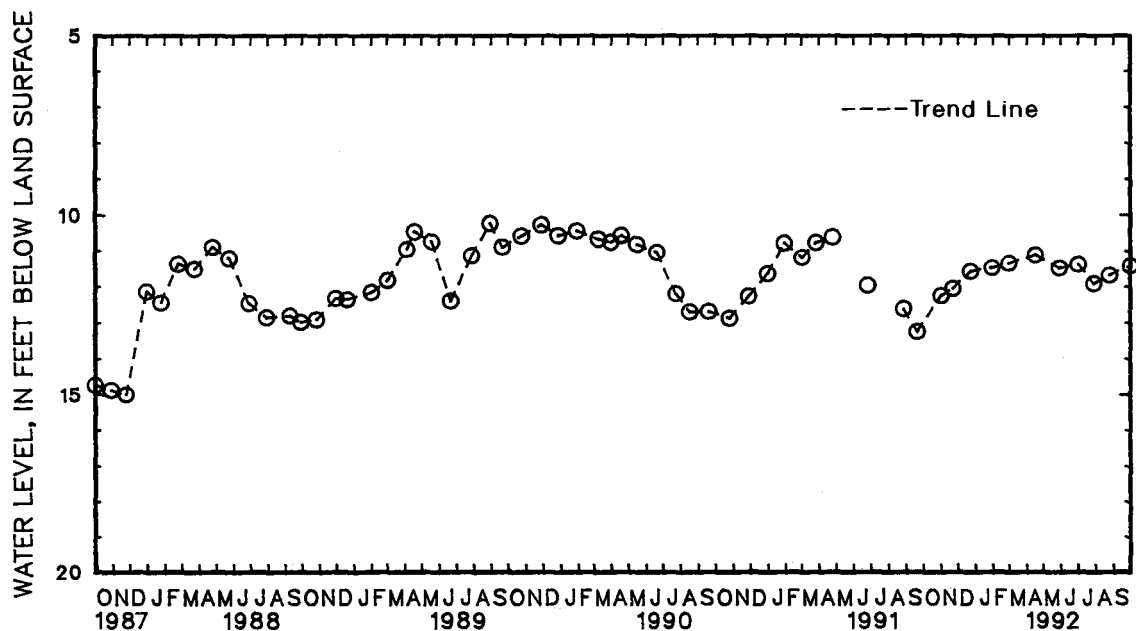
REMARKS.--Ocean City ground-water monitoring network well.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.49 ft below land surface, May 31, 1978;
lowest measured, 15.06 ft below land surface, Nov. 24, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	12.27	DEC 23	11.58	FEB 28	11.37	MAY 28	11.49	JUL 28	11.94	SEP 30	11.43
NOV 21	12.07	JAN 29	11.48	APR 15	11.12	JUN 30	11.39	AUG 25	11.70		
WATER YEAR 1992		HIGHEST	11.12	APR 15, 1992		LOWEST	12.27	OCT 31, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO A_e 25. SITE ID.--382621075174203. PERMIT NUMBER.--WO-73-0514.

LOCATION.--Lat 38°26'21", long 75°17'42", Hydrologic Unit 02060010, 2.75 mi north of Whaleysville.

Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 118 ft; casing diameter 4 in., to 108 ft; screened diameter 4 in. from 108 to 118 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of 4 in. coupling, 3.6 ft above land surface.

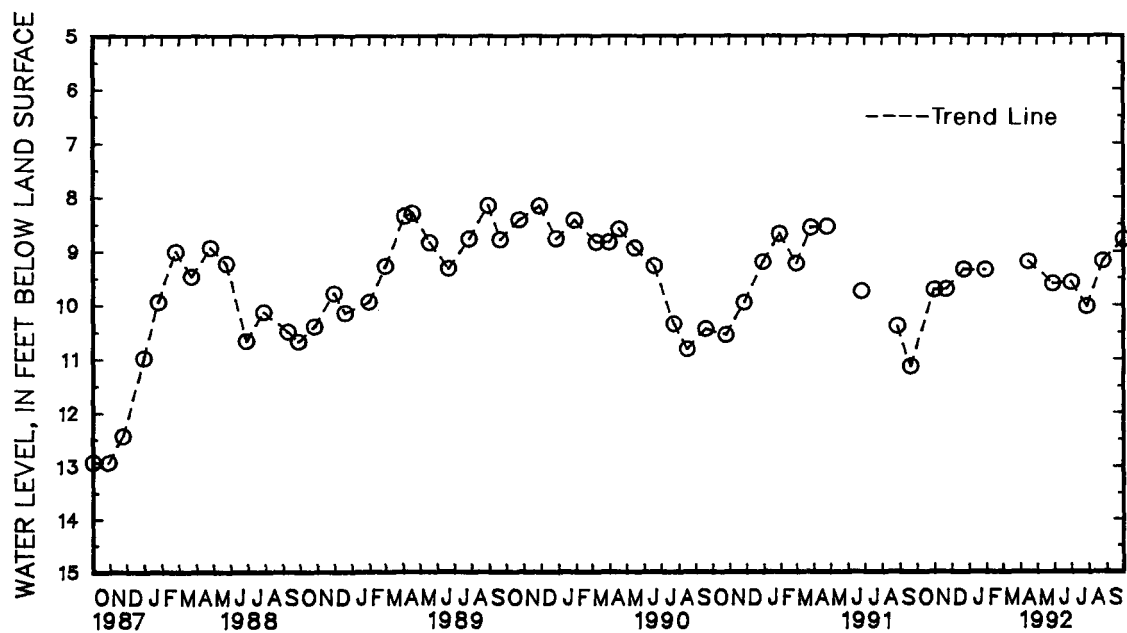
REMARKS.--Ocean City ground-water monitoring network well.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.79 ft below land surface, Nov. 20, 1975; lowest measured, 12.96 ft below land surface, Oct. 1 and 29, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	9.73	DEC 23	9.35	APR 15	9.20	JUN 30	9.60	AUG 25	9.19
NOV 21	9.72	JAN 29	9.36	MAY 28	9.63	JUL 28	10.05	SEP 30	8.78
WATER YEAR 1992		HIGHEST	8.78	SEP 30, 1992	LOWEST	10.05	JUL 28, 1992		



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 6. SITE ID.--382632075031801. PERMIT NUMBER.--WO-70-0009.
 LOCATION.--Lat 38°26'32", long 75°03'18", Hydrologic Unit 02060010, at east end of 137th St., Ocean City.
 Owner: U.S. Geological Survey.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 357 ft; casing diameter 4 in., to 347 ft; screen diameter 4 in. from 347 to 357 ft.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape from June 1972 to March 1985. Equipped with digital water-level recorder--15-minute recording interval, March 1985 to current year.
 DATUM.--Elevation of land surface is 6.35 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of shelter floor, 3.27 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.
 Missing data due to recorder malfunction.
 PERIOD OF RECORD.--June 1972 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.32 ft below land surface, April 8, 1988; lowest measured, 52.46 ft below land surface, July 24, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26.11	19.99	31.15	17.58	16.15	14.17	18.27	12.79	16.82	9.56	17.77	16.24
2	25.25	19.56	31.94	16.32	16.07	14.35	17.81	11.86	21.53	9.60	17.80	9.83
3	34.13	22.20	33.08	22.43	14.67	13.12	17.22	10.34	23.49	9.38	15.81	8.33
4	33.88	32.06	33.11	19.55	14.44	11.67	20.61	9.68	26.59	8.96	16.26	12.73
5	36.81	32.25	29.81	17.74	18.73	11.89	18.73	9.89	19.45	9.53	16.33	9.66
6	36.86	32.95	28.66	17.37	18.90	12.76	16.17	10.12	16.20	9.26	16.10	9.70
7	33.80	31.49	28.81	16.53	18.52	14.51	16.78	10.51	15.68	8.43	16.12	14.65
8	32.79	25.04	28.00	15.59	18.76	11.95	16.91	10.73	15.66	13.14	16.61	15.47
9	32.70	30.78	31.05	18.55	18.00	16.99	20.02	10.46	16.87	13.21	16.53	15.41
10	32.67	30.73	29.92	17.32	17.52	11.48	20.48	9.81	16.91	10.48	16.09	13.81
11	34.13	31.22	29.30	17.19	17.32	11.70	19.45	9.92	16.84	9.81	15.92	8.99
12	36.03	31.24	29.22	16.88	16.97	10.03	25.01	15.72	19.02	9.32	16.29	10.09
13	34.07	32.43	28.05	16.91	17.37	16.10	19.19	9.85	25.03	9.19	11.48	10.06
14	33.05	20.47	28.16	14.79	17.42	10.68	17.11	14.90	16.48	9.11	14.71	10.50
15	32.74	19.72	16.78	13.34	18.01	11.00	20.70	8.93	16.65	15.52	13.06	10.80
16	32.41	18.24	17.40	13.86	17.93	11.47	17.17	12.04	17.71	15.80	12.73	10.89
17	30.70	18.04	16.54	15.15	17.23	9.96	17.80	12.01	17.76	16.46	12.14	9.72
18	31.83	29.49	16.31	13.16	16.89	10.23	18.42	11.68	17.52	8.53	11.64	10.35
19	33.24	31.16	28.30	14.91	16.89	10.00	18.46	12.26	16.28	14.78	11.23	8.83
20	34.27	20.44	29.24	17.13	16.89	10.01	17.00	11.09	16.65	9.45	10.67	8.49
21	32.61	18.11	28.43	14.69	16.90	10.70	16.92	10.85	20.91	8.88	12.13	10.14
22	31.18	19.39	15.63	14.09	17.17	10.80	18.31	9.72	18.75	15.82	13.14	10.57
23	31.79	19.47	15.01	13.50	16.75	10.49	16.91	10.43	17.36	13.10	11.36	10.46
24	32.47	20.74	14.84	13.16	16.74	9.91	17.33	10.47	16.49	15.47	11.60	8.73
25	32.61	18.75	14.99	13.66	20.75	10.18	17.71	16.62	15.59	9.55	12.64	10.93
26	33.78	23.01	15.20	13.99	17.04	9.76	17.60	10.19	15.39	8.87	12.84	9.58
27	34.03	23.44	14.97	13.78	16.85	9.68	16.85	10.11	15.75	8.83	12.67	9.55
28	32.07	21.22	14.71	13.65	17.14	9.90	---	---	15.46	8.21	13.92	10.86
29	30.69	18.96	14.79	13.96	17.03	9.93	---	---	16.67	12.43	15.17	10.55
30	28.64	17.48	15.05	13.88	17.00	10.12	17.11	9.45	---	---	12.59	9.61
31	27.22	16.25	---	---	16.75	9.80	16.17	9.77	---	---	11.13	8.87
MONTH	36.86	16.25	33.11	13.16	20.75	9.68	25.01	8.93	26.59	8.21	17.80	8.33

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5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 35. SITE ID.--382635075030601. PERMIT NUMBER.--WO-73-0516.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City.

Owner: U.S. Geological Survey.

AQUIFER.--Choptank Formation of Miocene age. Aquifer code: 122CPNK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 726 ft; casing diameter 4 in., to 726 ft; screen diameter 2 in. from 716 to 726 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 13.99 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 4 in. coupling, 3.7 ft above land surface.

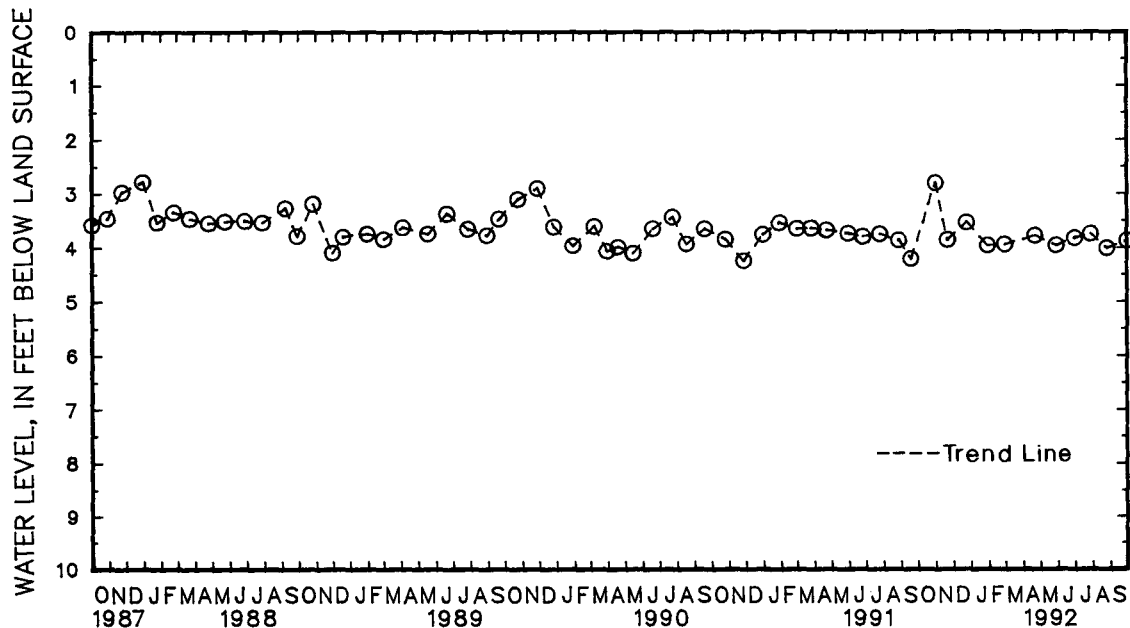
REMARKS.--Ocean City ground-water monitoring network well. Water levels may be affected by nearby pumping.
PERIOD OF RECORD --October 1975 to current year.

PERIOD OF RECORD.--October 1975 to current year.
EXTENTS FOR PERIOD OF RECORD. Highest extent 1

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.90 ft below land surface, March 10, 1976; lowest measured, 10.26 ft below land surface, Oct. 28, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL		WATER LEVEL	
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	2.81	DEC 23	3.56	FEB 28	3.97	MAY 28	3.99	JUL 28	3.77	SEP 30	3.90
NOV 21	3.88	JAN 29	3.99	APR 21	3.80	JUN 30	3.85	AUG 25	4.04		
WATER YEAR 1992		HIGHEST	2.81	OCT 31, 1991		LOWEST	4.04	AUG 25, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 36. SITE ID.--382635075030602. PERMIT NUMBER.--WO-73-0518.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City.

Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 430 ft; casing diameter 4 in., to 420 ft; screen diameter 2 in. from 420 to 430 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 14.32 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 4 in. coupling, 1.08 ft above land surface.

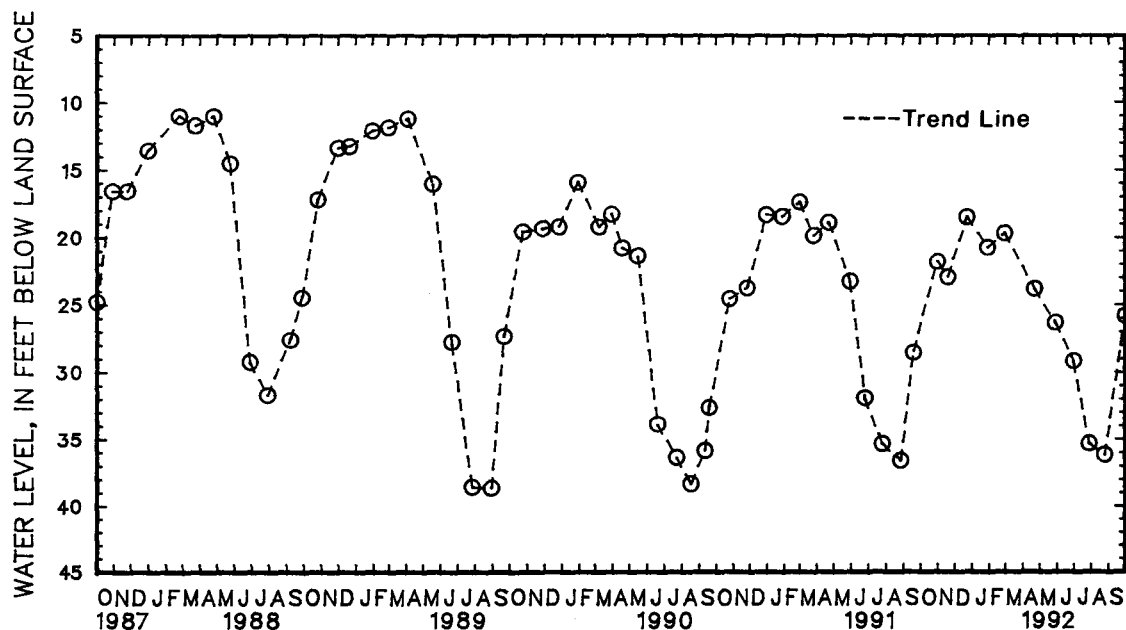
REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.61 ft below land surface, April 18, 1984; lowest measured, 38.75 ft below land surface, Aug. 30, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	21.82	DEC 23	18.52	FEB 28	19.73	MAY 28	26.45	JUL 28	35.47	SEP 30	25.85
NOV 19	23.00	JAN 29	20.80	APR 21	23.92	JUN 30	29.32	AUG 25	36.29		
WATER YEAR 1992		HIGHEST	18.52	DEC 23, 1991	LOWEST	36.29	AUG 25, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Ah 37. SITE ID.--382635075030603. PERMIT NUMBER.--WO-73-0517.

LOCATION.--Lat 38°26'35", long 75°03'06", Hydrologic Unit 02060010, at east end of 137th St., Ocean City.

Owner: U.S. Geological Survey.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 478 ft; casing diameter 4 in., to 468 ft; screen diameter 2 in. from 468 to 478 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 13.89 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Top of 4 in. casing, 2.75 ft above land surface.

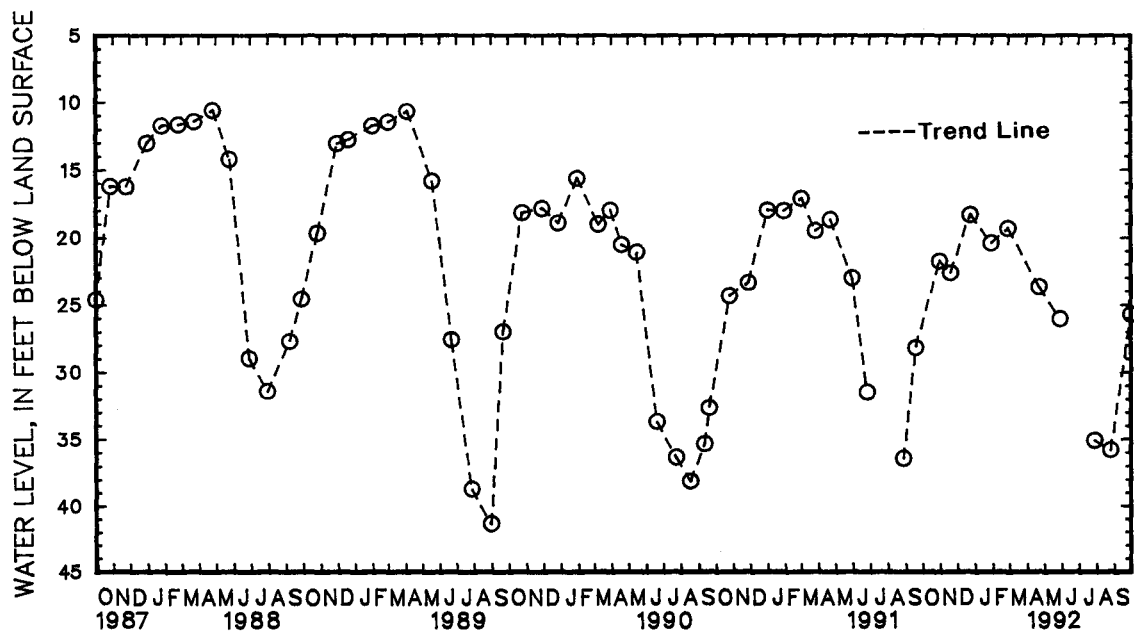
REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.58 ft below land surface, Feb. 10, 1977;
lowest measured, 41.42 ft below land surface, Aug. 30, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 31	21.77	DEC 23	18.31	FEB 28	19.37	MAY 28	26.17	AUG 25	35.96		
NOV 19	22.67	JAN 29	20.47	APR 21	23.79	JUL 28	35.25	SEP 30	25.74		
WATER YEAR 1992		HIGHEST	18.31	DEC 23, 1991		LOWEST	35.96	AUG 25, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 1. SITE ID.--382022075072401.

LOCATION.--Lat 38°20'22", long 75°07'24", Hydrologic Unit 02060010, 0.4 mi east of Herring Creek on U.S. Rt. 50.
Owner: MD State Highway Administration.

AQUIFER.--Sinepuxent Formation of Pleistocene age. Aquifer code: 112SNPX.

WELL CHARACTERISTICS.--Driven, water-table well, depth 14 ft; casing diameter 1.25 in., to 14 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing, 0.25 ft above land surface.

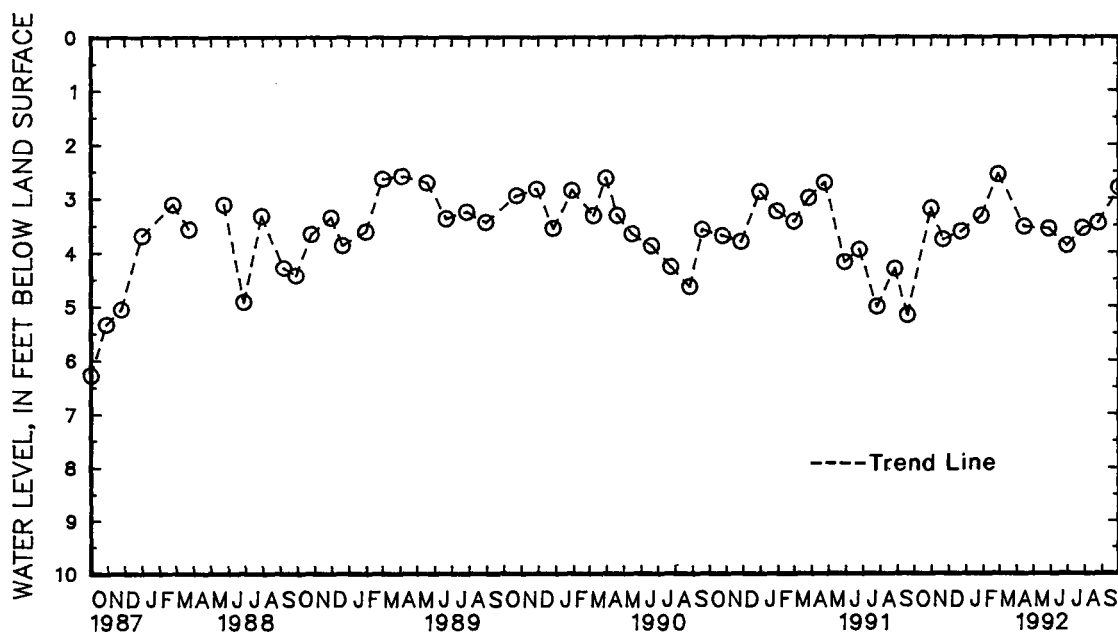
REMARKS.--Maryland Water-Level Network observation well.

PERIOD OF RECORD.--August 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.41 ft below land surface, March 8, 1962;
lowest measured, 8.61 ft below land surface, May 14, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	3.20	DEC 23	3.62	FEB 28	2.56	MAY 28	3.58	JUL 28	3.57	SEP 30	2.81
NOV 21	3.77	JAN 29	3.33	APR 15	3.54	JUN 30	3.90	AUG 25	3.47		
WATER YEAR 1992		HIGHEST	2.56	FEB 28, 1992		LOWEST	3.90	JUN 30, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

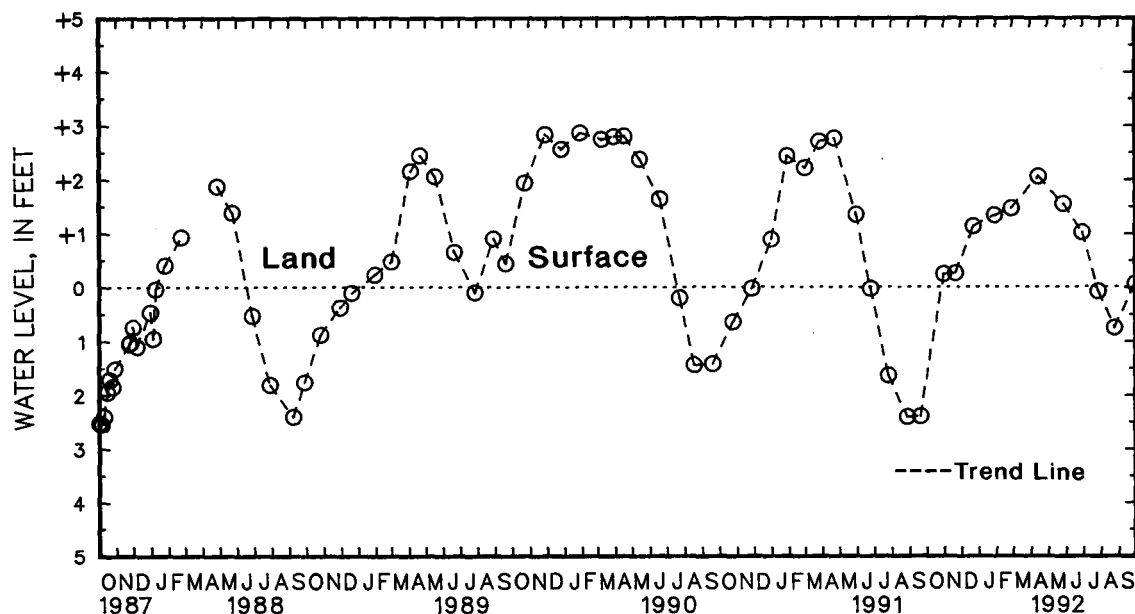
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 15. SITE ID.--382359075094501. PERMIT NUMBER.--WO-78-0066.
 LOCATION.--Lat 38°23'59", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines.
 Owner: Ocean Pines.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 318 ft; casing diameter 6 in., to 288 ft; screen diameter 6 in. from 288 to 318 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 7 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of 6 in. casing, 5.94 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels may be affected by nearby pumping.
 PERIOD OF RECORD.--September 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.13 ft above land surface, Feb. 29, 1972; lowest measured, 3.00 ft below land surface, Sept. 5, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE LAND SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 31	+0.25	DEC 23	+1.14	FEB 28	+1.47	MAY 28	+1.55	JUL 28	.08	SEP 30	+0.06	
NOV 21	+0.26	JAN 29	+1.34	APR 15	+2.06	JUN 30	+1.02	AUG 25	.76			
WATER YEAR 1992		HIGHEST	+2.06	APR 15, 1992		LOWEST	.76	AUG 25, 1992				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

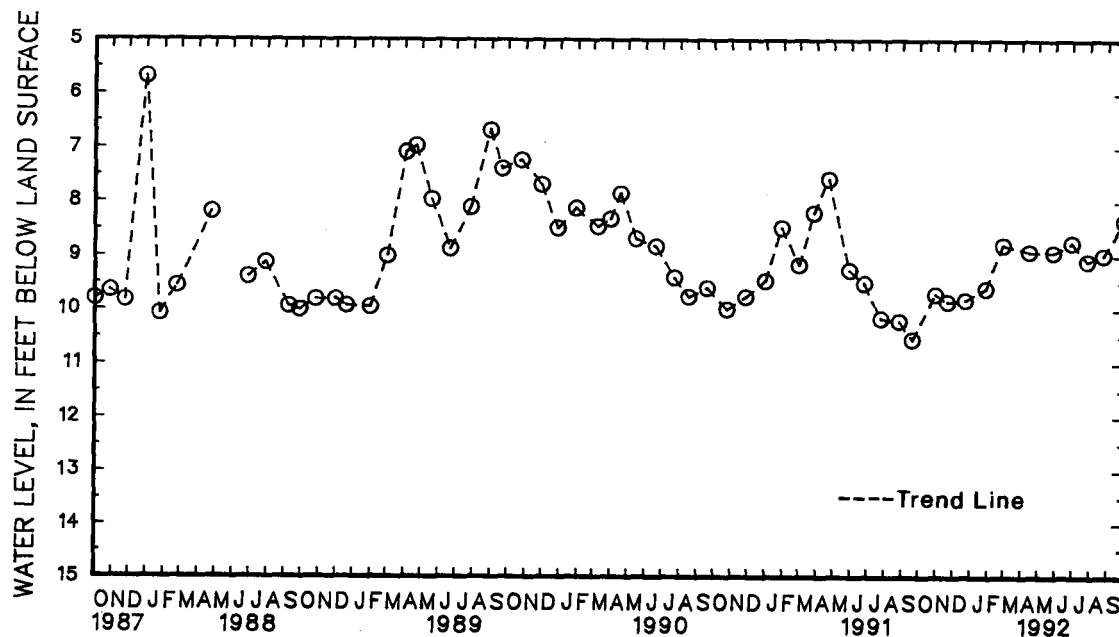
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 45. SITE ID.--382358075094501. PERMIT NUMBER.--WO-78-0066.
 LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines.
 Owner: Ocean Pines.
 AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 112CLMB.
 WELL CHARACTERISTICS.--Drilled, observation well, depth 77 ft; casing diameter 2 in., to 56 ft;
 screen diameter 2 in. from 56 to 77 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of 2 in. casing, 1.7 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well.
 PERIOD OF RECORD.--October 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.22 ft below land surface, Jan. 8, 1971;
 lowest measured, 10.59 ft below land surface, Sept. 19, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	9.73	DEC 23	9.84	FEB 28	8.80	MAY 28	8.94	JUL 28	9.11	SEP 30	8.35
NOV 21	9.87	JAN 29	9.62	APR 15	8.93	JUN 30	8.76	AUG 25	9.00		
WATER YEAR 1992		HIGHEST	8.35	SEP 30, 1992	LOWEST	9.87	NOV 21, 1991				



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

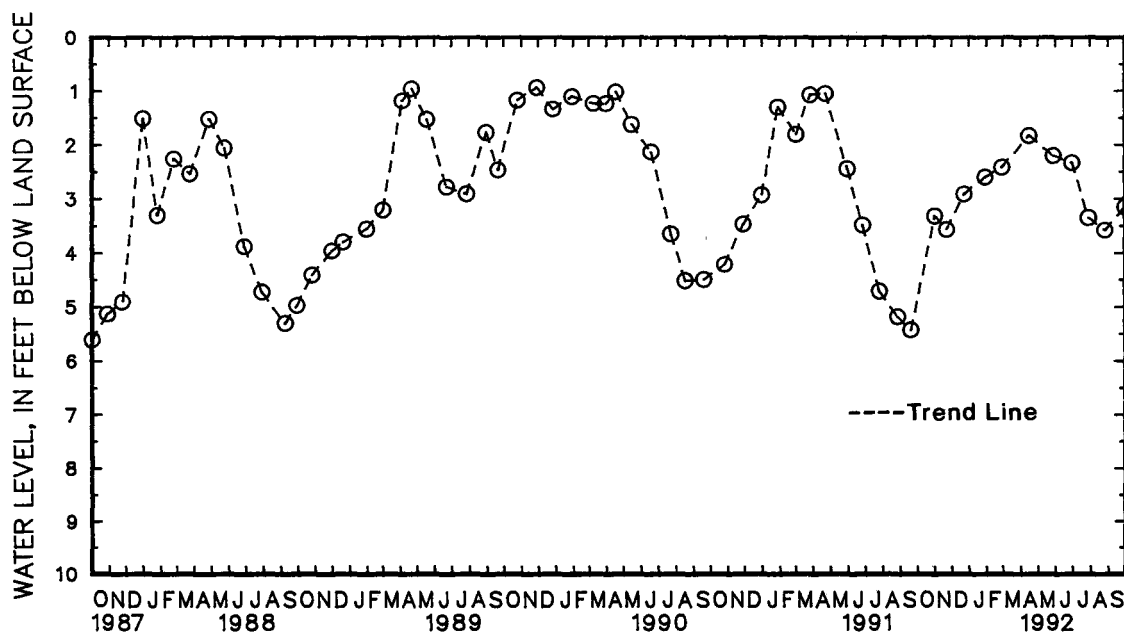
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg. 46. SITE ID.--382358075094502 PERMIT NUMBER.--WO-78-0066
 LOCATION.--Lat 38°23'58", long 75°09'45", Hydrologic Unit 02060010, south side of Beauchamp Rd. at Ocean Pines.
 Owner: Ocean Pines.
 AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122PCMK.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 194 ft; casing diameter 6 in., to 164 ft; screen diameter 6 in. from 164 to 194 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of 2 in. coupling, 2.5 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels maybe affected by nearby pumping.
 PERIOD OF RECORD.--October 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.22 ft above land surface, April 27, 1983; lowest measured, 5.74 ft below land surface, Aug. 26, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	3.32	DEC 23	2.92	FEB 28	2.42	MAY 28	2.20	JUL 28	3.36	SEP 30	3.17
NOV 21	3.57	JAN 29	2.60	APR 15	1.83	JUN 30	2.34	AUG 25	3.60		
WATER YEAR 1992		HIGHEST	1.83	APR 15, 1992		LOWEST	3.60	AUG 25, 1992			



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

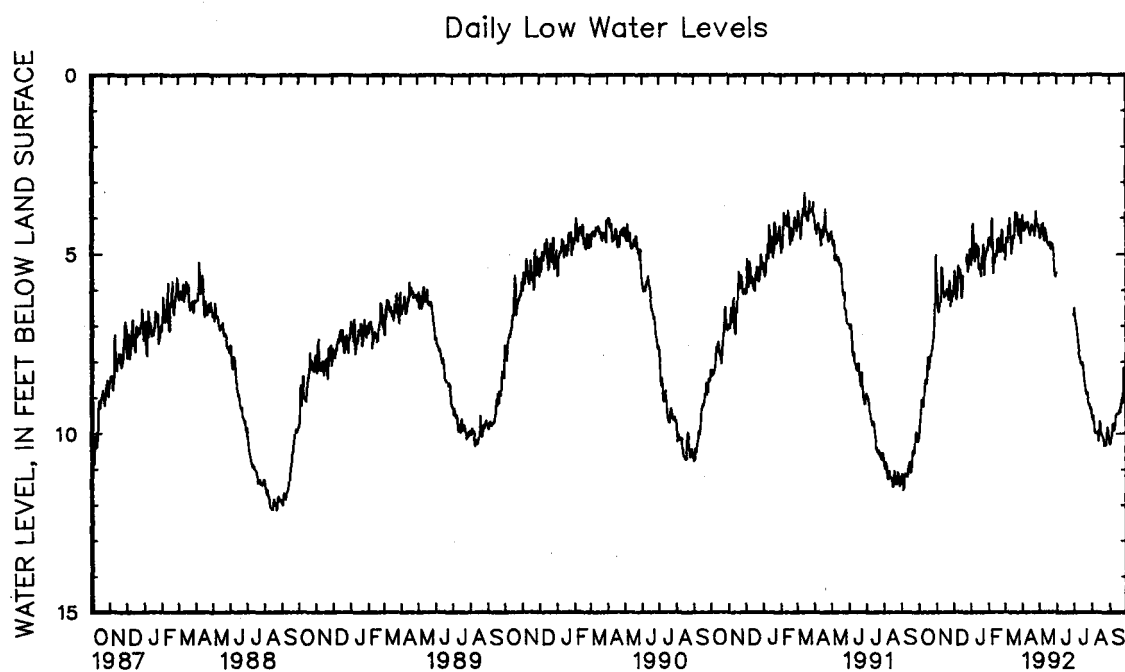
WELL NUMBER.--WO Bg 47. SITE ID.--382325075063301. PERMIT NUMBER.--WO-73-0521.
 LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight.
 Owner: U.S. Geological Survey.
 AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 122OCNC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 268 ft; casing diameter 4 in., to 258 ft; screen diameter 4 in. from 258 to 268 ft.
 INSTRUMENTATION.--Periodic measurements with chalked steel tape September 1975 to July 1985. Equipped with digital water-level recorder--60-minute recording interval from July 1985 to current year.
 DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of recorder shelf, 4.07 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--September 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.47 ft below land surface, Jan. 4, 1992; lowest measured, 12.72 ft below land surface, Aug. 26, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.01	9.23	5.68	4.82	5.91	5.34	5.15	4.29	4.56	3.85	4.97	4.44
2	9.92	9.19	6.09	5.26	5.81	5.13	5.29	4.55	4.62	3.91	5.17	4.19
3	9.70	8.87	6.38	5.78	5.48	4.55	5.01	3.97	4.60	3.84	4.56	3.91
4	9.50	8.80	6.57	5.89	5.93	4.55	4.21	2.47	4.54	3.83	4.56	4.00
5	9.32	8.55	6.62	5.93	6.21	5.63	4.16	3.36	4.76	4.11	4.61	4.06
6	9.06	8.40	6.51	5.75	6.27	5.65	4.56	3.86	4.81	3.79	4.67	3.88
7	9.12	8.44	6.38	5.61	6.05	5.15	4.93	4.28	4.17	3.39	4.25	3.37
8	9.24	8.55	6.33	5.50	5.84	5.20	5.20	4.65	4.02	3.33	4.24	3.35
9	9.25	8.55	6.03	5.14	5.65	4.89	5.11	4.36	5.00	3.67	4.34	3.71
10	9.08	8.29	5.37	4.44	5.33	4.60	4.71	4.13	5.55	4.78	4.01	3.58
11	8.74	7.89	5.41	4.58	5.41	4.82	4.87	4.30	5.14	4.71	4.50	3.15
12	8.52	7.81	6.02	5.40	5.64	5.03	4.97	4.44	5.25	4.61	4.98	4.10
13	8.56	7.86	6.10	5.57	5.46	4.97	4.78	4.37	5.11	4.55	4.85	4.38
14	8.61	7.95	6.21	5.73	5.72	4.97	4.83	3.90	5.00	4.18	4.71	3.99
15	8.51	7.78	6.14	5.63	6.23	5.51	5.41	4.58	5.06	4.08	4.58	3.95
16	8.24	7.56	6.11	5.69	6.19	5.80	5.43	4.75	4.61	3.78	4.52	3.85
17	7.88	7.05	6.07	5.57	5.94	5.13	5.42	4.61	4.95	4.27	4.48	3.84
18	8.21	7.72	6.09	5.40	5.62	4.88	5.39	4.72	4.89	3.92	4.54	3.72
19	8.17	7.54	5.99	5.37	---	---	5.62	4.81	4.57	3.82	4.19	3.13
20	8.01	7.40	6.15	5.51	---	---	5.33	4.37	4.80	3.93	3.84	3.16
21	7.87	7.21	6.16	5.47	---	---	5.10	4.21	4.93	4.24	4.08	3.21
22	7.81	7.13	6.27	5.36	---	---	4.95	4.24	4.94	4.36	4.04	3.25
23	7.82	7.07	5.93	5.13	---	---	4.74	3.77	4.88	4.18	3.86	3.10
24	7.63	6.84	5.75	4.79	5.01	4.14	5.14	3.70	4.52	4.06	4.33	3.31
25	7.45	6.61	6.11	5.30	5.25	4.52	5.59	5.00	4.33	3.69	4.48	3.88
26	7.37	6.57	6.46	5.80	5.30	4.70	5.18	4.67	4.35	3.56	4.21	3.67
27	7.21	6.36	6.32	5.60	5.49	4.78	5.02	4.48	4.91	3.88	4.04	3.18
28	6.99	6.02	6.06	5.48	5.36	4.90	4.94	4.44	4.94	4.29	4.41	3.68
29	6.41	5.54	6.19	5.72	5.21	4.52	4.86	4.16	4.78	4.09	4.69	4.16
30	5.85	4.89	6.09	5.43	4.87	4.30	4.90	4.32	---	---	4.69	3.70
31	5.02	4.19	---	---	4.85	4.11	4.79	3.99	---	---	4.05	3.49
MONTH	10.01	4.19	6.62	4.44	6.27	4.11	5.62	2.47	5.55	3.33	5.17	3.10

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bg 47--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.02	3.35	4.34	3.69	5.51	5.51	6.69	5.80	9.49	8.63	10.31	9.60
2	3.92	3.34	4.55	3.82	---	---	6.52	5.78	9.58	8.90	10.27	9.55
3	4.29	3.67	4.55	3.66	---	---	6.75	5.80	9.64	9.01	10.14	9.47
4	4.34	3.61	4.44	3.65	---	---	6.87	6.03	9.53	8.91	10.09	9.41
5	4.34	3.66	4.28	3.46	---	---	6.95	6.22	9.74	9.13	9.95	9.16
6	4.30	3.66	4.20	3.39	---	---	7.06	6.39	9.99	9.30	9.74	9.04
7	4.14	3.50	4.18	3.40	---	---	7.29	6.63	10.01	9.32	9.82	9.20
8	4.15	3.31	4.15	3.36	---	---	7.53	6.94	9.99	9.26	9.92	9.28
9	4.16	3.47	4.56	3.62	---	---	7.67	7.02	10.00	9.34	9.90	9.26
10	4.25	3.45	4.63	3.99	---	---	7.80	7.09	9.97	9.28	9.79	9.14
11	4.11	3.57	4.56	3.83	---	---	7.90	7.23	10.01	9.39	9.62	9.02
12	4.26	3.35	4.29	3.65	---	---	7.89	7.16	10.21	9.54	9.49	8.95
13	4.30	3.72	4.38	3.71	---	---	8.06	7.37	10.10	9.32	9.46	8.90
14	4.42	3.82	4.49	3.78	---	---	8.04	7.29	9.87	9.17	9.45	8.84
15	4.47	3.75	4.65	3.92	---	---	8.09	7.41	9.67	9.05	9.46	8.86
16	4.38	3.58	4.71	3.95	---	---	8.02	7.35	9.87	9.13	9.46	8.84
17	4.24	3.49	4.76	3.98	---	---	8.12	7.37	10.01	9.49	9.42	8.81
18	4.17	3.37	4.70	3.99	---	---	8.36	7.56	10.03	9.51	9.36	8.67
19	4.22	3.42	4.69	3.99	---	---	8.56	7.83	10.07	9.52	9.41	8.80
20	4.33	3.50	4.68	3.94	---	---	8.67	8.13	10.11	9.48	9.29	8.56
21	4.32	3.67	4.87	4.06	---	---	8.82	8.27	10.16	9.55	9.17	8.44
22	4.37	3.62	4.74	4.25	---	---	8.92	8.35	10.33	9.70	9.08	8.32
23	4.49	3.77	4.70	4.17	---	---	8.93	8.32	10.33	9.61	9.16	8.23
24	4.36	3.93	4.73	4.14	---	---	8.87	8.19	10.31	9.52	8.78	7.61
25	4.08	3.58	4.83	4.18	---	---	9.04	8.37	10.34	9.58	8.17	7.01
26	3.82	3.25	5.05	4.42	---	---	9.14	8.39	10.18	9.33	8.23	7.27
27	4.11	3.42	5.19	4.70	---	---	9.19	8.34	10.01	9.19	8.57	7.86
28	4.21	3.71	5.48	5.02	---	---	9.19	8.38	9.84	9.10	8.60	7.85
29	4.20	3.55	5.62	5.48	---	---	9.28	8.51	10.04	9.32	8.61	7.85
30	4.20	3.61	5.55	5.54	---	---	9.33	8.54	10.12	9.44	8.61	7.84
31	---	---	5.53	5.51	---	---	9.29	8.58	10.28	9.67	---	---
MONTH	4.49	3.25	5.62	3.36	5.51	5.51	9.33	5.78	10.34	8.63	10.31	7.01



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

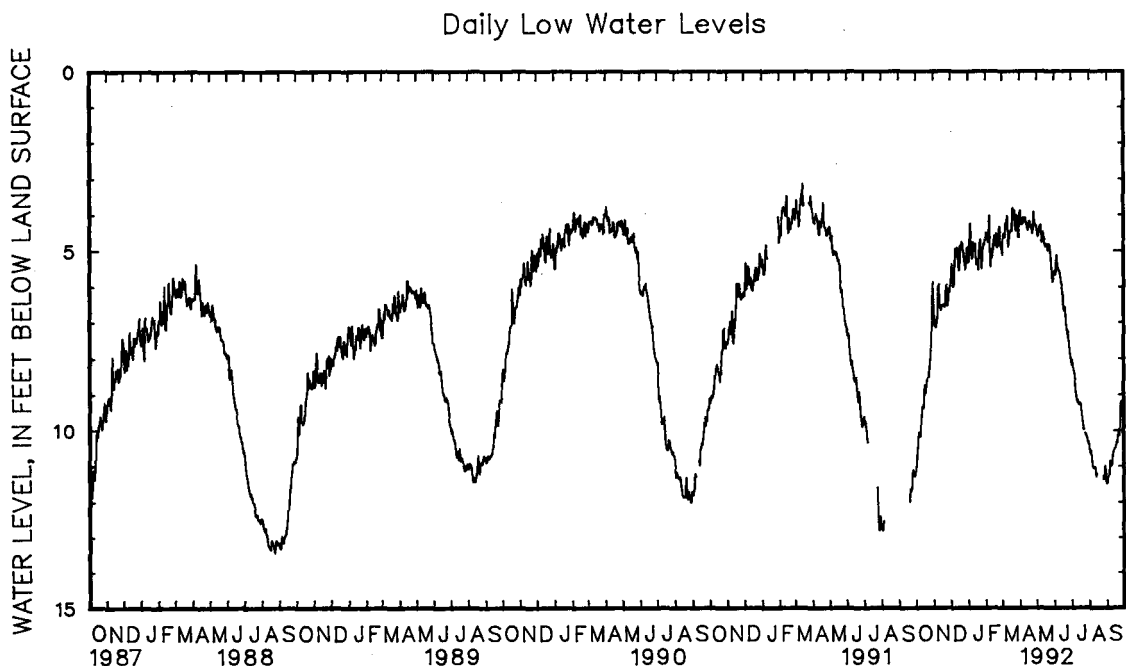
WELL NUMBER.--WO Bg 48. SITE ID.--382325075063302. PERMIT NUMBER.--WO-73-0522.
 LOCATION.--Lat 38°23'25", long 75°06'33", Hydrologic Unit 02060010, at intersection of MD Rt. 90 and Isle of Wight Rd., Isle of Wight.
 Owner: U.S. Geological Survey.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 420 ft; casing diameter 4 in., to 410 ft; screen diameter 4 in. from 410 to 420 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Periodic measurements with chalked steel tape September 1975 to April 1985. Equipped with digital water-level recorder--60 minute recording interval from July 1985 to current year.
 DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.87 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping. Missing data due to recorder malfunctions.
 PERIOD OF RECORD.--September 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.75 ft below land surface, Feb. 14, 1991, and Jan. 4, 1992; lowest measured, 4.29 ft below land surface, Aug. 26, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.05	10.38	6.35	5.51	5.83	5.35	5.23	4.47	4.52	3.92	4.98	4.53
2	10.95	10.34	6.82	5.96	5.68	5.09	5.34	4.72	4.60	3.99	5.14	4.29
3	10.73	10.01	7.06	6.45	5.37	4.52	5.07	4.13	4.57	3.94	4.57	4.00
4	10.52	9.93	7.13	6.56	5.74	4.49	4.32	2.75	4.52	3.90	4.55	4.08
5	10.34	9.65	7.17	6.59	5.99	5.50	4.25	3.55	4.72	4.05	4.60	4.15
6	10.06	9.49	7.05	6.39	6.02	5.47	4.65	4.04	4.79	3.86	4.64	3.97
7	10.08	9.52	6.92	6.24	5.77	4.98	5.00	4.45	4.19	3.48	4.26	3.45
8	10.18	9.60	6.85	6.12	5.49	4.96	5.25	4.80	4.03	3.43	4.23	3.44
9	10.18	9.58	6.58	5.73	5.28	4.62	5.17	4.47	4.97	3.74	4.35	3.78
10	9.98	9.27	5.94	5.08	4.95	4.32	4.77	4.26	5.49	4.80	4.03	3.62
11	9.59	8.87	5.94	5.17	4.98	4.48	4.91	4.42	5.24	4.75	4.46	3.25
12	9.35	8.75	6.49	5.94	5.16	4.65	5.00	4.56	5.21	4.65	4.92	4.15
13	9.37	8.78	6.60	6.13	4.92	4.52	4.84	4.47	5.16	4.56	4.87	4.43
14	9.39	8.84	6.69	6.26	5.12	4.46	4.82	4.02	4.96	4.24	4.73	4.06
15	9.28	8.65	6.62	6.15	5.55	4.94	5.38	4.63	4.99	4.11	4.52	3.99
16	9.02	8.43	6.56	6.19	5.55	5.18	5.40	4.81	4.60	3.84	4.46	3.92
17	8.75	7.95	6.54	6.10	5.31	4.48	5.40	4.69	4.87	4.34	4.43	3.87
18	8.98	8.57	6.54	5.94	4.87	4.25	5.34	4.77	4.85	4.01	4.46	3.77
19	8.96	8.38	6.53	5.90	4.93	4.35	5.55	4.86	4.54	3.90	4.14	3.23
20	8.79	8.25	6.58	6.02	4.98	4.28	5.27	4.44	4.77	3.94	3.81	3.23
21	8.63	8.08	6.58	5.98	4.76	3.99	5.04	4.29	4.92	4.32	4.05	3.24
22	8.54	7.97	6.55	5.72	4.80	4.01	4.91	4.32	4.93	4.44	4.02	3.30
23	8.52	7.91	6.16	5.49	5.02	3.75	4.70	3.80	4.85	4.27	3.87	3.19
24	8.35	7.68	5.96	5.11	5.07	4.33	5.05	3.75	4.55	4.15	4.32	3.39
25	8.16	7.43	6.23	5.50	5.30	4.66	5.52	4.96	4.34	3.81	4.46	3.94
26	8.05	7.35	6.56	5.98	5.38	4.87	5.27	4.73	4.35	3.66	4.28	3.69
27	7.87	7.14	6.42	5.77	5.54	4.92	5.00	4.56	4.88	3.96	4.02	3.28
28	7.65	6.80	6.07	5.59	5.44	5.02	4.96	4.49	4.90	4.37	4.40	3.73
29	7.09	6.30	6.16	5.76	5.33	4.63	4.84	4.24	4.80	4.20	4.64	4.19
30	6.62	5.64	6.11	5.45	4.96	4.44	4.85	4.36	---	---	4.65	3.76
31	5.87	4.96	---	---	4.93	4.31	4.74	4.05	---	---	4.04	3.55
MONTH	11.05	4.96	7.17	5.08	6.02	3.75	5.55	2.75	5.49	3.43	5.14	3.19

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bg 48--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.00	3.41	4.46	3.89	5.63	4.90	8.23	7.48	10.57	9.77	11.55	10.94
2	3.89	3.40	4.61	4.00	5.59	4.91	8.10	7.45	10.66	10.09	11.52	10.90
3	4.23	3.65	4.63	3.87	5.70	4.91	8.29	7.45	10.72	10.20	11.37	10.79
4	4.28	3.67	4.54	3.86	5.62	4.97	8.39	7.69	10.63	10.09	11.31	10.74
5	4.28	3.67	4.42	3.70	5.28	4.65	8.46	7.87	10.83	10.33	11.16	10.48
6	4.26	3.70	4.35	3.65	5.14	4.45	8.54	8.00	11.07	10.52	10.89	10.31
7	4.10	3.52	4.34	3.67	5.40	4.68	8.78	8.20	11.12	10.56	10.95	10.45
8	4.10	3.38	4.30	3.63	5.52	4.99	8.99	8.48	11.10	10.50	11.05	10.54
9	4.12	3.53	4.69	3.85	5.56	5.03	9.09	8.54	11.09	10.56	11.04	10.53
10	4.20	3.51	4.79	4.23	5.60	4.98	9.20	8.60	11.09	10.52	10.94	10.41
11	4.10	3.62	4.78	4.10	5.65	5.02	9.28	8.71	11.14	10.64	10.77	10.27
12	4.24	3.43	4.50	3.91	5.79	5.19	9.23	8.61	11.36	10.81	10.65	10.19
13	4.30	3.80	4.54	3.96	5.95	5.35	9.34	8.77	11.28	10.61	10.60	10.13
14	4.39	3.90	4.65	4.05	6.03	5.41	9.33	8.69	---	---	10.56	10.04
15	4.45	3.85	4.79	4.18	6.10	5.47	9.35	8.72	---	---	10.53	10.01
16	4.36	3.68	4.87	4.22	6.27	5.51	9.30	8.72	---	---	10.52	9.98
17	4.23	3.60	4.90	4.25	6.61	5.78	9.36	8.72	---	---	10.45	9.91
18	4.19	3.52	4.84	4.25	6.73	6.11	9.57	8.89	---	---	10.35	9.74
19	4.25	3.52	4.87	4.25	6.63	6.16	9.73	9.14	---	---	10.36	9.84
20	4.36	3.64	4.86	4.23	6.64	6.09	9.83	9.39	---	---	10.25	9.62
21	4.37	3.79	5.03	4.34	6.84	6.22	9.95	9.49	---	---	10.14	9.51
22	4.42	3.77	4.91	4.52	7.17	6.56	10.04	9.54	---	---	10.06	9.42
23	4.54	3.92	4.85	4.43	7.28	6.86	10.03	9.51	---	---	10.16	9.37
24	4.43	4.06	4.86	4.37	7.36	6.90	---	---	---	---	9.81	8.77
25	4.21	3.72	4.97	4.40	7.30	6.85	10.13	9.57	---	---	9.25	8.17
26	3.93	3.45	5.25	4.65	7.47	6.91	10.19	9.55	11.42	10.68	9.22	8.42
27	4.22	3.60	5.49	4.98	7.58	6.99	10.20	9.47	11.22	10.54	9.50	8.92
28	4.32	3.90	5.79	5.26	7.81	7.18	10.26	9.58	11.06	10.46	9.53	8.90
29	4.32	3.76	5.91	5.34	8.01	7.33	10.36	9.71	11.25	10.54	9.54	8.91
30	4.31	3.81	5.84	5.18	8.12	7.42	10.41	9.75	11.35	10.79	9.55	8.93
31	---	---	5.62	4.89	---	---	10.37	9.76	11.50	10.93	---	---
MONTH	4.54	3.38	5.91	3.63	8.12	4.45	10.41	7.45	11.50	9.77	11.55	8.17



GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bg 49. SITE ID.--382038075065901. PERMIT NUMBER.--WO-73-0520.
 LOCATION.--Lat 38°20'38", long 75°06'59", Hydrologic Unit 020060010, near Keyser Point Rd., West Ocean City.
 Owner: U.S. Geological Survey.
 AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 122OCNC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 243 ft; casing diameter 4 in., to 233 ft; screen diameter 4 in. from 233 to 243 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.
 Periodic measurements with chalked steel tape October 1975 to May 1985. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to current year.
 DATUM.--Elevation of land surface is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of recorder shelf, 4.4 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network. Water levels affected by nearby pumping.
 Missing data due to recorder malfunction.
 PERIOD OF RECORD.--October 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.61 ft below land surface, March 14 and 15, 1991; lowest measured, 24.84 ft below land surface, Aug. 16, 1988.

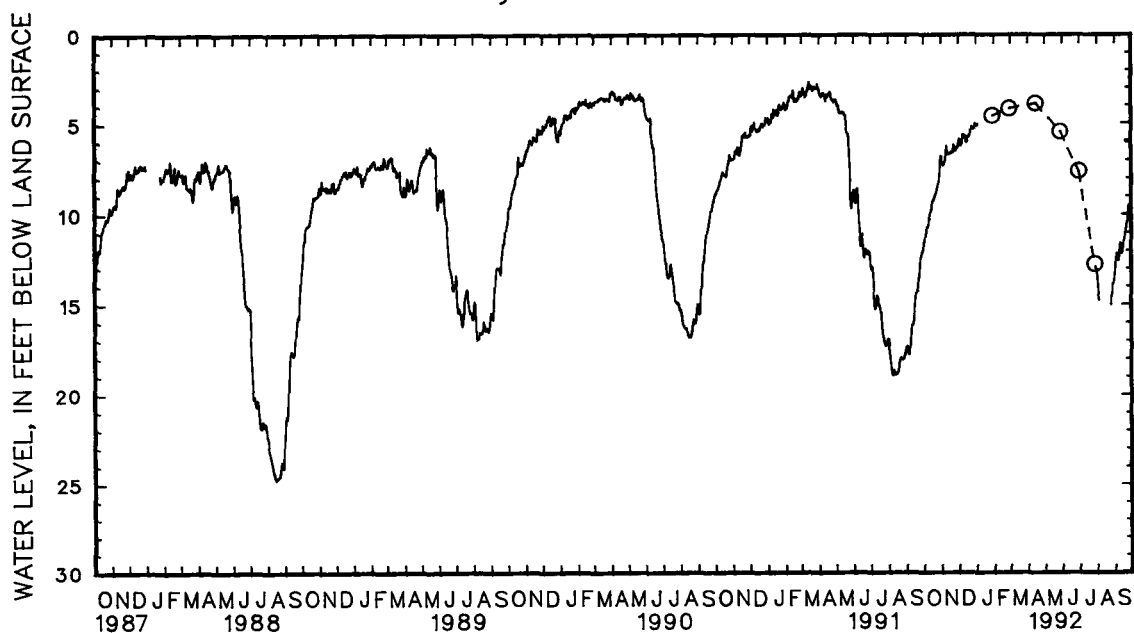
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.85	11.65	6.80	6.52	6.24	6.04	5.06	4.85	4.58	4.57	4.45	4.25
2	11.67	11.52	7.05	6.80	6.05	5.85	5.09	5.00	4.57	4.57	4.50	4.45
3	11.53	11.31	7.24	7.05	5.85	5.49	5.01	4.59	4.57	4.57	4.50	4.50
4	11.31	11.12	7.27	7.19	5.94	5.48	4.59	4.49	4.57	4.57	4.50	4.50
5	11.13	10.87	7.31	7.23	6.15	5.94	4.49	4.49	4.57	4.57	4.50	4.50
6	10.87	10.68	7.27	7.12	6.19	6.10	4.49	4.49	4.57	4.56	4.50	4.50
7	10.73	10.63	7.16	7.01	6.15	5.90	4.73	4.49	4.56	4.56	4.51	4.50
8	10.73	10.63	7.07	6.88	5.94	5.83	4.88	4.73	4.56	4.56	4.51	4.51
9	10.69	10.54	6.89	6.50	5.83	5.57	4.88	4.68	4.56	4.56	4.51	4.51
10	10.56	10.29	6.50	6.03	5.59	5.45	4.68	4.67	4.71	4.56	4.51	4.51
11	10.29	10.02	6.22	6.00	5.57	5.49	4.71	4.67	4.68	4.55	4.51	4.51
12	10.03	9.86	6.54	6.22	5.72	5.57	4.77	4.70	4.64	4.55	4.51	4.51
13	9.93	9.80	6.62	6.54	5.69	5.57	4.76	4.64	4.64	4.54	4.51	4.51
14	9.86	9.73	6.68	6.60	5.67	5.51	4.64	4.38	4.54	4.54	4.51	4.51
15	9.75	9.55	6.68	6.63	5.97	5.67	4.91	4.55	4.54	4.54	4.51	4.51
16	9.55	9.32	6.67	6.60	6.01	5.95	5.04	4.83	4.54	4.53	4.51	4.51
17	9.32	8.84	6.66	6.57	5.99	5.69	5.04	4.87	4.53	4.53	4.51	4.51
18	9.25	9.06	6.62	6.47	5.72	5.57	5.11	4.95	4.53	4.53	4.51	4.51
19	9.25	9.14	6.56	6.43	5.72	5.60	5.15	5.01	4.53	4.53	4.51	4.51
20	9.16	9.03	6.59	6.48	5.72	5.57	5.05	4.82	4.53	4.53	4.51	4.51
21	9.04	8.89	6.58	6.46	5.60	5.42	4.87	4.71	4.53	4.52	4.51	4.51
22	8.93	8.82	6.55	6.30	5.59	5.42	4.76	4.63	4.52	4.52	4.52	4.51
23	8.89	8.76	6.34	6.17	5.44	5.11	4.63	4.37	4.52	4.52	4.52	4.52
24	8.79	8.62	6.17	5.93	5.15	4.97	4.62	4.37	4.52	4.52	4.52	4.52
25	8.64	8.44	6.29	6.08	5.20	5.06	4.99	4.62	4.52	4.52	4.52	4.52
26	8.49	8.31	6.46	6.29	5.23	5.17	4.94	4.81	4.52	4.51	4.52	4.52
27	8.34	8.13	6.47	6.34	5.27	5.20	4.84	4.72	4.51	4.51	4.52	4.52
28	8.17	7.87	6.34	6.21	5.27	5.27	4.76	4.64	4.51	4.14	4.52	4.52
29	7.87	7.54	6.33	6.24	5.27	4.98	4.70	4.58	4.25	4.10	4.52	4.52
30	7.54	6.97	6.33	6.19	5.00	4.90	4.58	4.52	---	---	4.52	4.52
31	6.97	6.51	---	---	4.96	4.82	4.58	4.58	---	---	4.52	4.52
MONTH	11.85	6.51	7.31	5.93	6.24	4.82	5.15	4.37	4.71	4.10	4.52	4.25

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bg 49--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.52	4.52	3.80	3.80	4.95	4.88	---	---	13.34	13.09	13.46	13.12
2	4.52	4.52	3.80	3.80	4.88	4.88	---	---	13.74	13.29	13.12	12.74
3	4.52	4.52	3.80	3.80	4.93	4.78	---	---	14.28	13.74	12.74	12.51
4	4.52	4.52	3.80	3.80	4.81	4.76	---	---	14.75	14.28	12.51	12.24
5	4.52	4.52	3.80	3.80	4.82	4.81	---	---	14.86	14.71	12.24	12.03
6	4.52	4.52	3.80	3.79	4.82	4.82	---	---	---	---	12.25	12.11
7	4.52	3.65	3.79	3.79	4.82	4.82	---	---	---	---	12.53	12.23
8	3.75	3.65	3.79	3.79	4.82	4.82	---	---	---	---	12.63	12.44
9	3.76	3.65	3.79	3.79	4.82	4.82	---	---	---	---	12.44	12.17
10	3.77	3.62	3.79	3.79	4.82	4.82	---	---	---	---	12.17	11.86
11	3.81	3.66	3.79	3.79	4.83	4.82	---	---	---	---	11.89	11.54
12	3.81	3.79	3.79	3.79	4.83	4.83	---	---	---	---	11.63	11.40
13	3.89	3.72	3.79	3.79	4.99	4.83	---	---	---	---	12.06	11.63
14	3.94	3.81	3.79	3.79	5.83	4.99	---	---	---	---	12.22	12.06
15	3.92	3.81	3.87	3.78	6.57	5.83	---	---	---	---	12.12	11.90
16	3.86	3.81	3.88	3.78	7.05	6.57	---	---	---	---	11.90	11.68
17	3.82	3.82	3.91	3.80	7.38	7.05	---	---	---	---	11.68	11.40
18	3.82	3.82	3.95	3.82	7.53	7.38	---	---	---	---	11.40	11.14
19	3.82	3.81	3.91	3.82	7.46	7.22	---	---	---	---	11.16	10.98
20	3.81	3.81	3.94	3.82	7.29	7.07	---	---	---	---	10.98	10.75
21	3.81	3.81	4.01	3.84	7.37	7.29	---	---	---	---	10.80	10.52
22	3.81	3.81	3.99	3.93	7.37	7.30	---	---	---	---	10.57	10.37
23	3.81	3.81	4.10	3.89	7.30	7.16	---	---	---	---	10.47	10.26
24	3.81	3.81	4.94	4.10	7.16	6.97	---	---	---	---	10.27	9.86
25	3.81	3.81	5.59	4.94	6.99	6.80	---	---	---	---	9.90	9.28
26	3.81	3.81	5.59	5.59	6.80	6.78	---	---	15.15	14.63	9.52	9.35
27	3.81	3.81	5.59	5.59	6.92	6.78	---	---	14.65	14.24	9.69	9.52
28	3.81	3.80	5.59	5.44	7.38	6.92	---	---	14.28	13.91	9.68	9.56
29	3.80	3.80	5.44	5.36	7.79	7.38	13.01	12.90	13.94	13.83	9.66	9.53
30	3.80	3.80	5.36	5.32	---	---	13.12	12.92	13.93	13.68	9.69	9.38
31	---	---	5.33	4.90	---	---	13.17	13.10	13.80	13.46	---	---
MONTH	4.52	3.62	5.59	3.78	7.79	4.76	13.17	12.90	15.15	13.09	13.46	9.28

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 31. SITE ID.--382215075041801. PERMIT NUMBER.--WO-04-9586.
 LOCATION.--Lat 38°22'15", long 75°04'18", Hydrologic Unit 020060010, at 44th St, Ocean City.
 Owner: Town of Ocean City.
 AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 1220CNC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 278 ft; casing diameter 4 in., to 263 ft; screen diameter 4 in. from 263 to 278 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel. Periodic measurements with chalked steel tape September 1970 to May 1985. Equipped with digital water-level recorder--60-minute recording interval, May 1985 to current year.
 DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of recorder shelf, 3.47 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.
 PERIOD OF RECORD.--September 1970 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.23 ft below land surface, March 15, 1991; lowest measured, 51.03 ft below land surface, July 27, 1986.

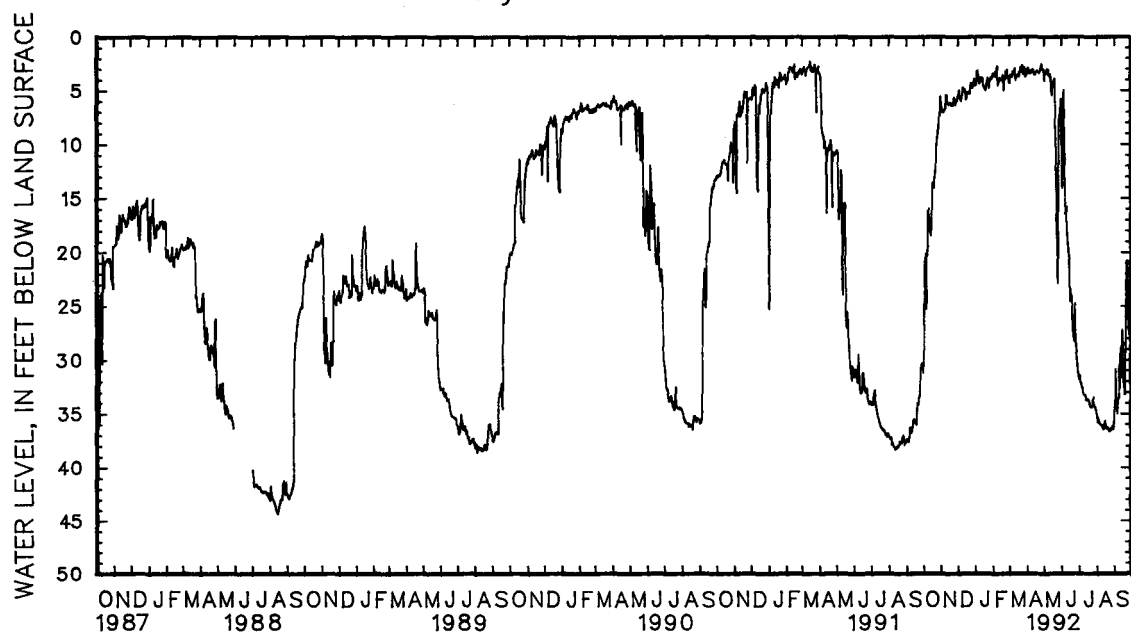
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	30.49	23.23	6.19	5.03	5.52	4.65	4.50	3.09	3.43	2.33	4.28	3.13
2	25.74	21.17	6.75	5.39	5.39	4.37	4.51	3.35	3.42	2.36	4.33	2.90
3	21.38	19.79	7.06	5.80	5.01	3.70	4.18	2.82	3.48	2.32	3.59	2.51
4	20.57	19.21	7.07	5.86	5.75	3.63	3.26	1.00	3.45	2.31	3.59	2.60
5	20.12	18.68	7.06	5.90	5.89	4.80	3.16	2.00	3.68	2.64	3.63	2.68
6	25.44	18.43	6.95	5.69	5.99	4.88	3.56	2.46	3.74	2.27	3.73	2.46
7	19.84	18.44	6.82	5.53	5.69	4.35	4.00	2.98	2.98	1.78	3.24	1.91
8	19.54	16.11	6.69	5.36	5.46	4.40	4.36	3.44	2.77	1.81	3.19	2.03
9	16.82	15.27	6.23	4.93	5.15	4.05	4.29	3.10	3.88	2.16	3.28	2.16
10	15.97	14.50	5.40	4.16	4.72	3.64	3.83	2.92	4.57	3.35	2.95	1.91
11	17.00	13.81	5.42	4.32	4.84	3.93	4.00	3.09	4.10	3.43	3.44	1.77
12	17.68	15.16	6.08	5.28	5.03	4.18	4.17	3.31	4.24	3.15	4.06	2.71
13	18.14	17.29	6.17	5.38	4.91	4.11	3.88	3.25	3.87	3.23	3.83	3.10
14	18.50	16.67	6.35	5.61	5.10	4.15	3.93	2.72	4.06	2.74	3.70	2.66
15	17.45	14.65	6.28	5.52	5.85	4.65	4.65	3.34	4.00	2.70	3.61	2.58
16	14.59	13.34	6.25	5.55	5.72	5.00	4.70	3.45	3.92	2.24	3.58	2.38
17	13.59	12.43	6.24	5.32	5.23	4.35	4.78	3.44	4.02	2.75	3.63	2.43
18	13.70	12.92	6.15	5.16	5.18	3.98	4.96	3.48	4.00	2.35	3.72	2.33
19	14.02	12.51	6.39	5.12	5.30	3.92	5.04	3.48	3.59	2.22	3.34	1.48
20	13.28	12.23	6.40	5.24	5.32	3.92	4.74	3.05	5.02	2.47	2.84	1.61
21	13.05	11.81	6.44	5.18	5.15	3.60	4.41	2.85	4.03	2.85	3.04	1.90
22	12.64	10.23	6.37	4.89	5.30	3.73	4.18	2.88	3.99	2.72	3.00	1.59
23	10.91	9.23	5.94	4.53	4.76	3.19	3.88	2.36	3.83	2.71	2.65	1.60
24	9.99	8.54	5.67	4.09	4.32	2.82	4.23	2.37	3.35	2.41	3.23	1.83
25	9.38	7.91	6.01	4.65	4.58	3.35	4.81	3.74	3.09	2.14	3.45	2.51
26	9.02	7.64	6.37	5.16	4.61	3.54	4.21	3.40	3.11	2.01	3.21	2.31
27	8.58	7.24	6.19	5.00	4.78	3.65	4.10	3.25	3.80	2.38	2.91	1.88
28	8.17	6.62	5.87	4.89	4.60	3.82	3.87	3.20	3.75	2.97	3.37	2.23
29	7.26	5.98	5.97	5.15	4.21	3.42	3.90	2.86	3.87	2.62	3.73	2.85
30	6.48	5.15	5.64	4.83	3.94	3.12	3.88	3.02	---	---	3.72	2.41
31	5.57	4.32	---	---	3.98	2.86	3.76	2.62	---	---	3.09	2.11
MONTH	30.49	4.32	7.07	4.09	5.99	2.82	5.04	1.00	5.02	1.78	4.33	1.48

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bh 31--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.00	1.96	3.30	2.17	9.83	4.02	32.07	25.15	35.42	34.10	34.97	26.01
2	2.90	1.88	4.15	2.38	14.19	4.70	31.67	27.16	36.03	26.87	34.39	25.82
3	3.29	2.25	3.56	2.15	7.86	4.30	32.30	27.35	35.62	26.78	30.93	24.14
4	3.42	2.18	3.41	2.10	5.46	3.99	32.44	31.19	35.83	34.56	33.72	23.77
5	3.33	2.24	3.21	1.83	5.00	3.47	32.74	31.45	36.13	34.98	34.61	33.30
6	3.36	2.16	3.03	1.85	11.50	3.46	32.84	31.79	36.20	35.34	34.95	33.85
7	3.17	1.88	3.45	1.90	16.59	11.08	33.24	31.98	36.24	35.31	35.18	27.64
8	3.39	1.89	3.16	2.02	16.03	6.19	33.43	32.31	36.27	35.29	34.01	25.54
9	3.12	2.07	3.61	2.26	15.96	7.78	33.49	32.51	36.39	35.48	33.61	24.61
10	3.23	2.06	3.67	2.63	18.33	12.71	33.50	32.54	36.32	35.50	30.56	22.91
11	3.08	2.17	3.77	2.71	19.28	17.66	33.45	32.52	36.57	35.54	32.71	28.62
12	3.31	1.93	3.51	2.39	19.98	18.74	33.66	32.58	36.67	35.63	29.71	27.97
13	3.37	2.24	3.77	2.61	20.55	19.50	33.94	32.85	36.63	35.35	28.77	27.73
14	3.55	2.42	5.16	2.92	20.90	19.70	33.88	32.68	36.11	31.18	31.78	23.80
15	3.58	2.28	5.50	3.77	24.75	20.41	33.94	32.81	35.88	34.79	27.25	21.90
16	3.53	2.08	4.69	3.22	23.66	15.30	33.87	32.78	36.28	31.46	28.45	21.62
17	3.33	1.96	4.37	3.06	24.37	18.61	33.91	32.87	36.60	35.46	32.15	28.21
18	3.18	1.84	4.18	2.97	24.30	15.74	34.03	32.97	36.53	35.54	32.72	29.62
19	3.18	1.95	4.03	2.86	26.05	14.86	34.35	33.24	36.62	35.60	33.39	28.64
20	3.27	2.09	3.95	2.89	27.44	21.32	34.55	33.50	36.50	35.54	33.30	24.83
21	3.26	2.17	9.53	2.99	27.94	19.25	34.62	33.65	36.69	35.52	29.19	23.10
22	3.25	2.18	12.98	3.44	28.32	19.19	34.55	33.73	36.87	35.99	23.04	21.01
23	3.36	2.33	18.20	12.82	28.53	19.41	34.60	33.74	36.88	36.07	21.73	19.92
24	3.23	2.53	20.16	17.94	24.90	18.76	34.42	25.35	36.86	32.94	20.79	18.77
25	2.86	2.14	23.12	12.17	28.55	18.51	33.63	24.32	36.62	30.48	25.17	18.33
26	2.55	1.80	15.69	8.81	29.27	19.76	34.29	32.87	36.72	35.57	26.82	18.88
27	2.98	1.96	8.81	6.82	30.00	28.55	34.52	33.30	36.60	31.27	27.81	26.28
28	3.04	2.25	7.35	5.95	30.58	29.16	34.64	30.64	36.39	31.19	27.86	20.25
29	3.04	2.03	6.86	5.41	31.33	29.85	34.62	28.69	36.54	35.17	20.96	19.40
30	3.14	2.12	6.23	4.84	31.67	30.13	34.84	28.62	36.67	31.82	19.63	14.08
31	---	---	5.78	4.25	---	---	35.17	33.57	36.00	27.46	---	---
MONTH	3.58	1.80	23.12	1.83	31.67	3.46	35.17	24.32	36.88	26.78	35.18	14.08

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 34. SITE ID.382443075033501. PERMIT NUMBER.--WO-04-9588.

LOCATION.--Lat 38°24'43", long 75°03'35", Hydrologic Unit 02060010, north side of 100th St., 0.2 mi west of MD Rt. 528, Ocean City.

Owner: Town of Ocean City.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 353 ft; casing diameter 4 in., to 337 ft; screened from 337 to 353 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel.

Equipped with digital water-level recorder--60-minute recording interval April 1985 to current year.

Prior to April 1985, periodic measurements with chalked steel tape.

DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of recorder shelf, 2.86 ft above land surface.

REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping. No record Jan. 27, 1991 to Jan 29, 1991 due to recorder malfunction.

PERIOD OF RECORD.--December 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.54 ft above land surface, March 27, 1973; lowest measured, 18.11 ft below land surface, Aug. 19, 1990.

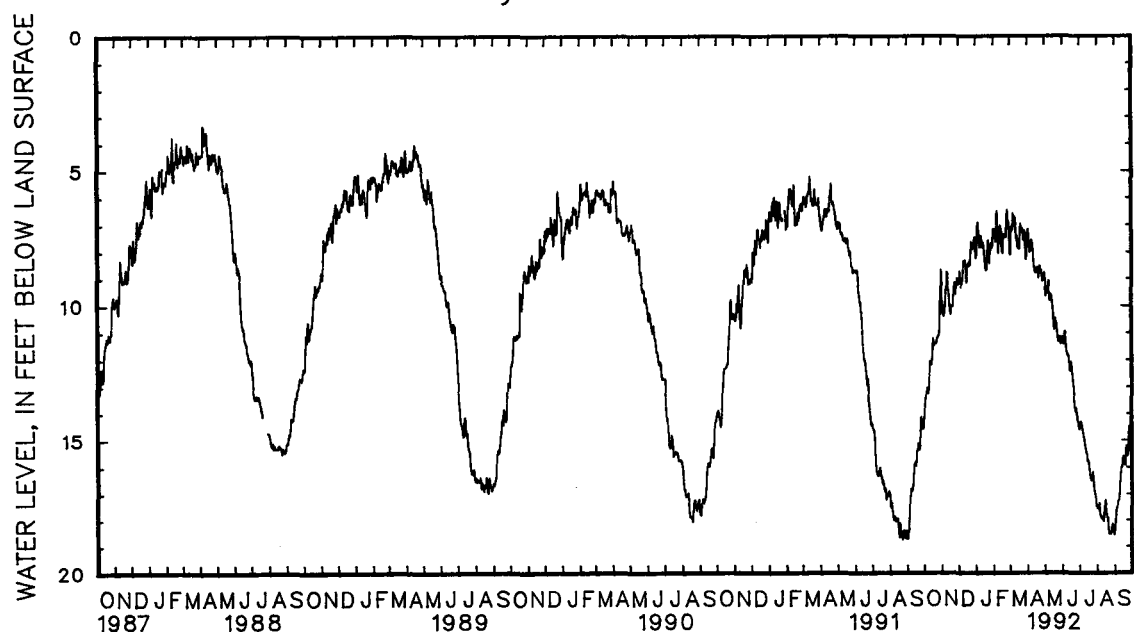
WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.26	13.24	9.26	8.12	9.21	8.23	8.24	6.79	7.17	6.16	8.10	6.80
2	14.17	13.16	9.92	8.50	9.20	8.35	8.24	7.30	7.25	6.34	8.16	6.87
3	13.70	12.59	10.33	9.07	8.74	7.49	8.01	6.69	7.25	6.22	7.33	6.20
4	13.46	12.39	10.37	9.33	9.03	7.24	7.09	5.00	7.18	6.25	7.10	6.14
5	13.25	12.13	10.44	9.40	9.16	8.16	6.92	5.84	7.65	6.68	7.24	6.25
6	13.06	12.05	10.29	9.15	9.36	8.38	7.19	6.18	7.54	6.06	7.10	5.85
7	13.21	12.08	10.09	8.93	9.20	8.02	7.53	6.66	6.69	5.54	6.59	5.69
8	13.25	12.05	9.89	8.71	9.07	8.05	7.85	7.11	6.51	5.57	7.05	5.96
9	13.10	11.98	9.46	8.34	8.80	7.83	7.85	6.79	7.60	6.07	7.08	6.07
10	12.84	11.70	8.76	7.57	8.35	7.36	7.41	6.66	8.09	7.20	6.72	5.77
11	12.35	11.25	8.81	7.75	8.38	7.57	7.46	6.78	7.71	7.08	6.96	5.61
12	12.06	11.16	9.39	8.67	8.49	7.68	7.84	6.93	7.60	6.83	7.52	6.37
13	12.13	11.31	9.43	8.76	8.32	7.62	7.71	6.94	7.05	6.54	7.42	6.67
14	12.19	11.44	9.62	8.91	8.52	7.59	7.67	6.38	7.34	6.01	7.63	6.49
15	12.04	11.20	9.98	9.29	9.20	8.13	7.84	7.16	7.19	6.32	7.86	6.70
16	11.64	10.78	10.18	9.52	9.15	8.52	8.03	6.79	7.99	6.10	7.88	6.80
17	11.21	10.14	10.37	9.45	8.56	7.75	8.38	6.92	8.07	6.95	7.93	6.87
18	11.47	10.80	10.18	9.43	8.45	7.46	8.64	7.25	8.08	6.33	7.93	6.60
19	11.46	10.64	10.07	9.13	8.54	7.43	8.73	7.35	7.38	6.06	7.52	5.87
20	11.42	10.63	10.05	8.96	8.56	7.33	8.72	7.17	7.48	6.27	6.97	5.72
21	11.38	10.51	10.07	8.83	8.34	6.97	8.29	6.85	7.42	6.32	7.18	6.13
22	11.38	10.39	10.06	8.62	8.50	7.12	7.99	6.79	7.37	6.30	7.23	6.14
23	11.39	10.26	9.50	8.09	8.02	6.64	7.59	6.30	7.47	6.32	7.16	6.20
24	11.24	10.07	9.16	7.59	7.64	6.32	7.93	6.35	7.18	6.31	7.28	6.41
25	11.16	9.94	9.34	8.11	7.79	6.78	8.47	7.43	6.65	6.06	7.61	6.63
26	11.16	9.99	9.61	8.48	7.89	6.94	8.10	7.34	6.47	5.70	7.45	6.78
27	11.08	9.94	9.35	8.24	7.88	6.95	7.96	7.31	6.99	5.94	7.24	6.38
28	10.96	9.71	9.00	8.09	7.86	7.12	7.68	7.08	6.89	6.32	7.70	6.70
29	10.29	9.08	9.08	8.34	7.61	6.89	7.87	6.74	7.32	5.93	8.34	7.35
30	9.57	8.29	9.02	8.16	7.51	6.70	7.79	7.07	---	---	8.30	6.94
31	8.68	7.45	---	---	7.47	6.56	7.48	6.52	---	---	7.50	6.72
MONTH	14.26	7.45	10.44	7.57	9.36	6.32	8.73	5.00	8.09	5.54	8.34	5.61

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bh 34--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.36	6.36	8.97	8.01	11.23	9.92	14.69	13.36	17.53	16.52	18.37	17.20
2	7.19	6.10	9.44	8.44	11.28	10.06	14.58	13.05	17.61	16.59	18.15	17.13
3	7.41	6.54	9.70	8.57	11.49	10.22	14.41	13.23	17.62	16.55	17.91	16.92
4	7.75	6.77	9.63	8.47	11.43	10.15	14.42	13.39	17.41	16.43	17.65	16.82
5	8.04	7.07	9.53	8.24	11.10	9.79	14.54	13.43	17.55	16.69	17.56	16.59
6	8.03	6.90	9.36	8.18	11.01	9.77	14.69	13.73	17.81	16.92	17.31	16.45
7	7.80	6.74	9.19	8.05	11.50	10.21	14.81	13.90	17.88	17.02	17.30	16.50
8	7.58	6.62	9.12	8.01	11.76	10.80	14.95	14.05	17.92	16.98	17.21	16.28
9	7.65	6.60	9.63	8.29	11.89	10.98	15.06	14.07	17.99	17.10	16.93	15.94
10	7.82	6.75	9.86	8.81	11.95	10.94	15.20	14.24	17.94	17.02	16.61	15.66
11	8.01	7.01	9.87	8.85	11.90	10.72	15.33	14.38	17.98	17.08	16.38	15.29
12	8.57	7.15	9.61	8.60	11.94	10.90	15.42	14.42	18.09	17.13	16.04	15.25
13	8.62	7.67	9.70	8.60	12.23	11.23	15.57	14.61	17.95	16.86	16.04	15.18
14	8.80	7.78	9.86	8.72	12.51	11.44	15.60	14.65	17.46	16.54	15.94	14.98
15	8.84	7.69	10.06	8.95	12.35	11.15	15.87	14.95	17.29	16.45	15.69	14.72
16	8.82	7.54	10.34	9.23	12.17	11.13	15.84	14.89	17.50	16.59	15.62	14.78
17	8.65	7.47	10.73	9.70	12.33	11.53	15.96	15.13	17.70	16.96	15.91	15.02
18	8.63	7.44	10.96	9.88	12.60	11.83	16.18	15.41	17.82	17.08	15.74	14.76
19	8.77	7.74	10.76	9.61	12.86	11.99	16.40	15.58	17.94	17.21	15.95	15.07
20	9.04	8.03	10.52	9.67	13.08	12.16	16.51	15.85	17.96	17.18	15.57	14.56
21	8.87	7.83	10.74	9.74	13.31	12.45	16.59	15.93	18.35	17.61	15.23	14.26
22	8.57	7.76	10.72	9.95	13.64	12.83	16.56	15.74	18.54	17.69	15.29	14.21
23	8.59	7.73	11.02	10.05	13.85	13.18	16.43	15.59	18.56	17.61	15.60	14.37
24	8.85	8.01	11.28	10.41	13.99	13.23	16.27	15.49	18.57	17.45	15.36	13.80
25	8.74	8.12	11.41	10.62	13.89	13.13	16.60	15.75	18.55	17.35	14.79	12.98
26	8.90	8.02	11.32	10.63	14.04	13.12	16.90	15.88	18.47	17.14	14.50	13.18
27	9.14	8.39	11.22	10.45	14.18	13.18	17.07	15.82	18.31	17.00	14.67	13.40
28	9.03	8.31	11.39	10.51	14.39	13.27	17.08	15.86	18.19	16.96	14.65	13.29
29	8.93	7.95	11.50	10.55	14.43	13.19	17.35	16.08	18.33	17.19	14.25	12.97
30	8.83	7.87	11.43	10.40	14.65	13.37	17.49	16.15	18.47	17.21	13.89	12.78
31	---	---	11.38	10.15	---	---	17.53	16.32	18.58	17.45	---	---
MONTH	9.14	6.10	11.50	8.01	14.65	9.77	17.53	13.05	18.58	16.43	18.37	12.78

Daily Low Water Levels



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

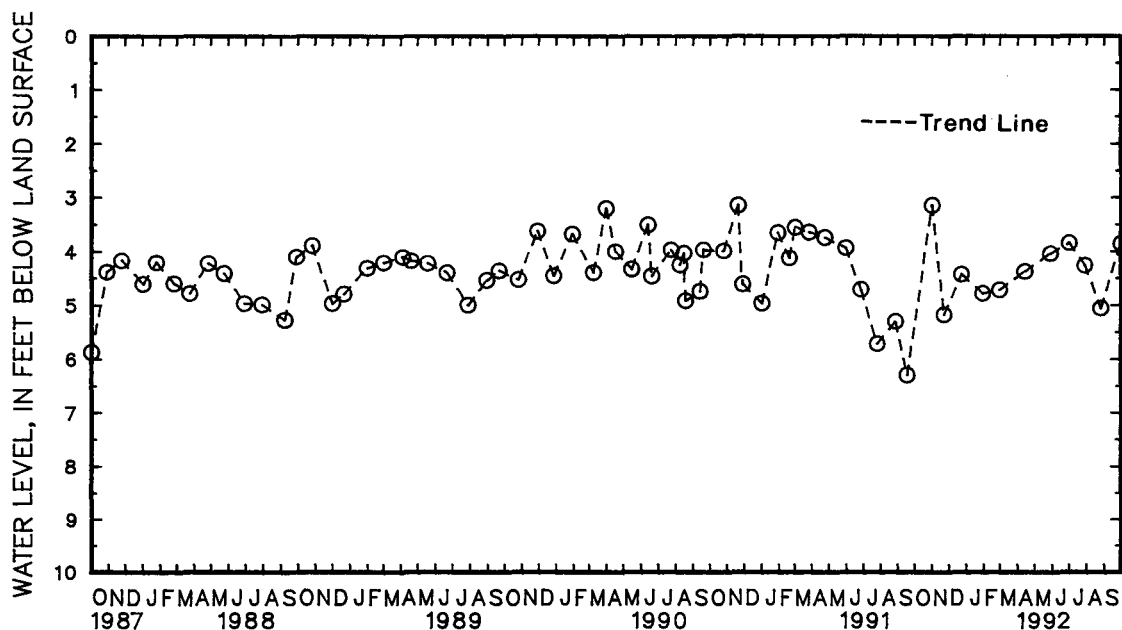
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 84. SITE ID.--382215075041901. PERMIT NUMBER.--WO-73-0094.
LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 02060010, west end of 44th St., Ocean City.
Owner: U.S. Geological Survey.
AQUIFER.--Columbia Formation of Pleistocene age. Aquifer code: 122CLMB.
WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 86 ft; casing diameter 4 in., to 81 ft;
screen diameter 4 in. from 81 to 86 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of 4 in. coupling, 0.9 ft above land surface.
REMARKS.--Ocean City ground-water monitoring network well.
PERIOD OF RECORD.--April 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.65 ft below land surface, Dec. 3, 1986,
lowest measured, 6.34 ft below land surface, Sept. 17, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 31	3.15	DEC 23	4.45	FEB 28	4.74	MAY 28	4.05	JUL 28	4.28	SEP 30	3.86				
NOV 21	5.21	JAN 29	4.81	APR 13	4.39	JUN 30	3.85	AUG 25	5.09						
WATER YEAR 1992		HIGHEST	3.15	OCT 31, 1991		LOWEST	5.21	NOV 21, 1991							



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 85. SITE ID.--382215075041902. PERMIT NUMBER.--WO-73-0094.

LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 02060010, west end of 44th St., Ocean City.

Owner: U.S. Geological Survey.

AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122PCMK.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 195 ft; casing diameter 4 in., to 190 ft; screen diameter 4 in. from 190 to 195 ft.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring Point: Top of 4 in. coupling, 2.1 ft above land surface.

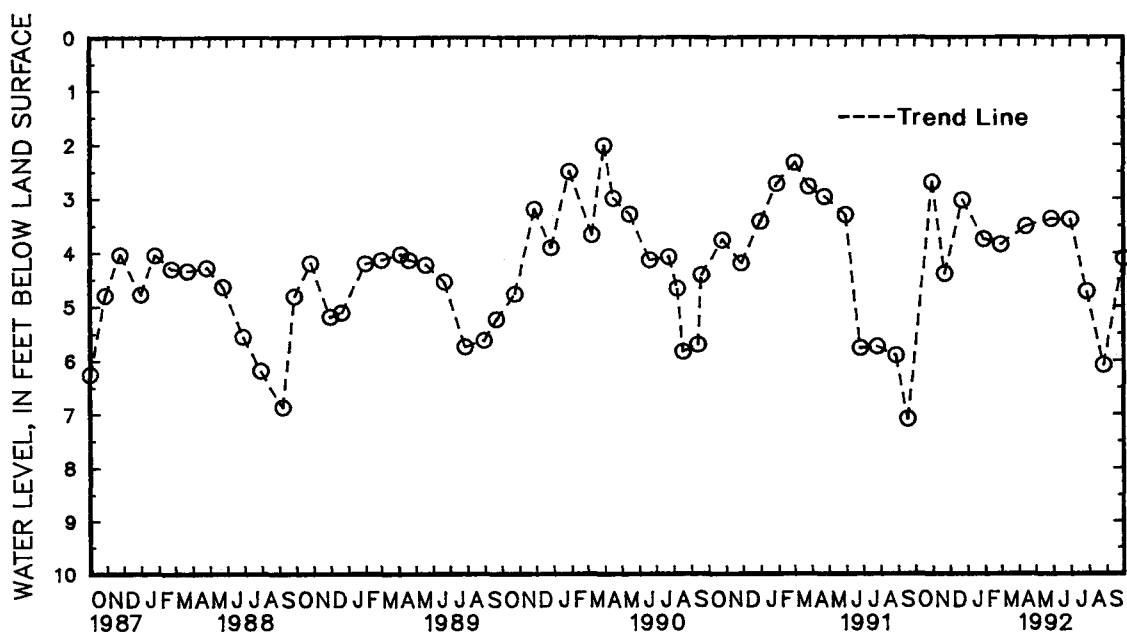
REMARKS.--Ocean City ground-water monitoring network well. Water levels maybe affected by seasonal pumping.

PERIOD OF RECORD.--April 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land surface, April 26, 1973; lowest measured, 7.48 ft below land surface, Sept. 15, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	2.70	DEC 23	3.04	FEB 28	3.87	MAY 28	3.39	JUL 28	4.75	SEP 30	4.12
NOV 21	4.42	JAN 29	3.77	APR 13	3.53	JUN 30	3.40	AUG 25	6.13		
WATER YEAR 1992		HIGHEST	2.70	OCT 31, 1991	LOWEST	6.13	AUG 25, 1992				



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Bh 89. SITE ID.--382215075041903 PERMIT NUMBER.--WO-81-1497.
 LOCATION.--Lat 38°22'15", long 75°04'19", Hydrologic Unit 020060010, at 44th St, Ocean City.
 Owner: Town of Ocean City

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 500 ft; casing diameter 4 in., to 388 ft; screen diameter 4 in. from 388 to 500 ft.

INSTRUMENTATION.--Equipped with digital water-level recorder--60-minute recording interval, October 1986 to current year.

DATUM.--Elevation of land surface is 5.59 ft above National Geodetic Vertical Datum of 1929.

Measuring Point: Top of recorder shelf, 2.90 ft above land surface.

REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.

Missing data due to recorder malfunction.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.27 ft below land surface, March 14, and 15, 1991; lowest recorded, 39.83 ft below land surface, Aug. 6, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	24.16	21.84	6.43	5.35	5.74	4.95	4.67	3.34	3.66	2.62	4.43	3.39
2	22.09	20.03	6.96	5.69	5.64	4.67	4.68	3.62	3.63	2.63	4.51	3.16
3	20.29	18.65	7.25	6.10	5.23	3.98	4.36	3.08	3.68	2.61	3.77	2.79
4	19.39	18.09	7.29	6.17	5.91	3.93	3.47	1.36	3.65	2.59	3.77	2.86
5	18.91	17.55	7.27	6.21	6.07	5.08	3.38	2.31	3.85	2.91	3.81	2.94
6	20.00	17.24	7.17	6.01	6.19	5.17	3.76	2.75	3.93	2.55	3.91	2.73
7	18.59	17.30	7.03	5.84	5.91	4.67	4.20	3.27	3.19	2.03	3.42	2.18
8	18.32	15.75	6.89	5.67	5.68	4.71	4.54	3.72	2.97	2.04	3.38	2.25
9	16.37	14.93	6.44	5.20	5.40	4.35	4.49	3.38	4.05	2.40	3.47	2.44
10	15.54	14.15	5.62	4.44	4.95	3.95	4.03	3.21	4.72	3.59	3.14	2.22
11	15.43	13.45	5.63	4.61	5.07	4.23	4.19	3.37	4.27	3.65	3.61	2.01
12	16.03	14.72	6.26	5.51	5.27	4.47	4.37	3.58	4.41	3.43	4.23	2.96
13	16.48	15.69	6.36	5.64	5.15	4.42	4.09	3.52	4.05	3.47	4.01	3.35
14	16.81	16.07	6.54	5.85	5.34	4.43	4.15	2.99	4.21	2.97	3.88	2.92
15	16.15	14.30	6.47	5.76	6.06	4.94	4.84	3.63	4.18	2.92	3.85	2.85
16	14.26	13.00	6.44	5.79	5.97	5.32	4.92	3.73	4.02	2.47	3.77	2.66
17	13.25	12.08	6.42	5.57	5.55	4.66	5.02	3.76	4.15	2.98	3.80	2.70
18	13.29	12.56	6.37	5.42	5.43	4.30	5.10	3.84	---	---	3.89	2.61
19	13.25	12.19	6.55	5.37	5.52	4.25	5.26	3.83	---	---	3.52	1.77
20	12.91	11.92	6.56	5.49	5.56	4.23	4.94	3.38	---	---	3.03	1.90
21	12.64	11.57	6.60	5.42	5.38	3.91	4.64	3.18	---	---	3.22	2.13
22	12.31	10.46	6.58	5.19	5.52	4.06	4.40	3.21	---	---	3.19	1.86
23	11.07	9.53	6.16	4.85	4.98	3.53	4.10	2.70	---	---	2.85	1.85
24	10.19	8.87	5.87	4.38	4.58	3.20	4.48	2.70	---	---	3.43	2.10
25	9.60	8.24	6.21	4.93	4.81	3.69	5.02	4.05	---	---	3.64	2.76
26	9.24	7.94	6.57	5.46	4.83	3.85	4.46	3.73	---	---	3.42	2.57
27	8.81	7.55	6.41	5.29	4.96	3.93	4.35	3.57	---	---	3.11	2.16
28	8.39	6.98	6.09	5.18	4.78	4.08	4.13	3.52	---	---	3.56	2.51
29	7.51	6.30	6.20	5.44	4.40	3.66	4.14	3.16	4.03	2.90	3.92	3.10
30	6.74	5.46	5.87	5.11	4.14	3.37	4.13	3.32	---	---	3.92	2.70
31	5.84	4.67	---	---	4.16	3.12	3.99	2.91	---	---	3.30	2.40
MONTH	24.16	4.67	7.29	4.38	6.19	3.12	5.26	1.36	4.72	2.03	4.51	1.77

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

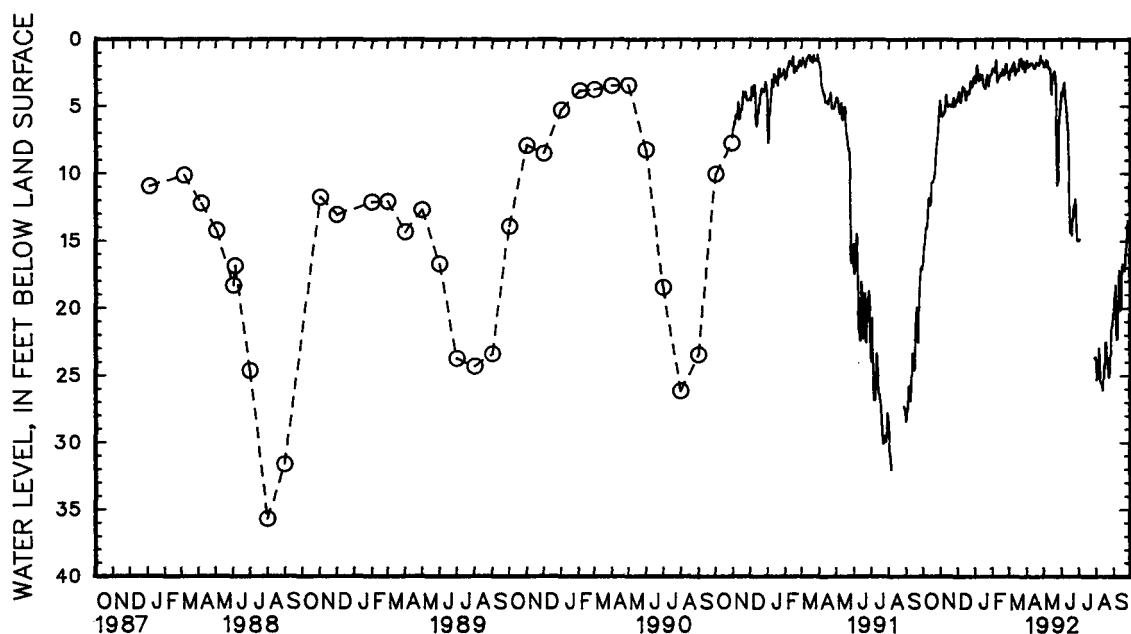
WELL NUMBER.--WO Bh 98. SITE ID.--382127075043802. PERMIT NUMBER.--WO-81-1822.
 LOCATION.--Lat 38°21'27", long 75°04'38", Hydrologic Unit 02060010, at 28th Street Park, Ocean City.
 Owner: Town of Ocean City.
 AQUIFER.--Ocean City aquifer of Miocene age. Aquifer code: 122OCNC.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 275 ft; casing diameter 4 in., to 255 ft; screen diameter 4 in. from 255 to 275 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel from January 1988 to October 1990. Equipped with digital water-level recorder--60-minute recorder interval from November 1990 to current year.
 DATUM.--Elevation of land surface is 5 ft above National Geodetic Vertical Datum of 1929.
 Measuring Point: Top of casing, 2.52 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--January 1988 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.48 ft below land surface, March 18, 1991; lowest measured, 35.70 ft below land surface, Aug. 1, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.74	16.10	4.94	4.14	4.32	3.76	3.19	2.20	2.21	1.49	2.90	2.11
2	16.49	15.46	5.42	4.51	4.16	3.50	3.20	2.49	2.17	1.49	2.97	1.98
3	15.71	14.49	5.71	4.89	3.92	2.98	2.97	1.95	2.20	1.47	2.34	1.59
4	14.95	13.98	5.75	5.01	4.50	2.95	2.16	.58	2.19	1.48	2.25	1.64
5	14.52	13.51	5.76	5.05	4.63	3.95	1.94	1.18	2.35	1.70	2.30	1.74
6	14.03	13.21	5.67	4.87	4.70	4.01	2.29	1.62	2.44	1.43	2.38	1.57
7	14.04	13.20	5.53	4.72	4.46	3.56	2.72	2.08	1.80	.94	2.00	1.06
8	13.92	12.92	5.40	4.55	4.17	3.52	3.05	2.52	1.53	.94	1.89	1.08
9	13.36	12.33	4.98	4.01	3.92	3.14	3.04	2.20	2.49	1.18	1.99	1.29
10	12.73	11.67	4.23	3.38	3.52	2.80	2.61	2.05	3.18	2.24	1.70	1.04
11	11.99	11.10	4.14	3.43	3.57	3.01	2.73	2.07	2.84	2.43	2.03	.92
12	11.82	11.16	4.74	4.10	3.75	3.22	2.90	2.34	2.92	2.25	2.67	1.67
13	12.12	11.56	4.86	4.39	3.66	3.19	2.68	2.30	2.72	2.24	2.52	2.09
14	12.35	11.83	5.02	4.60	3.82	3.18	2.66	1.88	2.72	1.87	2.36	1.75
15	12.18	11.47	5.00	4.53	4.51	3.59	3.30	2.33	2.72	1.80	2.35	1.66
16	11.47	10.54	4.95	4.53	4.46	4.00	3.39	2.58	2.51	1.43	2.26	1.50
17	10.68	9.71	4.91	4.36	4.17	3.44	3.43	2.56	2.62	1.87	2.26	1.53
18	10.65	10.18	4.89	4.24	3.92	3.14	3.60	2.63	2.63	1.50	2.33	1.45
19	10.63	9.90	4.98	4.16	3.97	3.11	3.68	2.67	2.25	1.39	2.02	.72
20	10.37	9.64	4.99	4.28	4.02	3.10	3.41	2.30	2.43	1.58	1.50	.76
21	10.10	9.40	5.04	4.25	3.86	2.77	3.11	2.10	2.64	1.85	1.69	.86
22	9.87	8.83	5.00	4.02	3.96	2.96	2.89	2.07	2.63	1.84	1.66	.75
23	9.22	8.06	4.61	3.73	3.50	2.49	2.63	1.54	2.52	1.82	1.38	.75
24	8.48	7.50	4.35	3.32	3.10	2.14	2.88	1.54	2.13	1.52	1.88	.88
25	7.95	7.01	4.60	3.74	3.28	2.49	3.47	2.63	1.85	1.28	2.12	1.46
26	7.62	6.74	4.96	4.23	3.34	2.69	3.02	2.49	1.82	1.14	1.92	1.30
27	7.27	6.37	4.87	4.10	3.50	2.75	2.86	2.35	2.43	1.41	1.64	.96
28	6.88	5.76	4.57	3.98	3.38	2.91	2.70	2.28	2.43	1.96	2.03	1.24
29	6.07	5.24	4.67	4.15	3.16	2.55	2.64	1.97	2.52	1.70	2.37	1.76
30	5.42	4.46	4.47	3.89	2.80	2.29	2.64	2.09	---	---	2.37	1.47
31	4.53	3.67	---	---	2.75	2.05	2.53	1.76	---	---	1.83	1.15
MONTH	16.74	3.67	5.76	3.32	4.70	2.05	3.68	.58	3.18	.94	2.97	.72

GROUND-WATER LEVELS
MARYLAND--Continued
WORCESTER COUNTY--Continued
WO Bh 98--Continued

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.69	1.03	1.80	1.10	3.91	2.96	15.02	14.44	23.78	22.47	20.11	19.08
2	1.57	.96	2.03	1.27	4.16	3.16	14.93	13.95	25.33	23.72	19.28	18.41
3	1.93	1.28	2.02	1.12	4.03	3.07	---	---	25.32	24.03	18.95	17.81
4	2.05	1.27	1.90	1.06	3.79	2.84	---	---	24.65	23.06	18.33	17.30
5	1.98	1.29	1.73	.83	3.38	2.37	---	---	24.26	22.60	20.39	18.22
6	1.99	1.25	1.54	.83	3.21	2.32	---	---	22.96	21.59	21.98	20.08
7	1.83	1.00	1.98	.85	4.43	2.87	---	---	23.48	21.32	22.32	21.55
8	1.78	.99	1.63	.96	4.70	3.99	---	---	25.24	23.48	22.27	19.63
9	1.80	1.12	2.04	1.10	5.41	4.30	---	---	25.42	24.60	19.79	18.19
10	1.87	1.10	2.12	1.46	5.58	4.53	---	---	25.55	24.55	18.35	16.89
11	1.75	1.19	2.21	1.54	6.18	5.38	---	---	25.60	24.50	17.22	16.62
12	1.89	1.00	2.16	1.29	6.72	6.05	---	---	25.83	24.87	18.70	16.26
13	1.94	1.22	2.22	1.45	8.77	6.60	---	---	26.10	24.76	20.17	18.70
14	2.13	1.39	3.73	1.73	10.96	8.77	---	---	25.24	23.59	19.95	18.39
15	2.13	1.35	4.10	2.67	14.40	10.96	---	---	24.27	22.70	18.46	16.75
16	2.10	1.16	3.11	2.09	14.43	12.58	---	---	24.42	22.32	16.97	16.07
17	1.91	1.03	2.76	1.92	14.26	12.93	---	---	22.53	21.72	16.74	16.13
18	1.76	.89	2.61	1.84	14.60	13.44	---	---	22.54	21.65	16.90	16.25
19	1.72	.96	2.46	1.71	13.44	11.63	---	---	22.52	21.56	17.18	16.59
20	1.83	.99	2.38	1.71	13.45	11.63	---	---	24.13	21.74	17.24	16.56
21	1.85	1.13	2.71	1.79	13.31	12.59	---	---	23.69	22.63	16.80	15.77
22	1.84	1.16	3.31	2.10	12.62	12.06	---	---	24.63	22.99	16.02	14.77
23	1.92	1.26	6.78	3.19	12.42	11.86	---	---	25.14	23.82	15.22	13.99
24	1.83	1.42	10.44	6.78	12.34	11.50	---	---	25.14	24.12	14.47	12.98
25	1.52	1.07	10.90	9.94	11.95	11.25	---	---	24.79	22.35	13.51	12.49
26	1.18	.76	10.68	7.88	12.32	11.65	---	---	23.51	22.39	13.78	12.70
27	1.53	.83	7.88	6.01	14.32	12.16	---	---	23.43	21.23	14.50	13.60
28	1.61	1.13	6.21	4.99	15.02	13.93	---	---	21.71	20.33	14.72	13.74
29	1.60	.96	5.32	4.40	15.04	14.63	23.69	22.21	21.42	20.28	14.23	13.26
30	1.66	1.04	4.82	3.83	15.00	14.53	23.78	22.50	21.32	20.31	13.70	11.90
31	---	---	4.31	3.24	---	---	23.67	22.26	20.86	19.85	---	---
MONTH	2.13	.76	10.90	.83	15.04	2.32	23.78	13.95	26.10	19.85	22.32	11.90



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

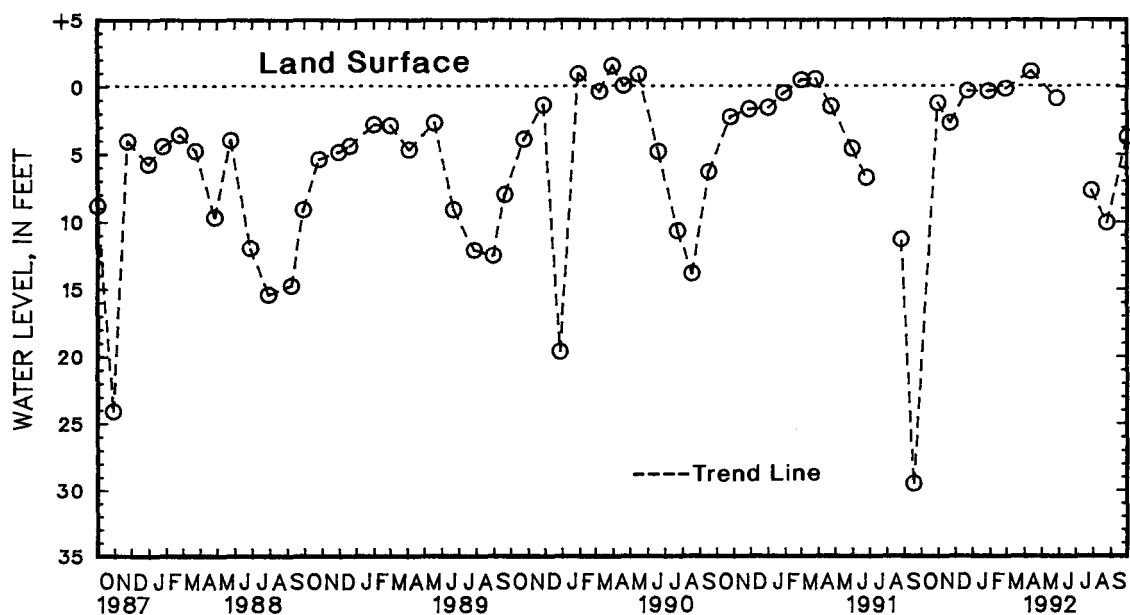
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Cg 72. SITE ID.--381939075052101. PERMIT NUMBER.--WO-73-1304.
 LOCATION.--Lat 38°19'39", long 75°05'21", Hydrologic Unit 02060010, at South Division St., Ocean City.
 Owner: Town of Ocean City.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 450 ft; casing diameter 4 in., to 384 ft; screen diameter 4 in. from 384 to 450 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
 DATUM.--Elevation of land surface is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map.
 Measuring Point: Top of 6 in. flange, 3.2 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping.
 PERIOD OF RECORD.--January 1985 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.58 ft above land surface, March 30, 1990, lowest measured, 29.85 ft below land surface, July 14, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE LAND SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	1.22	DEC 23	.30	FEB 28	.14	MAY 28	.88	AUG 25	10.20
NOV 21	2.70	JAN 29	.34	APR 12	+1.15	JUL 28	7.80	SEP 30	3.76
WATER YEAR 1992		HIGHEST	+1.15	APR 12, 1992		LOWEST	10.20	AUG 25, 1992	



5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dd 7. SITE ID.--381037075234301.

LOCATION.--Lat 38°10'37", long 75°23'43", Hydrologic Unit 02060009, near intersection of Green and Commerce Sts., Snow Hill.

Owner: City of Snow Hill.

AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 290 ft; casing diameter 6 in.; casing length unknown.

INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.

DATUM.--Elevation of land surface is 13 ft above National Geodetic Vertical Datum of 1929, from topographic map.

Measuring point: Top of casing extension, 0.40 ft below land surface.

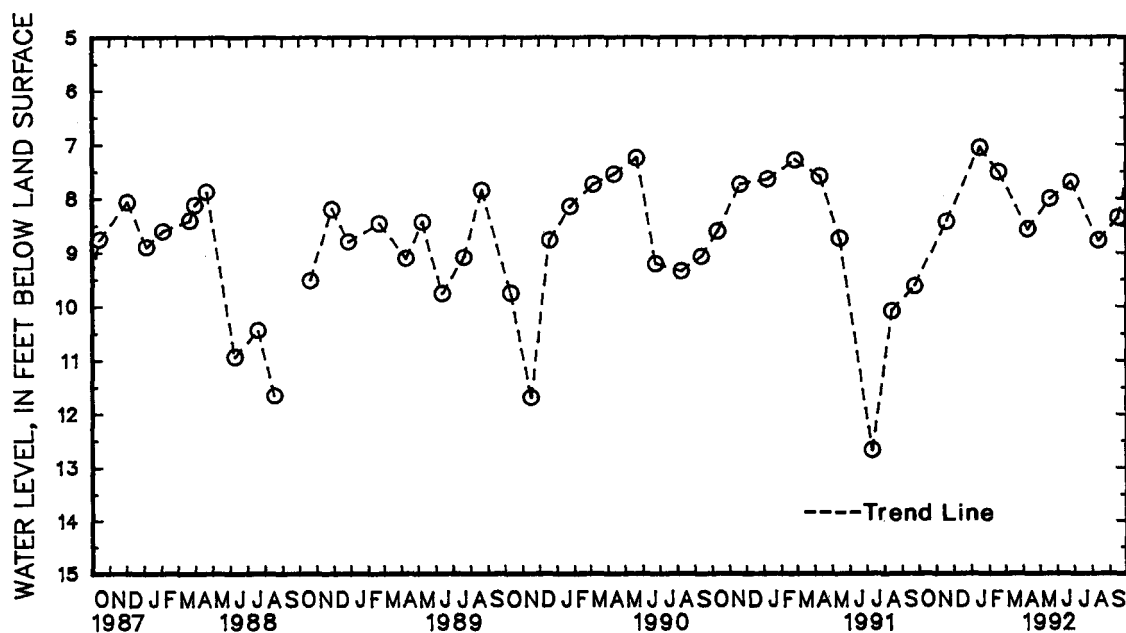
REMARKS.--Maryland Water-Level Network observation well. Water levels affected by nearby pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.63 ft below land-surface datum, March 8, 1962; lowest measured, 38.02 ft below land-surface datum, Sept. 17, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

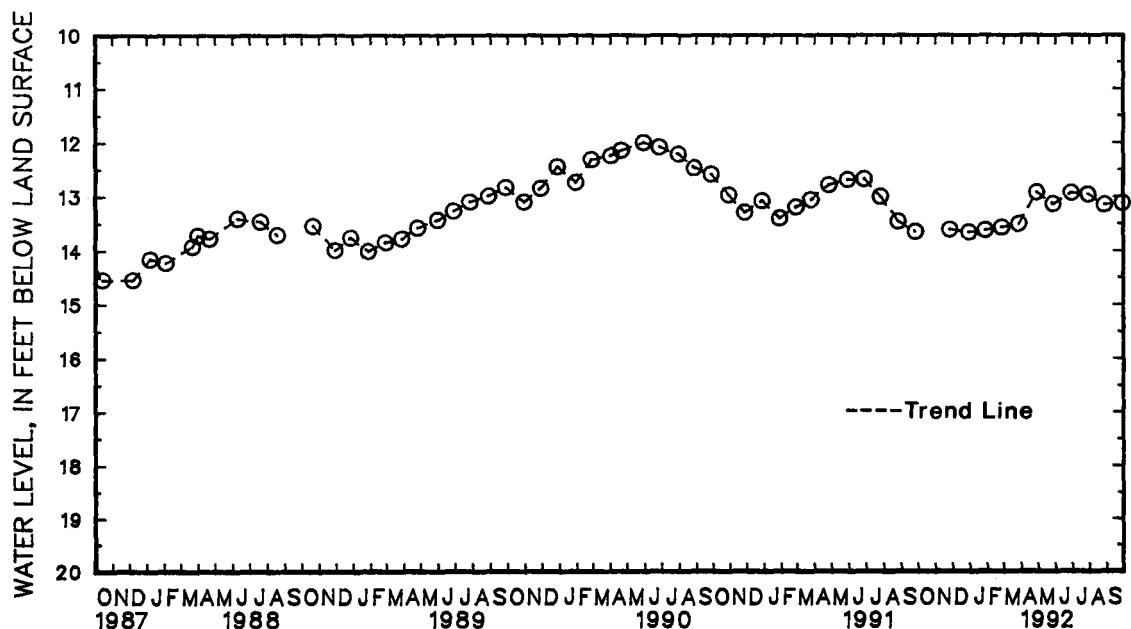
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 19	8.43	FEB 18	7.52	MAY 18	8.02	AUG 12	8.80
JAN 16	7.06	APR 9	8.59	JUN 25	7.70	SEP 16	8.37
WATER YEAR 1992		HIGHEST	7.06	JAN 16, 1992	LOWEST	8.80	AUG 12, 1992



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--WO De 36. SITE ID.--381457075174101. PERMIT NUMBER.--WO-73-0515.
LOCATION.--Lat 38°14'57", long 75°17'41", Hydrologic Unit 02060010, at Newark.
Owner: U.S. Geological Survey.
AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 330 ft; casing diameter 4 in., to 320 ft;
screen diameter 4 in. from 320 to 330 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring Point: Top of 4 in. coupling, 2.00 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well.
PERIOD OF RECORD.--September 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.62 ft below land surface, May 20, 1976,
lowest measured, 14.75 ft below land surface, Oct. 22, 1975.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	13.64	JAN 28	13.65	MAR 27	13.53	MAY 27	13.16	JUL 29	12.98	SEP 28	13.14
DEC 30	13.69	FEB 26	13.60	APR 27	12.94	JUN 29	12.95	AUG 27	13.17		
WATER YEAR 1992		HIGHEST	12.94	APR 27, 1992		LOWEST	13.69	DEC 30, 1991			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER LEVELS

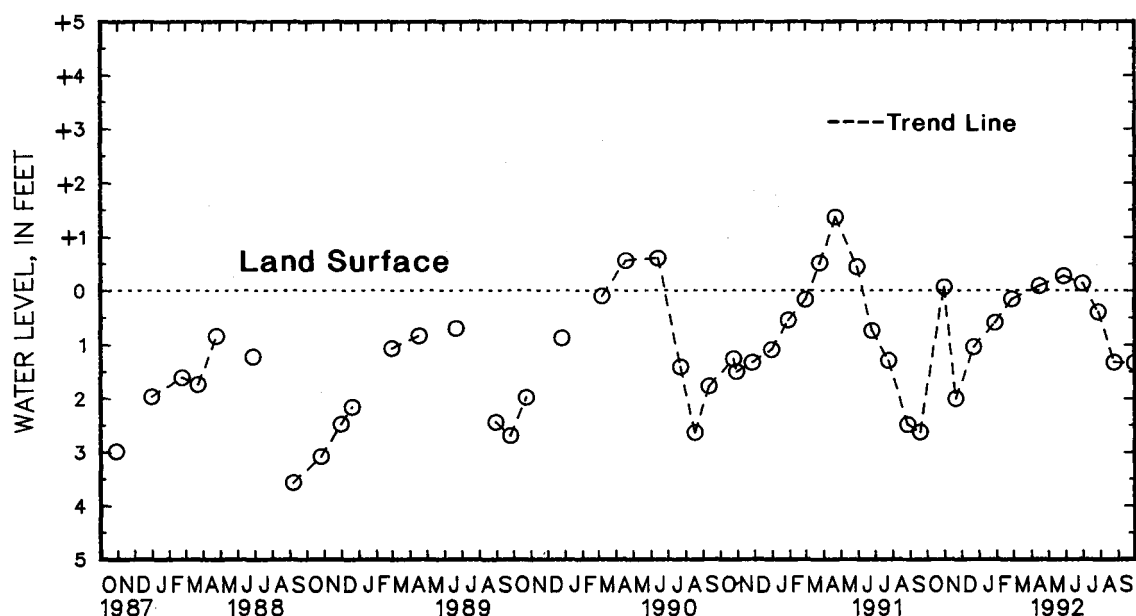
MARYLAND--Continued

WORCESTER COUNTY--Continued

WELL NUMBER.--WO Dg 21. SITE ID.--381427075081102. PERMIT NUMBER.--WO-73-0519.
 LOCATION.--Lat 38°14'27", long 75°08'11", Hydrologic Unit 020060010, at Assateague Island State Park.
 Owner: U.S. Geological Survey.
 AQUIFER.--Manokin aquifer of Miocene age. Aquifer code: 122MNKN.
 WELL CHARACTERISTICS.--Drilled, observation, artesian well, depth 310 ft; casing diameter 4 in., to 300 ft; screen diameter 4 in. from 300 to 310 ft.
 INSTRUMENTATION.--Monthly measurements with chalked steel tape by U.S. Geological Survey personnel, November 1990 to current year. Periodic measurements with chalked steel tape October 1975, to April 1985. Equipped with digital water-level recorder--60-minute recording interval, April 1985 to October 1990.
 DATUM.--Elevation of land surface is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of recorder shelf, 4.06 ft above land surface.
 REMARKS.--Ocean City ground-water monitoring network well. Water levels affected by nearby pumping. Missing data due to recorder malfunction.
 PERIOD OF RECORD.--October 1975 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.37 ft above land surface, April 22, 1991; lowest recorded, 5.25 ft below land surface, Aug. 25, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 (READINGS ABOVE LAND SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 31	+ .07	DEC 23	1.04	FEB 28	.15	MAY 28	+ .28	JUL 28	.39	SEP 30	1.34	
NOV 21	2.00	JAN 29	.59	APR 15	+ .09	JUN 30	+ .14	AUG 25	1.33			
WATER YEAR 1992		HIGHEST	+ .28	MAY 28, 1992		LOWEST	2.00	NOV 21, 1991				

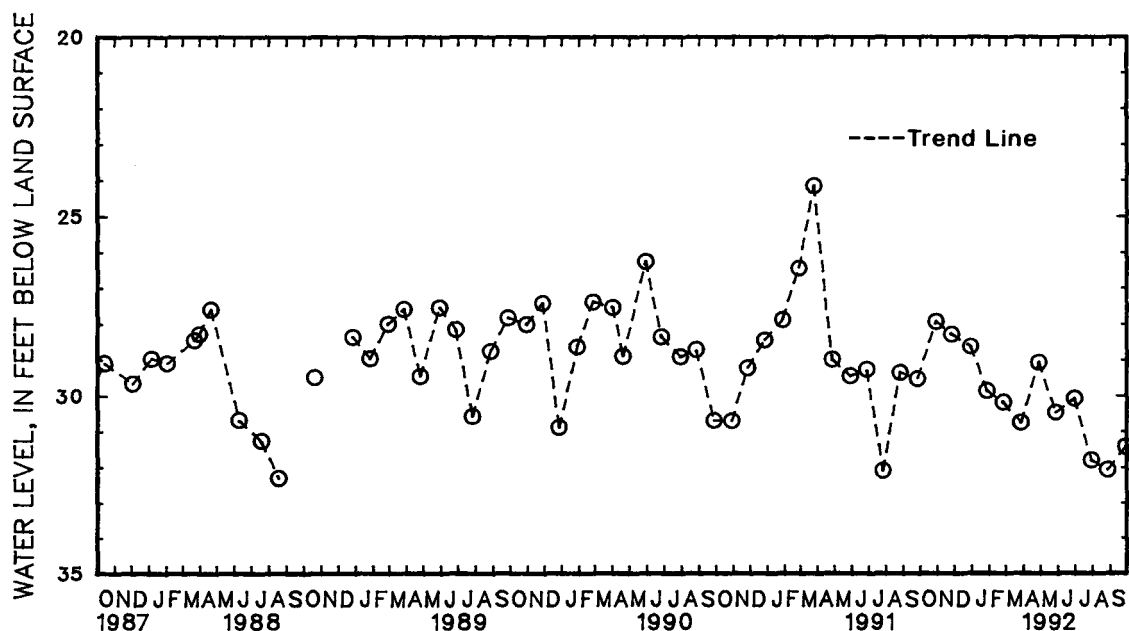


5 YEAR HYDROGRAPH
 OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

WELL NUMBER.--WO Fb 2. SITE ID.--380408075335701.
LOCATION.--Lat 38°04'08", long 75°33'57", Hydrologic Unit 02060009, nr 7th and Young Sts., Pocomoke City.
Owner: Pocomoke City.
AQUIFER.--Pocomoke aquifer of Miocene age. Aquifer code: 122FCMK.
WELL CHARACTERISTICS.--Drilled, unused, artesian well, depth 130 ft; casing diameter 16 in., to 100 ft; casing diameter 10 in., to 100 ft; screen diameter 9.5 in. from 100 to 130 ft.
INSTRUMENTATION.--Monthly measurements with chalked steel tape by USGS personnel.
DATUM.--Elevation of land surface is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.
Measuring point: Top of 1.5 in. casing extension, 3.40 ft above land surface.
REMARKS.--Maryland Water-Level Network observation well. Water level reported 30 ft below land surface, Oct. 3, 1947; water levels may be affected by nearby pumpage.
PERIOD OF RECORD.--January 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.61 ft below land surface, Feb. 20, 1953; lowest measured, 49.70 ft below land surface, July 1, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE		WATER LEVEL		DATE		WATER LEVEL		DATE		WATER LEVEL	
OCT 29	27.94	DEC 30	28.65	FEB 26	30.22	APR 27	29.08	JUN 29	30.11	AUG 27	32.10
NOV 26	28.30	JAN 28	29.90	MAR 27	30.80	MAY 27	30.50	JUL 29	31.85	SEP 28	31.46
WATER YEAR 1992		HIGHEST	27.94	OCT 29, 1991		LOWEST	32.10	AUG 27, 1992			



5 YEAR HYDROGRAPH
OCTOBER 1, 1987 THROUGH SEPTEMBER 30, 1992

GROUND-WATER QUALITY RECORDS

Remarks Codes

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

Dissolved Trace-Element Concentrations

NOTE--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in water year 1994.

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
Bb33-13	12-12-91	1100	394706075420601	300CCKV		GW	4040	57.68	163.00	40
Bb33-15	12-12-91	1300	394709075421601	300CCKV		GW	4040	58.99	298.00	62
Bb33-26	12-12-91	1700	394732075420202	300CCKV		GW	4040	63.51	340.00	74
Bb34-34	12-13-91	1200	394714075414501	300CCKV		GW	4040	58.00	298.00	145
Bb44-13	12-13-91	1345	394656075415801	300CCKV		GW	4040	--	190.00	130
Ea44-11	06-18-92	1045	393134075460101	211MGTY		GW	4040	38.82	97.00	--
Ea44-12	06-18-92	1100	393134075460201	112CLMB		GW	4030	6.38	22.50	--
Eb32-22	06-17-92	1000	393211075433401	211EGLS		GW	4040	--	26.00	--
Eb42-03	06-18-92	1330	393143075440101	211MGTY		GW	4040	57.63	--	--
Eb43-05	06-17-92	1230	393059075421301	211MGTY		GW	4040	--	190.00	180
Eb51-11	06-18-92	1300	393025075441501	211MGTY		GW	4040	--	177.00	155
Fa25-11	06-17-92	1530	392800075454401	125RCCS		GW	4040	--	90.00	80
Gb42-05	10-16-91	1230	392120075434402	112CLMB		GW	4040	3.95	18.00	15
	11-13-91	1010		112CLMB		GW	4040	3.99	18.00	15
	12-10-91	1230		112CLMB		GW	4040	2.44	18.00	15
	01-07-92	1200		112CLMB		GW	4040	2.31	18.00	15
	02-04-92	1230		112CLMB		GW	4040	2.49	18.00	15
	03-03-92	1150		112CLMB		GW	4040	1.64	18.00	15
	03-30-92	1500		112CLMB		GW	4040	1.05	18.00	15
Gb42-06	10-16-91	1730	392118075434701	112CLMB		GW	4040	10.97	18.00	15
Gb42-07	10-16-91	1100	392120075434301	112CLMB		GW	4040	1.25	5.50	2.5
	11-13-91	0900		112CLMB		GW	4040	1.15	5.50	2.5
	12-10-91	1130		112CLMB		GW	4040	-0.35	5.50	2.5
	01-07-92	1110		112CLMB		GW	4040	-0.36	5.50	2.5
	02-04-92	1130		112CLMB		GW	4040	-0.27	5.50	2.5
	03-03-92	1100		112CLMB		GW	4040	-0.61	5.50	2.5
	03-30-92	1200		112CLMB		GW	4040	-1.25	5.50	2.5
Gb42-08	10-16-91	1400	392120075434403	112CLMB		GW	4040	4.23	9.00	6.0
	11-13-91	1050		112CLMB		GW	4040	4.04	9.00	6.0
	12-10-91	1310		112CLMB		GW	4040	2.47	9.00	6.0
	01-07-92	1240		112CLMB		GW	4040	2.41	9.00	6.0
	02-04-92	1300		112CLMB		GW	4040	2.54	9.00	6.0
	03-03-92	1230		112CLMB		GW	4040	2.04	9.00	6.0
	03-30-92	1650		112CLMB		GW	4040	1.20	9.00	6.0
Gb42-10A	10-16-91	1600	392120075434501	112CLMB		GW	4040	4.83	9.00	6.0
	11-13-91	1130		112CLMB		GW	4040	4.69	9.00	6.0
	12-10-91	1430		112CLMB		GW	4040	3.49	9.00	6.0
	01-07-92	1340		112CLMB		GW	4040	3.02	9.00	6.0
	02-04-92	1400		112CLMB		GW	4040	2.99	9.00	6.0
	03-03-92	1330		112CLMB		GW	4040	2.90	9.00	6.0
Gb42-11	03-30-92	1810		112CLMB		GW	4040	1.72	9.00	6.0
	10-16-91	1600	392120075434303	112CLMB		GW	4080	--	2.00	1.5

Geologic unit (aquifer): 112CLMB - Columbia Formation
 125RCCS - Rancocas Formation
 211EGLS - Englishtown Formation
 211MGTY - Magothy Formation
 300CCKV - Cockeysville Marble

Site type: GW - Groundwater

Sampling method: 4030 - Suction pump
 4040 - Submersible pump
 4080 - Peristaltic pump

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
Bb33-13	163	250	80	6.0	347	7.5	12.0	22.0	4.5	--
Bb33-15	298	300	20	1.0	319	7.0	12.0	15.0	1.7	--
Bb33-26	340	280	105	1.0	280	7.5	12.0	--	4.8	--
Bb34-34	298	260	60	1.0	--	--	--	--	--	--
Bb44-13	190	245	--	500	--	--	--	--	--	--
Ea44-11	--	40.0	37	6.6	135	5.8	13.5	--	0.2	10
Ea44-12	--	40.0	45	--	225	5.4	13.5	--	8.1	12
Eb32-22	--	70.0	20	--	295	6.0	15.0	--	5.8	18
Eb42-03	--	70.0	84	8.0	176	6.1	14.0	--	0.2	20
Eb43-05	190	60.0	40	--	229	7.2	16.5	--	0.1	31
Eb51-11	177	45.0	45	--	177	6.7	14.0	--	3.9	24
Fa25-11	90	60.0	35	--	236	7.3	15.0	--	0.1	41
Gb42-05	18	75.0	38	0.5	168	5.3	16.0	16.0	8.7	--
	18	75.0	12	0.7	166	5.5	15.5	7.5	11.4	--
	18	75.0	12	0.8	166	5.6	15.0	7.0	8.8	--
	18	75.0	21	0.4	165	5.5	13.5	5.5	9.7	--
	18	75.0	12	0.6	165	5.5	13.5	8.0	8.8	--
	18	75.0	13	0.9	164	5.3	12.5	13.0	13.2	--
	18	75.0	19	0.5	160	5.7	12.5	14.5	13.0	--
Gb42-06	18	80.0	14	0.4	227	5.4	16.0	19.0	7.5	--
Gb42-07	5.5	73.0	35	0.5	111	5.7	16.5	15.0	0.3	--
	5.5	73.0	10	0.6	106	6.0	12.5	9.0	1.6	--
	5.5	73.0	8	0.6	104	6.0	11.5	7.5	0.8	--
	5.5	73.0	12	0.3	106	5.8	10.5	6.0	9.8	--
	5.5	73.0	9	0.5	108	6.0	9.5	6.0	8.6	--
	5.5	73.0	9	0.4	90	5.3	10.0	8.5	12.8	--
	5.5	73.0	11	0.6	93	6.0	12.0	18.5	13.2	--
Gb42-08	9.0	75.0	32	0.4	234	5.9	19.5	16.0	8.5	--
	9.0	75.0	8	0.4	222	6.4	16.0	7.5	9.4	--
	9.0	75.0	8	0.6	223	6.5	14.0	7.0	9.1	--
	9.0	75.0	11	0.4	217	6.4	11.0	5.5	10.2	--
	9.0	75.0	9	0.4	232	6.5	9.5	8.5	11.0	--
	9.0	75.0	7	0.8	232	6.3	8.5	6.5	13.6	--
	9.0	75.0	13	0.4	229	6.3	9.5	11.5	11.9	--
Gb42-10A	9.0	74.4	35	--	225	5.7	19.0	20.0	5.1	--
	9.0	74.4	--	--	227	6.1	15.0	8.0	12.0	--
	9.0	74.4	--	--	214	6.0	13.0	8.5	6.4	--
	9.0	74.4	--	--	216	6.1	11.0	6.0	6.2	--
	9.0	74.4	30	--	230	6.6	9.5	9.0	5.2	--
	9.0	74.4	--	--	223	6.3	8.5	7.0	7.9	--
	9.0	74.4	35	--	225	5.9	9.0	10.0	9.3	--
Gb42-11	1.6	75.0	10	--	157	6.3	17.0	18.0	--	11

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	ALKA- LINITY WAT WH TOT IT FIELD (MG/L AS CACO3)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
Bb33-13	--	--	--	185	--	--	--	--	--	--
Bb33-15	--	--	--	186	--	--	--	--	--	--
Bb33-26	--	--	--	142	--	--	--	--	--	--
Bb34-34	--	--	--	--	--	--	--	--	--	--
Bb44-13	--	--	--	--	--	--	--	--	--	--
Ea44-11	4.0	3.9	2.7	--	49	60	5.0	1.9	0.20	18
Ea44-12	12	4.0	3.0	--	4	5	22	15	<0.10	14
Eb32-22	13	13	5.1	--	16	19	42	28	<0.10	10
Eb42-03	3.7	4.0	2.4	--	72	87	7.0	5.2	0.20	16
Eb43-05	6.3	5.2	5.1	--	115	141	4.0	1.6	0.20	8.8
Eb51-11	4.4	3.0	2.8	--	85	104	5.4	2.3	0.20	12
Fa25-11	2.0	3.3	4.0	--	87	106	22	6.1	0.50	28
Gb42-05	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-06	--	--	--	--	--	--	--	--	--	--
Gb42-07	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-08	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--
Gb42-10A	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--
Gb42-11	4.1	6.7	1.6	--	51	--	4.9	11	<0.10	14

QUALITY OF GROUND WATER

509

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)
Bb33-13	--	--	--	--	--	--	--	--	--	--
Bb33-15	--	--	--	--	--	--	--	--	--	--
Bb33-26	--	--	--	--	--	--	--	--	--	--
Bb34-34	--	--	--	--	--	--	--	--	--	--
Bb44-13	--	--	--	--	--	--	--	--	--	--
Ea44-11	84	0.020	0.010	0.030	0.030	0.25	0.070	10	--	--
Ea44-12	138	12.0	0.010	12.0	0.020	<0.20	<0.010	30	--	--
Eb32-22	173	7.69	0.010	7.70	0.020	<0.20	<0.010	30	--	--
Eb42-03	107	--	0.010	<0.020	0.040	0.21	0.070	20	--	--
Eb43-05	134	--	<0.010	0.310	0.150	0.51	0.020	30	--	--
Eb51-11	109	0.010	0.010	0.020	0.050	<0.20	0.010	30	--	--
Fa25-11	159	--	<0.010	<0.020	0.030	<0.20	0.010	30	--	--
Gb42-05	--	--	<0.010	9.60	<0.010	<0.0	<0.010	--	--	--
	--	--	<0.010	9.20	0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	9.50	<0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	8.90	<0.010	<0.20	0.010	--	--	--
	--	--	<0.010	9.20	<0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	9.30	<0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	9.10	0.010	<0.20	<0.010	--	--	--
Gb42-06	--	--	<0.010	13.0	0.160	0.30	0.040	--	--	--
Gb42-07	--	--	<0.010	1.20	<0.010	<0.0	0.020	--	--	--
	--	--	<0.010	0.950	0.010	<0.20	0.010	--	--	--
	--	1.69	0.010	1.70	0.010	<0.20	0.030	--	--	--
	--	--	<0.010	7.30	0.020	<0.20	0.010	--	--	--
	--	--	<0.010	7.70	<0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	6.10	<0.010	<0.20	<0.010	--	--	--
	--	--	<0.010	6.30	0.020	<0.20	<0.010	--	--	--
Gb42-08	--	--	<0.010	10.0	0.020	<0.0	<0.010	--	--	--
	--	--	<0.010	9.30	0.040	<0.20	<0.010	--	--	--
	--	--	<0.010	9.30	0.030	<0.20	0.020	--	--	--
	--	--	<0.010	9.90	0.030	<0.20	0.020	--	--	--
	--	--	<0.010	10.0	0.010	<0.20	0.010	--	--	--
	--	--	<0.010	12.0	0.030	<0.20	<0.010	--	--	--
	--	--	<0.010	10.0	0.040	0.50	<0.010	--	--	--
Gb42-10A	--	--	<0.010	7.90	0.070	0.30	<0.010	--	--	--
	--	--	<0.010	9.10	0.060	<0.20	<0.010	--	--	--
	--	--	<0.010	8.50	0.040	<0.20	<0.010	--	--	--
	--	--	<0.010	7.50	0.040	<0.20	<0.010	--	--	--
	--	--	<0.010	7.20	0.040	0.30	<0.010	--	--	--
	--	--	<0.010	7.90	0.070	<0.20	<0.010	--	--	--
	--	--	<0.010	8.20	0.050	0.30	<0.010	--	--	--
Gb42-11	88	--	<0.010	<0.050	0.450	0.80	0.280	<10	<1	3

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
Bb33-13	--	--	--	--	--	--	--	--	--	--
Bb33-15	--	--	--	--	--	--	--	--	--	--
Bb33-26	--	--	--	--	--	--	--	--	--	--
Bb34-34	--	--	--	--	--	--	--	--	--	--
Bb44-13	--	--	--	--	--	--	--	--	--	--
Ea44-11	--	--	--	--	--	--	--	8500	--	--
Ea44-12	--	--	--	--	--	--	--	44	--	--
Eb32-22	--	--	--	--	--	--	--	22	--	--
Eb42-03	--	--	--	--	--	--	--	5400	--	--
Eb43-05	--	--	--	--	--	--	--	1200	--	--
Eb51-11	--	--	--	--	--	--	--	3900	--	--
Fa25-11	--	--	--	--	--	--	--	110	--	--
Gb42-05	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-06	--	--	--	--	--	--	--	--	--	--
Gb42-07	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-08	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-10A	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-11	--	--	--	--	--	--	--	--	--	--
	71	<0.5	10	<1.0	<5	8	<10	7300	<10	<4

QUALITY OF GROUND WATER

511

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	RADON 222 TOTAL (PCI/L)	HARD- NESS TOTAL (MG/L AS CACO3)
Bb33-13	--	--	--	--	--	--	--	--	--	--
Bb33-15	--	--	--	--	--	--	--	--	--	--
Bb33-26	--	--	--	--	--	--	--	--	--	--
Bb34-34	--	--	--	--	--	--	--	--	--	--
Bb44-13	--	--	--	--	--	--	--	--	--	--
Ea44-11	180	--	--	--	--	--	--	--	110	41
Ea44-12	44	--	--	--	--	--	--	--	490	79
Eb32-22	<5	--	--	--	--	--	--	--	210	98
Eb42-03	130	--	--	--	--	--	--	--	150	65
Eb43-05	14	--	--	--	--	--	--	--	100	100
Eb51-11	75	--	--	--	--	--	--	--	190	78
Fa25-11	8	--	--	--	--	--	--	--	540	110
Gb42-05	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-06	--	--	--	--	--	--	--	--	--	--
Gb42-07	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-08	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-10A	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Gb42-11	120	<10	<10	<1	<1.0	130	<6	7	--	45

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

NEW CASTLE COUNTY, DELAWARE--CONTINUED

WELL NUMBER	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)
Bb33-13	--	<0.10	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.01
Bb33-15	--	<0.10	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.01
Bb33-26	--	<0.10	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.01
Bb34-34	--	<0.10	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.01
Bb44-13	--	<0.10	<0.1	<0.001	<0.1	<0.001	<0.001	<0.001	<0.01
Ea44-11	--	--	--	--	--	--	--	--	--
Ea44-12	<0.2	--	--	--	--	--	--	--	--
Eb32-22	0.7	--	--	--	--	--	--	--	--
Eb42-03	<0.2	--	--	--	--	--	--	--	--
Eb43-05	<0.2	--	--	--	--	--	--	--	--
Eb51-11	<0.2	--	--	--	--	--	--	--	--
Fa25-11	<0.2	--	--	--	--	--	--	--	--
Gb42-05	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Gb42-06	--	--	--	--	--	--	--	--	--
Gb42-07	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Gb42-08	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Gb42-10A	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
Gb42-11	6.1	--	--	--	--	--	--	--	--

NEW CASTLE COUNTY, DELAWARE--CONTINUED

[illegible]

[illegible]

QUALITY OF GROUND WATER

515

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

ALLEGANY COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
AL Ae 36	07-28-92	1545	394143078421301	344RMNY	GW		4040	--	40.00	29
AL Ai 26	07-28-92	1200	394311078245501	341JNGS	GW		4040	--	83.00	30
AL Cb 8	07-08-92	1035	393342078570901	321CNMG	GW		4040	46.40	86.00	34
AL Ce 4	07-06-92	1210	393438078420601	347ORSK	SP		4010	--	--	--

	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
AL Ae 36	40	700	95	5.0	610	7.6	13.5	27.0	0.1	89
AL Ai 26	83	1250	59	10	192	6.8	12.5	23.5	0.9	14
AL Cb 8	86	2000	92	1.0	406	7.1	11.0	20.5	2.9	58
AL Ce 4	--	710	--	33	197	7.6	13.5	25.0	8.0	33

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	ALKA- POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, SILICA, DIS- SOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
AL Ae 36	13	16	0.90	228	278	58	32	<0.10	17	364
AL Ai 26	8.9	7.9	0.60	94	115	2.6	0.70	0.10	23	120
AL Cb 8	18	0.80	1.6	178	217	15	4.3	0.10	6.3	206
AL Ce 4	2.6	1.8	0.70	86	105	10	<0.10	<0.10	11	106

	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AL Ae 36	364	<0.010	<0.050	0.180	<0.010	0.020	610	590	940	1000
AL Ai 26	118	<0.010	<0.050	0.080	0.030	<0.010	9300	2900	1300	1200
AL Cb 8	211	<0.010	0.051	0.030	<0.010	<0.010	170	11	80	8
AL Ce 4	--	<0.010	0.120	0.010	0.070	0.060	10	<3	<10	<1

	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	PCN DISSOLV (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)
AL Ae 36	250	0.6	280	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
AL Ai 26	390	0.5	72	--	--	--	--	--	--	--
AL Cb 8	260	0.2	220	--	--	--	--	--	--	--
AL Ce 4	--	0.3	93	<0.10	--	--	--	--	--	--

Geologic unit (aquifer): 344RMNY - Romney Formation
 341JNGS - Jennings Formation
 321CNMG - Conemaugh Formation
 347ORSK - Oriskany Group

Site type: GW - Groundwater
 SP - Spring

Sampling method: 4010 - Thief Sample
 4040 - Submersible pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

ALLEGANY COUNTY, MARYLAND--CONTINUED

WELL NUMBER	CHLORO- FORM TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	DI- BROMO- METHANE WHOLE RECOVER (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)
AL Ae 36	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	--	--	--	--	--	--	--	--	--
	O- CHLORO- TOLUENE WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	STYRENE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- FLURA- LIN TOTAL RECOVER (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)
AL Ae 36	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.10	<1.0
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	--	--	--	--	--	--	--	--	--
	XYLENE WATER UNFLTRD REC (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	BENZENE O- CHLORO- WATER UNFLTRD REC (UG/L)
AL Ae 36	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	--	--	--	--	--	--	--	--	--
	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	1,2- TRANSDI CHLORO- ETHENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)	PCB, DIS- SOLVED (UG/L)
AL Ae 36	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	--
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	--	--	--	--	--	--	--	--	<0.1
	ALA- CHLOR TOTAL RECOVER (UG/L)	ALDRIN, DIS- SOLVED (UG/L)	AME- TRYNE TOTAL	ATRA- ZINE WATER UNFLTRD REC (UG/L)	CHLOR- DANE, DIS- SOLVED (UG/L)	CYAN- AZINE TOTAL (UG/L)	DDD, DIS- SOLVED (UG/L)	DDE, DIS- SOLVED (UG/L)	DDT, DIS- SOLVED (UG/L)	DI- ELDRIN DIS- SOLVED (UG/L)
AL Ae 36	<0.10	--	<0.10	<0.1	--	<0.20	--	--	--	--
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	<0.01	--	--	<0.1	--	<0.01	<0.01	<0.01	<0.01

QUALITY OF GROUND WATER

517

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

ALLEGANY COUNTY, MARYLAND--CONTINUED

WELL NUMBER	ENDRIN, DIS- SOLVED (UG/L)	ETHION DISSOLV (UG/L)	HEPTA- CHLOR, DIS- SOLVED (UG/L)	HEPTA- CHLOR EPOXIDE DIS- SOLVED (UG/L)	LINDANE DIS- SOLVED (UG/L)	METH- OXY- CHLOR DISSOLV (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L)	METRI- BUZIN WATER WHOLE TOT.REC (UG/L)	MIREX, DIS- SOLVED (UG/L)	PER- THANE DISSOLV (UG/L)
AL Ae 36	--	--	--	--	--	--	<0.20	<0.10	--	--
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.10
	PROME- TRYNE TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	PRO- PAZINE TOTAL (UG/L)	TOX- APHENE, DIS- SOLVED (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)
AL Ae 36	<0.10	<0.20	<0.10	--	<0.01	<0.01	<0.01	<0.01	<0.10	<0.10
AL Ai 26	--	--	--	--	--	--	--	--	--	--
AL Cb 8	--	--	--	--	--	--	--	--	--	--
AL Ce 4	--	--	--	<1.0	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

ANNE ARUNDEL COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
AA Ad 104	05-21-92	1005	391032076385905	217PPSC	GW		4040	9.31	28.00	19
AA Bc 216	12-10-91	1500	390903076413601	217PPSC	GW		4090	21.80	80.00	48
AA Bd 155	12-10-91	1215	390938076383701	217PPSC	GW		4030	17.00	159.00	145
AA Bd 156	11-26-91	1200	390922076371001	217PPSC	GW		4030	47.00	173.00	160
AA Bd 157	11-26-91	1400	390737076374401	217PPSC	GW		4030	39.00	178.00	145
AA Bd 158	11-27-91	1430	390744076390001	217PPSC	GW		4030	53.80	187.00	174
AA Bd 159	11-27-91	1130	390737076374402	217PPSC	GW		4030	48.80	100.00	89
AA Cg 25	05-19-92	1050	390127076240301	125AQUI	GW		4040	15.88	107.00	100
AA Df 103	05-19-92	1340	385623076274401	125AQUI	GW		4040	24.19	46.00	39
AA Ee 84	12-12-91	1015	385003076310501	125AQUI	GW		4040	16.68	148.00	141

	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
AA Ad 104	28	80.0	100	1.0	552	6.2	12.0	20.5	0.2	35
AA Bc 216	53	142	30	8.0	262	4.5	13.0	8.0	--	8.5
AA Bd 155	155	47.0	90	8.0	55	4.7	13.5	11.0	--	2.8
AA Bd 156	170	69.0	75	8.0	184	4.4	14.0	4.0	--	5.2
AA Bd 157	155	75.0	75	8.0	39	4.8	13.5	4.0	--	2.0
AA Bd 158	184	108	90	6.0	76	4.8	13.5	10.0	--	3.0
AA Bd 159	99	75.0	75	6.0	170	4.8	13.5	8.0	--	8.1
AA Cg 25	107	10.0	147	0.7	139	6.3	14.5	22.0	0.4	8.2
AA Df 103	46	22.0	77	0.7	251	5.4	14.5	21.5	5.2	13
AA Ee 84	148	10.0	20	5.0	1750	--	--	--	--	--

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)
AA Ad 104	8.3	50	3.4	99	121	6.3	95	<0.10	--
AA Bc 216	3.3	33	3.3	--	--	10	68	0.20	0.070
AA Bd 155	1.2	2.6	1.0	--	--	0.30	3.9	0.20	0.020
AA Bd 156	3.4	18	3.3	--	--	1.0	36	0.20	0.15
AA Bd 157	0.66	1.7	0.80	--	--	0.40	2.6	0.20	0.010
AA Bd 158	1.7	5.5	1.6	--	--	0.60	9.6	0.20	0.030
AA Bd 159	4.2	14	2.5	--	--	5.8	30	0.20	0.060
AA Cg 25	2.3	3.3	3.4	56	68	4.1	5.0	0.70	--
AA Df 103	5.0	20	3.3	17	20	15	49	<0.10	--
AA Ee 84	--	--	--	--	--	--	390	--	1.2

Geologic unit (aquifer): 112PLSC - Pleistocene Series
 125AQUI - Aquia Formation
 217PPSC - Patapsco Formation

Site type: GW - Groundwater

Sampling method: 4030 - Suction pump
 4040 - Submersible pump
 4090 - Jet pump

ANNE ARUNDEL COUNTY, MARYLAND--Continued

[illegible]

ANNE ARUNDEL COUNTY, MARYLAND--Continued

[illegible]

QUALITY OF GROUND WATER

521

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

BALTIMORE COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
BA Dc 444	05-27-92	1400	392931076410301	300CCKV	GW		4040	41.91	300.00
	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
BA Dc 444	88	300	390	167	7.2	279	7.9	12.5	17.5
	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	
BA Dc 444	1.3	32	14	1.6	1.5	131	160	2.2	
	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
BA Dc 444	4.6	<0.10	9.0	138	144	<0.010	0.290	<0.010	
	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	
BA Dc 444	0.010	<0.010	490	4	<10	<1	0.5	140	

Geologic unit (aquifer): 300CCKV - Cockeysville Marble

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CALVERT COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
CA Fc 13	10-21-91	1600	382343076302901	122	CSFK	GW	4040	30.33	34.00	29
	12-11-91	1520						30.52	34.00	29
	01-27-92	1145						29.93	34.00	29
	06-24-92	1250						29.01	34.00	29
	06-29-92	1038						29.18	34.00	29
	08-31-92	1317						29.14	34.00	29
CA Fc 14	06-24-92	1230	382343076302902	111	LLND	GW	4020	--	30.00	25
CA Fc 15	10-22-91	1220	382340076303001	122	CSFK	GW	4040	17.97	36.00	31
	12-11-91	1405						18.24	36.00	31
	01-27-92	1100						17.77	36.00	31
	06-24-92	1120						16.82	36.00	31
	08-31-92	1235						16.85	36.00	31
	10-22-91	1045						18.20	23.00	18
CA Fc 16	12-11-91	1345	382340076303002	122	CSFK	GW	4040	18.32	23.00	18
	01-27-92	1030						17.99	23.00	18
	06-24-92	1050						17.18	23.00	18
	08-31-92	1219						17.09	23.00	18
	01-27-92	1010						14.56	32.00	27
	10-21-91	1305						8.98	18.00	18
CA Fc 17	12-11-91	1230	382340076303801	122	CSFK	GW	4040	9.11	18.00	18
	01-27-92	0916						9.23	18.00	18
	06-24-92	1005						8.82	18.00	18
	08-31-92	1000						8.46	18.00	18
	01-27-92	0940						14.25	27.00	22
	11-05-91	1230						--	3.56	3.6
CA Fc 20	06-25-92	0955	382340076303401	111	LLND	LYS	4030	--	3.56	3.6
	09-01-92	0945						--	3.56	3.6
	10-22-91	1445						--	8.52	8.5
	12-16-91	1440						--	8.52	8.5
	01-28-92	0825						--	8.52	8.5
	06-25-92	1005						--	8.52	8.5
CA Fc 28	09-01-92	0940	382340076303402	111	LLND	LYS	4030	--	8.52	8.5
	10-22-91	1440						--	13.70	14
	12-16-91	1445						--	13.70	14
	01-28-92	0830						--	13.70	14
	06-25-92	1025						--	13.70	14
	09-01-92	0935						--	13.70	14
CA Fc 30	01-28-92	0915	382340076303802	111	LLND	LYS	4030	--	2.50	2.5
	06-25-92	0900						--	2.50	2.5
	09-01-92	0840						--	2.50	2.5
	12-16-91	1415						--	5.00	5.0
	01-28-92	0920						--	5.00	5.0
	06-25-92	0925						--	5.00	5.0
CA Fc 32	09-01-92	0845	382340076303803	111	LLND	LYS	4030	--	5.00	5.0
	10-22-91	1330						8.62	13.70	12
	12-11-91	1030						8.36	13.70	12
	01-27-92	1315						8.83	13.70	12
	06-24-92	0910						8.57	13.70	12
	08-31-92	1045						8.34	13.70	12
CA Fc 33	10-22-91	1315	382339076304201	111	LLND	GW	4030	8.83	17.80	16
	12-11-91	1045						8.47	17.80	16
	01-27-92	1300						8.76	17.80	16
	06-24-92	0900						8.32	17.80	16
	08-31-92	1030						8.29	17.80	16

Geologic Unit (aquifer): 111LLND - Lowland Deposits
122CSFK - Chesapeake Group

Site type: GW - Groundwater
LYS - Lysimeter

Sampling method: 4020 - Bailer
4030 - Suction pump
4040 - Submersible pump

QUALITY OF GROUND WATER

523

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CALVERT COUNTY, MARYLAND--CONTINUED

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
CA Fc 13	34	47.4	80	--	590	7.3	16.0	--	5.8	--
	34	47.4	5	1.0	604	6.5	16.0	16.0	5.7	--
	34	47.4	5	0.9	605	6.5	14.5	5.0	6.0	--
	34	47.4	5	0.9	602	7.2	17.0	29.5	5.8	--
	34	47.4	40	5.0	620	7.1	16.5	26.5	5.5	110
	34	47.4	5	1.0	609	7.1	16.5	34.0	5.5	--
CA Fc 14	30	47.6	--	--	--	--	--	--	--	--
CA Fc 15	36	30.6	80	--	563	7.0	15.0	--	6.4	--
	36	30.6	17	1.2	560	6.7	15.5	19.0	6.0	--
	36	30.6	25	0.9	569	6.6	14.0	3.5	6.9	--
	36	30.6	20	1.0	530	7.3	19.0	24.0	7.3	--
	36	30.6	15	1.0	576	7.2	16.5	28.5	6.9	--
	36	30.6	15	1.0	556	7.0	16.0	--	6.3	--
CA Fc 16	23	30.7	80	--	551	6.7	16.5	18.0	7.4	--
	23	30.7	8	1.2	561	6.5	13.0	2.0	8.1	--
	23	30.7	5	1.1	513	7.2	19.0	24.0	7.4	--
	23	30.7	5	1.0	568	7.2	17.0	28.0	7.5	--
	23	30.7	8	1.0	590	6.6	14.5	3.0	6.8	--
	23	30.7	20	1.1	581	7.3	17.5	--	5.5	--
CA Fc 17	32	22.6	20	1.1	576	6.5	16.0	14.5	6.8	--
CA Fc 18	23	15.6	115	--	574	6.6	14.0	0.5	6.2	--
	23	15.6	15	1.3	561	7.2	18.0	22.5	5.1	--
	23	15.6	12	1.2	615	7.1	15.5	23.5	7.1	--
	23	15.6	20	1.1	606	6.6	14.5	2.5	7.0	--
	23	15.6	20	1.0	--	--	--	--	--	--
	27	20.6	15	1.1	278	--	--	--	--	--
CA Fc 20	3.6	31.4	--	--	--	--	--	--	--	--
CA Fc 28	3.6	31.4	--	--	391	--	--	--	--	--
	3.6	31.4	--	--	269	--	--	--	--	--
	8.5	31.4	--	--	288	--	--	--	--	--
	8.5	31.4	--	--	273	--	--	--	--	--
	8.5	31.4	--	--	--	--	--	--	--	--
	8.5	31.4	--	--	280	--	--	--	--	--
CA Fc 30	14	31.4	--	--	618	--	--	--	--	--
	14	31.4	--	--	586	--	--	--	--	--
	14	31.4	--	--	529	--	--	--	--	--
	14	31.4	--	--	641	--	--	--	--	--
	14	31.4	--	--	667	--	--	--	--	--
	14	31.4	--	--	439	--	--	--	--	--
CA Fc 31	2.5	15.5	--	--	--	--	--	--	--	--
	2.5	15.5	--	--	--	--	--	--	--	--
	2.5	15.5	--	--	410	--	--	--	--	--
	5.0	15.5	--	--	399	--	--	--	--	--
	5.0	15.5	--	--	497	--	--	--	--	--
	5.0	15.5	--	--	388	--	--	--	--	--
CA Fc 32	5.0	15.5	--	--	600	--	--	--	--	--
	14	12.2	--	--	684	6.9	17.5	--	1.2	--
	14	12.2	--	--	718	6.6	15.0	--	2.6	--
	14	12.2	--	--	719	6.7	12.0	--	4.5	--
	14	12.2	--	--	700	7.0	12.5	--	2.0	--
	14	12.2	--	--	732	7.1	7.0	--	1.9	--
CA Fc 34	18	12.0	--	--	659	6.9	17.0	--	3.6	--
	18	12.0	--	--	724	7.0	15.0	--	4.2	--
	18	12.0	--	--	712	6.8	13.0	--	5.5	--
	18	12.0	--	--	673	7.2	12.5	--	4.4	--
	18	12.0	--	--	683	7.0	6.0	--	6.2	--
	18	12.0	--	--	--	--	--	--	--	--

[illegible]

QUALITY OF GROUND WATER

525

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CALVERT COUNTY, MARYLAND--CONTINUED

WELL NUMBER	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)
CA Fc 13	--	--	--	<0.010	--	7.40	--	0.040	<0.0	--
	--	--	--	<0.010	--	8.10	--	<0.010	<0.20	--
	--	--	--	<0.010	--	7.80	--	<0.010	<0.20	--
	--	--	--	<0.010	--	7.30	--	<0.010	<0.20	--
	339	--	<0.010	--	6.90	--	0.010	--	--	0.130
CA Fc 14	--	--	--	<0.010	--	7.60	--	<0.010	<0.20	--
CA Fc 15	--	--	--	<0.010	--	8.70	--	0.020	<0.0	--
	--	--	--	<0.010	--	9.80	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.40	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.80	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.90	--	<0.010	<0.20	--
CA Fc 16	--	--	--	<0.010	--	9.00	--	0.020	0.10	--
	--	--	--	<0.010	--	9.80	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.50	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.40	--	<0.010	<0.20	--
CA Fc 17	--	--	--	<0.010	--	10.0	--	<0.010	<0.20	--
CA Fc 18	--	--	--	<0.010	--	9.00	--	<0.010	<0.20	--
	--	--	--	<0.010	--	10.0	--	0.020	<0.20	--
	--	--	--	<0.010	--	10.0	--	<0.010	<0.20	--
	--	--	--	<0.010	--	8.30	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.90	--	<0.010	<0.20	--
CA Fc 20	--	--	--	<0.010	--	12.0	--	0.020	0.50	--
CA Fc 28	--	--	--	<0.010	--	9.70	--	<0.010	<0.20	--
	--	--	--	<0.010	--	0.140	--	0.050	<0.20	--
	--	--	--	--	--	--	--	--	--	--
CA Fc 29	--	--	--	<0.010	--	<0.050	--	0.030	0.30	--
	--	--	--	<0.010	--	0.050	--	0.030	0.30	--
	--	--	--	<0.010	--	<0.050	--	<0.010	<0.20	--
	--	--	--	<0.010	--	<0.050	--	<0.010	0.20	--
	--	--	--	--	--	--	--	--	--	--
CA Fc 30	--	--	--	<0.010	--	<0.050	--	0.020	<0.20	--
	--	--	--	<0.010	--	0.320	--	0.030	0.30	--
	--	--	--	<0.010	--	0.080	--	<0.010	<0.20	--
	--	--	--	<0.010	--	0.061	--	<0.010	<0.20	--
	--	--	--	<0.010	--	0.160	--	<0.010	<0.20	--
CA Fc 31	--	--	--	<0.010	--	0.120	--	0.020	0.20	--
	--	--	--	<0.010	--	0.810	--	<0.010	0.20	--
	--	--	--	--	--	--	--	--	--	--
CA Fc 32	--	--	--	<0.010	--	<0.050	--	0.040	0.80	--
	--	--	--	<0.010	--	0.540	--	<0.010	<0.20	--
	--	--	--	<0.010	--	1.10	--	<0.010	0.70	--
	--	--	--	<0.010	--	1.10	--	<0.010	0.30	--
	--	--	--	<0.010	--	<0.050	--	0.020	0.30	--
CA Fc 33	--	5.41	--	0.290	--	5.70	--	0.030	<0.20	--
	--	3.68	--	0.120	--	3.80	--	<0.010	<0.20	--
	--	4.05	--	0.150	--	4.20	--	<0.010	<0.20	--
	--	7.12	--	0.180	--	7.30	--	0.010	<0.20	--
	--	6.78	--	0.220	--	7.00	--	0.030	0.60	--
CA Fc 34	--	--	--	<0.010	--	7.60	--	0.020	0.10	--
	--	--	--	<0.010	--	8.60	--	<0.010	<0.20	--
	--	--	--	<0.010	--	8.60	--	<0.010	<0.20	--
	--	--	--	<0.010	--	9.50	--	0.010	<0.20	--
	--	--	--	<0.010	--	9.10	--	0.010	<0.20	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CALVERT COUNTY, MARYLAND--CONTINUED

WELL NUMBER	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CaCO3)
CA Fc 13	--	0.170	--	--	--	--	--	--	--
	--	0.130	--	--	--	--	--	--	--
	--	0.130	--	--	--	--	--	--	--
	--	0.140	--	--	--	--	--	--	--
	0.140	--	30	<3	<10	<1	1000	0.3	300
	--	0.130	--	--	--	--	--	--	--
CA Fc 14	--	--	--	--	--	--	--	--	--
CA Fc 15	--	0.200	--	--	--	--	--	--	--
	--	0.190	--	--	--	--	--	--	--
	--	0.180	--	--	--	--	--	--	--
	--	0.190	--	--	--	--	--	--	--
	--	0.190	--	--	--	--	--	--	--
CA Fc 16	--	0.170	--	--	--	--	--	--	--
	--	0.160	--	--	--	--	--	--	--
	--	0.160	--	--	--	--	--	--	--
	--	0.160	--	--	--	--	--	--	--
	--	0.170	--	--	--	--	--	--	--
CA Fc 17	--	0.150	--	--	--	--	--	--	--
CA Fc 18	--	0.130	--	--	--	--	--	--	--
	--	0.130	--	--	--	--	--	--	--
	--	0.120	--	--	--	--	--	--	--
	--	0.140	--	--	--	--	--	--	--
	--	0.130	--	--	--	--	--	--	--
CA Fc 20	--	0.160	--	--	--	--	--	--	--
CA Fc 28	--	<0.010	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	0.010	--	--	--	--	--	--	--
CA Fc 29	--	0.010	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
CA Fc 30	--	0.260	--	--	--	--	--	--	--
	--	0.270	--	--	--	--	--	--	--
	--	0.260	--	--	--	--	--	--	--
	--	0.210	--	--	--	--	--	--	--
	--	0.240	--	--	--	--	--	--	--
CA Fc 31	--	0.050	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	0.070	--	--	--	--	--	--	--
CA Fc 32	--	0.060	--	--	--	--	--	--	--
	--	0.030	--	--	--	--	--	--	--
	--	0.080	--	--	--	--	--	--	--
	--	0.060	--	--	--	--	--	--	--
CA Fc 33	--	0.110	--	--	--	--	--	--	--
	--	0.100	--	--	--	--	--	--	--
	--	0.100	--	--	--	--	--	--	--
	--	0.100	--	--	--	--	--	--	--
	--	0.100	--	--	--	--	--	--	--
CA Fc 34	--	0.120	--	--	--	--	--	--	--
	--	0.120	--	--	--	--	--	--	--
	--	0.110	--	--	--	--	--	--	--
	--	0.120	--	--	--	--	--	--	--
	--	0.120	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CAROLINE COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
CO Dc 146	05-18-92	1521	385302075540101	112PCPC	GW		4040	6.63	20.00
CO De 16	06-02-92	1335	385009075445002	112CLMB	GW		4040	5.63	17.00
	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
CO Dc 146	17	20	45.0	28	0.9	232	4.9	14.0	26.0
CO De 16	14	17	61.0	15	0.9	321	4.4	17.5	23.0
	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	SILICUM, DIS- SOLVED (MG/L AS MG)	MAGNE- SODIUM, DIS- SOLVED (MG/L AS NA)	SILICUM, DIS- SOLVED (MG/L AS K)	POTAS- SODIUM TOT IT FIELD MG/L AS CACO3	ALKA- LINITY WAT WH WH IT FIELD MG/L AS HCO3	BICAR- BONATE SULFATE DIS- SOLVED AS SO4)	
CO Dc 146	9.8	8.5	14	2.3	3.3	2	2	12	
CO De 16	8.7	2.6	8.1	34	4.0	1	1	1.3	
	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
CO Dc 146	24	<0.10	13	128	78	0.030	12.0	0.040	
CO De 16	72	<0.10	13	166	135	<0.010	6.60	0.030	
	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	
CO Dc 146	0.040	0.050	230	<3	30	21	1.0	79	
CO De 16	0.020	<0.010	60	22	30	28	0.5	40	

Geologic unit (aquifer): 112CLMB - Columbia Group
112PCPC - Pleistocene-Pliocene series

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CARROLL COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
CL Ae 1	05-26-92	1515	394200076551201	300MRBG	GW		4040	--	100.00	17
CL Bf 184	05-13-92	1155	393754076512401	300PRTB	GW		4030	1.32	340.00	50
	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
CL Ae 1	100	1005	70	1.4	109	5.3	13.0	9.5	8.3	5.3
CL Bf 184	340	785	115	10	206	6.4	12.0	24.0	6.8	26
	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
CL Ae 1	3.6	7.2	0.80	5	6	0.90	22	<0.10	5.6	64
CL Bf 184	5.1	3.5	0.50	30	36	3.9	12	<0.10	10	135
	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
CL Ae 1	49	<0.010	2.20	<0.010	0.030	<0.010	20	20	<1	13
CL Bf 184	79	<0.010	10.0	0.040	0.020	0.020	--	--	--	--
	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
CL Ae 1	<0.5	<10	<1.0	<1	<1	10	120	30	2	<4
CL Bf 184	--	--	--	--	--	--	1400	19	--	--
	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	RADON 222 TOTAL (PCI/L)
CL Ae 1	40	5	0.1	<1	1	<1	<1	30	28	7000
CL Bf 184	20	4	--	--	--	--	--	--	--	--

Geologic unit (aquifer): 300PRTB - Prettyboy Schist
300MRBG - Marburg Formation

Site type: GW - Groundwater

Sampling method: 4030 - Suction pump
4040 - Submersible pump

CARROLL COUNTY, MARYLAND--CONTINUED

[illegible]

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CECIL COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)
CE Cc 40	05-21-92	1450	393459076045001	300LFPP	SP		4010	--	--	--
CE Dd 102	06-09-92	1015	392544075574803	217PTMC	GW		4040	112.00	100	112
	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
CE Cc 40	180	3.8	351	5.3	11.5	27.0	8.4	18	11	22
CE Dd 102	65.0	--	65	5.0	15.0	22.5	4.3	2.1	1.2	4.7
	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WAT WH TOT IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)
CE Cc 40	0.90	9	10	0.40	92	<0.10	22	250	171	<0.010
CE Dd 102	1.2	3	4	2.8	7.8	<0.10	12	50	34	<0.010
	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)
CE Cc 40	0.720	0.020	0.010	0.020	40	20	10	40	0.2	90
CE Dd 102	1.80	0.030	0.030	0.010	330	310	20	12	0.2	10
	PCN DISSOLV (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)
CE Cc 40	--	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CE Dd 102	<0.10	--	--	--	--	--	--	--	--	--
	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	STYRENE TOTAL (UG/L)
CE Cc 40	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CE Dd 102	--	--	--	--	--	--	--	--	--	--

Geologic unit (aquifer): 217PTMC - Potomac Formation
 300LFPP - Little Northeast Creek, Frenchtown, Principio Furnace Members,
 James Run Formation

Sample type: GW - Groundwater
 SP - Spring

Sampling method: 4010 - Thief sampler
 4040 - Submersible pump

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

CECIL COUNTY, MARYLAND--CONTINUED

WELL NUMBER	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- FLURA- LIN TOTAL RECOVER (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)
CE Cc 40 CE Dd 102	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	-- <0.10	<1.0 --	<3.0 --	<3.0 --	<3.0 --
	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	BENZENE O- CHLORO- WATER UNFLTRD REC (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	
CE Cc 40 CE Dd 102	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	
	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L)	1,2- TRANSDI CHLORO- ETHENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L)	PCB, DIS- SOLVED (UG/L)	ALA- CHLOR TOTAL RECOVER (UG/L)	
CE Cc 40 CE Dd 102	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	<3.0 --	-- <0.1	-- <0.10	
	ALDRIN, DIS- SOLVED (UG/L)	AME- TRYNE TOTAL (UG/L)	ATRA- ZINE WATER UNFLTRD REC (UG/L)	CHLOR- DANE, DIS- SOLVED (UG/L)	CYAN- AZINE TOTAL (UG/L)	DDD, DIS- SOLVED (UG/L)	DDE, DIS- SOLVED (UG/L)	DDT, DIS- SOLVED (UG/L)	DI- AZINON, DIS- SOLVED (UG/L)	
CE Cc 40 CE Dd 102	-- <0.01	-- <0.10	-- <0.1	-- <0.1	-- <0.20	-- <0.01	-- <0.01	-- <0.01	-- <0.01	
	DI- ELDRIN DIS- SOLVED (UG/L)	ENDO- SULFAN DISSOLV (UG/L)	ENDRIN, DIS- SOLVED (UG/L)	ETHION DISSOLV (UG/L)	HEPTA- CHLOR, DIS- SOLVED (UG/L)	HEPTA- CHLOR EPOXIDE DIS- SOLVED (UG/L)	LINDANE DIS- SOLVED (UG/L)	MALA- THION, DIS- SOLVED (UG/L)	METH- OXY- CHLOR DISSOLV (UG/L)	
CE Cc 40 CE Dd 102	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	
	METHYL PARA- THION, DIS- SOLVED (UG/L)	METHYL- TRI- THION DISSOLV (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L)	METRI- BUZIN WATER WHOLE TOT.REC (UG/L)	MIREX, DIS- SOLVED (UG/L)	PARA- THION, DIS- SOLVED (UG/L)	PER- THANE DISSOLV (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)	
CE Cc 40 CE Dd 102	-- <0.01	-- <0.01	-- <0.20	-- <0.10	-- <0.01	-- <0.01	-- <0.10	-- <0.10	-- <0.20	
	PRO- PAZINE TOTAL (UG/L)	TOX- APHENE, DIS- SOLVED (UG/L)	TRI- THION DISSOLV (UG/L)	2,4-D, TOTAL (UG/L)	2,4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	
CE Cc 40 CE Dd 102	-- <0.10	-- <1.0	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.01	-- <0.10	-- <0.10	

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
CHARLES COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
CH Cb 7	06-17-92	1310	383422077114601	217PPSC	GW		4040	82.39	167.00	154
CH Ee 16	06-30-92	0935	382103076560201	112TLBT	GW		4040	--	20.70	--
CH Ee 90	06-29-92	1630	382456076562201	124NNJM	GW		4040	5.28	21.00	11
	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
CH Cb 7	167	36.0	100	6.7	315	7.7	16.0	24.5	0.1	2.6
CH Ee 16	20.7	40.0	119	0.5	221	6.5	16.0	25.5	7.2	33
CH Ee 90	16	7.0	82	0.8	237	5.6	15.0	26.0	3.0	19
	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD (MG/L AS CACO3)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
CH Cb 7	1.4	60	3.0	142	173	6.6	12	0.80	33	194
CH Ee 16	4.4	6.6	5.0	72	88	22	11	1.3	67	178
CH Ee 90	4.8	11	5.9	19	23	43	14	<0.10	15	124
	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
CH Cb 7	205	<0.010	<0.050	0.670	1.80	1.60	730	620	30	39
CH Ee 16	194	<0.010	0.440	0.190	2.90	0.880	4600	190	170	120
CH Ee 90	124	<0.010	4.80	<0.010	0.040	0.020	1600	7	30	13
	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)
CH Cb 7	0.5	12	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CH Ee 16	2.6	100	--	--	--	--	--	--	--	--
CH Ee 90	1.6	67	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)	
CH Cb 7	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
CH Ee 16	--	--	--	--	--	--	--	--	--	--
CH Ee 90	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Geologic unit (aquifer): 112TLBT - Talbot Formation
124NNJM - Nanjemoy Formation
217PPSC - Patapsco Formation

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

CHARLES COUNTY, MARYLAND--CONTINUED

[illegible]

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DORCHESTER COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
DO Cg 46	05-18-92	1300	383218075522802	112BVDM	GW		4040	2.57	17.00	14
	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
DO Cg 46	17	18.0	99	4.8	14.0	26.0	0.5	4.1	2.1	7.1
	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, DIS- NITRITE TOTAL (MG/L AS N)
DO Cg 46	1.5	1	1	15	11	<0.10	21	68	62	<0.010
	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)
DO Cg 46	1.40	<0.010	0.030	<0.010	30	5	90	74	2.7	19

Geologic unit (aquifer): 112BVDM - Beaverdam Sand

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

535

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

FREDERICK COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
FR Af 27	05-11-92	1455	394200077190701	231GBRG	GW		4030	1.15	365.00	39
FR Bd 96	04-01-92	1400	393733077274801	400CTCN	GW		4040	13.00	189.00	50
FR Cd 38	05-11-92	1645	393218077271001	377WVRN	SP		4010	--	--	--
FR Dd 178	05-12-92	1050	392552077262201	377FDCK	SP		4010	--	--	--
FR Df 35	05-12-92	1815	392517077190401	300SMCK	GW		4040	59.37	302.00	26
FR Fb 12	05-12-92	1305	391846077370501	400PCMB	SP		4010	--	--	--

	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
FR Af 27	365	385	265	6.3	517	7.8	14.0	22.5	7.4	59
FR Bd 96	189	1110	145	1.0	94	6.0	10.0	6.0	8.3	--
FR Cd 38	--	820	--	--	26	5.3	11.5	23.0	12.0	0.75
FR Dd 178	--	315	--	314	620	7.3	13.0	19.0	6.2	90
FR Df 35	302	570	195	5.3	146	6.6	12.5	22.0	9.4	18
FR Fb 12	--	300	--	7.5	358	6.3	12.5	22.0	10.0	30

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	ALKA- LITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
FR Af 27	19	19	0.40	--	172	210	74	8.8	0.20	27
FR Bd 96	--	--	--	29	--	--	--	--	--	--
FR Cd 38	0.83	1.2	1.4	--	5	6	2.2	1.8	<0.10	6.6
FR Dd 178	11	20	2.1	--	194	237	23	50	0.20	9.2
FR Df 35	6.7	1.6	0.40	--	67	82	0.40	2.7	<0.10	11
FR Fb 12	10	16	1.3	--	33	40	45	43	<0.10	21

	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
FR Af 27	316	311	<0.010	1.90	0.020	<0.010	<0.010	140	27	10
FR Bd 96	--	--	--	--	--	--	--	--	--	--
FR Cd 38	<1	18	<0.010	0.410	0.030	<0.010	0.010	<10	<3	<10
FR Dd 178	338	322	<0.010	5.60	0.040	0.010	0.020	30	3	10
FR Df 35	88	81	<0.010	0.380	0.040	0.110	0.110	220	6	70
FR Fb 12	226	186	<0.010	4.90	0.030	0.100	0.100	40	4	<10

Geologic unit (aquifer): 231GBRG - Gettysburg Shale
 300SMCK - Sams Creek Metabasalt
 377FDCK - Frederick Limestone
 377WVRN - Weverton Formation
 400PCMB - Precambrian Erathem
 400CTCN - Catoctin Metabasalt

Sampling method: 4010 - Thief sampler
 4030 - Suction pump
 4040 - Submersible pump

Site type: GW - Groundwater
 SP - Spring

FREDERICK COUNTY, MARYLAND--CONTINUED

[illegible]

QUALITY OF GROUND WATER

537

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

GARRETT COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
GA Ba 1	08-31-92	1530	393930079264301	321CNMG	GW		4040	--	70.00	41
GA Da 17	07-07-92	1605	392959079252402	324PVAG	GW		4040	75.00	226.00	37
GA Eb 72	07-06-92	1515	392420079221701	341JNGS	SP		4010	--	--	--
	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
GA Ba 1	70	2010	65	--	335	6.7	13.5	23.0	2.3	40
GA Da 17	226	2430	335	2.0	133	6.4	11.5	22.5	0.2	9.7
GA Eb 72	--	2410	--	19	55	5.1	9.0	21.0	9.7	3.8
	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
GA Ba 1	8.1	6.0	1.1	77	94	4.7	52	0.20	7.2	196
GA Da 17	5.4	0.70	1.3	46	56	11	4.7	<0.10	6.1	62
GA Eb 72	1.4	1.8	1.0	1	1	11	3.7	<0.10	4.6	22
	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOVER- ABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOVER- ABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
GA Ba 1	168	<0.010	<0.050	0.080	0.020	0.040	3700	2100	770	780
GA Da 17	76	<0.010	<0.050	0.040	0.050	<0.010	16000	8600	570	570
GA Eb 72	28	<0.010	0.510	0.010	<0.010	<0.010	<10	<3	50	44
	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)
GA Ba 1	--	0.2	130	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
GA Da 17	80	0.4	46	--	--	--	--	--	--	--
GA Eb 72	--	0.3	15	--	--	--	--	--	--	--
	CHLORO- ETHANE TOTAL (UG/L)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- ENE CHLO- RIDE TOTAL (UG/L)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L)
GA Ba 1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
GA Da 17	--	--	--	--	--	--	--	--	--	--
GA Eb 72	--	--	--	--	--	--	--	--	--	--

Geologic unit (aquifer): 321CNMG - Conemaugh Formation
 324PVAG - Pottsville-Allegheny Formation, Undifferentiated
 341JNGS - Jennings Formation

Site type: GW - Groundwater
 SP - Spring

Sampling method: 4010 - Thief sample
 4040 - Submersible pump

GARRETT COUNTY, MARYLAND--CONTINUED

[illegible]

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

HARFORD COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
HA Aa 9	06-15-92	0900	394153076325701	300WSCK	SP		4010	--	--	--
HA Bc 31	06-15-92	1045	393800076240101	300WSCK	SP		4010	--	--	--
HA Ca 23	06-15-92	1330	393158076302601	300LCRV	GW		4030	7.80	200.00	24
HA Dd 92	05-21-92	1315	392721076150302	112TLBT	GW		4040	10.77	38.00	16
HA Ed 49	08-31-92	0855	392455076192103	112TLBT	GW		4040	14.15	28.00	14

	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
HA Aa 9	--	660	--	8.0	157	5.2	11.5	21.5	9.4	8.4
HA Bc 31	--	290	--	--	32	5.6	11.0	23.5	8.1	1.7
HA Ca 23	200	470	86	9.2	129	6.2	13.5	27.0	9.2	7.8
HA Dd 92	28	20.0	101	1.0	449	5.9	15.5	19.0	0.2	13
HA Ed 49	23	91.9	56	0.6	245	4.1	15.5	20.5	4.0	13

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
HA Aa 9	6.9	5.1	1.2	5	5	2.5	18	<0.10	9.2	114
HA Bc 31	1.1	2.2	0.40	7	9	0.30	3.0	<0.10	9.7	16
HA Ca 23	4.2	7.2	2.1	18	22	1.2	7.7	<0.10	21	102
HA Dd 92	11	49	0.80	50	61	46	69	<0.10	33	298
HA Ed 49	8.4	5.3	2.5	--	--	83	6.0	0.30	9.9	137

	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
HA Aa 9	54	<0.010	11.0	0.020	0.020	0.010	--	--	--
HA Bc 31	23	<0.010	0.190	0.030	0.020	0.020	<10	<1	<2
HA Ca 23	62	<0.010	6.40	0.020	0.010	0.010	--	--	--
HA Dd 92	255	<0.010	<0.050	0.100	0.010	<0.010	--	--	--
HA Ed 49	--	<0.010	1.20	0.030	<0.010	0.020	--	--	--

	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
HA Aa 9	--	--	--	--	--	40	<3	--	--
HA Bc 31	0.7	<1.0	<1	<1	2	20	5	<1	<4
HA Ca 23	--	--	--	--	--	200	<3	--	--
HA Dd 92	--	--	--	--	--	2800	2900	--	--
HA Ed 49	--	--	--	--	--	20	19	--	--

Geologic unit (aquifer): 112TLBT - Talbot Formation
 300LCRV - Loch Raven Schist
 300WSCK - Wissahickon Formation

Sampling method: 4010 - Thief sample
 4030 - Suction pump
 4040 - Submersible pump

Site Type: GW - Groundwater
 SP - Spring

HARFORD COUNTY, MARYLAND--CONTINUED

[illegible][illegible]

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
HOWARD COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
HO Cd 20	10-29-91	1645	391440076555401	300LCRV	GW		4020	8.28	96.00	30
HO Cd 28	10-29-91	1150	391447076554702	300LCRV	GW		4040	29.44	46.00	41
	06-22-92	1045		300LCRV	GW		4040	29.36	46.00	41
HO Cd 29	06-22-92	1120	391442076554702	300LCRV	GW		4040	47.40	68.00	63
HO Cd 78	10-29-91	1500	391440076555402	300LCRV	GW		4040	10.00	19.00	9.0
	12-18-91	1345		300LCRV	GW		4040	9.39	19.00	9.0
	01-29-92	1148		300LCRV	GW		4040	9.58	19.00	9.0
	06-22-92	1238		300LCRV	GW		4040	9.29	19.00	9.0
	06-23-92	1500		300LCRV	GW		4040	9.32	19.00	9.0
	09-02-92	1140		300LCRV	GW		4040	9.99	19.00	9.0
HO Cd 79	10-30-91	0925	391445076555101	300LCRV	GW		4040	29.46	53.00	43
	12-18-91	1453		300LCRV	GW		4040	29.32	53.00	43
	01-29-92	1600		300LCRV	GW		4040	29.54	53.00	43
	06-22-92	1340		300LCRV	GW		4040	28.65	53.00	43
HO Cd 80	10-30-91	1000	391439076555601	300LCRV	SP		4030	--	2.00	0.0
	12-18-91	1200		300LCRV	SP		4030	--	2.00	0.0
	01-29-92	1220		300LCRV	SP		4030	--	2.00	0.0
	06-22-92	1420		300LCRV	SP		4030	--	2.00	0.0
	09-02-92	1345		300LCRV	SP		4030	--	2.00	0.0
HO Cd 81	10-30-91	1010	391439076555602	300LCRV	SP		4030	--	2.00	0.0
	12-18-91	1150		300LCRV	SP		4030	--	2.00	0.0
	01-29-92	1205		300LCRV	SP		4030	--	2.00	0.0
	06-22-92	1440		300LCRV	SP		4030	--	2.00	0.0
	09-02-92	1245		300LCRV	SP		4030	--	2.00	0.0
HO Cd 253	10-30-91	1105	391447076554703	300LCRV	LYS		4030	--	1.00	1.0
	12-18-91	1255		300LCRV	LYS		4030	--	1.00	1.0
	06-23-92	1040		300LCRV	LYS		4030	--	1.00	1.0
	09-03-92	1050		300LCRV	LYS		4030	--	1.00	1.0
HO Cd 290	10-30-91	1115	391447076554704	300LCRV	LYS		4030	--	5.00	5.0
	12-18-91	1315		300LCRV	LYS		4030	--	5.00	5.0
	01-30-92	1145		300LCRV	LYS		4030	--	5.00	5.0
	06-23-92	1015		300LCRV	LYS		4030	--	5.00	5.0
	09-03-92	1100		300LCRV	LYS		4030	--	5.00	5.0
HO Cd 292	12-18-91	1300	391447076554706	300LCRV	LYS		4030	--	13.80	14
	06-23-92	0955		300LCRV	LYS		4030	--	13.80	14
	09-03-92	1105		300LCRV	LYS		4030	--	13.80	14
HO Cd 342	06-22-92	1157	391438076555001	300LCRV	GW		4040	22.34	25.00	20
	09-02-92	1410		300LCRV	GW		4040	23.64	25.00	20
HO Cd 390	10-09-91	1350	391441076555301	300LCRV	LYS		4030	--	--	3.5
	10-30-91	1030		300LCRV	LYS		4030	--	--	3.5
	12-18-91	1220		300LCRV	LYS		4030	--	--	3.5
	01-30-92	1050		300LCRV	LYS		4030	--	--	3.5
	06-23-92	0910		300LCRV	LYS		4030	--	--	3.5
	09-03-92	1030		300LCRV	LYS		4030	--	--	3.5
HO Cd 391	12-18-91	1225	391441076555302	300LCRV	LYS		4030	--	--	7.0
	01-30-92	1055		300LCRV	LYS		4030	--	--	7.0
	06-23-92	0930		300LCRV	LYS		4030	--	--	7.0
	09-03-92	1035		300LCRV	LYS		4030	--	--	7.0

Geologic unit (aquifer): 300LCRV - Loch Raven Schist

Site type: GW - Groundwater
LYS - Lysimeter
SP - Spring

Sampling method: 4020 - Bailer
4030 - Suction pump
4040 - Submersible pump

QUALITY OF GROUND WATER
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 HOWARD COUNTY, MARYLAND--CONTINUED

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
HO Cd 20	96	426	85	--	116	7.5	12.0	--	0.4	--
HO Cd 28	46	453	120	0.1	31	6.2	13.0	--	4.0	--
	46	453	10	1.0	27	5.6	19.5	16.5	2.4	--
HO Cd 29	68	470	20	0.9	21	5.4	18.0	16.5	7.8	--
HO Cd 78	19	422	80	1.0	105	5.5	14.5	--	9.0	--
	19	422	10	1.2	100	5.4	13.0	3.0	10.6	--
	19	422	12	0.9	100	5.1	11.5	5.0	8.8	--
	19	422	8	1.3	83	5.3	16.5	18.5	8.6	--
	19	426	32	0.9	98	5.4	12.0	23.0	7.7	5.1
	19	422	10	1.2	98	4.8	14.5	21.5	7.9	--
HO Cd 79	53	449	25	1.0	38	5.3	13.5	15.5	8.3	--
	53	449	23	1.0	38	5.5	12.0	6.0	8.8	--
	53	449	40	0.6	40	5.1	13.0	--	7.6	--
	53	449	30	0.9	32	5.2	21.5	24.0	--	--
HO Cd 80	2.0	410	--	--	--	5.4	12.0	--	7.5	--
	2.0	410	--	--	115	5.6	10.5	--	8.0	--
	2.0	410	--	--	117	5.2	14.0	--	8.2	--
	2.0	410	--	--	133	5.4	--	--	10.0	--
	2.0	410	--	--	117	5.2	14.0	--	8.4	--
HO Cd 81	2.0	409	--	--	94	5.5	12.0	--	8.0	--
	2.0	409	--	--	104	5.8	10.0	--	9.0	--
	2.0	409	--	--	105	5.4	8.0	--	9.6	--
	2.0	409	--	--	104	5.5	--	--	11.0	--
	2.0	409	--	--	95	5.5	14.0	--	7.4	--
HO Cd 253	1.0	457	--	--	117	--	--	--	--	--
	1.0	453	--	--	454	--	--	--	--	--
	1.0	457	--	--	276	--	--	--	--	--
	1.0	453	--	--	773	--	--	--	--	--
HO Cd 290	5.0	453	--	--	78	--	--	--	--	--
	5.0	453	--	--	921	--	--	--	--	--
	5.0	453	--	--	1120	--	--	--	--	--
	5.0	453	--	--	924	--	--	--	--	--
	5.0	453	--	--	713	--	--	--	--	--
HO Cd 292	14	453	--	--	157	--	--	--	--	--
	14	453	--	--	147	--	--	--	--	--
	14	453	--	--	141	--	--	--	--	--
HO Cd 342	25	433	3	1.0	78	5.8	20.0	17.5	8.2	--
	25	433	--	--	96	5.6	14.0	23.0	9.2	--
HO Cd 390	3.5	428	--	--	--	--	--	--	--	--
	3.5	428	--	--	321	--	--	--	--	--
	3.5	428	--	--	263	--	--	--	--	--
	3.5	428	--	--	211	--	--	--	--	--
	3.5	428	--	--	203	--	--	--	--	--
	3.5	428	--	--	206	--	--	--	--	--
HO Cd 391	7.0	428	--	--	263	--	--	--	--	--
	7.0	428	--	--	288	--	--	--	--	--
	7.0	428	--	--	304	--	--	--	--	--
	7.0	428	--	--	325	--	--	--	--	--

[illegible]

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
HOWARD COUNTY, MARYLAND--CONTINUED

WELL NUMBER	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)
HO Cd 20	--	--	<0.010	--	<0.050	--	0.020	<0.20	--
HO Cd 28	--	--	<0.010	--	0.670	--	0.230	0.20	--
HO Cd 29	--	--	<0.010	--	0.990	--	0.040	<0.20	--
	--	--	<0.010	--	0.930	--	0.030	<0.20	--
HO Cd 78	--	--	<0.010	--	3.20	--	0.010	<0.20	--
	--	--	<0.010	--	3.20	--	<0.010	<0.20	--
	--	--	<0.010	--	3.10	--	<0.010	<0.20	--
	--	--	<0.010	--	3.30	--	<0.010	<0.20	--
	47	<0.010	--	3.10	--	0.020	--	--	<0.010
HO Cd 79	--	--	<0.010	--	3.50	--	<0.010	<0.20	--
	--	--	<0.010	--	1.90	--	0.010	<0.20	--
	--	--	<0.010	--	1.90	--	<0.010	<0.20	--
	--	--	<0.010	--	2.00	--	<0.010	<0.20	--
HO Cd 80	--	--	<0.010	--	1.90	--	<0.010	<0.20	--
	--	--	<0.010	--	3.00	--	0.020	<0.20	--
	--	--	<0.010	--	3.20	--	<0.010	<0.20	--
	--	--	<0.010	--	3.20	--	<0.010	<0.20	--
	--	--	<0.010	--	3.50	--	0.020	<0.20	--
HO Cd 81	--	--	<0.010	--	3.70	--	0.020	<0.20	--
	--	--	<0.010	--	3.20	--	<0.010	<0.20	--
	--	--	<0.010	--	3.30	--	<0.010	<0.20	--
	--	--	<0.010	--	3.20	--	<0.010	<0.20	--
HO Cd 253	--	--	<0.010	--	3.60	--	0.010	<0.20	--
	--	--	<0.010	--	3.50	--	<0.010	<0.20	--
	--	--	<0.010	--	79.0	--	0.030	0.40	--
	--	--	<0.010	--	20.0	--	<0.010	0.60	--
	--	--	<0.010	--	13.0	--	0.140	1.0	--
HO Cd 290	--	--	<0.010	--	77.0	--	0.050	0.70	--
	--	--	<0.010	--	33.0	--	<0.010	0.20	--
	--	--	<0.010	--	24.0	--	0.010	<0.20	--
	--	--	<0.010	--	30.0	--	<0.010	<0.20	--
	--	--	<0.010	--	5.20	--	0.020	<0.20	--
HO Cd 292	--	--	<0.010	--	41.0	--	0.020	<0.20	--
	--	--	<0.010	--	15.0	--	0.010	<0.20	--
	--	--	<0.010	--	14.0	--	0.020	<0.20	--
	--	--	<0.010	--	14.0	--	0.010	<0.20	--
HO Cd 342	--	--	<0.010	--	4.20	--	<0.010	<0.20	--
	--	--	<0.010	--	4.30	--	<0.010	<0.20	--
HO Cd 390	--	--	0.020	--	<0.050	--	0.050	0.20	--
	--	--	<0.010	--	<0.050	--	<0.010	<0.20	--
	--	--	<0.010	--	0.120	--	<0.010	<0.20	--
	--	--	<0.010	--	0.110	--	<0.010	<0.20	--
	--	--	<0.010	--	1.20	--	<0.010	<0.20	--
	--	--	<0.010	--	0.580	--	0.020	<0.20	--
HO Cd 391	--	--	<0.010	--	1.60	--	<0.010	<0.20	--
	--	--	<0.010	--	2.70	--	<0.010	<0.20	--
	--	--	<0.010	--	4.30	--	0.010	<0.20	--
	--	--	<0.010	--	4.30	--	0.020	0.20	--

QUALITY OF GROUND WATER
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
 HOWARD COUNTY, MARYLAND--CONTINUED

WELL NUMBER	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CaCO3)
HO Cd 20	--	<0.010	--	--	--	--	--	--	--
HO Cd 28	--	<0.010	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
HO Cd 29	--	<0.010	--	--	--	--	--	--	--
HO Cd 78	--	<0.010	--	--	--	--	--	--	--
	--	0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	<0.010	--	40	<3	<10	3	700	<0.1	30
	--	0.010	--	--	--	--	--	--	--
HO Cd 79	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
HO Cd 80	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
HO Cd 81	--	<0.010	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
HO Cd 253	--	0.020	--	--	--	--	--	--	--
	--	0.030	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	0.010	--	--	--	--	--	--	--
	--	0.070	--	--	--	--	--	--	--
HO Cd 290	--	0.310	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
	--	0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
HO Cd 292	--	0.010	--	--	--	--	--	--	--
	--	0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
HO Cd 342	--	0.030	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--
HO Cd 390	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
HO Cd 391	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	<0.010	--	--	--	--	--	--	--
	--	0.020	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL, (FEET)
KE Ad 20	05-26-92	1330	392212076035501	112CLMB	SP	4010	--	--	
KE Ad 43	05-26-92	1230	392158076034302	211MGTY	GW	4040	--	160.00	
KE Af 56	05-27-92	1100	392002075523901	125AQUI	GW	4040	--	119.00	
KE Bb 12	04-16-92	1250	391621076120701	211MGTY	GW	4040	--	64.00	
KE Bb 38	04-16-92	1100	391631076100301	112CLMB	GW	4040	--	58.00	
KE Bc 70	07-15-92	1100	391929076084001	211MGTY	GW	4040	--	61.00	
KE Bc 185	05-05-92	1100	391650076050402	112CLMB	GW	4040	15.15	55.00	
KE Bc 186	05-05-92	1330	391650076050403	217PTMC	GW	4040	--	275.00	
KE Bd 147	12-06-91	1200	391648076005401	125AQUI	GW	4080	--	3.00	
KE Be 47	06-09-92	1220	391832075560802	112CLMB	GW	4040	13.52	24.00	
KE Be 49	12-05-91	1500	391923075564301	112PCPC	GW	4040	--	25.00	
KE Be 50	10-15-91	1430	391851075561801	112PCPC	GW	4040	12.15	22.00	
	11-14-91	1320		112PCPC	GW	4040	12.60	22.00	
	12-09-91	1230		112PCPC	GW	4040	12.59	22.00	
	01-06-92	1230		112PCPC	GW	4040	12.69	22.00	
	02-03-92	1400		112PCPC	GW	4040	12.55	22.00	
	03-02-92	1400		112PCPC	GW	4040	13.00	22.00	
	03-31-92	1000		112PCPC	GW	4040	11.95	22.00	
KE Be 52	10-15-91	1520	391810075555801	112PCPC	GW	4040	18.48	36.00	
	11-14-91	1200		112PCPC	GW	4040	18.90	36.00	
	12-09-91	1320		112PCPC	GW	4040	19.33	36.00	
	01-06-92	1400		112PCPC	GW	4040	19.49	36.00	
	02-03-92	1430		112PCPC	GW	4040	19.61	36.00	
	03-02-92	1500		112PCPC	GW	4040	19.84	36.00	
	03-31-92	1330		112PCPC	GW	4040	19.68	36.00	
KE Be 60	03-06-92	1630	391811075564901	125AQUI	GW	4080	22.26	27.00	
KE Be 62	10-15-91	1700	391742075554801	125AQUI	GW	4040	9.02	26.00	
	11-14-91	1030		125AQUI	GW	4040	9.48	26.00	
	12-09-91	1430		125AQUI	GW	4040	9.58	26.00	
	01-06-92	1500		125AQUI	GW	4040	9.58	26.00	
	02-03-92	1620		125AQUI	GW	4040	9.77	26.00	
	03-02-92	1610		125AQUI	GW	4040	9.89	26.00	
	03-31-92	1500		125AQUI	GW	4040	9.35	26.00	
KE Be 113	05-26-92	1045	391911075583502	211MNMT	GW	4040	--	180.00	
KE Be 158	12-05-91	1000	391814075575501	125AQUI	GW	4040	24.79	34.00	
KE Be 159	09-09-92	1100	391720075554601	125AQUI	GW	4040	4.84	69.00	
KE Be 160	10-15-91	1330	391720075554602	125AQUI	GW	4040	4.98	38.00	
	11-13-91	1300		125AQUI	GW	4040	4.95	38.00	
	12-09-91	1530		125AQUI	GW	4040	4.99	38.00	
	01-06-92	1600		125AQUI	GW	4040	5.00	38.00	
	02-03-92	1200		125AQUI	GW	4040	5.08	38.00	
	03-02-92	1200		125AQUI	GW	4040	5.08	38.00	
	03-31-92	1700		125AQUI	GW	4040	3.88	38.00	
KE Be 161	10-15-91	1300	391720075554603	125AQUI	GW	4040	--	19.00	
KE Be 162	09-09-92	1600	391742075554802	125AQUI	GW	4040	10.57	67.00	
KE Be 165	10-11-91	1230	391838075560901	125AQUI	GW	4040	7.02	48.00	
KE Be 167	10-11-91	1500	391838075560903	125AQUI	GW	4040	--	18.00	
KE Be 171	12-20-91	1235	391643075550901	217PTMC	GW	4040	39.56	440.00	
KE Be 172	10-10-91	1200	391820075580401	125AQUI	GW	4080	--	4.30	

Geologic unit (aquifer): 112CLMB - Columbia Group
 211MGTY - Magothy Formation
 125AQUI - Aquia Formation
 217PTMC - Potomac Group
 112PCPC - Pleistocene-Plioene Series
 211MNMT - Monmouth Formation

Sampling Method: 4010 - Thief sample
 4040 - Submersible pump
 4080 - Peristaltic pump

Site type: GW - Groundwater
 SP - Spring

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
KE Ad 20	--	--	10.0	--	5.5	214	5.5	13.0	--
KE Ad 43	115	140	82.0	--	--	44	5.3	13.5	--
KE Af 56	104	119	70.0	20	6.3	366	7.3	14.0	--
KE Bb 12	58	64	30.0	35	4.0	236	5.6	13.0	--
KE Bb 38	48	58	25.0	55	1.5	199	5.1	12.0	--
KE Bc 70	56	61	10.0	25	5.5	289	6.5	16.5	--
KE Bc 185	40	50	82.1	40	4.0	55	5.2	13.5	--
KE Bc 186	255	265	82.0	70	5.0	141	6.4	13.5	--
KE Bd 147	2.9	3.0	5.0	60	0.04	100	6.5	7.5	7.5
KE Be 47	21	24	64.0	90	0.7	303	5.9	14.0	24.0
KE Be 49	22	25	73.6	30	0.5	244	5.7	12.5	0.0
KE Be 50	20	22	70.2	13	0.3	392	5.0	16.0	18.0
	20	22	70.2	14	0.3	389	5.1	16.0	17.0
	20	22	70.2	11	0.5	383	5.2	16.0	21.0
	20	22	70.2	11	0.4	394	5.1	14.0	19.0
	20	22	70.2	11	0.6	388	5.0	14.0	6.5
	20	22	70.2	15	0.3	372	4.9	13.5	11.5
	20	22	70.2	16	0.3	361	5.2	13.5	10.5
KE Be 52	33	36	74.7	15	0.2	217	4.9	16.0	20.0
	33	36	74.7	18	0.5	212	5.0	15.0	17.0
	33	36	74.7	18	0.5	212	5.1	15.5	18.5
	33	36	74.7	18	0.5	211	5.0	14.5	9.5
	33	36	74.7	19	0.3	211	4.9	14.5	8.5
	33	36	74.7	11	0.8	211	5.1	14.5	12.5
	33	36	74.7	9	1.0	206	5.0	15.0	16.0
KE Be 60	25	27	78.1	30	--	190	5.7	12.0	--
KE Be 62	23	26	60.7	16	0.3	267	5.5	15.5	20.0
	23	26	60.7	15	0.6	263	5.6	15.0	11.0
	23	26	60.7	21	0.3	259	5.7	15.5	18.0
	23	26	60.7	15	0.5	259	5.3	14.0	9.0
	23	26	60.7	19	0.4	253	5.5	14.0	8.0
	23	26	60.7	15	0.5	250	5.7	12.0	11.0
	23	26	60.7	7	1.2	140	5.7	14.0	13.5
KE Be 113	168	178	76.0	30	3.0	399	7.1	15.0	--
KE Be 158	31	34	65.0	60	0.3	224	5.3	12.5	0.0
KE Be 159	66	69	45.3	20	--	198	7.1	15.0	--
KE Be 160	35	38	45.2	18	0.9	56	5.3	14.0	20.0
	35	38	45.2	26	0.8	58	5.5	13.5	11.0
	35	38	45.2	24	0.7	57	5.6	14.0	17.0
	35	38	45.2	19	1	60	5.4	13.5	8.5
	35	38	45.2	21	0.7	58	5.3	14.0	11.0
	35	38	45.2	30	0.5	60	4.7	14.0	20.0
	35	38	45.2	15	1.2	60	5.5	14.0	13.0
KE Be 161	16	19	45.2	--	--	--	--	--	--
KE Be 162	67	64	61.0	40	1.0	63	5.4	15.0	--
KE Be 165	45	48	50.0	15	1.1	270	5.3	13.5	18.5
KE Be 167	15	18	65.9	15	0.3	184	5.7	17.5	18.5
KE Be 171	425	435	41.4	180	94	222	7.5	15.5	2.5
KE Be 172	4.2	4.3	33.0	10	0.1	217	7.3	17.0	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WAT WH WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
KE Ad 20	8.0	12	6.0	16	4.7	19	23	13	34
KE Ad 43	7.4	2.0	0.84	3.6	1.5	3	4	2.2	3.5
KE Af 56	0.5	72	1.7	3.2	2.6	154	188	33	9.6
KE Bb 12	2.7	11	3.5	26	1.7	14	17	21	39
KE Bb 38	2.0	7.2	3.5	23	1.5	7	8	23	41
KE Bc 70	0.2	0.05	0.01	66	5.7	101	124	0.80	41
KE Bc 185	7.9	2.4	1.7	2.7	2.1	4	5	0.50	4.5
KE Bc 186	0	11	3.2	1.9	3.0	60	74	8.1	2.4
KE Bd 147	0	3.5	0.88	2.7	1.5	42	51	2.1	4.3
KE Be 47	9.1	21	14	6.2	3.1	18	23	24	22
KE Be 49	--	--	--	--	--	9	11	--	--
KE Be 50	8.5	--	--	--	--	--	--	--	--
	8.3	--	--	--	--	--	--	--	--
	8.6	--	--	--	--	--	--	--	--
	10.8	--	--	--	--	--	--	--	--
	12.8	--	--	--	--	--	--	--	--
	10.6	--	--	--	--	--	--	--	--
KE Be 52	9.9	--	--	--	--	--	--	--	--
	8.4	--	--	--	--	--	--	--	--
	8.3	--	--	--	--	--	--	--	--
	9.2	--	--	--	--	--	--	--	--
	11.0	--	--	--	--	--	--	--	--
	12.6	--	--	--	--	--	--	--	--
	11.0	--	--	--	--	--	--	--	--
	11.6	--	--	--	--	--	--	--	--
KE Be 60	--	--	--	--	--	10	13	--	--
KE Be 62	8.8	--	--	--	--	--	--	--	--
	9.2	--	--	--	--	--	--	--	--
	8.8	--	--	--	--	--	--	--	--
	11.3	--	--	--	--	--	--	--	--
	13.1	--	--	--	--	--	--	--	--
	11.2	--	--	--	--	--	--	--	--
	9.0	--	--	--	--	--	--	--	--
KE Be 113	0.2	75	2.9	5.9	3.5	172	210	6.2	38
KE Be 158	9.8	12	11	3.1	8.8	5	6	5.8	17
KE Be 159	3.9	--	--	--	--	85	104	--	--
KE Be 160	9.1	--	--	--	--	--	--	--	--
	4.6	--	--	--	--	--	--	--	--
	9.6	--	--	--	--	--	--	--	--
	11.0	--	--	--	--	--	--	--	--
	13.9	--	--	--	--	--	--	--	--
	11.1	--	--	--	--	--	--	--	--
	10.0	--	--	--	--	--	--	--	--
KE Be 161	--	--	--	--	--	--	--	--	--
KE Be 162	9.6	--	--	--	--	4	5	--	--
KE Be 165	8.9	--	--	--	--	3	4	--	--
KE Be 167	9.7	--	--	--	--	7	8	--	--
KE Be 171	0.1	11	3.0	31	7.2	100	122	11	5.8
KE Be 172	--	36	2.4	3.3	2.9	89	107	4.9	8.2

QUALITY OF GROUND WATER

549

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
KE Ad 20	0.30	0.050	15	140	137	--	--	<0.010	--
KE Ad 43	<0.10	0.020	12	35	37	--	--	<0.010	--
KE Af 56	0.50	0.020	26	240	242	--	--	<0.010	--
KE Bb 12	<0.10	0.10	20	171	131	--	<0.010	--	5.10
KE Bb 38	0.10	0.13	23	112	127	--	<0.010	--	1.40
KE Bc 70	0.40	0.14	37	201	213	--	--	<0.010	--
KE Bc 185	<0.10	0.030	13	62	47	--	--	<0.010	--
KE Bc 186	0.30	0.010	18	81	100	--	--	<0.010	--
KE Bd 147	<0.10	--	22	--	81	--	--	<0.010	--
KE Be 47	<0.10	--	9.9	188	112	--	<0.010	--	16.0
KE Be 49	--	--	--	--	--	--	--	<0.010	--
KE Be 50	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
KE Be 52	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
KE Be 60	--	--	--	--	--	--	--	<0.010	--
KE Be 62	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
KE Be 113	0.20	0.040	19	282	259	--	--	<0.010	--
KE Be 158	0.10	--	7.8	--	132	--	--	<0.010	--
KE Be 159	--	--	--	--	--	--	--	<0.010	--
KE Be 160	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
	--	--	--	--	--	--	--	<0.010	--
KE Be 161	--	--	--	--	--	--	--	<0.010	--
KE Be 162	--	--	--	--	--	--	--	<0.010	--
KE Be 165	--	--	--	--	--	22.0	--	0.020	--
KE Be 167	--	--	--	--	--	2.78	--	0.020	--
KE Be 171	0.20	--	8.1	151	138	--	--	<0.010	--
KE Be 172	0.30	--	21	--	134	--	--	0.020	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
KE Ad 20	5.50	--	0.020	--	--	--	<0.010	--	--
KE Ad 43	2.10	--	0.020	--	--	--	<0.010	--	--
KE Af 56	<0.050	--	0.080	--	--	--	0.040	--	--
KE Bb 12	--	0.030	--	--	<0.010	<0.010	--	--	--
KE Bb 38	--	0.020	--	--	<0.010	<0.010	--	--	--
KE Bc 70	<0.050	--	0.130	--	--	--	0.170	--	--
KE Bc 185	4.00	--	<0.010	--	--	--	<0.010	--	--
KE Bc 186	<0.050	--	0.040	--	--	--	0.100	--	--
KE Bd 147	<0.050	--	0.470	0.50	--	--	0.150	1100	<1
KE Be 47	--	0.030	--	--	0.030	0.010	--	--	--
KE Be 49	15.0	--	0.080	<0.20	--	--	0.010	--	--
KE Be 50	31.0	--	<0.010	0.10	--	--	<0.010	--	--
	29.0	--	0.010	0.20	--	--	<0.010	--	--
	31.0	--	<0.010	<0.20	--	--	0.010	--	--
	30.0	--	<0.010	<0.20	--	--	<0.010	--	--
	29.0	--	<0.010	<0.20	--	--	<0.010	--	--
	29.0	--	0.020	0.30	--	--	0.010	--	--
	28.0	--	<0.010	<0.20	--	--	<0.010	--	--
KE Be 52	16.0	--	<0.010	<0.0	--	--	<0.010	--	--
	16.0	--	<0.010	<0.20	--	--	<0.010	--	--
	16.0	--	0.020	<0.20	--	--	<0.010	--	--
	16.0	--	<0.010	<0.20	--	--	<0.010	--	--
	16.0	--	0.020	<0.20	--	--	<0.010	--	--
	17.0	--	<0.010	<0.20	--	--	<0.010	--	--
	17.0	--	<0.010	<0.20	--	--	<0.010	--	--
KE Be 60	14.0	--	0.010	<0.20	--	--	0.010	--	--
KE Be 62	17.0	--	<0.010	0.20	--	--	<0.010	--	--
	18.0	--	<0.010	<0.20	--	--	<0.010	--	--
	17.0	--	<0.010	<0.20	--	--	<0.010	--	--
	17.0	--	<0.010	<0.20	--	--	<0.010	--	--
	16.0	--	<0.010	0.30	--	--	<0.010	--	--
	17.0	--	<0.010	<0.20	--	--	<0.010	--	--
	17.0	--	0.010	<0.20	--	--	<0.010	--	--
KE Be 113	<0.050	--	0.040	--	--	--	<0.010	--	--
KE Be 158	14.0	--	0.010	0.40	--	--	<0.010	30	<1
KE Be 159	1.30	--	0.020	<0.20	--	--	0.020	--	--
KE Be 160	3.30	--	<0.010	<0.0	--	--	<0.010	--	--
	3.60	--	0.010	<0.20	--	--	<0.010	--	--
	3.80	--	0.010	<0.20	--	--	<0.010	--	--
	3.70	--	<0.010	<0.20	--	--	<0.010	--	--
	3.90	--	<0.010	<0.20	--	--	<0.010	--	--
	3.80	--	<0.010	<0.20	--	--	<0.010	--	--
	4.00	--	0.010	<0.20	--	--	<0.010	--	--
KE Be 161	9.50	--	<0.010	<0.0	--	--	<0.010	--	--
KE Be 162	3.50	--	0.020	<0.20	--	--	<0.010	--	--
KE Be 165	22.0	--	<0.010	<0.0	--	--	<0.010	--	--
KE Be 167	2.80	--	<0.010	<0.0	--	--	<0.010	--	--
KE Be 171	<0.050	--	0.300	--	--	--	0.020	--	--
KE Be 172	<0.050	--	0.070	<0.0	--	--	0.030	<10	<1

QUALITY OF GROUND WATER

551

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IODIDE, DIS- SOLVED (MG/L AS I)
KE Ad 20	--	--	--	--	--	--	--	--	0.004
KE Ad 43	--	--	--	--	--	--	--	--	0.003
KE Af 56	--	--	--	--	--	--	--	--	0.005
KE Bb 12	--	--	--	--	--	--	--	--	0.003
KE Bb 38	--	--	--	--	--	--	--	--	0.003
KE Bc 70	--	--	--	--	--	--	--	--	0.018
KE Bc 185	--	--	--	--	--	--	--	--	<0.001
KE Bc 186	--	--	--	--	--	--	--	--	0.001
KE Bd 147	2	26	<0.5	10	1.0	<5	<3	<10	--
KE Be 47	--	--	--	--	--	--	--	--	--
KE Be 49	--	--	--	--	--	--	--	--	--
KE Be 50	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 52	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 60	--	--	--	--	--	--	--	--	--
KE Be 62	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 113	--	--	--	--	--	--	--	--	0.001
KE Be 158	<1	640	<0.5	<10	<1.0	<5	<3	<10	--
KE Be 159	--	--	--	--	--	--	--	--	--
KE Be 160	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 161	--	--	--	--	--	--	--	--	--
KE Be 162	--	--	--	--	--	--	--	--	--
KE Be 165	--	--	--	--	--	--	--	--	--
KE Be 167	--	--	--	--	--	--	--	--	--
KE Be 171	--	--	--	--	--	--	--	--	--
KE Be 172	3	280	<0.5	20	<1.0	<5	<3	<10	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
KE Ad 20	--	4	--	--	--	5	--	--	--
KE Ad 43	--	21	--	--	--	10	--	--	--
KE Af 56	--	920	--	--	--	12	--	--	--
KE Bb 12	--	16	--	--	--	5	--	--	--
KE Bb 38	--	16	--	--	--	330	--	--	--
KE Bc 70	--	14	--	--	--	6	--	--	--
KE Bc 185	--	13	--	--	--	23	--	--	--
KE Bc 186	--	15000	--	--	--	190	--	--	--
KE Bd 147	--	17000	<10	<4	--	29	<10	<10	<1
KE Be 47	50	23	--	--	800	780	--	--	--
KE Be 49	--	--	--	--	--	--	--	--	--
KE Be 50	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 52	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 60	--	--	--	--	--	--	--	--	--
KE Be 62	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 113	--	5200	--	--	--	90	--	--	--
KE Be 158	--	11	<10	<4	--	130	<10	<10	3
KE Be 159	--	--	--	--	--	--	--	--	--
KE Be 160	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 161	--	--	--	--	--	--	--	--	--
KE Be 162	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
KE Be 165	--	--	--	--	--	--	--	--	--
KE Be 167	--	--	--	--	--	--	--	--	--
KE Be 171	--	190	--	--	--	15	--	--	--
KE Be 172	--	2100	<10	7	--	6	<10	<10	<1

QUALITY OF GROUND WATER

553

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
KE Ad 20	--	--	--	--	--	--	55	--
KE Ad 43	--	--	--	--	--	--	8	--
KE Af 56	--	--	--	--	330	--	190	--
KE Bb 12	--	--	--	--	370	--	42	--
KE Bb 38	--	--	--	--	280	--	32	--
KE Bc 70	--	--	--	--	--	--	0	--
KE Bc 185	--	--	--	--	--	--	13	--
KE Bc 186	--	--	--	--	340	--	41	--
KE Bd 147	<1.0	31	6	5	--	--	12	2.5
KE Be 47	--	--	--	--	--	0.7	110	--
KE Be 49	--	--	--	--	--	--	--	0.7
KE Be 50	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
KE Be 52	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
KE Be 60	--	--	--	--	--	--	--	--
KE Be 62	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
KE Be 113	--	--	--	--	830	--	200	--
KE Be 158	<1.0	180	<6	7	--	--	76	0.5
KE Be 159	--	--	--	--	--	--	--	0.4
KE Be 160	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
KE Be 161	--	--	--	--	--	--	--	--
KE Be 162	--	--	--	--	--	--	--	0.6
KE Be 165	--	--	--	--	--	--	--	0.3
KE Be 167	--	--	--	--	--	--	--	1.1
KE Be 171	--	--	--	--	--	--	40	--
KE Be 172	<1.0	120	<6	<3	--	--	100	2.2

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
KE Be 172	03-06-92	1230	391820075580401	125AQUI	GW		4080	--	--	--
KE Be 173	10-10-91	1600	391820075580402	125AQUI	GW		4080	--	3.50	3.4
KE Be 174	10-15-91	1300	391719075554702	112CLMB	GW		4080	--	2.00	1.9
KE Be 175	10-15-91	1700	391719075554703	112CLMB	GW		4040	--	2.00	1.3
KE Be 176	03-03-92	1330	391745075551601	125AQUI	GW		4080	--	2.30	2.2
KE Be 177	03-05-92	1130	3916290755562001	125AQUI	GW		4080	--	3.00	2.9
KE Be 178	03-05-92	1630	3918390755574801	125AQUI	GW		4080	--	4.50	4.5
	06-08-92	1900		125AQUI	GW		4080	--	4.50	4.5
	09-10-92	1300		125AQUI	GW		--	--	4.50	--
KE Be 179	04-03-92	1200	3918490755573901	125AQUI	GW		4080	--	2.60	--
KE Be 180	04-07-92	1730	3918390755574802	125AQUI	GW		4080	--	4.60	--
	09-10-92	1200		125AQUI	GW		4080	--	4.60	3.6
KE Be 181	06-09-92	1800	3918470755563401	125AQUI	GW		4080	--	3.20	3.1
KE Be 182	09-10-92	1600	3916530755560601	125AQUI	GW		4080	--	1.25	1.2
KE Bf 9	05-20-92	1145	391611075511101	125AQUI	GW		4040	--	130.00	68
KE Bf 58	05-27-92	1015	3918500755502701	125AQUI	GW		4040	--	192.00	187
	07-15-92	0940		125AQUI	GW		4040	--	192.00	187
KE Bf 138	05-20-92	1045	3915360755501601	125AQUI	GW		4040	--	227.00	62
KE Bf 183	05-20-92	0930	3915310755501401	125AQUI	GW		4040	--	100.00	90
KE Cb 64	04-14-92	1410	391224076144801	112CLMB	GW		4040	--	52.00	47
KE Cb 71	07-08-92	1240	391247076143002	112CLMB	GW		4040	--	32.00	25
KE Cb 79	07-08-92	1100	391318076142001	112CLMB	GW		4040	--	60.00	55
KE Cb 88	07-08-92	1000	391435076133701	211MGTY	GW		4040	--	80.00	73
KE Cb 97	05-06-92	1010	391124076101001	211MGTY	GW		4040	57.00	285.00	270
KE Cb 98	12-05-91	1440	391124076101002	211MNMT	GW		4040	42.42	225.00	210
KE Cb 99	05-06-92	1205	391124076101003	125AQUI	GW		4040	42.61	134.00	118
KE Cb 100	12-11-91	1315	391124076101004	125AQUI	GW		4040	39.79	67.00	52
KE Cb 101	05-05-92	1545	391251076142201	112CLMB	GW		4040	28.76	73.00	58
KE Cb 103	12-09-91	1330	391124076101005	217PTMC	GW		4040	67.55	404.00	389
KE Cc 61	07-16-92	1040	391033076061301	125AQUI	GW		4040	--	100.00	90
KE Cd 2	07-15-92	1410	391246076035001	125AQUI	GW		4040	--	82.00	--
KE Cd 104	07-15-92	1450	391246076034702	217PTMC	GW		4040	--	428.00	392
KE Da 11	07-08-92	1400	390915076163501	211MGTY	GW		4040	--	174.00	169
KE Db 79	07-16-92	1245	390944076112901	125AQUI	GW		4040	--	80.00	72
KE Db 96	07-07-92	1450	390804076101301	112CLMB	GW		4040	--	40.00	31
KE Db 120	04-14-92	1145	390702076103101	125AQUI	GW		4040	--	80.00	70
KE Dc 55	07-07-92	1130	390749076055401	125AQUI	GW		4040	--	110.00	92
KE Dc 73	05-21-92	1030	390719076090903	112CLMB	GW		4040	--	73.00	41
KE Dc 77	05-21-92	1145	390704076095001	125AQUI	GW		4040	--	232.00	217
KE Dc 89	12-18-91	1215	390626076083301	112CLMB	GW		4040	4.69	29.00	10
KE Dc 91	12-16-91	1345	390626076083302	125AQUI	GW		4040	5.67	155.00	140
KE Dd 5	07-07-92	1335	390948076032401	125AQUI	GW		4040	--	120.00	100
KE Eb 12	07-01-92	1115	390321076132301	125AQUI	GW		4040	--	97.00	89

Geologic unit (aquifer): 112CLMB - Columbia Group
 211MGTY - Magothy Formation
 125AQUI - Aquia Formation
 217PTMC - Potomac Group
 112PCPC - Pleistocene-Plioene Series
 211MNMT - Monmouth Formation

Sampling Method: 4010 - Thief sample
 4040 - Submersible pump
 4080 - Peristaltic pump

Site type: GW - Groundwater
 SP - Spring

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
KE Be 172	--	33.0	--	0.1	215	6.7	10.0	14.0	0.1	--
KE Be 173	3.5	33.0	10	0.1	148	6.9	17.0	--	0.2	--
KE Be 174	2.0	35.0	--	--	77	5.2	16.0	17.5	9.5	4.1
KE Be 175	1.4	35.0	--	0.1	69	5.3	16.0	17.5	8.8	--
KE Be 176	2.3	58.0	--	--	171	5.2	10.0	9.5	10.1	--
KE Be 177	3.0	30.0	--	--	94	6.1	11.5	--	10.3	--
KE Be 178	4.5	45.0	--	0.1	256	6.9	11.0	15.0	0.1	--
	4.5	45.0	--	--	252	7.4	18.5	24.5	0.0	--
	--	45.0	--	--	1	6.3	20.5	--	6.5	--
KE Be 179	--	55.0	--	--	91	5.1	18.5	9.5	9.6	--
KE Be 180	--	45.0	--	--	101	6.2	6.5	5.0	0	--
	3.7	45.0	30	0.1	97	5.7	20.5	--	0.8	--
KE Be 181	3.2	55.0	--	--	260	7.3	16.5	25.5	0.4	--
KE Be 182	1.2	37.0	30	0.1	158	6.5	19.5	--	3.5	--
KE Bf 9	130	60.0	25	2.3	258	6.9	--	--	0.3	55
KE Bf 58	192	65.0	30	2.7	274	7.1	14.0	--	0.4	56
	192	65.0	--	--	--	6.9	--	--	--	--
KE Bf 138	227	30.0	20	--	285	6.9	--	--	4.3	50
KE Bf 183	100	27.0	40	6.0	270	6.6	--	--	1.8	54
KE Cb 64	52	20.0	20	6.6	293	5.8	13.5	--	0.3	9.9
KE Cb 71	32	5.0	25	7.0	395	6.7	17.5	--	0.8	0.30
KE Cb 79	60	20.0	20	9.2	124	5.1	15.0	--	4.7	6.3
KE Cb 88	80	30.0	25	7.5	71	5.3	14.5	--	3.2	3.9
KE Cb 97	280	65.8	90	2.5	223	6.5	15.0	--	0	15
KE Cb 98	220	65.8	219	65	134	6.0	14.0	--	0	12
KE Cb 99	128	66.0	25	5.0	124	6.2	14.0	12.0	0	6.4
KE Cb 100	62	65.7	246	6.0	36	5.4	18.5	--	8.2	2.0
KE Cb 101	68	30.9	30	4.0	196	6.0	14.0	--	0	8.5
KE Cb 103	399	65.6	238	18	133	6.6	16.5	--	0	9.9
KE Cc 61	100	30.0	20	--	248	7.1	17.5	--	0	37
KE Cd 2	--	15.0	15	--	124	5.6	15.5	--	7.6	12
KE Cd 104	416	20.0	10	--	153	6.3	18.0	--	0	12
KE Da 11	174	10.0	25	8.6	167	6.3	15.5	--	0	7.2
KE Db 79	80	10.0	25	6.0	144	6.0	16.0	--	0	10
KE Db 96	40	10.0	20	4.0	168	4.6	16.0	--	3.0	8.2
KE Db 120	80	5.0	30	8.5	1880	7.0	14.5	--	0	180
KE Dc 55	107	10.0	20	2.5	357	7.1	15.0	--	0.2	68
KE Dc 73	51	25.0	30	2.6	294	6.2	16.0	--	0	7.9
KE Dc 77	232	10.0	35	3.9	351	5.2	13.0	--	1.5	23
KE Dc 89	20	4.5	180	16	7150	6.5	16.5	3.0	0	140
KE Dc 91	150	4.6	240	98	1220	6.3	14.5	-1.0	0	1000
KE Dd 5	120	20.0	30	6.6	282	7.0	16.0	--	0.5	58
KE Eb 12	97	5.0	30	5.0	2780	6.7	17.5	--	0	410

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SIO2)
KE Be 172	--	--	--	87	106	--	--	--	--	--
KE Be 173	--	--	--	55	67	--	--	--	--	--
KE Be 174	1.5	4.8	2.1	3	3	0.50	5.6	<0.10	--	11
KE Be 175	--	--	--	3	4	--	--	--	--	--
KE Be 176	--	--	--	2	2	--	--	--	--	--
KE Be 177	--	--	--	10	13	--	--	--	--	--
KE Be 178	--	--	--	126	154	--	--	--	--	--
	--	--	--	91	111	--	--	--	--	--
	--	--	--	15	18	--	--	--	--	--
KE Be 179	--	--	--	3	3	--	--	--	--	--
KE Be 180	--	--	--	22	27	--	--	--	--	--
	--	--	--	10	12	--	--	--	--	--
KE Be 181	--	--	--	98	120	--	--	--	--	--
KE Be 182	--	--	--	49	59	--	--	--	--	--
KE Bf 9	2.0	2.4	2.1	139	170	6.2	2.5	<0.10	0.030	23
KE Bf 58	1.1	2.7	2.3	--	--	18	2.7	0.20	0.020	20
	--	--	--	140	171	--	--	--	--	--
KE Bf 138	2.7	3.1	2.9	138	168	4.4	3.2	<0.10	0.040	18
KE Bf 183	1.5	2.6	1.3	135	164	5.7	2.8	0.10	0.020	16
KE Cb 64	4.2	38	1.5	17	20	30	56	<0.10	0.18	21
KE Cb 71	0.10	94	0.10	163	199	15	34	<0.10	0.10	16
KE Cb 79	3.1	9.7	1.4	9	11	22	11	<0.10	0.050	20
KE Cb 88	1.1	6.3	1.1	9	11	2.4	8.6	<0.10	0.030	19
KE Cb 97	3.8	17	4.2	96	117	8.7	6.9	0.30	0.020	9.8
KE Cb 98	1.8	2.3	3.3	48	58	10	2.7	0.30	--	29
KE Cb 99	1.5	2.3	6.0	34	42	20	2.5	0.60	0.020	36
KE Cb 100	0.62	2.9	1.4	7	8	0.50	3.8	0.20	--	11
KE Cb 101	3.1	25	2.5	43	52	32	19	<0.10	0.060	17
KE Cb 103	4.2	3.1	4.2	51	62	15	1.1	0.20	--	6.8
KE Cc 61	5.9	5.2	2.4	137	167	0.40	1.7	0.20	0.030	17
KE Cd 2	2.2	6.6	2.2	10	12	2.5	12	<0.10	0.040	13
KE Cd 104	3.5	9.2	5.5	64	78	12	2.3	0.20	0.030	7.5
KE Da 11	3.7	8.7	2.7	81	99	0.80	6.6	<0.10	0.13	15
KE Db 79	3.0	3.8	5.1	54	66	9.3	6.0	0.40	0.22	30
KE Db 96	1.7	16	3.6	1	1	27	27	<0.10	0.12	54
KE Db 120	25	160	5.6	167	204	43	480	0.30	1.9	28
KE Dc 55	3.3	11	2.5	175	213	12	14	0.30	0.060	28
KE Dc 73	4.4	17	1.6	92	112	2.3	37	0.10	0.080	45
KE Dc 77	11	20	4.6	8	10	35	53	<0.10	0.090	18
KE Dc 89	180	1200	20	161	196	300	2400	1.4	--	19
KE Dc 91	230	1700	23	188	229	730	4300	1.7	--	26
KE Dd 5	1.7	1.8	1.3	136	166	11	4.9	<0.10	0.020	14
KE Eb 12	41	320	9.0	152	185	140	1200	0.30	3.9	24

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N)
KE Be 172	--	--	--	--	<0.010	--	<0.050	--	0.060	<0.20
KE Be 173	--	--	--	--	--	--	--	--	--	--
KE Be 174	--	52	--	--	<0.010	--	4.70	--	<0.010	<0.0
KE Be 175	--	--	--	--	<0.010	--	4.10	--	<0.010	<0.0
KE Be 176	--	--	--	--	<0.010	--	8.60	--	<0.010	<0.20
KE Be 177	--	--	--	--	<0.010	--	5.60	--	<0.010	<0.20
KE Be 178	--	--	--	--	<0.010	--	<0.050	--	0.010	<0.20
	--	--	--	--	<0.010	--	<0.050	--	<0.010	<0.20
KE Be 179	--	--	--	--	<0.010	--	5.30	--	0.020	<0.20
KE Be 180	--	--	--	--	--	--	--	--	--	--
KE Be 181	--	--	1.89	--	0.010	--	1.90	--	0.150	<0.20
KE Be 182	--	--	--	--	<0.010	--	<0.050	--	<0.010	<0.20
KE Bf 9	184	178	--	--	<0.010	--	<0.050	--	0.010	<0.20
KE Bf 58	197	186	--	--	<0.010	--	<0.050	--	0.050	--
KE Bf 138	166	168	--	--	<0.010	--	<0.050	--	0.070	--
KE Bf 183	160	165	--	--	<0.010	--	<0.050	--	0.020	--
KE Cb 64	173	171	--	<0.010	--	1.10	--	0.020	--	--
KE Cb 71	253	261	--	--	<0.010	--	0.750	--	0.020	--
KE Cb 79	89	88	--	--	<0.010	--	2.10	--	0.020	--
KE Cb 88	55	56	--	--	<0.010	--	1.90	--	0.020	--
KE Cb 97	115	136	--	--	<0.010	--	<0.050	--	0.060	--
KE Cb 98	69	102	--	--	<0.010	--	<0.050	--	0.030	--
KE Cb 99	114	113	--	--	<0.010	--	<0.050	--	0.020	--
KE Cb 100	25	31	--	--	<0.010	--	0.910	--	0.020	--
KE Cb 101	132	143	--	--	<0.010	--	0.970	--	0.070	--
KE Cb 103	58	89	--	--	<0.010	--	<0.050	--	0.060	--
KE Cc 61	154	155	--	--	<0.010	--	<0.050	--	1.50	--
KE Cd 2	85	75	--	--	<0.010	--	4.20	--	0.010	--
KE Cd 104	88	96	--	--	<0.010	--	<0.050	--	0.230	--
KE Da 11	92	113	--	--	<0.010	--	<0.050	--	1.20	--
KE Db 79	90	118	--	--	<0.010	--	<0.050	--	0.070	--
KE Db 96	145	143	--	--	<0.010	--	0.880	--	0.100	--
KE Db 120	1230	1030	--	0.010	--	0.086	--	4.50	--	--
KE Dc 55	240	245	--	--	<0.010	--	0.057	--	0.320	--
KE Dc 73	206	212	--	--	0.020	--	<0.050	--	1.50	--
KE Dc 77	246	218	--	--	<0.010	--	11.0	--	0.020	--
KE Dc 89	6300	4380	--	--	0.010	--	<0.050	--	0.560	--
KE Dc 91	13900	8150	--	--	0.010	--	<0.050	--	2.60	--
KE Dd 5	165	177	--	--	<0.010	--	0.410	--	0.030	--
KE Eb 12	2620	2250	--	--	<0.010	--	<0.050	--	0.470	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)
KE Be 172	--	--	0.050	--	--	--	--	--	--	--
KE Be 173	--	--	--	--	--	--	--	--	--	--
KE Be 174	--	--	<0.010	4	<1	<1	72	0.5	<10	<1.0
KE Be 175	--	--	<0.010	--	--	--	--	--	--	--
KE Be 176	--	--	<0.010	--	--	--	--	--	--	--
KE Be 177	--	--	<0.010	--	--	--	--	--	--	--
KE Be 178	--	--	0.140	--	--	--	--	--	--	--
	--	--	0.150	--	--	--	--	--	--	--
KE Be 179	--	--	<0.010	--	--	--	--	--	--	--
KE Be 180	--	--	--	--	--	--	--	--	--	--
	--	--	0.010	--	--	--	--	--	--	--
KE Be 181	--	--	0.070	--	--	--	--	--	--	--
KE Be 182	--	--	<0.010	--	--	--	--	--	--	--
KE Bf 9	--	--	0.070	--	--	--	--	--	--	--
KE Bf 58	--	--	0.020	--	--	--	--	--	--	--
KE Bf 138	--	--	0.030	--	--	--	--	--	--	--
KE Bf 183	--	--	0.030	--	--	--	--	--	--	--
KE Cb 64	0.010	<0.010	--	--	--	--	--	--	--	--
KE Cb 71	--	--	0.030	--	--	--	--	--	--	--
KE Cb 79	--	--	0.010	--	--	--	--	--	--	--
KE Cb 88	--	--	<0.010	--	--	--	--	--	--	--
KE Cb 97	--	--	<0.010	--	--	--	--	--	--	--
KE Cb 98	--	--	0.220	--	--	--	--	--	--	--
KE Cb 99	--	--	0.560	--	--	--	--	--	--	--
KE Cb 100	--	--	0.010	--	--	--	--	--	--	--
KE Cb 101	--	--	0.090	--	--	--	--	--	--	--
KE Cb 103	--	--	<0.010	--	--	--	--	--	--	--
KE Cc 61	--	--	0.030	--	--	--	--	--	--	--
KE Cd 2	--	--	0.010	--	--	--	--	--	--	--
KE Cd 104	--	--	0.020	--	--	--	--	--	--	--
KE Da 11	--	--	<0.010	--	--	--	--	--	--	--
KE Db 79	--	--	1.30	--	--	--	--	--	--	--
KE Db 96	--	--	<0.010	--	--	--	--	--	--	--
KE Db 120	0.590	0.050	--	--	--	--	--	--	--	--
KE Dc 55	--	--	0.060	--	--	--	--	--	--	--
KE Dc 73	--	--	<0.010	--	--	--	--	--	--	--
KE Dc 77	--	--	<0.010	--	--	--	--	--	--	--
KE Dc 89	--	--	<0.010	--	--	--	--	--	--	--
KE Dc 91	--	--	0.010	--	--	--	--	--	--	--
KE Dd 5	--	--	<0.010	--	--	--	--	--	--	--
KE Eb 12	--	--	<0.010	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

559

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IODIDE, DIS- SOLVED (MG/L AS I)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)
KE Be 172	--	--	--	--	--	--	--	--	--
KE Be 173	--	--	--	--	--	--	--	--	--
KE Be 174	<5	<3	<10	--	5	<10	<4	6	<10
KE Be 175	--	--	--	--	--	--	--	--	--
KE Be 176	--	--	--	--	--	--	--	--	--
KE Be 177	--	--	--	--	--	--	--	--	--
KE Be 178	--	--	--	--	--	--	--	--	--
KE Be 179	--	--	--	--	--	--	--	--	--
KE Be 180	--	--	--	--	--	--	--	--	--
KE Be 181	--	--	--	--	--	--	--	--	--
KE Be 182	--	--	--	--	--	--	--	--	--
KE Bf 9	--	--	--	0.007	1200	--	--	69	--
KE Bf 58	--	--	--	0.004	840	--	--	94	--
KE Bf 138	--	--	--	0.005	350	--	--	24	--
KE Bf 183	--	--	--	<0.001	450	--	--	23	--
KE Cb 64	--	--	--	0.006	52	--	--	52	--
KE Cb 71	--	--	--	0.008	<3	--	--	<1	--
KE Cb 79	--	--	--	0.002	6	--	--	4	--
KE Cb 88	--	--	--	<0.001	6	--	--	<1	--
KE Cb 97	--	--	--	0.019	12000	--	--	230	--
KE Cb 98	--	--	--	--	11000	--	--	99	--
KE Cb 99	--	--	--	0.003	15000	--	--	220	--
KE Cb 100	--	--	--	--	180	--	--	14	--
KE Cb 101	--	--	--	0.012	5200	--	--	180	--
KE Cb 103	--	--	--	--	14000	--	--	200	--
KE Cc 61	--	--	--	0.005	1000	--	--	43	--
KE Cd 2	--	--	--	0.002	6	--	--	7	--
KE Cd 104	--	--	--	0.003	4700	--	--	82	--
KE Da 11	--	--	--	0.008	18000	--	--	210	--
KE Db 79	--	--	--	0.002	14000	--	--	140	--
KE Db 96	--	--	--	0.008	510	--	--	230	--
KE Db 120	--	--	--	0.022	1700	--	--	560	--
KE Dc 55	--	--	--	0.004	430	--	--	13	--
KE Dc 73	--	--	--	0.015	39000	--	--	580	--
KE Dc 77	--	--	--	0.006	28	--	--	63	--
KE Dc 89	--	--	--	--	24000	--	--	530	--
KE Dc 91	--	--	--	--	21000	--	--	80	--
KE Dd 5	--	--	--	0.002	1000	--	--	27	--
KE Eb 12	--	--	--	0.017	7300	--	--	<10	--

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

KENT COUNTY, MARYLAND--Continued

WELL NUMBER	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	RADON 222 TOTAL (PCI/L)	HARD- NESS TOTAL (MG/L AS CACO3)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
KE Be 172	--	--	--	--	--	--	--	--	--
KE Be 173	--	--	--	--	--	--	--	--	--
KE Be 174	<10	<1	<1.0	21	<6	11	--	16	0.6
KE Be 175	--	--	--	--	--	--	--	--	0.4
KE Be 176	--	--	--	--	--	--	--	--	4.5
KE Be 177	--	--	--	--	--	--	--	--	0.8
KE Be 178	--	--	--	--	--	--	--	--	0.7
KE Be 179	--	--	--	--	--	--	--	--	1.2
KE Be 180	--	--	--	--	--	--	--	--	1.3
KE Be 181	--	--	--	--	--	--	--	--	1.1
KE Be 182	--	--	--	--	--	--	--	--	0.9
KE Bf 9	--	--	--	--	--	--	240	150	--
KE Bf 58	--	--	--	--	--	--	350	140	--
KE Bf 138	--	--	--	--	--	--	210	140	--
KE Bf 183	--	--	--	--	--	--	230	140	--
KE Cb 64	--	--	--	--	--	--	--	42	--
KE Cb 71	--	--	--	--	--	--	430	1	--
KE Cb 79	--	--	--	--	--	--	600	29	--
KE Cb 88	--	--	--	--	--	--	340	14	--
KE Cb 97	--	--	--	--	--	--	190	53	--
KE Cb 98	--	--	--	--	--	--	--	37	--
KE Cb 99	--	--	--	--	--	--	150	22	--
KE Cb 100	--	--	--	--	--	--	--	8	--
KE Cb 101	--	--	--	--	--	--	480	34	--
KE Cb 103	--	--	--	--	--	--	--	42	--
KE Cc 61	--	--	--	--	--	--	--	120	--
KE Cd 2	--	--	--	--	--	--	--	39	--
KE Cd 104	--	--	--	--	--	--	--	44	--
KE Da 11	--	--	--	--	--	--	<80	33	--
KE Db 79	--	--	--	--	--	--	--	37	--
KE Db 96	--	--	--	--	--	--	270	27	--
KE Db 120	--	--	--	--	--	--	--	550	--
KE Dc 55	--	--	--	--	--	--	230	180	--
KE Dc 73	--	--	--	--	--	--	--	38	--
KE Dc 77	--	--	--	--	--	--	--	100	--
KE Dc 89	--	--	--	--	--	--	--	1100	--
KE Dc 91	--	--	--	--	--	--	--	3400	--
KE Dd 5	--	--	--	--	--	--	270	150	--
KE Eb 12	--	--	--	--	--	--	130	1200	--

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

MONTGOMERY COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
MO Be 62	06-23-92	1005	391927077120801	300IJMV	GW		4040	--	180.00
MO Db 68	06-08-92	1210	390802077283801	231NOXF	GW		4040	17.12	252.00
	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
MO Be 62	29	180	790	122	7.7	303	8.3	18.0	18.5
MO Db 68	40	252	260	138	7.5	245	7.6	13.5	28.5
	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WAT WH TOT IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MO Be 62	5.8	39	6.3	7.9	3.3	68	83	27	29
MO Db 68	6.6	35	6.6	6.1	0.40	118	144	1.8	2.5
	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)
MO Be 62	0.90	6.1	178	160	<0.010	1.70	0.010	0.010	<0.010
MO Db 68	<0.10	22	156	145	<0.010	1.30	0.030	0.090	0.060
	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)
MO Be 62	20	20	<1	28	<0.5	20	<1.0	2	<1
MO Db 68	--	--	--	--	--	--	--	--	--
	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)
MO Be 62	34	50	4	<1	<4	<10	<1	<0.1	1
MO Db 68	--	570	<3	--	--	<10	<1	--	--
	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	
MO Be 62	<1	<1	1	<10	<3	<80	2.1	120	
MO Db 68	--	--	--	--	--	--	0.1	110	

Geologic unit (aquifer): 231NOXF - New Oxford Formation
300IJMV - Ijamsville Formation

Sampling method: 4040 - Submersible pump

Site type: GW - Groundwater

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
QUEEN ANNES COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
QA Cg 1	06-09-92	1600	390841075515201	112WCML	GW		4030	--	60.00	50
QA Db 14	03-16-92	1036	390055076184501	125AQUI	GW		4010	--	165.00	145
	08-10-92	1122		125AQUI	GW		--	--	165.00	145
QA Db 15	03-16-92	1335	390022076191801	125AQUI	GW		4010	--	103.00	96
	08-10-92	1317		125AQUI	GW		--	--	103.00	96
QA Db 17	03-17-92	0900	390059076191801	125AQUI	GW		4010	--	--	--
	08-10-92	1040		125AQUI	GW		--	--	--	--
QA Db 23	03-16-92	1430	390033076184501	125AQUI	GW		4010	--	185.00	165
	08-10-92	1204		125AQUI	GW		--	--	185.00	165
QA Db 27	03-16-92	0949	390117076191301	125AQUI	GW		4010	--	145.00	110
	08-10-92	0945		125AQUI	GW		--	--	145.00	110
QA Db 30	03-31-92	1430	390201076182701	125AQUI	GW		4040	17.00	220.00	210
	08-20-92	1150		125AQUI	GW		4040	16.49	220.00	210
QA Db 32	03-31-92	1122	390201076182703	125AQUI	GW		4040	16.80	116.00	106
	08-20-92	1020		125AQUI	GW		4040	16.51	116.00	106
QA Db 34	03-25-92	1005	390023076174301	125AQUI	GW		4010	8.40	180.00	170
	08-19-92	1140		125AQUI	GW		4030	10.50	180.00	170
QA Db 35	03-25-92	1548	390119076191001	125AQUI	GW		4010	6.00	200.00	190
	08-20-92	1400		125AQUI	GW		4030	6.09	200.00	190
QA Db 37	03-25-92	1220	390023076174302	125AQUI	GW		4010	9.70	250.00	240
	08-19-92	1550		125AQUI	GW		4040	8.32	250.00	240
QA Ea 39	03-16-92	1131	385825076202901	125AQUI	GW		4010	--	95.00	80
	08-11-92	0915		125AQUI	GW		--	--	95.00	80
QA Ea 42	03-16-92	1530	385820076202501	125AQUI	GW		4010	--	120.00	100
	08-12-92	0920		125AQUI	GW		--	--	120.00	100
QA Ea 45	03-17-92	1130	385554076213801	125AQUI	GW		4010	--	210.00	200
	08-11-92	1200		125AQUI	GW		--	--	210.00	200
QA Ea 48	03-17-92	0957	385825076201201	125AQUI	GW		4010	--	160.00	129
	08-11-92	1536		125AQUI	GW		--	--	160.00	129
QA Ea 59	03-17-92	1048	385505076215001	125AQUI	GW		4010	--	215.00	195
	08-11-92	1316		125AQUI	GW		--	--	215.00	195
QA Ea 60	08-11-92	1120	385701076212501	125AQUI	GW		--	--	185.00	165
QA Ea 61	03-19-92	1512	385812076202801	125AQUI	GW		4010	--	170.00	150
	08-10-92	1500		125AQUI	GW		--	--	170.00	150
QA Ea 71	03-16-92	1615	385742076205801	125AQUI	GW		4010	--	135.00	115
	08-10-92	1600		125AQUI	GW		--	--	135.00	115
QA Ea 77	03-26-92	1500	385718076211501	125AQUI	GW		4030	--	205.00	195
	08-14-92	1420		125AQUI	GW		4040	12.64	205.00	195
QA Ea 78	04-02-92	1026	385718076211502	125AQUI	GW		4040	12.80	135.00	125
	08-14-92	1303		125AQUI	GW		4040	12.71	135.00	125
QA Ea 79	03-20-92	1348	385757076200101	125AQUI	GW		4010	--	298.00	288
	03-30-92	1632		125AQUI	GW		4040	10.60	298.00	288
	08-18-92	1155		125AQUI	GW		4040	10.17	298.00	288
QA Ea 80	03-20-92	1255	385757076200102	125AQUI	GW		4010	10.90	130.00	120
	08-18-92	1120		125AQUI	GW		4030	10.50	130.00	120
QA Ea 81	03-30-92	1420	385718076211503	125AQUI	GW		4040	12.40	310.00	300
	08-14-92	1155		125AQUI	GW		4040	11.83	310.00	300
QA Ea 82	03-17-92	1330	385705076212002	125AQUI	GW		4010	--	170.00	155
	08-11-92	1047		125AQUI	GW		--	--	170.00	155

Geologic unit (aquifer): 112WCML - Wicomico Formation
125AQUI - Aquia Formation

Sampling Method: 4010 - Thief sample
4030 - Suction pump
4040 - Submersible pump

Site type: GW - Groundwater

QUALITY OF GROUND WATER

563

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

QUEEN ANNES COUNTY, MARYLAND--Continued

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
QA Cg 1	60	69.0	30	7.3	252	5.8	16.0	24.5	8.7
QA Db 14	165	15.0	26	--	458	7.5	12.0	-3.5	--
	165	15.0	--	--	461	7.3	15.5	28.0	--
QA Db 15	103	15.0	--	--	1050	7.3	12.5	2.0	--
	103	15.0	--	--	1030	7.1	18.0	28.5	--
QA Db 17	--	20.0	30	--	634	7.5	13.0	3.5	--
	--	20.0	--	--	643	7.3	16.0	28.0	--
QA Db 23	185	18.0	15	--	452	7.6	14.0	--	--
	185	18.0	--	--	447	7.4	15.5	28.5	--
QA Db 27	145	15.0	19	--	1440	7.2	14.0	--	--
	145	15.0	--	--	1440	7.1	15.5	26.0	--
QA Db 30	220	23.4	100	8.0	17000	6.4	15.5	13.5	--
	220	23.4	70	6.3	16900	6.2	16.0	22.0	--
QA Db 32	116	21.2	103	8.0	8970	6.7	14.5	10.0	--
	116	21.2	53	6.6	9380	6.5	15.0	21.0	--
QA Db 34	180	7.4	25	30	521	7.4	15.5	9.5	--
	180	7.4	25	51	524	7.3	15.5	25.0	--
QA Db 35	200	7.5	138	2.0	17500	7.0	17.0	11.5	--
	200	7.5	90	4.3	17000	6.6	16.5	25.5	--
QA Db 37	250	7.1	130	4.0	579	7.6	17.5	11.5	--
	250	7.1	75	6.4	586	7.4	16.0	28.0	--
QA Ea 39	95	15.0	--	--	418	7.8	14.0	-3.0	--
	95	15.0	--	--	418	7.6	15.5	25.5	--
QA Ea 42	120	18.0	--	--	595	7.8	14.0	4.5	--
	120	18.0	--	--	591	7.5	15.5	23.5	--
QA Ea 45	210	15.0	30	--	359	8.0	15.5	10.5	--
	210	15.0	--	--	365	7.7	16.0	30.5	--
QA Ea 48	160	5.0	--	--	1050	7.7	14.0	6.0	--
	160	5.0	--	--	1140	7.3	16.0	32.0	--
QA Ea 59	215	10.0	18	--	629	8.2	15.0	6.5	--
	215	10.0	--	--	650	7.9	16.5	29.0	--
QA Ea 60	185	7.0	--	--	1200	7.7	16.0	28.5	--
QA Ea 61	170	18.0	20	--	2720	7.6	14.0	2.0	--
	170	18.0	--	--	2820	7.4	16.0	29.0	--
QA Ea 71	135	20.0	20	--	622	7.7	14.5	2.0	--
	135	20.0	--	--	637	7.6	16.0	32.0	--
QA Ea 77	205	10.8	52	11	16200	7.2	16.0	9.0	--
	205	10.8	60	6.3	16200	7.0	16.0	25.5	--
QA Ea 78	135	11.8	56	6.7	320	7.7	15.0	4.5	--
	135	11.9	38	6.2	325	7.6	16.0	25.0	--
QA Ea 79	298	8.3	43	--	300	10.5	--	7.0	--
	298	8.3	80	8.0	371	9.5	15.5	14.0	--
	298	8.3	100	6.0	373	9.6	16.5	23.0	--
QA Ea 80	130	8.5	40	7.0	351	8.1	15.0	7.0	--
	130	8.5	23	40	356	8.0	15.0	22.0	--
QA Ea 81	310	12.4	110	9.0	569	8.0	16.0	12.0	--
	310	12.4	165	5.0	583	7.8	16.5	25.5	--
QA Ea 82	170	10.0	19	--	950	7.9	15.0	12.0	--
	170	10.0	--	--	962	7.7	16.0	28.5	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

QUEEN ANNES COUNTY, MARYLAND--Continued

[illegible]

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

QUEEN ANNES COUNTY, MARYLAND--Continued

WELL NUMBER	BROMIDE DIS- SOLVED (MG/L AS BR)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)
QA Cg 1	--	20	158	115	0.020	10.0	0.850	0.020	<0.010
QA Db 14	0.070	--	--	--	--	--	--	--	--
	0.040	--	--	--	--	--	--	--	--
QA Db 15	0.35	--	--	--	--	--	--	--	--
	0.33	--	--	--	--	--	--	--	--
QA Db 17	0.25	--	--	--	--	--	--	--	--
	0.23	--	--	--	--	--	--	--	--
QA Db 23	0.070	--	--	--	--	--	--	--	--
	0.060	--	--	--	--	--	--	--	--
QA Db 27	1.1	--	--	--	--	--	--	--	--
	0.97	--	--	--	--	--	--	--	--
QA Db 30	20	--	--	--	--	--	--	--	--
	13	--	--	--	--	--	--	--	--
QA Db 32	10	--	--	--	--	--	--	--	--
	5.1	--	--	--	--	--	--	--	--
QA Db 34	0.040	--	--	--	--	--	--	--	--
	<0.010	--	--	--	--	--	--	--	--
QA Db 35	22	--	--	--	--	--	--	--	--
	14	--	--	--	--	--	--	--	--
QA Db 37	0.040	--	--	--	--	--	--	--	--
	0.020	--	--	--	--	--	--	--	--
QA Ea 39	0.11	--	--	--	--	--	--	--	--
	0.090	--	--	--	--	--	--	--	--
QA Ea 42	0.28	--	--	--	--	--	--	--	--
	0.25	--	--	--	--	--	--	--	--
QA Ea 45	0.030	--	--	--	--	--	--	--	--
	<0.010	--	--	--	--	--	--	--	--
QA Ea 48	0.77	--	--	--	--	--	--	--	--
	0.55	--	--	--	--	--	--	--	--
QA Ea 59	0.33	--	--	--	--	--	--	--	--
	0.36	--	--	--	--	--	--	--	--
QA Ea 60	0.96	--	--	--	--	--	--	--	--
QA Ea 61	2.7	--	--	--	--	--	--	--	--
	2.3	--	--	--	--	--	--	--	--
QA Ea 71	0.30	--	--	--	--	--	--	--	--
	0.31	--	--	--	--	--	--	--	--
QA Ea 77	20	--	--	--	--	--	--	--	--
	5.9	--	--	--	--	--	--	--	--
QA Ea 78	0.030	25-	193	--	<0.010	<0.050	0.930	0.150	0.180
	0.010	--	--	--	--	--	--	--	--
QA Ea 79	<0.010	--	--	--	--	--	--	--	--
	0.020	--	--	--	--	--	--	--	--
	<0.010	--	--	--	--	--	--	--	--
QA Ea 80	0.030	--	--	--	--	--	--	--	--
	<0.010	--	--	--	--	--	--	--	--
QA Ea 81	0.25	--	--	--	--	--	--	--	--
	0.26	--	--	--	--	--	--	--	--
QA Ea 82	0.73	--	--	--	--	--	--	--	--
	0.63	--	--	--	--	--	--	--	--

QUEEN ANNES COUNTY, MARYLAND--Continued

[illegible]

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

QUEEN ANNES COUNTY, MARYLAND--Continued

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)
QA Ea 83	03-17-92	1302	385705076212001	125AQUI	GW	4010	--	
	08-11-92	1008		125AQUI	GW	--	--	
QA Eb 155	03-26-92	1334	385843076155302	125AQUI	GW	4030	8.20	
	08-19-92	1305		125AQUI	GW	4030	9.20	
QA Eb 156	03-26-92	1124	385852076195201	125AQUI	GW	4030	13.80	
	08-18-92	1445		125AQUI	GW	4040	13.42	
QA Eb 157	03-26-92	1200	385852076195202	125AQUI	GW	4030	13.40	
	08-18-92	1305		125AQUI	GW	4030	11.97	
QA Fa 49	03-20-92	1117	385354076212701	125AQUI	GW	4010	--	
	08-11-92	1425		125AQUI	GW	--	--	
QA Fa 54	03-19-92	0856	385024076222501	125AQUI	GW	4010	--	
	08-12-92	1220		125AQUI	GW	--	--	
QA Fa 58	09-01-92	1200	385133076201201	125AQUI	GW	--	--	
QA Fa 60	03-19-92	1150	385254076201901	125AQUI	GW	4010	--	
	08-20-92	1500		125AQUI	GW	--	--	
QA Fa 63	03-19-92	1314	385434076215601	125AQUI	GW	4010	--	
	08-11-92	1355		125AQUI	GW	--	--	
QA Fa 64	03-19-92	1417	385454076214901	125AQUI	GW	4010	--	
	08-21-92	1150		125AQUI	GW	--	--	
QA Fa 66	03-19-92	1000	385236076215201	125AQUI	GW	4010	--	
	08-12-92	1256		125AQUI	GW	--	--	
QA Fa 67	04-02-92	1145	385023076222201	125AQUI	GW	4010	--	
	08-12-92	1058		125AQUI	GW	--	--	
QA Fa 72	03-19-92	1048	385254076201301	125AQUI	GW	4010	--	
	08-21-92	0920		125AQUI	GW	--	--	
QA Fa 74	03-20-92	0906	385227076215401	125AQUI	GW	4010	--	
	08-12-92	1015		125AQUI	GW	--	--	
QA Fa 75	04-02-92	1250	385155076200401	125AQUI	GW	--	--	
	08-20-92	1545		125AQUI	GW	--	--	

Geologic unit (aquifer): 125AQUIA - Aquia Formation

Site type: GW - Groundwater

Sampling Method: 4010 - Thief sample
4030 - Suction pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

QUEEN ANNES COUNTY, MARYLAND--Continued

	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)
QA Ea 83	170.00	160	170	10.0	17	--	384	7.9
	170.00	160	170	10.0	--	--	391	7.7
QA Eb 155	245.00	235	245	3.9	46	13	330	8.0
	245.00	235	245	3.9	29	16	336	7.9
QA Eb 156	220.00	210	220	12.0	84	8.0	17300	6.9
	220.00	210	220	12.0	58	6.7	17500	6.9
QA Eb 157	120.00	110	120	11.9	22	34	338	7.6
	120.00	110	120	11.9	30	40	342	7.6
QA Fa 49	210.00	185	210	8.0	19	--	638	7.8
	210.00	185	210	8.0	--	--	960	7.7
QA Fa 54	260.00	240	260	10.0	18	6.6	354	7.9
	260.00	240	260	10.0	--	--	358	7.8
QA Fa 58	280.00	260	280	10.0	--	--	470	7.9
QA Fa 60	240.00	230	240	10.0	5	100	415	8.5
	240.00	230	240	10.0	--	--	417	7.9
QA Fa 63	235.00	200	235	15.0	17	6.6	464	7.6
	235.00	200	235	15.0	--	--	468	7.3
QA Fa 64	231.00	191	231	5.0	17	6.0	924	8.1
	231.00	191	231	5.0	--	--	921	7.7
QA Fa 66	270.00	250	270	13.0	22	4.3	518	8.0
	270.00	250	270	13.0	--	--	517	7.7
QA Fa 67	270.00	250	270	10.0	30	6.0	350	7.9
	270.00	250	270	10.0	--	--	353	7.6
QA Fa 72	220.00	200	220	12.0	18	6.6	484	8.2
	220.00	200	220	12.0	--	--	484	8.0
QA Fa 74	280.00	--	280	10.0	21	--	462	7.8
	280.00	--	280	10.0	--	--	463	7.8
QA Fa 75	200.00	180	200	10.0	35	14	526	8.1
	200.00	180	200	10.0	20	6.7	528	7.8

WELL NUMBER	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	MANGA- CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	BROMIDE DIS- SOLVED (MG/L AS BR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
QA Ea 83	15.0	12.0	21	0.070	--	--	--	--
	16.0	27.0	22	0.050	--	--	--	--
QA Eb 155	16.0	11.5	2.9	0.020	--	--	--	--
	16.0	26.0	1.5	<0.010	--	--	--	--
QA Eb 156	15.5	7.0	6500	22	--	--	--	--
	16.0	29.0	6200	14	12000	16000	240	240
QA Eb 157	15.0	7.5	5.1	0.040	--	--	--	--
	15.0	29.0	5.6	<0.010	--	--	--	--
QA Fa 49	15.0	7.0	63	0.22	--	--	--	--
	17.0	33.0	170	0.51	--	--	--	--
QA Fa 54	15.5	3.0	14	0.050	--	--	--	--
	16.5	29.0	14	0.020	--	--	--	--
QA Fa 58	16.0	24.0	12	0.030	--	--	--	--
QA Fa 60	15.5	5.5	12	0.040	--	--	--	--
	16.5	26.0	13	0.040	--	--	--	--
QA Fa 63	15.5	3.0	10	0.16	--	--	--	--
	16.0	33.5	11	0.020	--	--	--	--
QA Fa 64	16.5	3.0	--	--	--	--	--	--
	18.5	21.5	200	0.070	--	--	--	--
QA Fa 66	15.5	4.0	23	0.080	--	--	--	--
	17.0	25.0	24	0.070	--	--	--	--
QA Fa 67	15.5	15.0	14	0.050	--	--	--	--
	16.0	24.5	14	0.030	--	--	--	--
QA Fa 72	15.0	4.5	16	0.060	--	--	--	--
	16.0	21.5	19	0.050	--	--	--	--
QA Fa 74	15.0	4.0	14	0.050	--	--	--	--
	16.5	25.5	17	0.030	--	--	--	--
QA Fa 75	14.5	9.0	25	0.080	--	--	--	--
	18.0	24.5	25	0.070	--	--	--	--

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

ST. MARYS COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
SM Ef 80	06-29-92	1335	381052076253001	1120MAR		GW	4040	18.22	20.7
	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	
SM Ef 80	20.7	40.0	64	0.7	161	5.2	15.5	28.0	
	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	
SM Ef 80	1.6	16	5.1	2.4	0.90	6	7	39	
	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
SM Ef 80	6.1	<0.10	7.0	80	80	<0.010	3.00	0.020	
	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	
SM Ef 80	0.020	0.020	30	9	20	22	0.8	61	

Geologic unit (aquifer): 1120MAR - Omar Formation

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

TALBOT COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)
TA Ce 7	05-18-92	1050	384643076043801	122CLVR	GW	4040	10.20	104.00	
	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)
TA Ce 7	82	89	13.0	60	6.7	360	7.8	16.5	22.5
	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	
TA Ce 7	0.2	40	12	14	5.7	175	213	3.1	
	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	
TA Ce 7	4.3	<0.10	60	232	244	<0.010	0.140	0.150	
	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	
TA Ce 7	0.020	<0.010	170	71	20	2	0.6	150	

Geologic unit (aquifer): 122CLVR - Calvert Formation

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WASHINGTON COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
WA Ab 3	07-28-92	0940	394223078182101	341HMFR	SP		4010	--	--	--
WA Ad 101	07-27-92	1300	394149078052801	344RMNY	GW		4040	29.40	120.00	21
WA Ah 63	07-27-92	1610	394115077461501	367RCKR	GW		4040	6.50	25.00	1.0
WA Ak 99	07-27-92	1015	394219077335301	377TMSN	GW		4040	--	32.00	20
WA Di 103	07-08-92	1400	392836077442701	371CCCG	SP		4010	--	--	--

	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
WA Ab 3	--	910	--	8.0	57	5.4	13.0	19.5	8.4	4.0
WA Ad 101	120	560	50	4.3	200	7.3	13.5	22.5	1.4	25
WA Ah 63	25	515	100	0.8	774	7.1	12.5	25.0	6.6	130
WA Ak 99	32	730	48	1.0	794	7.1	14.5	24.5	6.9	97
WA Di 103	--	470	--	7.5	551	7.3	12.5	29.0	6.8	70

	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
WA Ab 3	1.9	1.9	1.4	5	6	10	2.5	<0.10	7.9	36
WA Ad 101	5.8	7.0	0.90	87	106	17	1.2	<0.10	22	166
WA Ah 63	14	13	4.4	237	289	42	38	0.10	8.5	470
WA Ak 99	29	16	2.7	266	324	30	48	0.20	8.2	448
WA Di 103	23	5.9	2.1	197	240	30	14	0.40	11	292

	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
WA Ab 3	33	<0.010	0.730	0.020	<0.010	0.010	40	6	<10	1
WA Ad 101	131	<0.010	0.130	0.010	0.020	0.020	80	4	<10	1
WA Ah 63	392	<0.010	17.0	0.010	<0.010	<0.010	60	<3	<10	<1
WA Ak 99	390	<0.010	14.0	<0.010	<0.010	0.010	20	<3	<10	<1
WA Di 103	274	<0.010	11.0	0.020	<0.010	<0.010	20	<3	<10	<1

	RADON 222 TOTAL (PCI/L)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CACO3)	PCN DISSOLV (UG/L)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)
WA Ab 3	--	0.4	18	--	--	--	--	--	--	--
WA Ad 101	460	0.1	86	--	--	--	--	--	--	--
WA Ah 63	830	0.6	380	<0.10	--	--	--	--	--	--
WA Ak 99	940	0.4	360	--	--	--	--	--	--	--
WA Di 103	490	0.8	270	<0.10	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Geologic unit (aquifer): 341HMFR - Hampshire Formation
 344RMNY - Romney Formation
 367RCKR - Rockdale Run Formation
 371CCCG - Conococheague Limestone
 377TMSN - Tomstown Dolomite

Site type: GW - Groundwater
 SP - Spring

Sampling method: 4010 - Thief sampler
 4040 - Submersible pump

WASHINGTON COUNTY, MARYLAND--CONTINUED

[illegible]

QUALITY OF GROUND WATER

573

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WASHINGTON COUNTY, MARYLAND--CONTINUED

WELL NUMBER	METHYL- PARA- THION, DIS- SOLVED (UG/L)	METHYL- TRI- THION DISSOLV (UG/L)	METOLA- CHLOR WATER WHOLE TOT.REC (UG/L)	METRI- BUZIN WATER WHOLE TOT.REC (UG/L)	MIREX, DIS- SOLVED (UG/L)	PARA- THION, DIS- SOLVED (UG/L)	PER- THANE DISSOLV (UG/L)	PROME- TRYNE TOTAL (UG/L)	PROME- TONE TOTAL (UG/L)
WA Ab 3	--	--	--	--	--	--	--	--	--
WA Ad 101	--	--	--	--	--	--	--	--	--
WA Ah 63	<0.01	<0.01	5.6	<0.10	<0.01	<0.01	<0.10	<0.10	0.30
WA Ak 99	--	--	--	--	--	--	--	--	--
WA Di 103	<0.01	<0.01	--	--	<0.01	<0.01	<0.10	--	--

	PRO- PAZINE TOTAL (UG/L)	TOX- APHENE, DIS- SOLVED (UG/L)	TRI- THION DISSOLV (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)
WA Ab 3	--	--	--	--	--	--	--	--	--
WA Ad 101	--	--	--	--	--	--	--	--	--
WA Ah 63	0.10	<1.0	<0.01	<0.01	<0.01	<0.01	<0.01	0.10	<0.10
WA Ak 99	--	--	--	--	--	--	--	--	--
WA Di 103	--	<1.0	<0.01	--	--	--	--	--	--

QUALITY OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
WICOMICO COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
WI Bh 2	10-17-91	1350	382511075203601		112PRBG	GW	4040	4.98	11.00	9.0
	11-15-91	1130			112PRBG	GW	4040	3.75	11.00	9.0
	12-11-91	1100			112PRBG	GW	4040	2.84	11.00	9.0
	01-08-92	1100			112PRBG	GW	4040	2.56	11.00	9.0
	02-05-92	1200			112PRBG	GW	4040	3.52	11.00	9.0
WI Bh 4	03-04-92	1150	382543075212201		112PRBG	GW	4040	2.59	11.00	9.0
	04-01-92	1210			112PRBG	GW	4040	2.40	11.00	9.0
	10-17-91	1140			112PRBG	GW	4040	5.54	12.00	10
	11-15-91	1430			112PRBG	GW	4040	5.53	12.00	10
	12-11-91	1240			112PRBG	GW	4040	4.76	12.00	10
	01-08-92	1400			112PRBG	GW	4040	4.56	12.00	10
	02-05-92	1400			112PRBG	GW	4040	5.54	12.00	10
	03-04-92	1500			112PRBG	GW	4040	4.58	12.00	10
	04-01-92	1630			112PRBG	GW	4040	4.32	12.00	10
	10-17-91	1030		382609075210502	112BVDM	GW	4040	4.29	41.00	38
WI Bh 9	11-15-91	1700			112BVDM	GW	4040	4.23	41.00	38
	12-11-91	1330			112BVDM	GW	4040	3.79	41.00	38
	01-08-92	1520			112BVDM	GW	4040	3.79	41.00	38
	02-05-92	0930			112BVDM	GW	4040	4.38	41.00	38
	03-04-92	1400			112BVDM	GW	4040	3.93	41.00	38
	04-01-92	1500			112BVDM	GW	4040	3.88	41.00	38
	10-17-91	1530	382549075204101		112PRBG	GW	4040	4.06	11.00	8.0
	11-15-91	1000			112PRBG	GW	4040	4.44	11.00	8.0
	12-11-91	1000			112PRBG	GW	4040	4.07	11.00	8.0
	01-08-92	1020			112PRBG	GW	4040	4.10	11.00	8.0
	02-05-92	1020			112PRBG	GW	4040	4.21	11.00	8.0
WI Cd 71	03-04-92	1120			112PRBG	GW	4040	4.22	11.00	8.0
	04-01-92	1020			112PRBG	GW	4040	4.17	11.00	8.0
	06-02-92	1035	382329075412002		112CLMB	GW	4040	2.86	18.00	15
	06-02-92	0855	382150075352101		112BVDM	GW	4040	3.70	65.00	45
	10-17-91	1300	382452075202902		112BVDM	GW	4040	9.96	50.00	47
WI Ch 57	11-15-91	1310			112BVDM	GW	4040	9.25	50.00	47
	12-11-91	1200			112BVDM	GW	4040	8.73	50.00	47
	01-08-92	1200			112BVDM	GW	4040	8.45	50.00	47
	02-05-92	1300			112BVDM	GW	4040	9.20	50.00	47
	03-04-92	1310			112BVDM	GW	4040	8.43	50.00	47
	04-01-92	1350			112BVDM	GW	4040	8.20	50.00	47

Geologic unit (aquifer): 110ALVM - Quaternary Alluvium
112BVDM - Beaverdam Sand
112CLMB - Columbia Group
112PRBG - Parsonsburg Formation

Site type: GW - Groundwater

Sampling method: 4040 - Submersible pump

QUALITY OF GROUND WATER

575

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WICOMICO COUNTY, MARYLAND--CONTINUED

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)
WI Bh 2	11	38.0	9	0.4	309	5.5	17.5	10.0	0.2	--
	11	38.0	9	0.5	254	5.4	16.5	18.0	0.2	--
	11	38.0	8	0.5	264	5.6	13.5	8.0	0.3	--
	11	38.0	8	0.5	246	5.7	10.5	4.0	0.4	--
	11	38.0	9	0.8	231	6.1	9.5	4.5	0.0	--
WI Bh 4	11	38.0	8	0.5	209	6.0	8.5	7.5	1.2	--
	11	38.0	9	0.6	198	6.1	9.0	15.5	0.9	--
	12	40.0	14	0.6	96	5.3	19.5	11.0	0.3	--
	12	40.0	9	0.6	126	5.0	19.0	21.0	0.5	--
	12	40.0	10	0.4	128	5.3	17.0	11.0	0.6	--
	12	40.0	14	0.3	130	5.1	13.5	8.0	0.9	--
	12	40.0	13	0.3	132	5.3	12.5	4.5	0.2	--
	12	40.0	8	0.9	123	4.9	11.5	9.5	1.4	--
	12	40.0	8	0.6	119	5.2	12.5	13.0	--	--
	41	38.0	21	0.9	166	6.3	14.0	13.0	0.2	--
WI Bh 9	41	38.0	30	0.7	162	6.5	14.5	17.0	0.1	--
	41	38.0	24	0.9	162	6.5	14.0	12.5	0.2	--
	41	38.0	38	0.5	161	6.3	14.0	7.0	0.2	--
	41	38.0	18	0.9	160	6.6	14.0	6.0	0.3	--
	41	38.0	23	0.8	159	6.0	14.0	10.0	1.0	--
	41	38.0	15	1.3	162	6.4	14.5	17.5	0.3	--
WI Bh 12	11	38.7	8	0.5	170	6.4	18.5	9.0	0.2	--
	11	38.7	9	0.7	171	6.3	17.5	12.5	0.2	--
	11	38.7	8	0.6	171	6.4	15.0	9.0	0.3	--
	11	38.7	6	0.8	172	6.2	12.5	3.5	0.3	--
	11	38.7	9	0.5	175	6.4	11.0	2.0	0.2	--
	11	38.7	6	0.6	174	6.0	10.5	8.5	1.1	--
	11	38.7	9	0.5	174	6.5	11.0	13.5	0.5	--
WI Cd 71	18	35.0	33	0.9	52	5.1	13.5	17.0	3.5	1.6
WI Ce 13	65	7.0	57	1.0	146	5.8	15.5	15.5	5.4	8.3
WI Ch 57	50	40.0	36	0.6	274	5.8	14.0	13.0	0.2	--
	50	40.0	39	0.7	268	5.6	15.0	18.0	0	--
	50	40.0	29	0.7	260	5.8	14.0	10.0	0.2	--
	50	40.0	33	0.6	254	5.7	13.5	4.0	0.3	--
	50	40.0	21	1.0	248	5.8	13.5	3.0	0.0	--
	50	40.0	39	0.5	256	5.5	13.5	--	1.0	--
	50	40.0	15	1.5	251	5.7	14.5	16.0	0.1	--

[illegible]

QUALITY OF GROUND WATER

577

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WICOMICO COUNTY, MARYLAND--CONTINUED

WELL NUMBER	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)
WI Bh 2	--	--	--	<0.010	--	<0.050	--	0.140	0.40
	--	--	--	0.020	--	<0.050	--	0.120	0.40
	--	--	--	<0.010	--	<0.050	--	0.080	0.30
	--	--	--	0.010	--	<0.050	--	0.060	0.30
	--	--	--	<0.010	--	<0.050	--	0.040	0.30
	--	--	--	<0.010	--	0.130	--	0.020	0.40
	--	--	--	<0.010	--	0.120	--	0.040	0.30
WI Bh 4	--	--	--	<0.010	--	6.30	--	<0.010	<0.20
	--	--	--	<0.010	--	>5.00	--	0.040	0.30
	--	7.39	--	0.010	--	7.40	--	0.020	0.30
	--	--	--	<0.010	--	5.00	--	0.020	0.40
	--	--	--	<0.010	--	8.10	--	<0.010	0.20
	--	--	--	<0.010	--	7.30	--	<0.010	<0.20
	--	--	--	<0.010	--	6.60	--	<0.010	<0.20
WI Bh 9	--	--	--	<0.010	--	0.081	--	0.190	0.20
	--	--	--	0.030	--	<0.050	--	0.220	0.40
	--	--	--	0.010	--	<0.050	--	0.190	<0.20
	--	--	--	0.010	--	<0.050	--	0.200	0.30
	--	--	--	<0.010	--	<0.050	--	0.180	0.20
	--	--	--	<0.010	--	<0.050	--	0.140	0.40
	--	--	--	<0.010	--	<0.050	--	0.170	<0.20
WI Bh 12	--	--	--	<0.010	--	<0.050	--	0.470	0.60
	--	--	--	0.010	--	<0.050	--	0.540	0.70
	--	--	--	0.020	--	<0.050	--	0.480	0.60
	--	--	--	0.010	--	<0.050	--	0.460	0.50
	--	--	--	<0.010	--	<0.050	--	0.420	0.60
	--	--	--	0.010	--	<0.050	--	0.440	0.50
	--	--	--	<0.010	--	<0.050	--	0.430	0.50
WI Cd 71	36	--	<0.010	--	0.064	--	0.020	--	--
WI Ce 13	76	--	<0.010	--	6.50	--	0.040	--	--
WI Ch 57	--	--	--	<0.010	--	4.10	--	<0.010	0.60
	--	3.58	--	0.020	--	3.60	--	0.020	0.70
	--	--	--	<0.010	--	3.50	--	0.020	0.60
	--	3.49	--	0.010	--	3.50	--	<0.010	0.50
	--	--	--	<0.010	--	3.40	--	<0.010	0.50
	--	--	--	<0.010	--	3.10	--	<0.010	0.50
	--	--	--	<0.010	--	3.40	--	<0.010	0.50

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WICOMICO COUNTY, MARYLAND--CONTINUED

WELL NUMBER	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CaCO3)
WI Bh 2	--	--	0.020	--	--	--	--	--	--
	--	--	0.020	--	--	--	--	--	--
	--	--	0.020	--	--	--	--	--	--
	--	--	0.020	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
WI Bh 4	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
WI Bh 9	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	0.210	--	--	--	--	--	--
WI Bh 12	--	--	0.150	--	--	--	--	--	--
	--	--	0.180	--	--	--	--	--	--
	--	--	0.200	--	--	--	--	--	--
	--	--	0.230	--	--	--	--	--	--
	--	--	0.040	--	--	--	--	--	--
WI Bh 12	--	--	0.190	--	--	--	--	--	--
	--	--	0.260	--	--	--	--	--	--
	--	--	0.200	--	--	--	--	--	--
	--	--	0.170	--	--	--	--	--	--
	--	--	0.150	--	--	--	--	--	--
WI Cd 71	--	--	0.530	--	--	--	--	--	--
	--	--	0.100	--	--	--	--	--	--
	--	--	0.110	--	--	--	--	--	--
	0.020	<0.010	--	10	<3	<10	4	0.9	10
	0.020	<0.010	--	2500	47	20	14	0.1	29
WI Ch 57	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--
WI Ch 57	--	--	<0.010	--	--	--	--	--	--
	--	--	<0.010	--	--	--	--	--	--

QUALITY OF GROUND WATER

579

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WORCESTER COUNTY, MARYLAND

WELL NUMBER	DATE	TIME	STATION	NUMBER	GEO- LOGIC UNIT	SITE	SAM- PLING METHOD, CODES	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)
WO Ah 34	04-13-92	0920	382632075031901	122MNKN	GW	4040	--	450.00	350	
	09-14-92	0930		122MNKN	GW	4040	--	450.00	350	
WO Ah 36	11-19-91	1115	382635075030602	122MNKN	GW	4030	23.00	430.00	420	
	09-15-92	1015		122MNKN	GW	4030	29.85	430.00	420	
WO Bf 87	06-01-92	1220	382332075141802	112BVDM	GW	4040	4.51	18.00	15	
WO Bg 15	04-15-92	1310	382359075094501	122MNKN	GW	4030	-2.06	325.00	288	
WO Bg 45	04-15-92	1200	382358075094501	112CLMB	GW	4030	8.93	77.00	56	
WO Bg 46	04-15-92	1155	382358075094502	122PCMK	GW	4030	1.83	200.00	164	
WO Bh 28	06-03-92	1030	382214075041901	122OCNC	GW	4040	--	294.00	248	
	09-14-92	1215		122OCNC	GW	4040	--	294.00	248	
WO Bh 34	09-15-92	1230	382443075033501	122MNKN	GW	4030	14.64	353.00	337	
WO Bh 84	04-13-92	1240	382215075041901	112CLMB	GW	4030	4.39	89.00	81	
	06-01-92	1415		112CLMB	GW	4040	3.91	89.00	81	
	09-14-92	1255		112CLMB	GW	4030	6.58	89.00	81	
WO Bh 85	04-13-92	1305	382215075041902	122PCMK	GW	4030	3.53	195.00	190	
	09-14-92	1235		122PCMK	GW	4030	6.66	195.00	190	
WO Bh 89	11-19-91	1440	382215075041903	122MNKN	GW	4030	9.20	500.00	388	
	04-13-92	1340		122MNKN	GW	4030	3.65	500.00	388	
	09-14-92	1630		122MNKN	GW	4030	23.25	500.00	388	
WO Bh 91	11-19-91	1315	382235075040901	122MNKN	GW	4030	10.02	385.00	340	
	04-14-92	1230		122MNKN	GW	4030	7.29	385.00	340	
WO Bh 93	04-14-92	1425	382304075040601	122MNKN	GW	4030	7.20	435.00	335	
WO Bh 95	04-14-92	1440	382304075040602	122OCNC	GW	4030	3.47	295.00	275	
WO Bh 96	11-19-91	1320	382235075041902	122OCNC	GW	4030	9.22	300.00	255	
	04-14-92	1250		122OCNC	GW	4030	6.54	300.00	255	
WO Bh 97	04-14-92	1050	382127075043803	122MNKN	GW	4030	1.72	445.00	370	
	09-15-92	1430		122MNKN	GW	4030	15.53	445.00	370	
WO Bh 98	04-14-92	1035	382127075043802	122OCNC	GW	4030	1.52	310.00	255	
	09-15-92	1415		122OCNC	GW	4030	17.18	310.00	255	
WO Cc 3	06-01-92	1643	381543075273802	112CLMB	GW	4040	3.67	21.00	18	
WO Cg 32	12-12-91	1145	381941075052201	122OCNC	GW	4040	--	280.00	245	
	04-13-92	1025		122OCNC	GW	4040	--	280.00	245	
WO Cg 75	04-13-92	1045	381939075052102	122MNKN	GW	4040	--	433.00	367	
	09-14-92	1100		122MNKN	GW	4040	--	433.00	367	

Geologic unit (aquifer): 112BVDM - Beaverdam Sand
 112CLMB - Columbia Group
 122MNKN - Manokin Aquifer
 122OCNC - Ocean City Aquifer
 122PCMK - Pocomoke Aquifer

Site type: GW - Groundwater

Sampling method: 4030 - Suction pump
 4040 - Submersible pump

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WORCESTER COUNTY, MARYLAND--Continued

WELL NUMBER	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (G/M)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TEMPER- ATURE AIR (DEG C)	DENSITY (GM/ML AT 20 C)	OXYGEN, DIS- SOLVED (MG/L)
WO Ah 34	450	5.0	30	30	541	6.5	15.5	5.0	--	--
	450	5.0	80	--	431	6.3	16.5	22.0	--	--
WO Ah 36	430	15.4	120	5.0	846	6.6	21.0	15.0	0.999	--
	430	15.4	85	7.0	728	7.3	16.5	22.0	--	--
WO Bf 87	18	33.0	64	0.8	333	5.7	14.5	22.5	--	7.8
WO Bg 15	318	7.0	55	30	277	6.7	15.5	16.0	--	--
WO Bg 45	77	10.0	60	30	74	6.8	14.5	16.0	--	--
WO Bg 46	194	10.0	55	30	272	6.3	14.5	16.0	--	--
WO Bh 28	294	5.0	15	--	--	6.0	18.0	22.0	--	818
	294	5.0	180	--	811	6.6	17.0	26.0	--	--
WO Bh 34	353	4.0	60	30	222	6.6	17.0	26.0	--	--
WO Bh 84	86	5.0	65	30	363	6.8	16.0	6.0	--	--
	86	5.0	58	1.0	379	6.9	16.5	22.0	--	0.3
	86	5.0	60	30	380	7.3	16.0	26.0	--	--
WO Bh 85	195	5.0	95	15	405	6.8	15.5	6.0	--	--
	195	5.0	35	24	422	7.2	16.5	26.0	--	--
WO Bh 89	500	5.0	60	30	1780	6.9	17.0	16.0	0.999	--
	500	5.0	50	30	1760	6.9	17.0	6.0	--	--
	500	5.0	150	7.0	1770	6.5	17.5	30.0	--	--
WO Bh 91	380	10.0	65	20	1080	6.8	17.0	15.5	0.998	--
	380	10.0	60	30	1050	6.8	16.5	13.0	--	--
WO Bh 93	430	4.0	55	30	858	6.6	16.5	13.0	--	--
WO Bh 95	295	4.0	70	10	513	6.8	16.0	13.0	--	--
WO Bh 96	295	10.0	80	20	499	7.0	16.5	15.5	0.997	--
	295	10.0	80	25	496	7.1	16.5	13.0	--	--
WO Bh 97	440	6.0	85	30	383	7.2	16.5	9.0	--	--
	440	6.0	55	30	387	7.1	17.0	22.0	--	--
WO Bh 98	310	5.0	70	30	418	7.0	16.0	9.0	--	--
	310	5.0	115	30	423	7.7	16.5	25.0	--	--
WO Cc 3	21	30.0	60	0.9	55	5.5	13.0	21.0	--	0.5
WO Cg 32	280	4.0	60	--	437	6.1	16.0	15.0	0.999	--
	280	4.0	35	--	438	6.9	15.5	8.0	--	--
WO Cg 75	427	5.0	55	--	458	6.6	16.5	8.0	--	--
	427	5.0	1440	--	467	6.6	17.5	24.0	--	--

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WORCESTER COUNTY, MARYLAND--Continued

WELL NUMBER	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CACO3	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	BROMIDE DIS- SOLVED (MG/L AS BR)
WO Ah 34	--	--	--	--	108	131	--	98	--	--
WO Ah 36	22	4.6	48	3.7	116	141	<0.10	67	0.10	0.36
	25	6.5	110	5.7	175	--	<0.10	190	<0.10	0.39
	25	6.4	100	5.3	180	219	<0.10	150	0.20	0.46
WO Bf 87	21	15	9.9	2.4	9	10	34	34	<0.10	--
WO Bg 15	--	--	--	--	115	140	--	26	--	--
WO Bg 45	--	--	--	--	19	24	--	13	--	--
WO Bg 46	--	--	--	--	158	192	--	9.5	--	--
WO Bh 28	--	--	--	--	18	--	--	180	--	--
	18	16	110	10	195	238	0.40	180	0.20	--
WO Bh 34	14	5.7	11	4.7	113	137	<0.10	18	0.10	0.13
WO Bh 84	--	--	--	--	174	212	--	38	--	--
	19	11	30	11	121	148	<0.10	45	<0.10	--
	17	10	31	12	148	180	<0.10	42	0.20	0.14
WO Bh 85	--	--	--	--	153	187	--	37	--	--
	15	13	38	11	170	207	<0.10	48	0.20	0.19
WO Bh 89	27	38	260	17	191	--	3.2	420	<0.10	1.9
	--	--	--	--	197	240	--	430	--	--
	27	38	250	16	208	253	4.0	490	0.20	1.8
WO Bh 91	13	17	180	15	170	--	<0.10	250	<0.10	0.92
	--	--	--	--	207	252	--	230	--	--
WO Bh 93	--	--	--	--	180	219	--	--	--	--
WO Bh 95	--	--	--	--	130	158	--	92	--	--
WO Bh 96	12	11	66	8.9	142	--	<0.10	70	<0.10	0.49
	--	--	--	--	255	311	--	68	--	--
WO Bh 97	--	--	--	--	124	151	--	55	--	--
	14	9.6	36	10	138	168	<0.10	39	0.20	0.28
WO Bh 98	--	--	--	--	198	241	--	32	--	--
	40	15	21	11	178	217	<0.10	31	0.10	0.090
WO Cc 3	1.5	0.89	5.6	1.2	7	9	4.4	7.4	<0.10	--
WO Cg 32	36	12	34	9.0	187	--	<0.10	41	0.20	0.12
	--	--	--	--	173	211	--	35	--	--
WO Cg 75	--	--	--	--	126	154	--	70	--	--
	9.6	8.3	66	7.0	165	198	<0.10	73	0.20	0.38

QUALITY OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WORCESTER COUNTY, MARYLAND--Continued

WELL NUMBER	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
WO Ah 34	--	--	--	--	--	--	--	--	--
	35	246	--	--	--	--	--	--	--
WO Ah 36	25	452	--	--	<0.010	--	<0.050	--	<0.010
	33	424	--	--	--	--	--	--	--
WO Bf 87	10	188	131	<0.010	--	13.0	--	0.020	--
WO Bg 15	--	--	--	--	--	--	--	--	--
WO Bg 45	--	--	--	--	--	--	--	--	--
WO Bg 46	--	--	--	--	--	--	--	--	--
WO Bh 28	--	--	--	--	--	--	--	--	--
	34	449	492	--	--	--	--	--	--
WO Bh 34	35	141	--	--	--	--	--	--	--
WO Bh 84	--	--	--	--	--	--	--	--	--
	34	208	--	<0.010	--	<0.050	--	0.450	--
	36	217	--	--	--	--	--	--	--
WO Bh 85	--	--	--	--	--	--	--	--	--
	34	232	--	--	--	--	--	--	--
WO Bh 89	30	949	918	--	<0.010	--	<0.050	--	<0.010
	--	--	--	--	--	--	--	--	--
	31	996	990	--	--	--	--	--	--
WO Bh 91	27	587	--	--	<0.010	--	<0.050	--	<0.010
	--	--	--	--	--	--	--	--	--
WO Bh 93	--	--	--	--	--	--	--	--	--
WO Bh 95	--	--	--	--	--	--	--	--	--
WO Bh 96	29	283	--	--	<0.010	--	<0.050	--	<0.010
	--	--	--	--	--	--	--	--	--
WO Bh 97	--	--	--	--	--	--	--	--	--
	33	221	--	--	--	--	--	--	--
WO Bh 98	--	--	--	--	--	--	--	--	--
	30	242	--	--	--	--	--	--	--
WO Cc 3	21	50	46	<0.010	--	0.057	--	0.030	--
WO Cg 32	24	245	--	--	0.010	--	<0.050	--	0.370
	--	--	--	--	--	--	--	--	--
WO Cg 75	--	--	--	--	--	--	--	--	--
	30	263	--	--	--	--	--	--	--

QUALITY OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WORCESTER COUNTY, MARYLAND--Continued

WELL NUMBER	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD- NESS TOTAL (MG/L AS CaCO ₃)
WO Ah 34	--	--	--	--	--	--	--	--	--
WO Ah 36	--	--	0.020	--	13000	--	140	--	74
WO Bf 87	0.030	0.010	--	10	41000	--	170	--	89
WO Bg 15	--	--	--	--	14000	--	130	0.9	89
WO Bg 45	--	--	--	--	<3	<10	3	--	110
WO Bg 46	--	--	--	--	--	--	--	--	--
WO Bh 28	--	--	--	--	--	--	--	--	--
WO Bh 34	--	--	--	--	6200	--	120	--	110
WO Bh 84	--	--	--	--	13000	--	100	--	58
WO Bh 85	0.250	0.230	--	5600	6000	90	80	2.0	93
WO Bh 89	--	--	--	--	5900	--	76	--	84
WO Bh 91	--	--	--	--	--	--	--	--	--
WO Bh 93	--	--	--	--	4600	--	85	--	91
WO Bh 95	--	--	--	--	7900	--	120	--	220
WO Bh 96	--	--	--	--	--	--	--	--	--
WO Bh 97	--	--	--	--	7100	--	120	--	220
WO Bh 98	--	--	--	--	7100	--	63	--	100
WO Bh 99	--	--	--	--	--	--	--	--	--
WO Bh 100	--	--	--	--	--	--	--	--	--
WO Bh 101	--	--	--	--	--	--	--	--	--
WO Bh 102	--	--	--	--	--	--	--	--	--
WO Bh 103	--	--	--	--	--	--	--	--	--
WO Bh 104	--	--	--	--	--	--	--	--	--
WO Bh 105	--	--	--	--	--	--	--	--	--
WO Bh 106	--	--	--	--	--	--	--	--	--
WO Bh 107	--	--	--	--	--	--	--	--	--
WO Bh 108	--	--	--	--	--	--	--	--	--
WO Bh 109	--	--	--	--	--	--	--	--	--
WO Bh 110	--	--	--	--	--	--	--	--	--
WO Bh 111	--	--	--	--	--	--	--	--	--
WO Bh 112	--	--	--	--	--	--	--	--	--
WO Bh 113	--	--	--	--	--	--	--	--	--
WO Bh 114	--	--	--	--	--	--	--	--	--
WO Bh 115	--	--	--	--	--	--	--	--	--
WO Bh 116	--	--	--	--	--	--	--	--	--
WO Bh 117	--	--	--	--	--	--	--	--	--
WO Bh 118	--	--	--	--	--	--	--	--	--
WO Bh 119	--	--	--	--	--	--	--	--	--
WO Bh 120	--	--	--	--	--	--	--	--	--
WO Bh 121	--	--	--	--	--	--	--	--	--
WO Bh 122	--	--	--	--	--	--	--	--	--
WO Bh 123	--	--	--	--	--	--	--	--	--
WO Bh 124	--	--	--	--	--	--	--	--	--
WO Bh 125	--	--	--	--	--	--	--	--	--
WO Bh 126	--	--	--	--	--	--	--	--	--
WO Bh 127	--	--	--	--	--	--	--	--	--
WO Bh 128	--	--	--	--	--	--	--	--	--
WO Bh 129	--	--	--	--	--	--	--	--	--
WO Bh 130	--	--	--	--	--	--	--	--	--
WO Bh 131	--	--	--	--	--	--	--	--	--
WO Bh 132	--	--	--	--	--	--	--	--	--
WO Bh 133	--	--	--	--	--	--	--	--	--
WO Bh 134	--	--	--	--	--	--	--	--	--
WO Bh 135	--	--	--	--	--	--	--	--	--
WO Bh 136	--	--	--	--	--	--	--	--	--
WO Bh 137	--	--	--	--	--	--	--	--	--
WO Bh 138	--	--	--	--	--	--	--	--	--
WO Bh 139	--	--	--	--	--	--	--	--	--
WO Bh 140	--	--	--	--	--	--	--	--	--
WO Bh 141	--	--	--	--	--	--	--	--	--
WO Bh 142	--	--	--	--	--	--	--	--	--
WO Bh 143	--	--	--	--	--	--	--	--	--
WO Bh 144	--	--	--	--	--	--	--	--	--
WO Bh 145	--	--	--	--	--	--	--	--	--
WO Bh 146	--	--	--	--	--	--	--	--	--
WO Bh 147	--	--	--	--	--	--	--	--	--
WO Bh 148	--	--	--	--	--	--	--	--	--
WO Bh 149	--	--	--	--	--	--	--	--	--
WO Bh 150	--	--	--	--	--	--	--	--	--
WO Cc 3	0.020	<0.010	--	100	1400	<10	28	0.7	160
WO Cg 32	--	--	0.140	--	110	--	9	--	7
WO Cg 75	--	--	--	--	940	--	81	--	140
WO Cg 75	--	--	--	--	5900	--	170	--	58

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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	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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