

**CHESTER COUNTY**

**395046075434401. Local number, CH 5180**  
**(New Garden Township, Chester County, Spray Irrigation Project)**

**LOCATION.**--Lat 39°50'46", long 75°43'44", Hydrologic Unit 02040205, at Spray Irrigation Site in New Garden Township.

Owner: New Garden Township Municipal Authority.

**AQUIFER.**--Felsic Gneiss of Precambrian age.

**WATER-LEVEL RECORDS**

**WELL CHARACTERISTICS.**--Drilled observation well, diameter 4 in., depth 32 ft, cased to 30 ft, closed end, screened from 20-30 ft.

**INSTRUMENTATION.**--Electronic data logger with 60-minute recording interval.

**DATUM.**--Elevation of land surface is 400.9 ft above sea level. Measuring point: Top of plywood shelf, 1.3 ft above land-surface datum.

**REMARKS.**--In addition to the daily mean water levels shown below, daily maximum and minimum water levels, since August 1999, are also available from the District Office. Data for this project are presented in tables on pages XXX, and XXX.

**PERIOD OF RECORD.**--August 9, 1999 to current year.

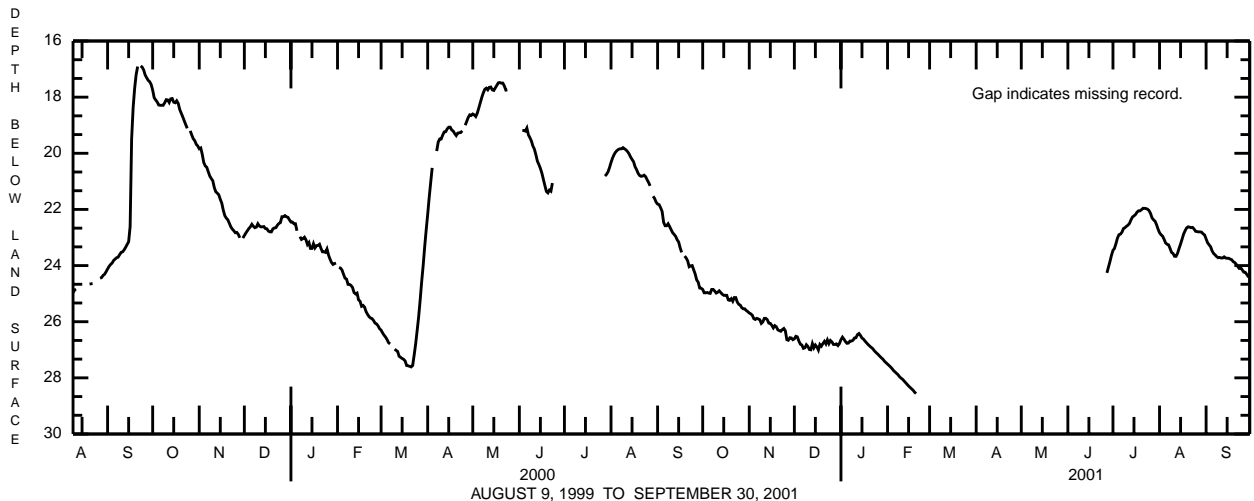
**EXTREMES FOR PERIOD OF RECORD.**--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 16.85 ft below land-surface datum, Sept. 21, 1999; lowest, 30.00 ft below land-surface datum, Mar. 26, 2001.

**EXTREMES FOR CURRENT YEAR.**--Highest water level, 21.94 ft below land-surface datum, July 21, 22; lowest, 30.00 ft below land-surface datum, Mar. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.85	25.69	26.61	26.64	27.51	---	---	---	---	23.46	22.83	23.05
2	24.97	25.72	26.52	26.55	27.56	---	---	---	---	23.39	22.90	23.19
3	24.97	25.77	26.54	26.62	27.61	---	---	---	---	23.22	22.95	23.26
4	24.96	25.89	26.69	26.71	27.67	---	---	---	27.63	23.02	23.06	23.33
5	24.98	25.92	26.80	26.77	27.74	---	---	---	---	22.90	23.19	23.48
6	24.99	25.88	26.83	26.76	27.79	---	---	---	26.46	22.88	23.24	23.57
7	24.85	25.90	26.95	26.69	27.84	---	---	---	---	22.81	23.26	23.62
8	24.85	25.93	26.93	26.69	27.89	---	---	---	---	22.68	23.39	23.68
9	24.91	26.06	26.82	26.66	27.96	---	---	---	---	22.65	23.53	23.72
10	24.98	26.01	26.88	26.58	28.01	---	---	---	---	22.60	23.57	23.71
11	24.95	25.88	26.99	26.57	28.05	---	---	---	---	22.56	23.67	23.73
12	24.90	25.88	27.00	26.46	28.11	---	---	---	---	22.50	23.67	23.73
13	24.96	25.93	26.78	26.42	28.17	---	---	---	---	22.37	23.56	23.69
14	25.02	26.05	26.93	26.49	28.23	---	---	---	---	22.27	23.39	23.73
15	25.06	26.06	26.83	26.58	28.29	---	---	---	---	22.23	23.23	23.74
16	25.06	26.13	26.90	26.62	28.34	---	---	---	---	22.18	23.06	23.74
17	25.06	26.22	27.01	26.69	28.39	---	---	---	---	22.10	22.88	23.77
18	25.22	26.14	26.81	26.75	28.44	---	---	---	---	22.05	22.76	23.79
19	25.24	26.18	26.87	26.81	28.51	---	---	---	---	22.05	22.66	23.86
20	25.18	26.29	26.78	26.86	28.56	---	---	---	---	22.01	22.62	23.89
21	25.27	26.32	26.70	26.91	---	---	---	---	---	21.96	22.63	23.95
22	25.14	26.34	26.79	26.95	---	---	---	---	---	21.96	22.65	24.03
23	25.14	26.28	26.65	27.02	---	---	---	---	---	21.97	22.64	24.10
24	25.30	26.24	26.78	27.08	---	---	---	---	---	21.99	22.70	24.08
25	25.38	26.32	26.67	27.13	---	---	---	---	---	22.04	22.78	24.15
26	25.41	26.64	26.72	27.18	---	---	---	---	---	22.14	22.79	24.23
27	25.50	26.66	26.81	27.24	---	---	---	---	24.26	22.30	22.80	24.24
28	25.54	26.57	26.81	27.29	---	---	---	---	24.06	22.37	22.80	24.31
29	25.54	26.58	26.79	27.34	---	---	---	---	23.86	22.42	22.81	24.39
30	25.60	26.64	26.85	27.41	---	---	---	27.63	23.64	22.54	22.87	24.41
31	25.64	---	26.78	27.46	---	---	---	---	---	22.70	22.91	---
MEAN	25.14	26.14	26.80	26.84	28.03	---	---	27.63	24.99	22.46	23.03	23.81
MAX	25.64	26.66	27.01	27.46	28.56	---	---	27.63	27.63	23.46	23.67	24.41
MIN	24.85	25.69	26.52	26.42	27.51	---	---	27.63	23.64	21.96	22.62	23.05



CHESTER COUNTY

395046075434401. Local number, CH 5180--Continued  
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY RECORDS

REMARKS.--Samples collected with disposable bailer or a submersible pump from recovery water after well was bailed more than three casing volumes.  
 PERIOD OF RECORD.--June 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT 2000											
17...	1400	9813	1028	9.6	5.7	351	12.8	--	--	--	--
NOV											
15...	1430	9813	1028	8.9	5.8	312	11.9	--	--	--	--
DEC											
11...	1530	9813	1028	--	5.2	300	9.6	22.4	14.6	3.06	5.4
JAN 2001											
16...	1400	9813	1028	--	5.9	300	11.2	--	--	--	--
FEB											
20...	1400	9813	1028	--	5.5	319	12.1	--	--	--	--
JUN											
04...	1300	9813	1028	--	6.0	243	12.9	--	--	--	--
25...	1500	9813	1028	8.3	5.7	316	12.3	30.6	17.4	3.37	6.2
JUL											
19...	1200	9813	1028	--	5.4	276	12.3	--	--	--	--
AUG											
28...	1600	9813	1028	--	5.7	297	12.9	--	--	--	--

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 2000										
17...	28	--	--	--	--	--	--	.070	.07	2.6
NOV										
15...	27	--	--	--	--	--	--	.310	.33	2.0
DEC										
11...	24	<.20	54.0	<.2	8.3	13.7	244	.110	--	1.9
JAN 2001										
16...	24	--	--	--	--	--	--	.030	.03	1.8
FEB										
20...	29	--	--	--	--	--	--	.020	.02	2.1
JUN										
04...	42	--	--	--	--	--	--	<.020	<.02	1.9
25...	26	<.20	72.4	<.2	10.2	19.6	432	<.020	--	2.1
JUL										
19...	32	--	--	--	--	--	--	<.020	<.02	2.5
AUG										
28...	27	--	--	--	--	--	--	<.020	<.02	2.5

## CHESTER COUNTY

395046075434401. Local number, CH 5180--Continued  
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
OCT 2000 17...	2.20	<.040	<.010	<.010	--	--	--	--	--
NOV 15...	1.41	<.040	<.010	<.010	--	--	--	--	--
DEC 11...	1.57	<.040	.010	<.010	1.2	<200	280	21.0	48
JAN 2001 16...	1.53	<.040	<.010	<.010	--	--	--	--	--
FEB 20...	1.81	<.040	<.010	<.010	--	--	--	--	--
JUN 04...	1.69	<.040	<.010	<.010	--	--	--	--	--
25...	2.01	<.040	<.010	<.010	<1.0	<200	<20	<10.0	<10
JUL 19...	2.02	<.040	.014	<.010	--	--	--	--	--
AUG 28...	2.21	<.040	.016	.012	--	--	--	--	--