

CHESTER COUNTY

395052075434502. Local number, CH 5177
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION.--Lat 39°50'52", long 75°43'45", 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 2 in., depth 35 ft, cased to 33 ft, closed end, screened from 23-33 ft.

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

DATUM.--Elevation of land surface is 340 ft above sea level from a GPS unit. 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 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX-XXX.

PERIOD OF RECORD.--August 1, 1998 to current year.

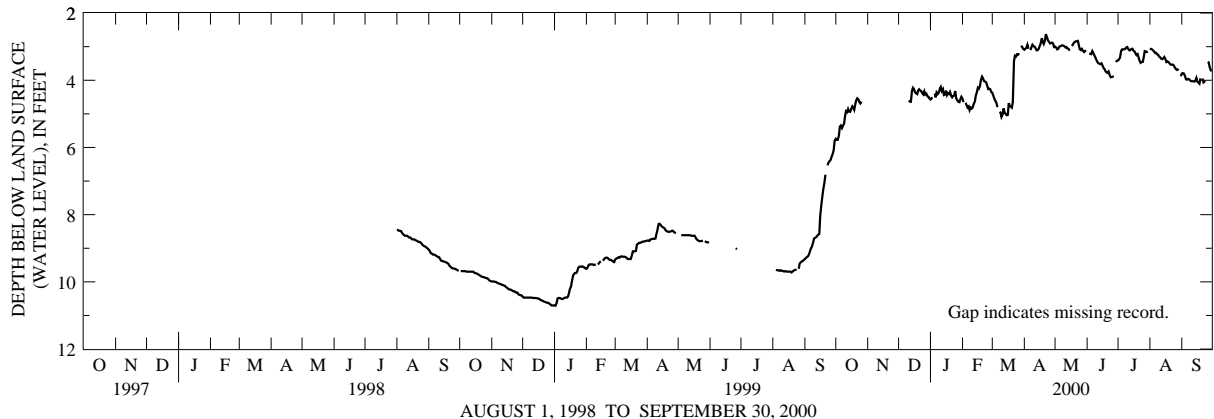
EXTREMES FOR PERIOD OF RECORD.--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 2.58 ft below land-surface datum, Apr. 22, 2000; lowest, 10.71 ft below land-surface datum, Jan. 1-3, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.74	---	---	4.57	4.55	4.37	3.09	3.00	---	3.41	3.05	3.80
2	5.78	---	---	4.53	4.65	4.47	3.06	3.03	---	3.38	3.07	3.79
3	5.77	---	---	4.55	---	4.55	3.04	3.08	3.20	3.33	3.08	3.80
4	5.65	---	---	---	4.67	4.61	2.94	3.06	3.21	3.13	3.11	3.86
5	5.38	---	---	4.40	4.74	4.68	3.06	3.00	3.22	3.08	3.15	3.97
6	5.35	---	---	4.51	4.81	4.80	---	2.99	3.13	3.08	3.19	3.98
7	5.42	---	---	4.36	4.78	---	3.10	2.97	3.19	3.08	3.18	3.96
8	5.36	---	---	4.41	4.89	4.94	3.01	2.96	3.25	3.07	3.23	3.97
9	5.29	---	---	4.37	4.81	4.96	2.94	2.97	3.32	3.02	3.24	4.00
10	5.07	---	---	4.25	4.84	5.09	2.99	2.99	3.39	3.01	3.30	4.03
11	4.92	---	4.60	4.20	4.81	5.02	3.00	3.02	3.45	3.07	3.32	4.03
12	4.95	---	4.64	4.32	4.69	4.84	3.05	3.01	3.50	3.11	3.36	4.03
13	4.86	---	4.64	4.26	4.64	4.97	3.11	3.05	3.51	3.10	3.37	4.04
14	4.93	---	4.31	4.44	4.46	5.00	3.10	3.06	3.52	3.07	3.35	4.02
15	4.94	---	4.22	4.43	4.35	5.04	3.06	3.12	3.50	3.06	3.31	3.93
16	4.86	---	4.26	4.31	4.22	5.03	2.98	---	3.56	3.12	3.37	4.04
17	4.78	---	4.36	4.44	4.25	4.68	2.91	2.97	3.64	3.14	3.46	4.07
18	4.82	---	4.39	4.38	4.17	4.77	2.75	2.95	3.67	3.20	3.44	4.10
19	4.88	---	4.41	4.41	3.99	4.78	2.85	2.89	3.73	3.25	3.46	3.94
20	4.70	---	4.30	4.35	3.89	4.81	2.92	2.86	3.77	3.22	3.50	---
21	4.59	---	4.27	4.46	3.94	4.65	2.83	2.84	3.78	3.32	3.53	3.95
22	4.54	---	4.31	4.51	4.02	3.43	2.63	2.84	3.74	3.42	3.54	4.06
23	4.57	---	4.32	4.47	4.04	3.27	2.72	2.83	3.85	3.48	3.53	4.04
24	4.65	---	4.38	4.45	4.06	3.29	2.81	2.96	3.91	3.46	3.55	4.04
25	4.69	---	4.42	4.32	4.15	3.23	2.85	3.08	3.90	3.45	3.61	---
26	4.64	---	4.33	4.53	4.26	3.24	2.90	3.10	3.89	3.31	3.66	3.46
27	---	---	4.42	4.60	4.25	3.20	2.89	3.07	3.89	3.13	3.69	3.47
28	---	---	4.40	4.64	4.26	---	2.88	3.12	---	3.14	3.68	3.60
29	---	---	4.48	4.65	4.35	2.97	2.91	3.16	3.46	3.16	3.70	3.71
30	---	---	4.49	4.56	---	3.01	3.01	3.13	3.42	3.15	---	3.72
31	---	---	4.55	4.49	---	3.06	---	3.11	---	---	3.88	---
MEAN	5.04	---	4.40	4.44	4.41	4.30	2.94	3.01	3.54	3.20	3.40	3.91
MAX	5.78	---	4.64	4.65	4.89	5.09	3.11	3.16	3.91	3.48	3.88	4.10
MIN	4.54	---	4.22	4.20	3.89	2.97	2.63	2.83	3.13	3.01	3.05	3.46

WTR YR 2000: HIGHEST 2.63, APRIL 22; LOWEST 5.78, OCTOBER 2.



CHESTER COUNTY

395052075434502. Local number, CH 5177--Continued
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY RECORDS

REMARKS.-- Samples collected with submersible pump from recovery water after well was pumped more than 3 casing volumes.
 PERIOD OF RECORD.--June 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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 WATER (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 1999											
28...	1000	9813	1028	7.3	5.9	307	12.6	--	--	--	--
DEC 01...	1100	9813	1028	7.0	6.8	382	12.7	--	--	--	--
JAN 2000											
04...	1500	9813	1028	7.0	6.0	382	13.9	42.2	8.90	1.4	11.0
FEB 03...	1300	9813	1028	7.5	6.1	389	11.0	--	--	--	--
MAR 07...	1000	9813	1028	7.5	5.6	394	12.6	--	--	--	--
APR 06...	1100	9813	1028	7.4	5.7	389	12.1	--	--	--	--
MAY 17...	1100	9813	1028	7.4	5.7	396	11.7	48.1	9.84	2.3	11.9
JUN 28...	1200	9813	1028	6.7	5.5	398	12.1	--	--	--	--
JUL 31...	1300	9813	1028	6.0	5.8	396	12.5	49.3	10.4	2.3	10.9
AUG 30...	1400	9813	1028	5.4	6.2	403	12.4	--	--	--	--
SEP 21...	1000	9813	1028	7.1	6.4	406	12.2	45.1	10.5	2.3	12.0

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	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)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT 1999											
28...	--	--	--	--	--	<.02	<.020	16.1	16	<.040	.051
DEC 01...	29	--	--	--	--	<.02	<.020	17.1	17	<.040	.039
JAN 2000											
04...	31	16.0	<.2	19.0	52.9	--	<.020	18.1	17	<.040	.053
FEB 03...	29	--	--	--	--	<.02	<.020	17.0	18	<.010	.061
MAR 07...	31	--	--	--	--	.02	<.020	16.8	17	<.040	.089
APR 06...	35	--	--	--	--	<.02	<.020	19.4	20	<.040	.025
MAY 17...	33	13.4	<.2	23.1	52.1	--	<.020	19.6	20	<.040	.032
JUN 28...	37	--	--	--	--	<.02	<.020	20.0	20	<.040	.028
JUL 31...	32	14.3	<.2	24.8	54.2	--	<.020	19.5	20	<.040	.041
AUG 30...	39	--	--	--	--	<.02	<.020	18.3	19	<.040	.024
SEP 21...	36	16.6	<.2	23.1	56.0	--	<.020	18.3	18	<.040	.023

CHESTER COUNTY

395052075434502. Local number, CH 5177--Continued
(New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (µG/L AS SB) (01095)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BORON, DIS- SOLVED (µG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)
OCT 1999											
28...	.033	--	--	--	--	--	--	--	--	--	--
DEC											
01...	.021	--	--	--	--	--	--	--	--	--	--
JAN 2000											
04...	.027	1.0	--	--	--	--	--	<200	<.20	--	--
FEB											
03...	.036	--	--	--	--	--	--	--	--	--	--
MAR											
07...	.031	--	--	--	--	--	--	--	--	--	--
APR											
06...	.018	--	--	--	--	--	--	--	--	--	--
MAY											
17...	.028	1.3	294	12	--	--	--	<200	<.20	--	--
JUN											
28...	.032	--	--	--	--	--	--	--	--	--	--
JUL											
31...	.024	1.6	444	16	--	--	--	<200	<.20	--	--
AUG											
30...	.028	--	--	--	--	--	--	--	--	--	--
SEP											
21...	.028	1.6	340	17	<2	<4.0	44	<200	<.20	<10.0	<4.0

DATE	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
OCT 1999										
28...	--	--	--	--	--	--	--	--	--	--
DEC										
01...	--	--	--	--	--	--	--	--	--	--
JAN 2000										
04...	--	60	--	--	<10	--	--	--	--	<10
FEB										
03...	--	--	--	--	--	--	--	--	--	--
MAR										
07...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
MAY										
17...	--	<20	--	--	<10	--	--	--	--	<10
JUN										
28...	--	--	--	--	--	--	--	--	--	--
JUL										
31...	--	<20	--	--	<10	--	--	--	--	<10
AUG										
30...	--	--	--	--	--	--	--	--	--	--
SEP										
21...	<4	<20	<1	<25.0	<10	<.2	<4	<7.0	129	<10