

CHESTER COUNTY

395052075434501. Local number, CH 5176
(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 4 in., depth 89 ft, cased to 89 ft, closed end, screened from 69-89 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, 3.2 ft above land-surface datum.

REMARKS.--In addition to the daily mean water levels shown below, daily maximum and minimum water levels, since July 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX-XXX.

PERIOD OF RECORD.--July 14, 1998 to current year.

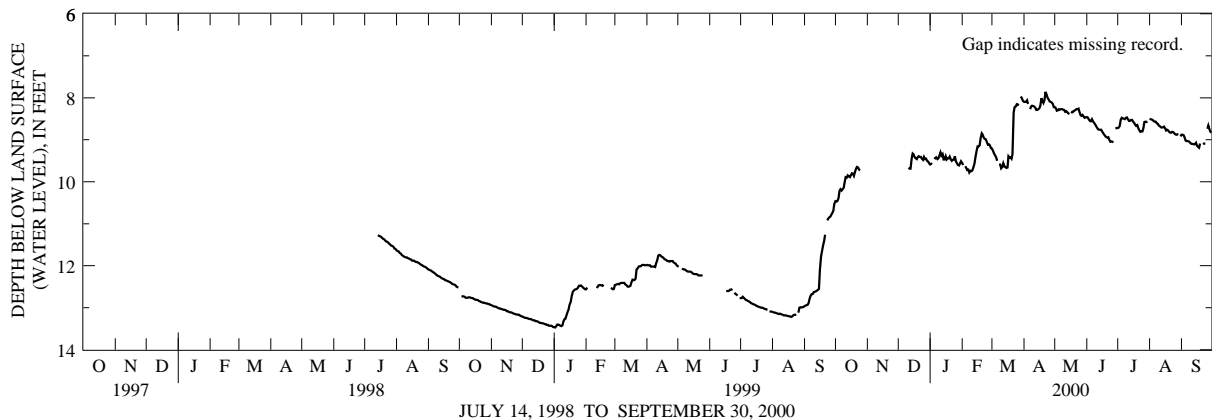
EXTREMES FOR PERIOD OF RECORD.--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 7.83 ft below land-surface datum, Apr. 22, 2000; lowest, 13.47 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	10.46	---	---	9.59	9.55	9.21	8.10	8.22	8.46	8.72	8.50	8.88
2	10.47	---	---	9.57	9.60	9.27	8.10	8.25	8.47	8.71	8.51	8.88
3	10.46	---	---	9.58	---	9.33	8.10	8.31	8.52	8.68	8.52	8.89
4	10.39	---	---	---	9.63	9.37	8.06	8.30	8.55	8.52	8.53	8.94
5	10.22	---	---	9.42	9.67	9.42	8.15	8.27	8.56	8.48	8.56	9.02
6	10.18	---	---	9.44	9.72	9.50	---	8.28	8.51	8.49	8.57	9.03
7	10.21	---	---	9.42	9.71	---	8.27	8.27	8.56	8.50	8.57	9.03
8	10.18	---	---	9.46	9.78	9.58	8.21	8.27	8.59	8.51	8.61	9.04
9	10.14	---	---	9.44	9.74	9.59	8.19	8.28	8.63	8.48	8.62	9.06
10	10.01	---	---	9.37	9.75	9.68	8.20	8.29	8.67	8.47	8.66	9.09
11	9.89	---	9.66	9.30	9.73	9.65	8.21	8.33	8.71	8.51	8.68	9.10
12	9.90	---	9.69	9.38	9.65	9.56	8.24	8.32	8.75	8.55	8.70	9.10
13	9.85	---	9.69	9.34	9.57	9.64	8.29	8.34	8.76	8.55	8.71	9.11
14	9.87	---	9.44	9.47	9.42	9.65	8.29	8.37	8.76	8.53	8.70	9.11
15	9.89	---	9.33	9.47	9.27	9.67	8.27	8.39	8.76	8.53	8.69	9.07
16	9.85	---	9.35	9.39	9.16	9.66	8.25	---	8.80	8.57	8.73	9.14
17	9.80	---	9.42	9.47	9.16	9.39	8.19	8.37	8.85	8.60	8.78	9.17
18	9.81	---	9.44	9.44	9.13	9.42	8.01	8.33	8.88	8.64	8.76	9.19
19	9.86	---	9.46	9.44	8.96	9.42	8.07	8.33	8.91	8.67	8.78	9.09
20	9.76	---	9.41	9.40	8.85	9.45	8.12	8.31	8.94	8.65	8.81	---
21	9.69	---	9.39	9.47	8.88	9.34	8.05	8.29	8.95	8.72	8.83	---
22	9.65	---	9.41	9.50	8.95	8.36	7.86	8.27	8.94	8.77	8.83	9.11
23	9.66	---	9.41	9.48	8.98	8.22	7.93	8.27	9.01	8.81	8.81	9.09
24	9.71	---	9.45	9.47	8.99	8.21	8.00	8.26	9.05	8.80	8.82	9.09
25	9.73	---	9.48	9.39	9.05	8.16	8.04	8.34	9.04	8.80	8.85	---
26	---	---	9.41	9.51	9.12	8.17	8.09	8.42	9.05	8.72	8.87	8.74
27	---	---	9.46	9.56	9.11	8.15	8.10	8.43	9.06	8.58	8.88	8.66
28	---	---	9.45	9.60	9.13	---	8.11	8.41	---	8.57	8.87	8.74
29	---	---	9.50	9.61	9.20	7.97	8.15	8.45	8.74	8.58	8.88	8.81
30	---	---	9.52	9.56	---	8.01	8.22	8.48	8.72	8.57	---	8.83
31	---	---	9.56	9.51	---	8.07	---	8.47	---	---	8.92	---
MEAN	9.99	---	9.47	9.47	9.34	9.07	8.13	8.33	8.77	8.61	8.72	9.00
MAX	10.47	---	9.69	9.61	9.78	9.68	8.29	8.48	9.06	8.81	8.92	9.19
MIN	9.65	---	9.33	9.30	8.85	7.97	7.86	8.22	8.46	8.47	8.50	8.66

WTR YR 2000: HIGHEST 7.86, APRIL 22; LOWEST 10.47, OCTOBER 2.



CHESTER COUNTY

395052075434501. Local number, CH 5176--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											
26...	1500	9813	1028	4.1	6.3	591	12.6	--	--	--	--
DEC 01...	1200	9813	1028	7.9	6.5	588	12.7	--	--	--	--
JAN 2000											
04...	1400	9813	1028	--	6.7	588	12.8	75.1	12.2	5.8	13.2
FEB 03...	1200	9813	1028	5.3	6.8	551	12.6	--	--	--	--
MAR 07...	1100	9813	1028	7.9	6.5	544	13.2	--	--	--	--
APR 06...	1000	9813	1028	2.2	6.8	567	13.0	--	--	--	--
MAY 16...	1100	9813	1028	8.1	6.7	525	13.2	71.0	11.6	5.5	10.9
JUN 28...	1100	9813	1028	.9	6.8	545	12.8	--	--	--	--
JUL 31...	1200	9813	1028	3.2	6.6	517	13.8	76.9	11.5	7.2	12.0
AUG 31...	1200	9813	1028	2.5	6.7	490	13.1	--	--	--	--
SEP 21...	0845	9813	1028	2.2	6.6	512	12.4	59.9	10.3	4.8	11.0

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											
26...	78	--	--	--	--	<.02	<.020	27.8	26	.070	.020
DEC 01...	76	--	--	--	--	<.02	<.020	26.2	26	.230	.023
JAN 2000											
04...	93	47.4	<.2	17.5	26.8	--	<.020	22.5	23	1.06	.067
FEB 03...	80	--	--	--	--	<.02	<.020	22.2	23	.010	.043
MAR 07...	78	--	--	--	--	<.02	<.020	9.70	22	.330	.056
APR 06...	106	--	--	--	--	<.02	<.020	18.0	20	1.62	.014
MAY 16...	87	40.8	<.2	22.9	25.5	--	<.020	18.7	20	.830	.018
JUN 28...	--	--	--	--	--	<.02	<.020	17.0	18	1.41	.019
JUL 31...	89	41.0	<.2	23.1	31.6	--	<.020	16.1	18	1.69	.021
AUG 31...	86	--	--	--	--	<.02	<.020	16.4	17	.990	.018
SEP 21...	81	38.3	<.2	22.7	26.0	--	<.020	17.2	19	.390	.010

CHESTER COUNTY

395052075434501. Local number, CH 5176--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											
26...	.020	--	--	--	--	--	--	--	--	--	--
DEC											
01...	.020	--	--	--	--	--	--	--	--	--	--
JAN 2000											
04...	.015	<1.0	--	--	--	--	--	<200	<.20	--	--
FEB											
03...	.040	--	--	--	--	--	--	--	--	--	--
MAR											
07...	.017	--	--	--	--	--	--	--	--	--	--
APR											
06...	<.010	--	--	--	--	--	--	--	--	--	--
MAY											
16...	.017	<1.0	440	17	--	--	--	<200	<.20	--	--
JUN											
28...	.018	--	--	--	--	--	--	--	--	--	--
JUL											
31...	.015	1.1	326	15	--	--	--	<200	<.20	--	--
AUG											
31...	.021	--	--	--	--	--	--	--	--	--	--
SEP											
21...	.015	<1.0	398	18	<2	<4.0	298	<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										
26...	--	--	--	--	--	--	--	--	--	--
DEC										
01...	--	--	--	--	--	--	--	--	--	--
JAN 2000										
04...	--	60	--	--	20	--	--	--	--	25
FEB										
03...	--	--	--	--	--	--	--	--	--	--
MAR										
07...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
MAY										
16...	--	<20	--	--	10	--	--	--	--	36
JUN										
28...	--	--	--	--	--	--	--	--	--	--
JUL										
31...	--	40	--	--	18	--	--	--	--	48
AUG										
31...	--	--	--	--	--	--	--	--	--	--
SEP										
21...	<4	30	<1	<25.0	<10	<.2	<4	<7.0	253	27