

CHESTER COUNTY

395052075434201. Local number, CH 5181
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION--Lat 39°50'52", long 75°43'42", 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 40 ft, cased to 40 ft, closed end, screened from 30-40 ft.

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

DATUM--Elevation of land surface is 336.5 ft above sea level. Measuring point: Top of plywood shelf, 2.25 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, and XXX.

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

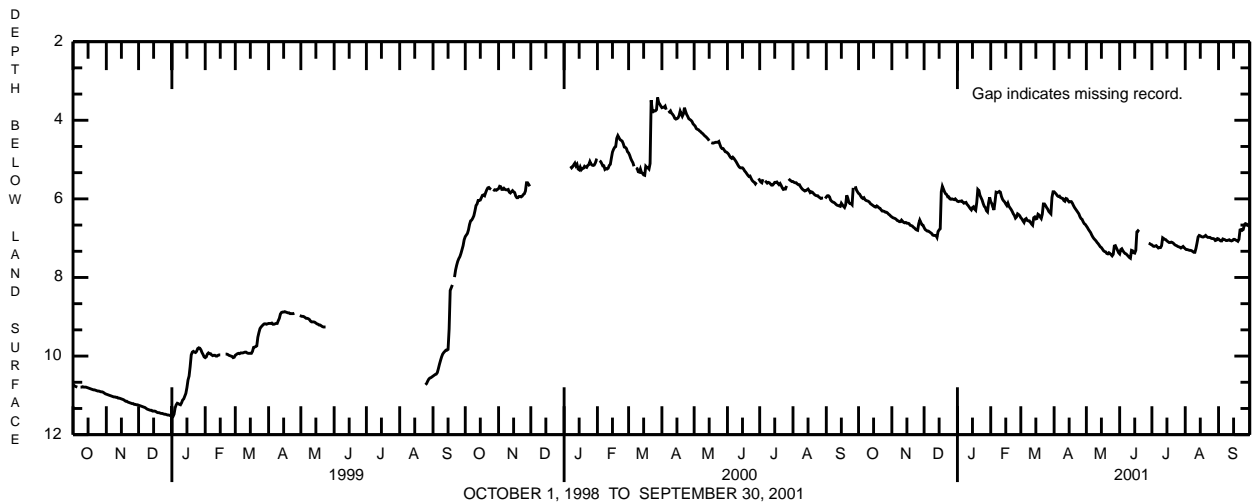
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 3.11 ft below land-surface datum, Mar. 28, 2000; lowest, 11.54 ft below land-surface datum, Jan. 1-3, 1999.

EXTREMES FOR CURRENT YEAR--Highest water level, 5.37 ft below land-surface datum, Dec. 17; lowest, 7.52 ft below land-surface datum, June 11.

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	5.86	6.46	6.73	6.06	6.07	6.48	5.82	6.69	7.40	7.17	7.27	7.02
2	5.88	6.48	6.78	6.07	6.12	6.51	5.85	6.73	7.29	7.20	7.29	7.05
3	5.93	6.49	6.80	6.06	6.21	6.56	5.88	6.78	7.27	7.21	7.29	7.07
4	5.97	6.50	6.82	6.06	6.28	6.60	5.92	6.82	7.32	7.20	7.30	7.07
5	5.99	6.52	6.82	6.05	6.07	6.52	5.94	6.86	7.36	7.19	7.31	7.02
6	5.97	6.55	6.84	6.08	5.83	6.50	5.93	6.92	7.39	7.22	7.31	7.03
7	6.02	6.56	6.86	6.11	5.84	6.55	5.97	6.97	7.40	7.25	7.32	7.04
8	6.04	6.58	6.88	6.10	5.83	6.56	5.98	7.01	7.43	7.24	7.34	7.06
9	6.05	6.58	6.92	6.09	5.81	6.56	5.99	7.04	7.46	7.24	7.36	7.06
10	6.06	6.54	6.93	6.14	5.83	6.60	6.04	7.07	7.49	7.19	7.36	7.05
11	6.08	6.57	6.93	6.17	5.94	6.64	6.06	7.11	7.51	6.99	7.26	7.04
12	6.12	6.60	6.93	6.21	6.01	6.67	5.99	7.14	7.31	7.01	7.12	7.06
13	6.14	6.61	6.98	6.25	6.05	6.48	6.00	7.18	7.32	7.03	6.97	7.07
14	6.16	6.60	6.83	6.28	6.08	6.46	6.05	7.22	7.37	7.04	6.93	7.06
15	6.18	6.62	6.79	6.22	6.13	6.51	6.08	7.24	7.38	7.07	6.94	7.03
16	6.20	6.62	6.76	6.20	6.17	6.50	6.07	7.28	7.31	7.09	6.96	7.03
17	6.21	6.63	5.82	6.26	6.11	6.39	6.07	7.32	6.84	7.11	6.97	7.05
18	6.18	6.67	5.68	6.29	6.19	6.41	6.11	7.34	6.81	7.11	6.97	7.06
19	6.20	6.68	5.75	6.09	6.23	6.46	6.17	7.35	6.84	7.10	6.95	7.08
20	6.23	6.69	5.82	5.76	6.27	6.50	6.22	7.39	---	7.11	6.93	7.03
21	6.24	6.72	5.87	5.79	6.32	6.39	6.26	7.40	---	7.13	6.96	6.79
22	6.28	6.74	5.89	5.91	6.38	6.13	6.30	7.37	---	7.16	6.98	6.78
23	6.31	6.77	5.95	5.97	6.42	6.13	6.34	7.39	---	7.18	6.98	6.80
24	6.31	6.79	5.95	6.03	6.49	6.17	6.38	7.42	---	7.19	6.98	6.78
25	6.32	6.80	6.00	6.12	6.46	6.22	6.45	7.45	---	7.21	7.00	6.66
26	6.34	6.63	6.01	6.19	6.38	6.26	6.50	7.41	---	7.22	7.01	6.63
27	6.34	6.54	6.00	6.22	6.40	6.32	6.52	7.20	---	7.23	7.01	6.64
28	6.36	6.60	6.01	6.30	6.43	6.35	6.58	7.19	7.13	7.25	7.02	6.66
29	6.39	6.66	6.02	6.33	---	6.38	6.63	7.25	7.14	7.23	7.06	6.69
30	6.41	6.67	6.00	6.10	---	5.96	6.65	7.31	7.16	7.21	7.05	6.71
31	6.44	---	6.03	5.96	---	5.82	---	7.37	---	7.24	7.01	---
MEAN	6.17	6.62	6.40	6.11	6.16	6.41	6.16	7.17	7.27	7.16	7.10	6.94
MAX	6.44	6.80	6.98	6.33	6.49	6.67	6.65	7.45	7.51	7.25	7.36	7.08
MIN	5.86	6.46	5.68	5.76	5.81	5.82	5.82	6.69	6.81	6.99	6.93	6.63



CHESTER COUNTY

395052075434201. Local number, CH 5181--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 dry.
 PERIOD OF RECORD.--June 1998 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-ARDS) (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 2000											
17...	1230	9813	1028	2.0	6.6	249	12.8	--	--	--	--
NOV											
15...	1230	9813	1028	2.2	6.6	246	12.4	--	--	--	--
DEC											
12...	1500	9813	1028	2.1	6.9	243	12.4	24.9	6.47	5.50	7.1
JAN 2001											
17...	1100	9813	1028	3.8	5.8	241	12.0	--	--	--	--
FEB											
21...	1500	9813	1028	3.7	6.1	237	11.5	--	--	--	--
MAR											
27...	1330	9813	1028	3.2	6.6	242	11.2	25.0	6.13	5.11	7.0
MAY											
09...	1000	9813	1028	1.8	6.5	242	11.5	--	--	--	--
JUN											
04...	1100	9813	1028	2.8	6.6	239	12.8	--	--	--	--
27...	1200	9813	1028	1.1	6.5	233	12.2	25.2	6.21	5.36	7.7
JUL											
17...	1400	9813	1028	--	6.3	236	14.1	--	--	--	--
AUG											
29...	1300	9813	1028	1.2	6.6	243	13.7	--	--	--	--

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...	51	--	--	--	--	--	--	<.020	<.02	4.7
NOV										
15...	57	--	--	--	--	--	--	<.020	<.02	3.9
DEC										
12...	56	<.20	6.7	<.2	15.0	31.2	206	<.020	--	3.9
JAN 2001										
17...	59	--	--	--	--	--	--	<.020	<.02	4.3
FEB										
21...	57	--	--	--	--	--	--	<.020	.03	3.9
MAR										
27...	58	<.20	6.5	<.2	16.3	33.4	184	<.020	--	4.0
MAY										
09...	57	--	--	--	--	--	--	<.020	<.02	3.8
JUN										
04...	53	--	--	--	--	--	--	<.020	<.02	3.8
27...	57	<.20	6.8	<.2	18.4	34.6	154	<.020	--	3.9
JUL										
17...	49	--	--	--	--	--	--	.030	.04	5.2
AUG										
29...	54	--	--	--	--	--	--	<.020	<.02	4.5

CHESTER COUNTY

395052075434201. Local number, CH 5181--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...	3.98	<.040	<.010	<.010	--	--	--	--	--
NOV 15...	3.81	<.040	<.010	<.010	--	--	--	--	--
DEC 12...	3.30	<.040	<.010	<.010	<1.0	<200	340	56.0	16
JAN 2001 17...	3.68	<.040	<.010	<.010	--	--	--	--	--
FEB 21...	3.58	<.040	<.010	<.010	--	--	--	--	--
MAR 27...	3.50	<.040	<.010	<.010	<1.0	<200	<20	25.0	684
MAY 09...	3.56	<.040	<.010	<.010	--	--	--	--	--
JUN 04...	3.50	<.040	<.010	<.010	--	--	--	--	--
JUN 27...	3.73	<.040	<.010	<.010	<1.0	<200	30	22.0	592
JUL 17...	4.49	<.040	<.010	<.010	--	--	--	--	--
AUG 29...	3.49	<.040	<.010	<.010	--	--	--	--	--