

CHESTER COUNTY

395049075434302. Local number, CH 5179
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION--Lat 39°50'49", long 75°43'43", 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 39 ft, cased to 39 ft, closed end, screened from 24-39 ft.

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

DATUM--Elevation of land surface is 357.6 ft above sea level. Measuring point: Top of plywood shelf, 1.2 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, and XXX.

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

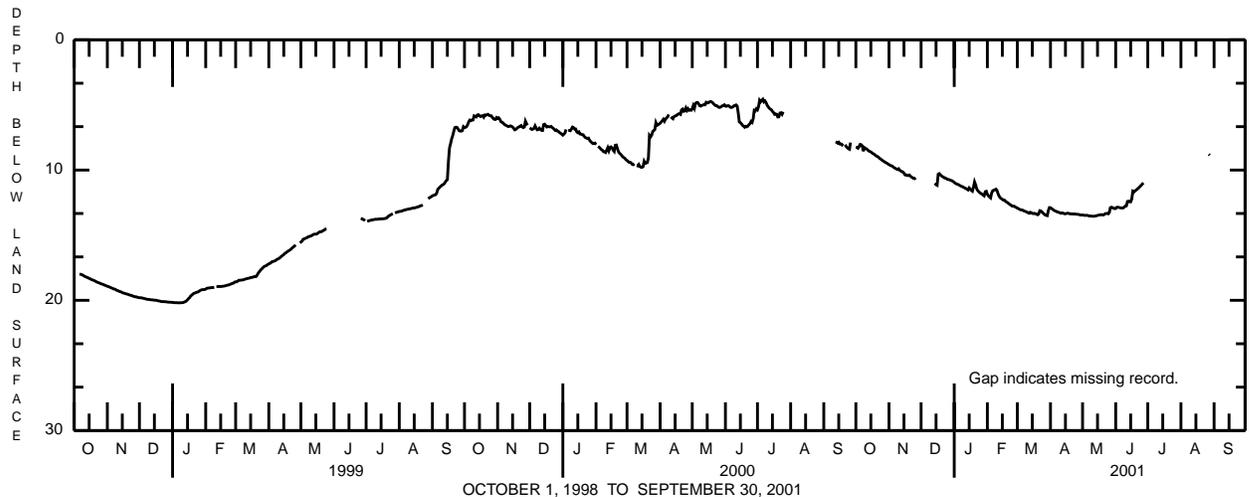
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 4.56 ft below land-surface datum, July 6, 2000; lowest, 20.19 ft below land-surface datum, Jan. 5, 6, 1999.

EXTREMES FOR CURRENT YEAR--Highest water level, 7.99 ft below land-surface datum, Oct. 5; lowest, 13.55 ft below land-surface datum, May 10-12.

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	8.24	9.58	---	10.95	11.86	12.92	12.89	13.45	12.95	---	---	---
2	8.26	9.63	---	11.01	11.98	12.96	12.95	13.46	12.86	---	---	---
3	8.32	9.67	---	11.06	12.07	13.01	13.01	13.48	12.85	---	---	---
4	8.19	9.69	---	11.09	12.14	13.05	13.08	13.48	12.87	---	---	---
5	8.03	9.76	---	11.12	11.76	13.06	13.13	13.47	12.89	---	---	---
6	8.05	9.83	---	11.17	11.58	13.08	13.15	13.49	12.91	---	---	---
7	8.15	9.87	---	11.22	11.55	13.13	13.20	13.52	12.91	---	---	---
8	8.55	9.92	---	11.26	11.51	13.16	13.23	13.53	12.91	---	---	---
9	8.28	9.96	---	11.28	11.47	13.19	13.25	13.53	12.84	---	---	---
10	8.34	9.90	---	11.34	11.56	13.23	13.29	13.54	12.77	---	---	8.65
11	8.37	10.01	---	11.38	11.82	13.27	13.32	13.55	12.75	---	---	---
12	8.45	10.07	11.11	11.42	12.01	13.31	13.29	13.54	12.41	---	---	8.79
13	8.53	10.12	---	11.48	12.13	13.24	13.31	13.53	12.39	---	---	---
14	8.57	10.14	11.01	11.53	12.19	13.27	13.35	13.51	12.43	---	---	---
15	8.61	10.24	11.13	11.37	12.25	13.33	13.36	13.48	12.44	---	---	---
16	8.67	10.37	11.17	11.46	12.31	13.34	13.33	13.46	12.23	---	---	---
17	8.74	10.37	10.32	11.56	12.31	13.32	13.31	13.45	11.63	---	---	---
18	8.77	10.42	10.27	11.62	12.40	13.36	13.32	13.43	11.69	---	---	9.83
19	8.85	10.42	10.36	11.32	12.46	13.39	13.36	13.42	11.60	9.49	---	---
20	8.92	10.38	10.44	10.91	12.51	13.43	13.36	13.45	11.55	---	---	---
21	8.95	10.47	10.51	11.13	12.57	13.37	13.37	13.43	11.47	---	---	---
22	9.00	10.53	10.54	11.43	12.64	13.12	13.37	13.36	11.41	---	---	---
23	9.09	10.59	10.61	11.58	12.69	13.14	13.38	13.33	11.33	---	---	---
24	9.14	10.64	10.62	11.66	12.76	13.21	13.37	13.33	11.24	---	---	---
25	9.21	10.66	10.68	11.74	12.78	13.30	13.39	13.36	11.16	---	---	---
26	9.27	10.59	10.72	11.80	12.77	13.37	13.40	13.27	11.06	---	---	---
27	9.32	---	10.73	11.85	12.83	13.45	13.40	12.89	10.99	---	8.79	---
28	9.38	---	10.76	11.92	12.87	13.48	13.42	12.85	---	---	8.86	---
29	9.43	---	10.80	11.98	---	13.50	13.45	12.88	---	---	---	---
30	9.47	---	10.82	11.66	---	13.11	13.45	12.93	---	---	---	---
31	9.53	---	10.88	11.63	---	12.88	---	12.96	---	---	---	---
MEAN	8.73	10.15	10.71	11.42	12.21	13.23	13.28	13.37	12.17	9.49	8.82	9.09
MAX	9.53	10.66	11.17	11.98	12.87	13.50	13.45	13.55	12.95	9.49	8.86	9.83
MIN	8.03	9.58	10.27	10.91	11.47	12.88	12.89	12.85	10.99	9.49	8.79	8.65



OCTOBER 1, 1998 TO SEPTEMBER 30, 2001

CHESTER COUNTY

395049075434302. Local number, CH 5179--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 three casing volumes. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.
 PERIOD OF RECORD.--May 1998 to current year.

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

DATE	TIME	AGENCY ANA-LYZING SAMPLE NUMBER (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE NUMBER (CODE NUMBER) (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD ARD UNITS) (00400)	SPECIFIC CONDUCTANCE (MICROSIEMENS/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT 2000											
16...	1400	9813	1028	9.6	6.1	270	12.7	--	--	--	--
NOV											
13...	1300	9813	1028	7.4	6.1	265	12.9	--	--	--	--
DEC											
11...	1300	9813	1028	7.1	6.0	258	12.9	14.2	9.22	2.62	4.9
JAN 2001											
16...	1500	9813	1028	9.2	6.0	258	12.8	--	--	--	--
FEB											
21...	1400	9813	1028	5.9	5.4	253	12.9	--	--	--	--
MAR											
27...	1100	9813	1028	8.0	6.2	250	12.5	23.7	8.15	2.45	5.0
MAY											
07...	1400	9813	1028	4.9	6.2	240	12.7	--	--	--	--
30...	1400	9813	1028	5.9	6.0	252	12.2	--	--	--	--
JUN											
25...	1300	9813	1028	8.3	6.1	258	12.3	27.0	9.83	2.76	5.4
JUL											
19...	1300	9813	1028	1.7	5.6	224	12.3	--	--	--	--
AUG											
27...	1500	9813	1028	4.4	6.0	243	12.7	--	--	--	--

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, 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)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN DIS-SOLVED (MG/L AS N) (00602)
OCT 2000										
16...	28	--	--	--	--	--	--	<.020	<.02	2.0
NOV										
13...	36	--	--	--	--	--	--	<.020	<.02	2.2
DEC										
11...	40	<.20	37.0	<.2	14.7	20.0	202	<.020	--	2.1
JAN 2001										
16...	33	--	--	--	--	--	--	<.020	<.02	2.1
FEB										
21...	26	--	--	--	--	--	--	<.020	<.02	1.9
MAR										
27...	37	<.20	35.6	<.2	13.9	18.5	190	<.020	--	2.0
MAY										
07...	31	--	--	--	--	--	--	<.020	.02	2.5
30...	30	--	--	--	--	--	--	<.020	<.02	2.0
JUN										
25...	51	<.20	42.6	<.2	15.5	17.9	896	<.020	--	1.7
JUL										
19...	32	--	--	--	--	--	--	.100	<.02	3.6
AUG										
27...	51	--	--	--	--	--	--	<.020	<.02	2.0

CHESTER COUNTY

395049075434302. Local number, CH 5179--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									
16...	1.81	<.040	.023	.023	--	--	--	--	--
NOV									
13...	1.84	<.040	.023	.023	--	--	--	--	--
DEC									
11...	1.81	<.040	.022	.023	<1.0	<200	60	<10.0	<10
JAN 2001									
16...	1.80	<.040	.020	.022	--	--	--	--	--
FEB									
21...	1.74	<.040	.019	.019	--	--	--	--	--
MAR									
27...	1.72	<.040	.022	.019	<1.0	<200	<20	<10.0	<10
MAY									
07...	1.69	<.040	.015	.016	--	--	--	--	--
30...	1.78	<.040	.019	.012	--	--	--	--	--
JUN									
25...	1.81	<.040	.019	.018	<1.0	<200	<20	<10.0	16
JUL									
19...	1.91	<.040	.021	.012	--	--	--	--	--
AUG									
27...	1.79	<.040	.020	.019	--	--	--	--	--