

CHESTER COUNTY

395043075440702. Local number, CH 5183
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION--Lat 39°50'43", long 75°44'07", 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 90 ft, cased to 90 ft, closed end, screened from 70-90 ft.

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

DATUM--Elevation of land surface is 381.5 ft above sea level. Measuring point: Top of plywood shelf, 1.95 ft above land-surface datum.

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

PERIOD OF RECORD--May 30, 1998 to current year.

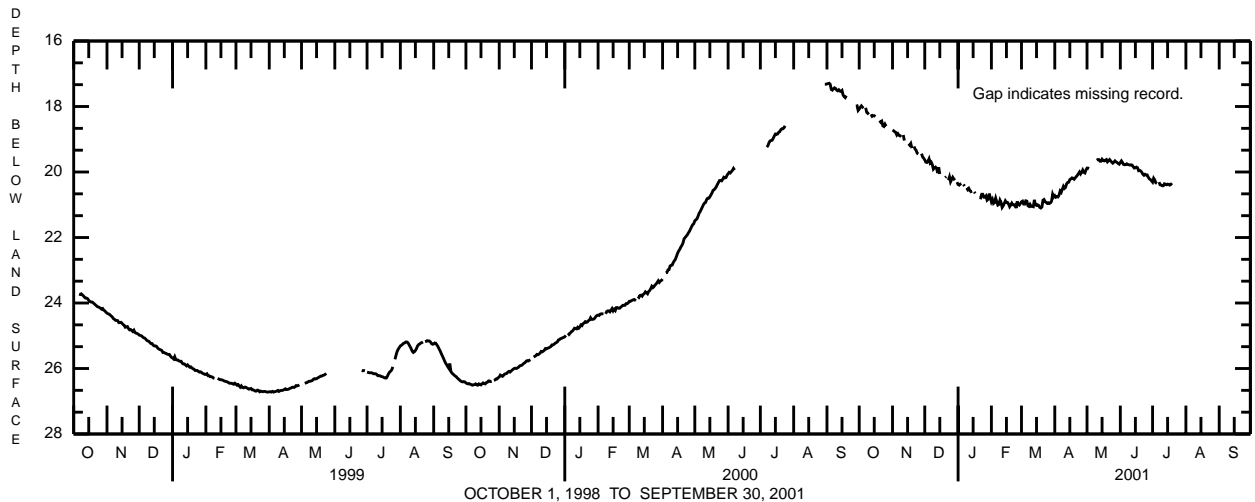
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the instantaneous depth below land-surface for the period of record indicated above.

Highest water level, 17.29 ft below land-surface datum, Sept. 2-4, 2000; lowest, 26.72 ft below land-surface datum, Mar. 30, 31, Apr. 2, 3, 5, 6, 1999.

EXTREMES FOR CURRENT YEAR--Highest water level, 17.95 ft below land-surface datum, Oct. 3; lowest, 21.60 ft below land-surface datum, Sept. 18.

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	18.08	18.72	19.63	20.38	20.91	20.91	20.72	19.88	19.71	20.31	---	---
2	18.02	18.74	19.70	20.40	20.84	20.89	20.77	19.88	19.66	20.19	---	---
3	17.98	18.77	19.71	20.37	20.96	20.98	20.75	19.89	19.71	20.24	---	---
4	18.02	18.79	19.68	20.35	20.93	20.98	20.76	---	19.77	20.33	---	---
5	18.05	18.87	19.60	---	20.80	20.88	20.70	---	19.78	20.35	---	---
6	---	18.83	19.73	20.38	20.91	20.89	20.58	---	19.77	---	---	---
7	18.04	18.88	19.70	20.43	21.01	21.03	20.62	---	19.75	20.31	---	---
8	18.18	18.89	19.77	---	20.99	21.05	20.53	---	19.77	20.39	---	---
9	18.21	18.93	19.91	20.49	20.86	20.99	20.44	---	19.78	20.40	---	---
10	18.18	---	19.87	20.54	20.93	21.05	20.50	19.64	19.79	20.42	---	---
11	---	18.87	19.85	20.50	21.08	21.05	20.47	19.62	19.78	20.42	---	---
12	18.24	19.04	19.89	20.57	21.03	21.06	20.36	19.62	19.79	20.36	---	---
13	18.30	---	20.03	20.60	20.96	20.85	20.32	19.67	19.84	20.37	---	---
14	18.28	19.10	19.86	20.58	20.88	21.00	20.31	19.67	19.88	20.39	---	---
15	18.28	---	20.06	---	20.93	21.02	20.23	19.61	19.87	20.37	---	---
16	18.31	19.14	---	20.61	20.93	21.00	20.21	19.65	19.85	20.38	---	---
17	---	19.18	---	20.65	20.98	21.02	20.18	19.66	19.87	20.40	---	---
18	---	19.13	20.10	---	21.06	21.08	20.19	19.64	19.96	20.38	---	21.60
19	---	19.27	---	---	21.01	21.10	20.22	19.62	19.95	20.34	---	---
20	18.43	---	20.17	---	20.95	21.07	20.18	19.69	19.97	---	---	---
21	18.48	19.22	20.14	20.78	21.00	20.86	20.14	19.66	20.01	---	---	---
22	18.45	19.30	---	20.79	21.01	20.84	20.10	19.62	20.07	---	---	---
23	18.59	19.34	20.25	20.68	21.00	20.91	20.05	19.66	20.10	---	---	---
24	18.61	19.43	20.15	20.68	21.10	20.93	20.00	19.70	20.07	---	---	---
25	18.54	19.45	20.30	20.77	20.90	20.96	20.06	19.73	20.09	---	---	---
26	18.60	---	20.23	20.77	20.99	20.94	20.01	19.70	20.09	---	---	---
27	---	---	20.16	20.73	21.01	20.96	19.94	19.66	20.16	---	---	---
28	---	19.44	20.21	20.86	20.96	20.94	20.01	19.69	20.21	---	21.17	---
29	---	19.54	20.25	20.83	---	20.89	20.03	19.71	20.23	---	---	---
30	---	19.58	---	20.66	---	20.68	19.94	19.74	20.27	---	---	---
31	---	---	20.31	20.78	---	20.76	---	19.76	---	---	---	---
MEAN	18.28	19.10	19.97	20.61	20.96	20.95	20.31	19.69	19.92	20.35	21.17	21.60
MAX	18.61	19.58	20.31	20.86	21.10	21.10	20.77	19.89	20.27	20.42	21.17	21.60
MIN	17.98	18.72	19.60	20.35	20.80	20.68	19.94	19.61	19.66	20.19	21.17	21.60



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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 (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD) (MG/L) (00400)	SPECIFIC CONDUCTANCE (MICROSIEMENS/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (00925)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)
OCT 2000											
19...	1300	9813	1028	8.2	6.9	243	12.1	--	--	--	--
NOV											
16...	1000	9813	1028	8.4	6.8	210	12.1	--	--	--	--
DEC											
13...	1100	9813	1028	4.7	6.4	209	11.9	30.4	3.88	2.11	4.7
JAN 2001											
18...	1100	9813	1028	6.8	6.6	208	11.8	--	--	--	--
FEB											
27...	1100	9813	1028	8.1	6.7	215	12.1	--	--	--	--
MAR											
28...	1000	9813	1028	8.3	7.0	228	12.2	31.3	4.01	2.18	4.5
MAY											
03...	1130	9813	1028	5.2	7.2	223	12.5	--	--	--	--
29...	1200	9813	1028	6.5	6.8	224	12.4	--	--	--	--
JUN											
26...	1000	9813	1028	7.1	6.5	215	13.5	34.1	3.92	2.15	4.7
JUL											
19...	1000	9813	1028	2.1	6.0	216	12.3	--	--	--	--
AUG											
28...	1000	9813	1028	2.5	7.0	212	12.8	--	--	--	--

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										
19...	84	--	--	--	--	--	--	<.020	<.02	3.8
NOV										
16...	76	--	--	--	--	--	--	<.020	<.02	3.9
DEC										
13...	82	<.20	7.0	<.2	22.5	2.0	160	<.020	--	3.9
JAN 2001										
18...	78	--	--	--	--	--	--	<.020	<.02	3.7
FEB										
27...	84	--	--	--	--	--	--	<.020	<.02	3.8
MAR										
28...	89	<.20	10.6	<.2	21.3	4.3	170	<.020	--	3.9
MAY										
03...	76	--	--	--	--	--	--	<.020	<.02	4.6
29...	75	--	--	--	--	--	--	<.020	<.02	4.1
JUN										
26...	75	<.20	9.4	<.2	22.0	5.5	110	<.020	--	3.6
JUL										
19...	77	--	--	--	--	--	--	<.020	<.02	3.7
AUG										
28...	85	--	--	--	--	--	--	<.020	<.02	3.8

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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									
19...	3.42	<.040	.016	.016	--	--	--	--	--
NOV									
16...	3.52	<.040	.017	.015	--	--	--	--	--
DEC									
13...	3.49	<.040	.013	.015	<1.0	<200	<20	<10.0	13
JAN 2001									
18...	3.41	<.040	.016	.015	--	--	--	--	--
FEB									
27...	3.45	<.040	.013	.014	--	--	--	--	--
MAR									
28...	3.56	<.040	.017	.016	<1.0	<200	<20	<10.0	<10
MAY									
03...	3.60	<.040	.013	.014	--	--	--	--	--
29...	3.57	<.040	.015	.010	--	--	--	--	--
JUN									
26...	3.49	<.040	.012	<.010	<1.0	<200	<20	<10.0	<10
JUL									
19...	3.54	<.040	.010	.011	--	--	--	--	--
AUG									
28...	3.47	<.040	.015	.016	--	--	--	--	--