

**CHESTER COUNTY**

**395048075434701. Local number, CH 5174.**  
**(New Garden Township, Chester County, Spray Irrigation Project)**

**LOCATION**--Lat 39°50'48", long 75°43'47", 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 99.4 ft, cased to 99 ft, closed end, screened from 79-99 ft.

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

**DATUM**--Elevation of land surface is 367.3 ft above sea level. Measuring point: Top of plywood shelf, 1.7 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 31, 1998 to current year.

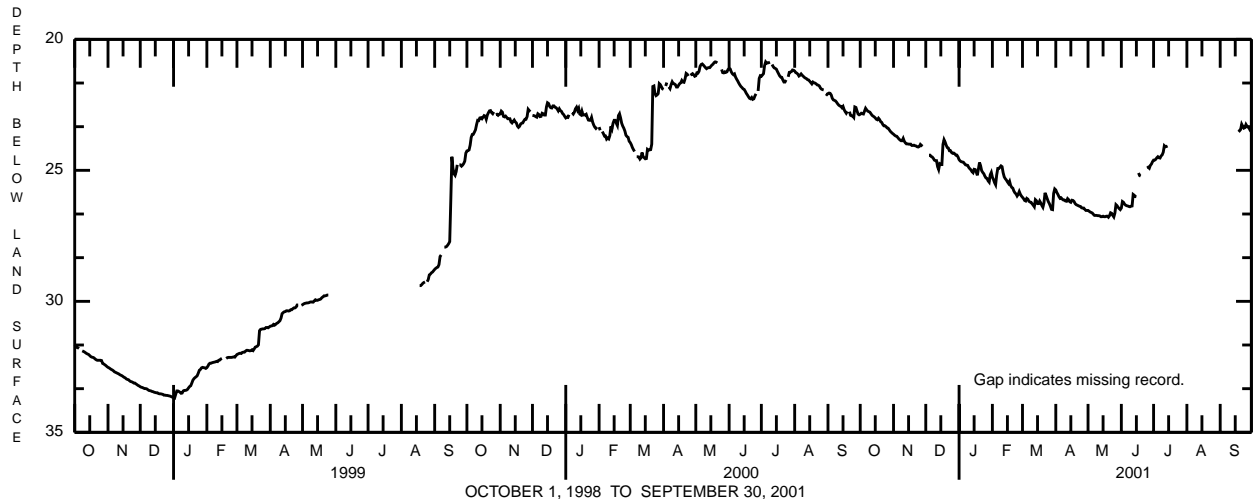
**EXTREMES FOR PERIOD OF RECORD**--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 20.83 ft below land-surface datum, May 19, 2000; lowest, 33.70 ft below land-surface datum, Jan. 1, 1999.

**EXTREMES FOR CURRENT YEAR**--Highest water level, 22.61 ft below land-surface datum, Oct. 6; lowest, 26.81 ft below land-surface datum, May 20.

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	22.86	23.62	---	24.59	25.26	26.03	25.75	26.53	26.44	24.61	---	---
2	22.82	23.66	---	24.64	25.35	26.08	25.85	26.56	26.19	24.61	---	---
3	22.84	23.69	---	24.67	25.47	26.15	25.92	26.59	26.22	24.58	---	---
4	22.85	23.70	24.42	24.68	25.55	26.17	26.01	26.61	26.29	24.52	---	---
5	22.74	23.75	24.42	24.69	25.18	26.07	26.07	26.63	26.33	24.48	---	---
6	22.63	23.80	24.47	24.74	24.93	26.10	26.05	26.68	26.35	24.52	---	---
7	22.69	23.84	24.49	24.79	24.93	26.18	26.10	26.72	26.36	24.53	---	---
8	22.74	23.87	24.54	24.80	24.88	26.21	26.13	26.72	26.38	24.45	---	---
9	22.76	23.87	24.61	24.81	24.83	26.22	26.13	26.72	26.39	24.41	---	---
10	22.78	23.78	24.63	24.89	24.86	26.28	26.17	26.73	26.37	24.31	---	23.38
11	22.84	23.89	24.63	24.94	25.09	26.33	26.18	26.73	26.36	24.06	---	---
12	22.90	23.95	24.86	24.98	25.25	26.39	26.08	26.74	25.92	24.10	---	---
13	22.93	23.99	24.97	25.05	25.32	26.12	26.12	26.77	25.95	24.09	---	---
14	22.96	23.99	24.75	25.09	25.37	26.16	26.20	26.77	26.00	24.07	---	---
15	23.00	24.00	24.78	24.96	25.44	26.27	26.22	26.75	26.01	---	---	---
16	23.05	24.00	24.78	24.97	25.50	26.27	26.14	26.77	---	24.04	---	---
17	23.07	24.00	24.01	25.07	25.42	26.17	26.15	26.77	25.10	---	---	---
18	23.01	24.05	23.83	25.19	25.58	26.24	26.19	26.75	25.20	---	---	23.45
19	23.06	24.05	23.92	24.95	25.65	26.34	26.27	26.75	25.22	24.02	---	23.49
20	23.14	24.04	24.04	24.70	25.68	26.41	26.31	26.79	---	---	---	23.44
21	23.17	24.06	24.13	24.82	25.79	26.24	26.33	26.73	---	---	---	23.24
22	23.25	24.07	24.15	25.01	25.86	26.25	26.35	26.62	---	---	---	23.32
23	23.30	24.10	24.25	25.08	25.90	25.96	26.37	26.64	---	---	---	23.39
24	23.30	24.11	24.25	25.13	25.98	26.08	26.38	26.72	---	---	---	23.37
25	23.33	24.09	24.32	25.22	25.92	26.19	26.43	26.78	24.91	---	---	23.25
26	23.38	24.01	24.35	25.29	25.81	26.27	26.44	26.63	24.88	---	---	23.32
27	23.39	24.05	24.34	25.31	25.91	26.37	26.44	26.31	24.92	---	---	23.35
28	23.45	24.08	24.37	25.40	25.98	26.49	26.49	26.35	24.81	---	23.46	23.40
29	23.51	---	24.42	25.45	---	26.50	26.53	26.41	24.76	---	---	23.48
30	23.55	---	24.42	25.17	---	25.88	26.53	26.46	24.67	---	---	23.53
31	23.59	---	24.49	25.08	---	25.71	---	26.50	---	---	---	---
MEAN	23.06	23.93	24.42	24.97	25.45	26.19	26.21	26.65	25.75	24.34	23.46	23.39
MAX	23.59	24.11	24.97	25.45	25.98	26.50	26.53	26.79	26.44	24.61	23.46	23.53
MIN	22.63	23.62	23.83	24.59	24.83	25.71	25.75	26.31	24.67	24.02	23.46	23.24



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WATER-QUALITY RECORDS

REMARKS.--Samples collected with submersible pump from recovery water after well was pumped dry. 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 (00028)	AGENCY COLLECTING SAMPLE NUMBER (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (µS/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											
17...	1100	9813	1028	.7	8.2	224	11.9	--	--	--	--
NOV											
15...	1000	9813	1028	1.2	7.8	223	12.1	--	--	--	--
DEC											
11...	1100	9813	1028	--	7.7	218	12.2	33.2	3.42	2.82	4.2
JAN 2001											
17...	1230	9813	1028	.8	7.5	218	11.8	--	--	--	--
FEB											
21...	1000	9813	1028	.8	7.1	221	12.3	--	--	--	--
MAR											
27...	1500	9813	1028	1.1	8.1	221	12.0	32.1	3.37	2.85	4.5
MAY											
09...	1200	9813	1028	.5	7.8	216	12.4	--	--	--	--
31...	1000	9813	1028	.9	8.2	219	12.5	--	--	--	--
JUN											
27...	1100	9813	1028	.6	8.1	217	12.8	32.3	3.45	3.20	4.5
JUL											
16...	1500	9813	1028	1.0	8.1	216	12.7	--	--	--	--
AUG											
28...	1400	9813	1028	.5	8.1	212	13.0	--	--	--	--

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 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										
17...	--	--	--	--	--	--	--	<.020	<.02	<.06
NOV										
15...	77	--	--	--	--	--	--	<.020	<.02	<.06
DEC										
11...	69	<.20	4.0	<.2	15.0	28.1	276	<.020	--	<.06
JAN 2001										
17...	64	--	--	--	--	--	--	<.020	<.02	<.06
FEB										
21...	69	--	--	--	--	--	--	<.020	<.02	<.06
MAR										
27...	77	<.20	3.7	<.2	14.6	27.8	162	<.020	--	<.06
MAY										
09...	70	--	--	--	--	--	--	<.020	<.02	<.06
31...	80	--	--	--	--	--	--	<.020	<.02	<.06
JUN										
27...	79	<.20	3.6	<.2	15.5	28.2	146	<.020	--	<.06
JUL										
16...	78	--	--	--	--	--	--	<.020	<.02	<.06
AUG										
28...	73	--	--	--	--	--	--	<.020	<.02	<.06

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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									
17...	<.040	<.040	<.010	<.010	--	--	--	--	--
NOV									
15...	<.040	<.040	<.010	<.010	--	--	--	--	--
DEC									
11...	<.040	<.040	<.010	<.010	<1.0	<200	100	24.0	<10
JAN 2001									
17...	<.040	<.040	<.010	<.010	--	--	--	--	--
FEB									
21...	<.040	<.040	<.010	<.010	--	--	--	--	--
MAR									
27...	<.040	<.040	<.010	<.010	<1.0	<200	50	25.0	<10
MAY									
09...	<.040	<.040	<.010	<.010	--	--	--	--	--
31...	<.040	<.040	<.010	.010	--	--	--	--	--
JUN									
27...	<.040	<.040	<.010	<.010	<1.0	<200	40	21.0	<10
JUL									
16...	<.040	<.040	<.010	<.010	--	--	--	--	--
AUG									
28...	<.040	<.040	<.010	<.010	--	--	--	--	--