

**CHESTER COUNTY**

**395049075434301. Local number, CH 5178**  
**(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 4 in., depth 89.9 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 357.0 ft. above sea level. Measuring point: Top of plywood shelf, 1.5 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 23, 1998 to current year.

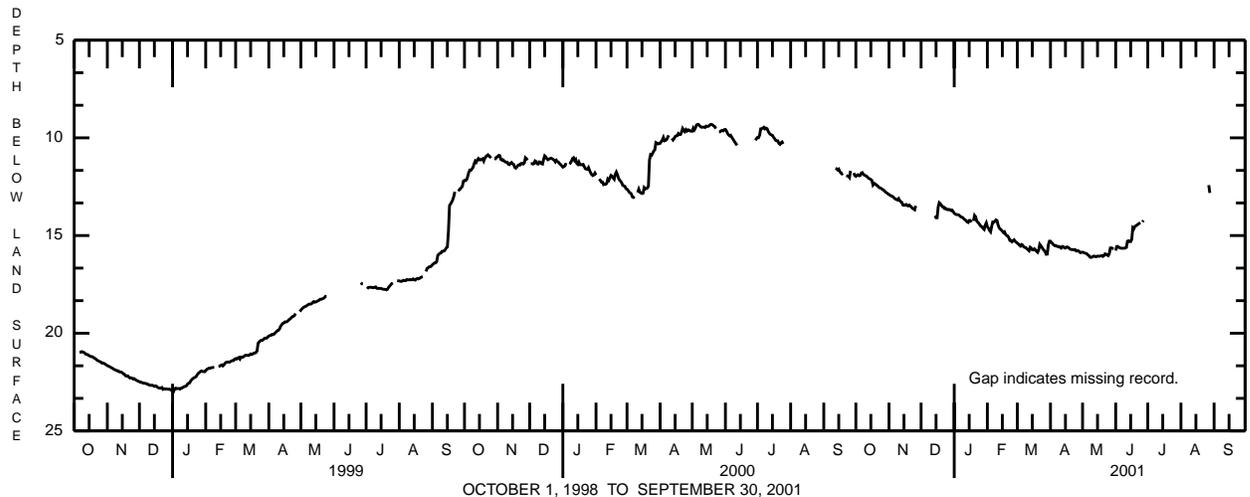
**EXTREMES FOR PERIOD OF RECORD**--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 9.26 ft below land-surface datum, May 18, 2000; lowest, 23.01 ft below land-surface datum, Jan. 1, 2, 1999.

**EXTREMES FOR CURRENT YEAR**--Highest water level, 11.75 ft below land-surface datum, Oct. 6, 7; lowest, 16.28 ft below land-surface datum, May 9.

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	11.97	12.90	---	13.86	14.55	15.39	15.29	15.85	15.77	---	---	---
2	11.92	12.94	---	13.90	14.62	15.43	15.36	15.87	15.56	---	---	---
3	11.89	12.97	---	13.93	14.74	15.50	15.42	15.90	15.56	---	---	---
4	11.94	12.99	---	13.93	14.81	15.54	15.48	15.91	15.61	---	---	---
5	11.93	13.03	---	13.94	14.54	15.46	15.52	15.93	15.63	---	---	---
6	11.81	13.09	---	13.98	14.31	15.49	15.51	15.99	15.65	---	---	---
7	11.78	13.13	---	14.04	14.32	15.58	15.55	16.03	15.65	---	---	---
8	11.86	13.16	---	14.06	14.28	15.61	15.57	16.11	15.65	---	---	---
9	11.91	13.18	---	14.08	14.20	15.62	15.56	16.12	15.65	---	---	---
10	11.93	13.11	---	14.15	14.23	15.68	15.60	16.10	15.64	---	---	12.35
11	11.96	13.21	---	14.19	14.46	15.73	15.64	16.06	15.61	---	---	---
12	12.02	13.27	---	14.23	14.60	15.78	15.56	16.05	15.29	---	---	12.43
13	12.07	13.30	---	14.30	14.67	15.60	15.57	16.08	15.27	---	---	---
14	12.10	13.44	13.99	14.33	14.71	15.64	15.63	16.08	15.31	---	---	---
15	12.13	13.45	14.09	14.23	14.78	15.73	15.64	16.05	15.31	---	---	---
16	12.18	13.44	14.09	14.23	14.85	15.73	15.59	16.06	15.20	---	---	---
17	12.41	13.41	13.53	14.32	14.81	15.68	15.59	16.06	14.60	---	---	---
18	12.33	13.47	13.32	---	14.94	15.74	15.62	16.04	14.65	---	---	12.53
19	12.35	13.48	13.37	14.25	15.00	15.81	15.68	16.03	14.53	13.06	---	---
20	12.41	13.44	13.45	13.97	15.02	15.86	15.71	16.07	14.50	---	---	---
21	12.44	13.49	13.53	14.04	15.11	15.74	15.72	16.03	14.46	---	---	---
22	12.50	13.55	13.53	14.25	15.25	15.45	15.72	15.94	14.42	---	---	---
23	12.55	13.61	13.62	14.32	15.25	15.52	15.73	15.95	14.38	---	---	---
24	12.57	13.64	13.61	14.37	15.32	15.60	15.72	16.00	14.34	---	---	---
25	12.60	13.68	13.66	14.46	15.27	15.70	15.79	16.03	---	---	---	---
26	12.65	13.48	13.68	14.53	15.22	15.76	15.79	15.93	14.30	---	---	---
27	12.67	---	13.66	14.55	15.30	15.83	15.78	15.64	14.23	---	12.42	---
28	12.73	---	13.68	14.64	15.34	15.96	15.83	15.63	---	---	12.82	---
29	12.79	---	13.72	14.69	---	15.95	15.88	15.66	---	---	---	---
30	12.82	---	13.70	14.46	---	15.48	15.86	15.69	---	---	---	---
31	12.87	---	13.77	14.35	---	15.29	---	---	---	---	---	---
MEAN	12.26	13.30	13.67	14.22	14.80	15.64	15.63	15.96	15.11	13.06	12.62	12.44
MAX	12.87	13.68	14.09	14.69	15.34	15.96	15.88	16.12	15.77	13.06	12.82	12.53
MIN	11.78	12.90	13.32	13.86	14.20	15.29	15.29	15.63	14.23	13.06	12.42	12.35



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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.  
 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 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 2000											
16...	1500	9813	1028	.7	8.6	245	12.5	--	--	--	--
NOV											
13...	1400	9813	1028	1.0	8.5	246	12.1	--	--	--	--
DEC											
11...	1400	9813	1028	.8	7.7	243	11.6	28.1	4.15	7.54	8.4
JAN 2001											
17...	1000	9813	1028	.8	7.8	245	11.7	--	--	--	--
FEB											
21...	1300	9813	1028	1.1	7.9	246	12.0	--	--	--	--
MAR											
27...	1000	9813	1028	.9	8.0	243	11.9	29.3	4.00	5.54	8.5
MAY											
07...	1300	9813	1028	.6	8.5	230	12.7	--	--	--	--
30...	1500	9813	1028	.9	8.4	237	12.6	--	--	--	--
JUN											
25...	1400	9813	1028	1.4	8.2	226	13.3	32.7	4.30	4.69	7.2
JUL											
19...	1400	9813	1028	.4	7.2	239	12.7	--	--	--	--
AUG											
27...	1600	9813	1028	.4	8.3	235	13.5	--	--	--	--

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										
16...	60	--	--	--	--	--	--	<.020	<.02	<.06
NOV										
13...	58	--	--	--	--	--	--	<.020	<.02	<.06
DEC										
11...	51	<.20	3.9	<.2	14.3	48.2	148	<.020	--	<.06
JAN 2001										
17...	51	--	--	--	--	--	--	<.020	<.02	.10
FEB										
21...	57	--	--	--	--	--	--	<.020	<.02	<.06
MAR										
27...	52	<.20	3.8	<.2	13.9	47.7	184	<.020	--	<.06
MAY										
07...	56	--	--	--	--	--	--	<.020	<.02	.34
30...	60	--	--	--	--	--	--	<.020	<.02	<.06
JUN										
25...	57	<.20	3.8	<.2	15.5	46.0	1130	<.020	--	<.06
JUL										
19...	67	--	--	--	--	--	--	<.020	<.02	<.06
AUG										
27...	65	--	--	--	--	--	--	<.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									
16...	<.040	<.040	<.010	<.010	--	--	--	--	--
NOV									
13...	<.040	<.040	<.010	<.010	--	--	--	--	--
DEC									
11...	<.040	<.040	<.010	<.010	<1.0	<200	80	16.0	<10
JAN 2001									
17...	<.040	<.040	<.010	<.010	--	--	--	--	--
FEB									
21...	<.040	<.040	<.010	.013	--	--	--	--	--
MAR									
27...	<.040	<.040	.010	<.010	<1.0	<200	<20	21.0	<10
MAY									
07...	<.040	<.040	<.010	<.010	--	--	--	--	--
30...	<.040	<.040	.011	<.010	--	--	--	--	--
JUN									
25...	<.040	<.040	<.010	<.010	<1.0	<200	30	22.0	<10
JUL									
19...	<.040	<.040	.010	<.010	--	--	--	--	--
AUG									
27...	<.040	<.040	.012	.012	--	--	--	--	--