

**CHESTER COUNTY**

**395048075434702. Local number, CH 5175**  
**(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 2 in., depth 56.5 ft, cased to 56.5 ft, closed end, screened from 36.5-56.5 ft.

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

**DATUM**--Elevation of land surface is 372 ft above sea level from a GPS unit. 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 Sept. 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX-XXX.

**PERIOD OF RECORD**--September 11, 1998 to current year.

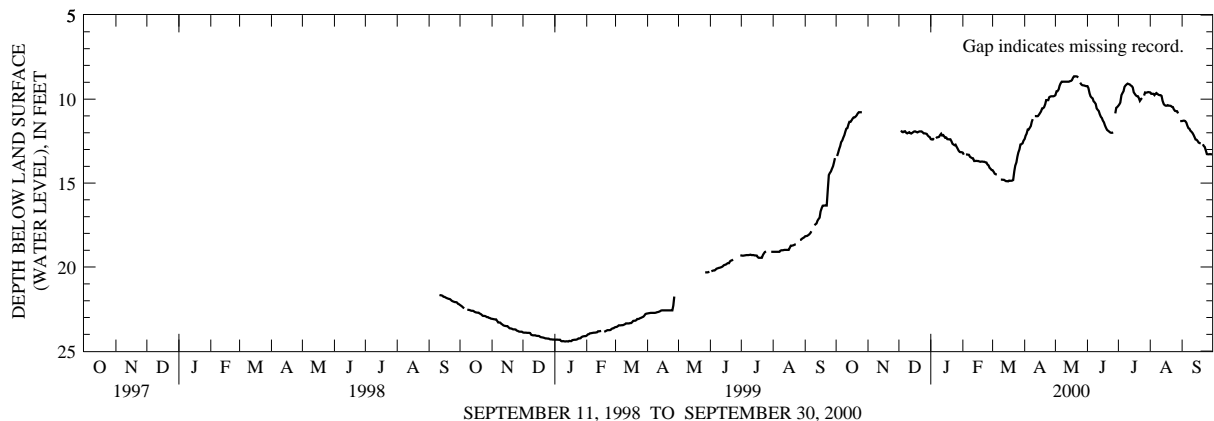
**EXTREMES FOR PERIOD OF RECORD**--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 8.65 ft below land-surface datum, May 19-21, 2000; lowest, 24.44 ft below land-surface datum, Jan. 13, 14, 1999.

**DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	12.38	13.19	14.23	12.37	9.77	9.23	10.40	9.61	11.31
2	13.39	---	---	12.41	13.31	14.34	12.18	9.54	9.34	10.31	9.68	11.29
3	13.22	---	11.87	12.41	---	14.44	12.06	9.53	9.66	10.21	9.68	11.29
4	12.97	---	11.95	12.33	13.30	14.47	11.81	9.42	9.83	9.77	9.69	11.31
5	12.81	---	11.97	---	13.30	14.48	11.81	9.21	9.90	9.65	9.76	11.40
6	12.57	---	11.93	12.33	13.31	---	11.72	9.07	9.96	9.53	9.69	11.57
7	12.46	---	11.91	12.28	13.32	---	11.61	8.97	10.13	9.27	9.64	11.73
8	12.30	---	12.00	12.27	13.43	---	11.35	8.97	10.19	9.19	9.70	11.77
9	12.14	---	12.04	12.25	13.48	14.79	11.19	8.97	10.29	9.12	9.74	11.88
10	11.94	---	12.00	12.13	13.51	14.79	---	8.97	10.56	9.08	9.76	11.95
11	11.76	---	11.97	12.06	13.53	14.81	11.01	8.97	10.64	9.10	9.77	12.02
12	11.72	---	12.03	12.17	13.68	14.80	11.01	8.97	10.72	9.13	9.81	12.12
13	11.52	---	12.05	12.14	13.68	14.85	11.02	8.97	10.90	9.18	10.10	12.27
14	11.35	---	12.01	12.22	13.67	14.88	11.01	8.96	11.06	9.23	10.29	12.40
15	11.35	---	11.96	12.30	13.68	14.89	10.92	8.93	11.13	9.31	10.36	12.43
16	11.27	---	11.92	12.29	13.68	14.90	10.83	8.92	11.28	9.59	10.39	12.50
17	11.16	---	11.92	12.38	13.71	14.85	10.74	8.87	11.39	9.70	10.40	12.59
18	11.09	---	11.96	12.39	13.73	14.86	10.56	8.73	11.56	9.78	10.36	12.62
19	11.09	---	11.98	12.39	13.72	14.86	10.54	8.65	11.70	9.82	10.39	12.63
20	11.04	---	11.95	12.39	13.72	14.85	10.49	8.65	11.83	9.83	10.39	---
21	10.97	---	11.93	12.52	13.73	14.82	10.30	8.65	11.88	9.95	10.41	12.69
22	10.86	---	11.93	12.66	13.73	14.29	10.06	8.66	11.92	10.11	10.46	12.79
23	10.78	---	11.93	12.70	13.76	13.96	10.06	8.71	11.98	10.01	10.48	12.85
24	10.78	---	11.97	12.75	13.78	13.77	10.06	---	12.01	9.94	10.61	13.08
25	10.78	---	12.04	12.72	13.89	13.43	9.89	9.02	12.00	---	10.70	13.27
26	10.78	---	12.04	12.83	13.95	13.18	9.84	9.12	11.98	9.79	10.72	13.29
27	---	---	12.05	12.96	14.09	12.99	9.83	9.17	---	9.61	10.73	13.29
28	---	---	12.07	13.07	14.14	12.70	9.83	9.18	10.85	9.62	10.85	13.28
29	---	---	12.17	13.15	14.22	12.68	9.83	9.19	10.52	9.60	---	13.29
30	---	---	12.23	13.16	---	12.63	9.81	9.22	10.47	9.58	11.31	13.29
31	---	---	12.27	13.16	---	12.47	---	9.23	---	9.59	11.31	---
MEAN	11.68	---	12.00	12.51	13.65	14.18	10.82	9.04	10.86	9.63	10.23	12.35
MAX	13.39	---	12.27	13.16	14.22	14.90	12.37	9.77	12.01	10.40	11.31	13.29
MIN	10.78	---	11.87	12.06	13.19	12.47	9.81	8.65	9.23	9.08	9.61	11.29

WTR YR 2000: HIGHEST 8.65, MAY 19-21; LOWEST 14.90, MARCH 16.



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WATER-QUALITY RECORDS

REMARKS.-- Samples collected with submersible pump from recovery water after well was pumped dry.  
 PERIOD OF RECORD.--May 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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 1999											
27...	1100	9813	1028	--	5.7	111	12.9	--	--	--	--
NOV											
30...	1200	9813	1028	--	5.9	126	11.0	--	--	--	--
JAN 2000											
05...	1100	9813	1028	--	6.4	133	11.2	13.0	2.35	<1.0	8.6
FEB											
03...	1500	9813	1028	--	6.8	157	8.8	--	--	--	--
MAR											
06...	1300	9813	1028	--	5.5	140	12.1	--	--	--	--
APR											
10...	1000	9813	1028	--	5.9	136	11.5	--	--	--	--
MAY											
24...	1200	9813	1028	--	7.6	138	13.2	14.2	2.15	1.2	9.1
JUN											
27...	1400	9813	1028	--	7.0	130	13.5	--	--	--	--
JUL											
25...	1400	9813	1028	--	7.6	130	14.7	14.4	2.69	1.1	4.8
AUG											
29...	1300	9813	1028	8.2	6.4	134	13.9	--	--	--	--
SEP											
20...	1400	9813	1028	--	6.7	121	15.6	13.5	2.99	1.6	5.5

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	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)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT 1999											
27...	69	--	--	--	--	<.02	<.020	.960	1.4	<.040	.086
NOV											
30...	29	--	--	--	--	<.02	<.020	1.01	1.3	<.040	.070
JAN 2000											
05...	28	2.4	<.2	21.1	20.6	--	<.020	1.02	1.4	<.040	.141
FEB											
03...	39	--	--	--	--	<.02	<.020	.980	1.2	.040	.165
MAR											
06...	29	--	--	--	--	<.02	<.020	1.04	1.2	<.040	.119
APR											
10...	69	--	--	--	--	<.02	<.020	1.02	1.3	<.040	.068
MAY											
24...	36	2.3	<.2	24.6	20.8	--	<.020	1.00	1.2	<.040	.055
JUN											
27...	28	--	--	--	--	<.02	<.020	.940	1.3	<.040	.048
JUL											
25...	E33	2.4	<.2	19.3	22.3	--	<.020	.880	1.1	<.040	.056
AUG											
29...	29	--	--	--	--	<.02	<.020	.820	.90	<.040	.042
SEP											
20...	25	2.1	<.2	22.0	22.3	--	<.020	.820	1.0	<.040	.036

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## WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (µG/L AS SB) (01095)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BORON, DIS- SOLVED (µG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)
OCT 1999											
27...	.059	--	--	--	--	--	--	--	--	--	--
NOV											
30...	.061	--	--	--	--	--	--	--	--	--	--
JAN 2000											
05...	.047	<1.0	98	--	--	--	--	<200	<.20	--	--
FEB											
03...	.129	--	--	--	--	--	--	--	--	--	--
MAR											
06...	.053	--	--	--	--	--	--	--	--	--	--
APR											
10...	.071	--	--	--	--	--	--	--	--	--	--
MAY											
24...	.054	<1.0	88	--	--	--	--	<200	<.20	--	--
JUN											
27...	.046	--	--	--	--	--	--	--	--	--	--
JUL											
25...	.048	<1.0	96	15	--	--	--	<200	<.20	--	--
AUG											
29...	.040	--	--	--	--	--	--	--	--	--	--
SEP											
20...	.041	<1.0	102	17	<2	<4.0	42	<200	<.20	<10.0	<4.0

DATE	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
OCT 1999										
27...	--	--	--	--	--	--	--	--	--	--
NOV										
30...	--	--	--	--	--	--	--	--	--	--
JAN 2000										
05...	--	40	--	--	11	--	--	--	--	<10
FEB										
03...	--	--	--	--	--	--	--	--	--	--
MAR										
06...	--	--	--	--	--	--	--	--	--	--
APR										
10...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	--	--	--	--	12	--	--	--	--	<10
JUN										
27...	--	--	--	--	--	--	--	--	--	--
JUL										
25...	--	<20	--	--	<10	--	--	--	--	17
AUG										
29...	--	--	--	--	--	--	--	--	--	--
SEP										
20...	<4	<20	<1	<25.0	<10	<.2	<4	<7.0	67.0	11