

CHESTER COUNTY

395043075440701. Local number, CH 5182
(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 195 ft, cased to 195 ft, closed end, screened from 165-195 ft.

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

DATUM--Elevation of land surface is 385 ft. above sea level from a GPS unit. Measuring point: Top of plywood shelf, 1.1 ft above land-surface datum.

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

PERIOD OF RECORD--June 24, 1998 to current year.

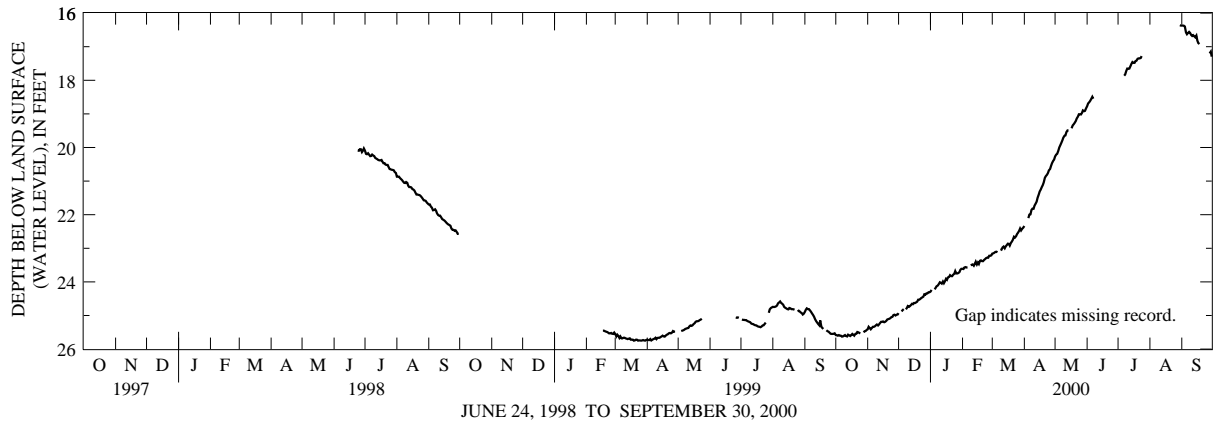
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the daily maximum depth below land surface for the period of record indicated above.

Highest water level, 16.36 ft below land-surface datum, Aug. 30, 2000; lowest, 25.77 ft below land-surface datum, Mar. 19, 20, 22, 29-31, 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	25.58	25.41	24.93	24.29	23.61	23.16	22.34	20.27	18.77	---	---	16.37
2	25.59	25.34	---	24.24	23.62	23.15	---	20.21	18.69	---	---	16.37
3	25.60	25.38	---	---	23.57	23.13	---	20.19	18.65	---	---	16.38
4	25.58	25.41	24.88	---	23.56	23.11	---	20.10	18.61	---	---	16.40
5	25.60	25.38	24.84	24.22	23.57	23.10	22.10	20.00	18.56	---	---	16.58
6	25.60	25.34	24.81	24.18	23.57	23.12	22.00	19.94	18.49	---	---	16.63
7	25.63	25.34	---	24.13	---	---	21.99	19.86	18.55	17.86	---	16.59
8	25.62	25.32	24.82	24.11	---	---	21.86	19.79	---	17.83	---	16.56
9	25.60	25.29	24.78	24.07	23.51	23.02	21.82	19.71	---	17.72	---	16.59
10	25.58	25.27	24.72	24.01	23.49	23.04	21.82	19.65	---	17.65	---	16.65
11	25.61	25.30	24.74	24.03	23.48	22.97	21.73	19.64	---	17.66	---	16.68
12	25.62	25.27	24.72	24.05	23.52	22.95	21.67	19.54	---	17.65	---	16.66
13	25.57	25.23	24.69	23.99	23.47	23.00	21.61	19.49	---	17.59	---	16.69
14	25.59	25.19	24.65	24.04	23.40	22.94	21.50	19.49	---	17.51	---	16.72
15	25.61	25.19	24.66	23.99	23.48	22.91	21.40	---	---	17.46	---	16.67
16	25.59	25.18	24.63	23.91	23.42	22.86	21.31	---	---	17.48	---	16.82
17	25.55	25.20	24.63	23.94	23.47	22.87	21.26	19.43	---	17.48	---	16.89
18	25.57	25.19	24.61	23.87	23.37	22.92	21.18	19.34	---	17.43	---	16.92
19	25.60	25.16	24.59	23.85	23.36	22.84	21.12	19.31	---	17.42	---	---
20	25.55	25.12	24.53	23.80	23.38	22.80	21.04	19.27	---	17.36	---	---
21	25.54	25.11	24.53	23.83	23.38	22.75	20.90	19.21	---	17.35	---	---
22	25.49	25.10	24.51	23.83	23.35	22.66	20.85	19.14	---	17.35	---	---
23	25.50	25.08	24.48	23.79	23.32	22.68	20.81	19.08	---	17.34	---	---
24	25.52	25.05	24.46	23.76	23.29	22.64	20.76	19.01	---	17.28	---	---
25	25.53	25.04	24.44	23.68	23.28	22.58	20.68	19.01	---	---	---	---
26	---	24.99	24.37	23.75	23.28	22.54	20.64	19.02	---	---	---	---
27	---	24.98	24.38	23.75	23.22	22.48	20.55	18.97	---	---	---	---
28	25.50	25.00	24.34	23.74	23.22	22.41	20.47	18.90	---	---	---	17.20
29	25.47	24.98	24.34	23.71	23.21	22.47	20.40	18.92	---	---	---	17.15
30	25.46	24.97	24.31	23.64	---	22.42	20.36	18.91	---	---	16.36	17.30
31	25.43	---	24.31	23.61	---	22.39	---	18.84	---	---	16.37	---
MEAN	25.56	25.19	24.60	23.92	23.42	22.82	21.27	19.46	18.62	17.52	16.37	16.71
MAX	25.63	25.41	24.93	24.29	23.62	23.16	22.34	20.27	18.77	17.86	16.37	17.30
MIN	25.43	24.97	24.31	23.61	23.21	22.39	20.36	18.84	18.49	17.28	16.36	16.37

WTR YR 2000: HIGHEST RECORDED 16.36, AUGUST 30; LOWEST 25.63, OCTOBER 7.



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WATER-QUALITY RECORDS

REMARKS.-- Samples collected with submersible pump from recovery water after well was pumped more than 3 casing volumes.
 PERIOD OF RECORD.--June 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											
26...	1200	9813	1028	.7	7.4	191	12.3	--	--	--	--
DEC 02...	1200	9813	1028	1.5	7.6	194	12.7	--	--	--	--
JAN 2000											
03...	1100	9813	1028	.2	7.7	192	13.4	28.0	3.50	2.8	4.2
FEB 07...	1100	9813	1028	.6	8.8	196	12.5	--	--	--	--
MAR 08...	1000	9813	1028	1.4	7.1	187	16.2	--	--	--	--
APR 03...	1200	9813	1028	1.6	7.5	194	12.1	--	--	--	--
MAY 15...	1200	9813	1028	.8	8.2	185	14.6	28.7	3.29	2.4	4.0
JUL 05...	1000	9813	1028	.3	8.0	186	13.7	--	--	--	--
25...	1100	9813	1028	.3	8.0	193	12.6	29.0	3.37	2.2	3.7
AUG 28...	1000	9813	1028	.4	8.4	189	13.1	--	--	--	--
SEP 19...	0900	9813	1028	.9	8.1	175	12.6	28.7	3.54	2.6	4.2

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											
26...	82	--	--	--	--	<.02	<.020	<.040	.08	<.040	.014
DEC 02...	70	--	--	--	--	<.02	<.020	<.040	.08	<.040	.014
JAN 2000											
03...	66	2.8	<.2	16.7	14.7	--	<.020	<.040	.08	<.040	.029
FEB 07...	68	--	--	--	--	<.02	<.020	<.040	<.06	<.040	.037
MAR 08...	73	--	--	--	--	<.02	<.020	3.10	.16	<.040	.017
APR 03...	62	--	--	--	--	<.02	<.020	<.040	<.06	<.040	.011
MAY 15...	77	3.0	<.2	16.5	14.0	--	<.020	<.040	<.06	<.040	.016
JUL 05...	67	--	--	--	--	<.02	<.020	<.040	<.06	<.040	.015
25...	79	3.0	<.2	15.2	13.9	--	<.020	<.040	<.06	<.040	.020
AUG 28...	67	--	--	--	--	<.02	<.020	<.040	.11	<.040	<.010
SEP 19...	68	4.8	<.2	17.7	15.3	--	<.020	<.040	<.06	<.040	<.010

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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											
26...	<.002	--	--	--	--	--	--	--	--	--	--
DEC											
02...	.012	--	--	--	--	--	--	--	--	--	--
JAN 2000											
03...	.019	<1.0	--	--	--	--	--	<200	<.20	--	--
FEB											
07...	<.010	--	--	--	--	--	--	--	--	--	--
MAR											
08...	.035	--	--	--	--	--	--	--	--	--	--
APR											
03...	.011	--	--	--	--	--	--	--	--	--	--
MAY											
15...	.013	<1.0	120	15	--	--	--	<200	<.20	--	--
JUL											
05...	.017	--	--	--	--	--	--	--	--	--	--
25...	.019	<1.0	144	15	--	--	--	<200	<.20	--	--
AUG											
28...	.011	--	--	--	--	--	--	--	--	--	--
SEP											
19...	<.010	<1.0	108	18	<2	<4.0	11	<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										
26...	--	--	--	--	--	--	--	--	--	--
DEC										
02...	--	--	--	--	--	--	--	--	--	--
JAN 2000										
03...	--	80	--	--	18	--	--	--	--	<10
FEB										
07...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	--	--	--	--	--	--	--	--	--	--
APR										
03...	--	--	--	--	--	--	--	--	--	--
MAY										
15...	--	40	--	--	19	--	--	--	--	<10
JUL										
05...	--	--	--	--	--	--	--	--	--	--
25...	--	30	--	--	19	--	--	--	--	<10
AUG										
28...	--	--	--	--	--	--	--	--	--	--
SEP										
19...	<4	80	<1	<25.0	21	<.2	<4	<7.0	61.0	<10