

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 360 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 May 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX-XXX.

PERIOD OF RECORD--May 23, 1998 to current year.

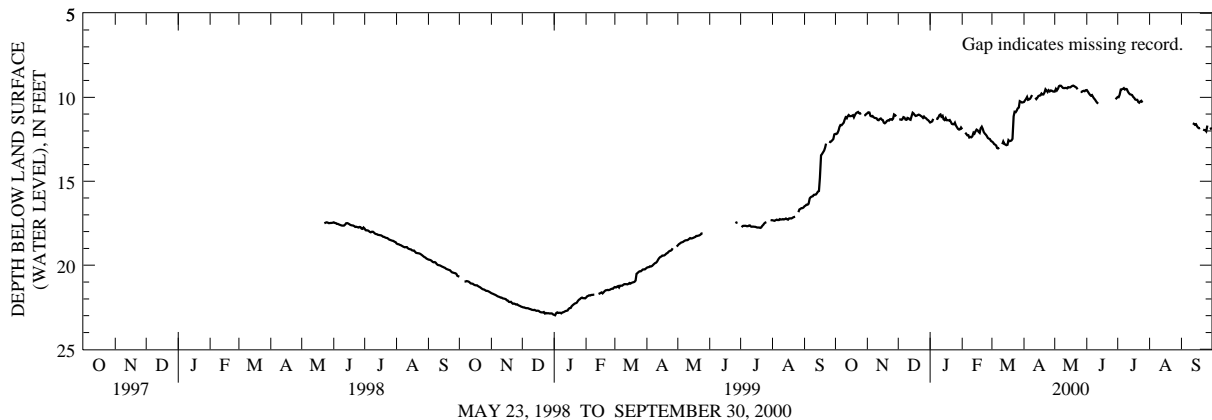
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

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.

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	12.18	10.96	---	11.50	11.90	12.63	10.28	9.66	9.57	9.98	---	---
2	12.19	10.90	11.32	11.47	---	12.69	10.19	9.50	9.65	9.99	---	---
3	12.14	10.91	11.32	11.43	---	12.78	10.11	9.59	9.77	9.86	---	---
4	11.98	11.10	11.34	11.29	12.11	12.82	9.98	9.49	9.85	9.54	---	---
5	11.77	11.14	11.32	---	12.18	12.87	10.15	9.34	9.90	9.53	---	---
6	11.65	11.12	11.18	---	12.26	13.02	10.13	9.31	9.87	9.50	---	---
7	11.66	11.18	11.21	11.26	12.26	13.05	10.09	9.32	9.97	9.46	---	---
8	11.59	11.23	11.33	11.29	12.39	13.00	9.98	9.39	10.06	9.54	---	---
9	11.51	11.24	11.34	11.20	12.36	---	9.87	9.44	10.14	9.50	---	---
10	11.33	11.25	11.23	11.06	12.38	---	---	9.46	10.23	9.53	---	---
11	11.19	11.35	11.25	11.02	12.33	12.80	---	9.45	10.31	9.66	---	---
12	11.25	11.37	11.32	11.16	12.11	12.63	10.03	9.45	10.38	9.76	---	11.55
13	11.13	11.30	11.34	11.10	12.17	12.78	10.11	9.47	---	9.82	---	11.58
14	11.06	11.26	11.10	11.31	12.04	12.82	10.04	9.40	---	9.85	---	11.64
15	11.13	11.33	10.92	11.36	11.92	12.85	9.93	9.41	---	9.87	---	11.60
16	11.13	11.36	10.97	11.24	11.96	12.83	9.90	9.41	---	9.97	---	11.72
17	11.10	11.51	11.07	11.37	12.05	12.55	9.89	9.37	---	10.04	---	11.80
18	11.07	11.55	11.12	11.37	12.12	12.61	9.78	9.32	---	10.13	---	11.85
19	11.19	11.49	11.09	11.38	11.86	12.60	9.83	9.31	---	10.15	---	11.82
20	11.05	11.41	11.06	11.36	11.75	12.57	9.83	9.34	---	10.15	---	---
21	10.96	11.38	11.04	11.47	11.88	12.47	9.71	9.39	---	10.28	---	---
22	10.91	11.39	11.07	11.58	12.06	11.14	9.52	9.42	---	10.33	---	11.93
23	10.87	11.31	11.11	11.60	12.16	10.86	9.61	9.53	---	10.25	---	11.95
24	10.94	11.31	11.15	11.61	12.22	10.89	9.68	---	---	10.21	---	11.96
25	10.98	11.34	11.23	11.52	12.30	10.79	9.58	---	---	10.31	---	12.03
26	10.94	11.28	11.15	11.67	12.43	10.67	9.65	9.69	---	---	---	11.69
27	---	11.02	11.22	11.79	12.46	10.61	9.59	9.69	---	---	---	---
28	---	11.07	11.25	11.88	12.48	10.24	9.60	9.64	---	---	---	---
29	11.06	11.14	11.32	11.93	12.60	10.27	9.65	9.62	10.12	---	---	11.80
30	11.07	---	11.37	11.90	---	10.31	9.66	9.64	10.05	---	---	11.93
31	10.99	---	11.44	11.80	---	10.30	---	9.58	---	---	---	---
MEAN	11.31	11.25	11.21	11.45	12.18	12.02	9.87	9.47	9.99	9.89	---	11.79
MAX	12.19	11.55	11.44	11.93	12.60	13.05	10.28	9.69	10.38	10.33	---	12.03
MIN	10.87	10.90	10.92	11.02	11.75	10.24	9.52	9.31	9.57	9.46	---	11.55

WTR YR 2000: HIGHEST 9.31, MAY 6, 19; LOWEST 13.05, MARCH 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.--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...	1200	9813	1028	.2	7.9	239	11.7	--	--	--	--
NOV											
30...	1300	9813	1028	.2	8.1	236	11.1	--	--	--	--
JAN 2000											
05...	1500	9813	1028	.5	7.6	241	10.1	30.2	4.06	4.5	6.9
FEB											
02...	1300	9813	1028	--	9.0	239	11.2	--	--	--	--
MAR											
09...	1000	9813	1028	2.4	6.1	241	13.3	--	--	--	--
APR											
10...	1100	9813	1028	.3	7.7	247	12.6	--	--	--	--
MAY											
24...	1300	9813	1028	.3	8.0	243	13.2	33.7	3.82	4.6	6.6
JUN											
27...	1200	9813	1028	.3	6.7	243	12.8	--	--	--	--
JUL											
27...	1000	9813	1028	1.6	7.9	238	12.9	32.7	4.18	4.7	7.0
AUG											
30...	0915	9813	1028	.4	8.4	247	12.8	--	--	--	--
SEP											
20...	1200	9813	1028	1.1	8.6	225	13.0	28.6	4.39	7.4	8.6

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...	53	--	--	--	--	<.02	<.020	<.040	.14	<.040	.024
NOV											
30...	60	--	--	--	--	<.02	<.020	<.040	.13	<.040	.029
JAN 2000											
05...	57	3.2	<.2	14.0	51.3	--	<.020	<.040	.14	<.040	.021
FEB											
02...	66	--	--	--	--	<.02	<.020	<.040	<.06	<.040	.060
MAR											
09...	68	--	--	--	--	<.02	<.020	<.040	<.06	<.040	.057
APR											
10...	56	--	--	--	--	.04	<.020	<.040	<.06	<.040	.015
MAY											
24...	59	3.4	<.2	13.2	52.3	--	<.020	<.040	<.06	<.040	.013
JUN											
27...	62	--	--	--	--	<.02	<.020	<.040	.14	<.040	.015
JUL											
27...	77	3.7	<.2	14.9	49.5	--	<.020	<.040	<.06	<.040	.013
AUG											
30...	55	--	--	--	--	<.02	<.020	<.040	.15	<.040	<.010
SEP											
20...	--	3.5	<.2	15.5	47.5	--	<.020	<.040	.11	<.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 DIS- 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...	.016	--	--	--	--	--	--	--	--	--	--
NOV											
30...	.019	--	--	--	--	--	--	--	--	--	--
JAN 2000											
05...	<.010	<1.0	128	--	--	--	--	<200	<.20	--	--
FEB											
02...	<.010	--	--	--	--	--	--	--	--	--	--
MAR											
09...	.014	--	--	--	--	--	--	--	--	--	--
APR											
10...	<.010	--	--	--	--	--	--	--	--	--	--
MAY											
24...	.012	<1.0	76	22	--	--	--	<200	<.20	--	--
JUN											
27...	.017	--	--	--	--	--	--	--	--	--	--
JUL											
27...	.013	<1.0	180	18	--	--	--	<200	<.20	--	--
AUG											
30...	.014	--	--	--	--	--	--	--	--	--	--
SEP											
20...	.011	<1.0	210	26	<2	<4.0	38	<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...	--	70	--	--	22	--	--	--	--	<10
FEB										
02...	--	--	--	--	--	--	--	--	--	--
MAR										
09...	--	--	--	--	--	--	--	--	--	--
APR										
10...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	--	50	--	--	28	--	--	--	--	<10
JUN										
27...	--	--	--	--	--	--	--	--	--	--
JUL										
27...	--	30	--	--	24	--	--	--	--	<10
AUG										
30...	--	--	--	--	--	--	--	--	--	--
SEP										
20...	<4	<20	<1	<25.0	21	<.2	<4	<7.0	93.0	<10