

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 367.7 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 Sept. 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX, and XXX.

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

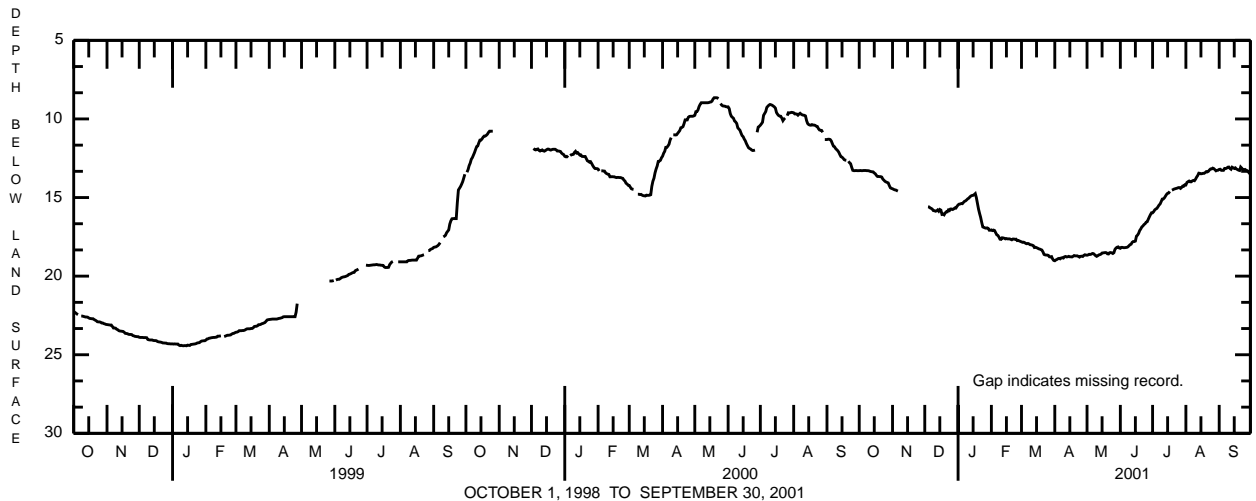
EXTREMES FOR PERIOD OF RECORD--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

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.

EXTREMES FOR CURRENT YEAR--Highest water level, 13.03 ft below land-surface datum, Sept. 9, 10; lowest, 19.04 ft below land-surface datum, Apr. 1.

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	13.29	14.44	---	15.47	17.06	17.82	19.02	18.67	18.23	15.97	14.20	13.21
2	13.28	14.48	---	15.42	17.10	17.85	18.97	18.65	18.17	15.90	14.04	13.20
3	13.29	14.51	---	15.41	17.07	17.84	18.94	18.61	18.17	15.79	13.99	13.27
4	13.29	14.52	15.59	15.38	17.10	17.87	18.89	18.62	18.19	15.73	13.95	13.27
5	13.28	14.56	15.60	15.39	17.24	17.92	18.87	18.60	18.19	15.69	14.00	13.27
6	13.28	14.59	15.66	15.31	17.37	17.94	18.90	18.56	18.18	15.59	14.00	13.15
7	13.28	---	15.69	15.24	17.41	17.92	18.84	18.57	18.17	15.48	13.94	13.16
8	13.29	---	15.74	15.21	17.51	17.95	18.83	18.63	18.14	15.41	13.91	13.13
9	13.29	---	15.83	15.15	17.65	18.00	18.85	18.70	18.07	15.26	13.93	13.07
10	13.30	---	15.84	15.08	17.66	18.01	18.77	18.74	18.00	15.10	13.83	13.06
11	13.33	---	15.87	15.04	17.56	18.03	18.75	18.70	17.97	15.09	13.70	13.15
12	13.35	---	15.85	14.96	17.57	18.06	18.78	18.65	17.85	15.02	13.60	13.20
13	13.36	---	15.79	14.90	17.59	18.18	18.77	18.63	17.80	14.91	13.45	13.07
14	13.37	---	15.87	14.87	17.63	18.16	18.74	18.60	17.80	14.80	13.46	13.11
15	13.44	15.56	15.76	14.86	17.61	18.19	18.77	18.53	17.77	14.73	13.49	13.15
16	13.49	---	15.80	14.81	17.63	18.22	18.77	18.52	17.46	14.71	13.48	13.11
17	13.59	---	16.07	14.75	17.63	18.26	18.78	18.51	17.39	14.61	13.46	13.18
18	13.66	---	16.05	15.00	17.63	18.28	18.74	18.50	17.28	---	13.46	13.22
19	13.66	---	16.10	15.36	17.66	18.31	18.69	18.51	17.10	14.53	13.41	13.26
20	13.67	---	15.98	15.73	17.69	18.34	18.71	18.58	17.00	14.50	13.35	13.28
21	13.67	---	15.91	16.01	17.64	18.46	18.71	18.59	16.87	14.46	13.37	13.06
22	13.70	---	15.91	16.26	17.64	18.62	18.71	18.51	16.81	14.44	13.33	13.13
23	13.83	---	15.79	16.59	17.66	18.65	18.75	18.50	16.72	14.42	13.24	13.22
24	13.90	---	15.83	16.87	17.65	18.66	18.79	18.52	16.67	14.40	13.18	13.23
25	13.97	---	15.73	16.90	17.74	18.66	18.74	18.56	16.57	14.37	13.18	13.21
26	14.01	---	15.73	16.93	17.73	18.68	18.73	18.51	16.54	14.37	13.13	13.26
27	14.04	---	15.76	16.95	17.76	18.77	18.75	18.30	16.38	14.42	13.16	13.29
28	14.07	15.41	15.72	16.93	17.79	18.78	18.68	18.21	16.23	14.36	13.23	13.36
29	14.24	---	15.66	16.96	---	18.76	18.64	18.16	16.09	14.27	13.30	13.45
30	14.38	---	15.67	17.08	---	18.91	18.66	18.14	15.97	14.28	13.27	13.50
31	14.42	---	15.56	17.08	---	19.00	---	18.21	---	14.19	13.26	---
MEAN	13.61	14.76	15.80	15.74	17.53	18.29	18.78	18.53	17.39	14.89	13.56	13.21
MAX	14.42	15.56	16.10	17.08	17.79	19.00	19.02	18.74	18.23	15.97	14.20	13.50
MIN	13.28	14.44	15.56	14.75	17.06	17.82	18.64	18.14	15.97	14.19	13.13	13.06



CHESTER COUNTY

395048075434702. Local number, CH 5175--Continued
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY RECORDS

REMARKS.-- Samples collected with disposable bailer from recovery water after well was bailed more than three casing volumes. 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)	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)	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)
OCT 2000											
17...	1000	9813	1028	6.6	131	12.5	--	--	--	--	24
NOV											
15...	1100	9813	1028	6.4	129	10.9	--	--	--	--	28
DEC											
11...	1200	9813	1028	6.2	137	11.0	33.9	2.65	1.46	5.1	29
JAN 2001											
17...	1400	9813	1028	5.9	127	10.7	--	--	--	--	26
FEB											
21...	1130	9813	1028	5.6	129	10.9	--	--	--	--	25
MAR											
26...	1400	9813	1028	6.3	127	10.9	13.2	2.77	1.48	5.3	26
MAY											
09...	1400	9813	1028	6.4	126	14.0	--	--	--	--	29
29...	1500	9813	1028	6.4	121	15.4	--	--	--	--	30
JUN											
27...	1000	9813	1028	6.4	121	13.3	12.2	2.39	1.85	5.7	29
JUL											
16...	1400	9813	1028	6.7	126	13.9	--	--	--	--	40
AUG											
28...	1300	9813	1028	6.2	122	14.4	--	--	--	--	23

DATE	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 DIS-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)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
OCT 2000										
17...	--	--	--	--	--	--	<.020	<.02	.94	.760
NOV										
15...	--	--	--	--	--	--	<.020	<.02	.93	.750
DEC										
11...	<.20	2.1	<.2	20.9	23.3	100	<.020	--	.91	.740
JAN 2001										
17...	--	--	--	--	--	--	<.020	<.02	.96	.760
FEB										
21...	--	--	--	--	--	--	<.020	<.02	.88	.780
MAR										
26...	<.20	2.0	<.2	20.2	22.0	116	<.020	--	.86	.760
MAY										
09...	--	--	--	--	--	--	<.020	<.02	.99	.790
29...	--	--	--	--	--	--	<.020	<.02	1.0	.790
JUN										
27...	<.20	2.2	<.2	20.9	21.1	92	<.020	--	.85	.780
JUL										
16...	--	--	--	--	--	--	<.020	<.02	.93	.770
AUG										
28...	--	--	--	--	--	--	<.020	<.02	1.0	.810

CHESTER COUNTY

395048075434702. Local number, CH 5175--Continued
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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	.075	.049	--	--	--	--	--
NOV 15...	<.040	.051	.045	--	--	--	--	--
DEC 11...	<.040	.041	.040	<1.0	<200	<20	<10.0	10
JAN 2001 17...	<.040	.043	.041	--	--	--	--	--
FEB 21...	<.040	.042	.054	--	--	--	--	--
MAR 26...	<.040	.042	.036	<1.0	<200	<20	<10.0	11
MAY 09...	<.040	.036	.032	--	--	--	--	--
29...	<.040	.039	.032	--	--	--	--	--
JUN 27...	<.040	.038	.032	<1.0	<200	<20	<10.0	<10
JUL 16...	<.040	.036	.034	--	--	--	--	--
AUG 28...	<.040	.037	.042	--	--	--	--	--