

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 381.9 ft. above sea level. 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, and XXX.

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

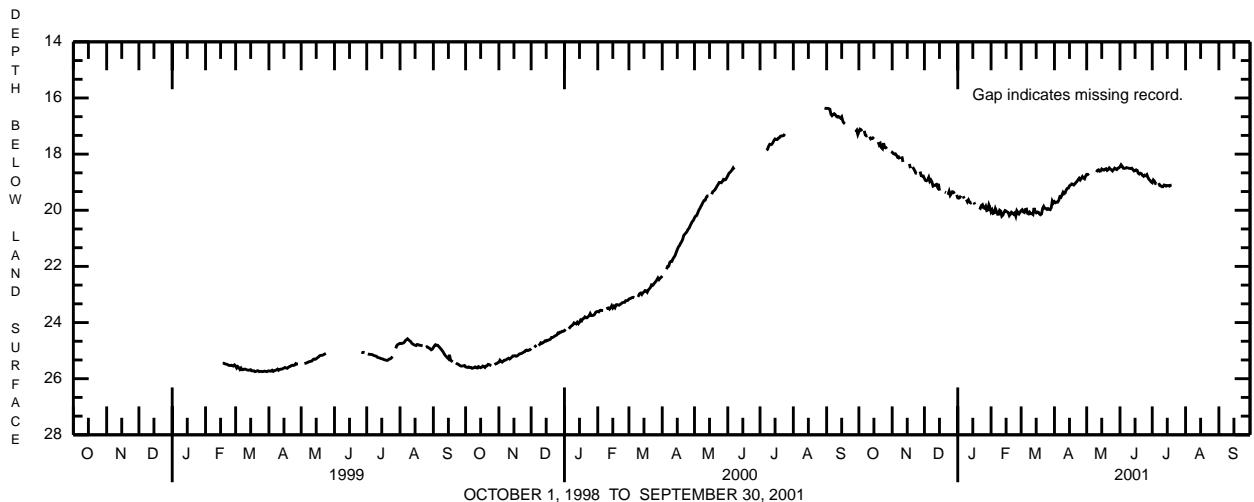
EXTREMES FOR PERIOD OF RECORD.--The extremes shown are extremes of the daily maximum depth below land surface for the period of record indicated above.

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.

EXTREMES FOR CURRENT YEAR.--Highest water level, 17.09 ft below land-surface datum, Oct. 2; lowest, 20.63 ft below land-surface datum, Sept. 18.

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	17.20	17.93	18.87	19.56	20.06	20.01	19.69	18.72	18.45	19.02	---	---
2	17.11	17.98	18.94	19.57	19.99	19.98	19.73	18.72	18.38	18.92	---	---
3	17.13	18.00	18.95	19.54	20.11	20.06	19.71	18.76	18.43	18.96	---	---
4	17.18	17.99	18.92	19.48	20.09	20.08	19.71	---	---	18.50	---	---
5	---	18.04	18.83	---	19.94	19.97	19.65	---	18.51	19.06	---	---
6	17.17	18.11	18.97	19.50	20.03	19.96	19.52	---	18.50	---	---	---
7	17.32	18.10	18.92	19.58	20.14	20.11	19.54	---	18.48	19.03	---	---
8	17.35	18.18	18.99	---	20.14	20.13	19.46	---	18.49	19.12	---	---
9	17.34	---	19.14	19.62	20.00	20.07	19.36	---	18.50	19.13	---	---
10	---	18.08	19.12	19.70	20.03	20.12	19.41	18.64	18.51	19.16	---	---
11	17.38	18.28	19.10	19.63	20.21	20.12	19.38	18.58	18.51	19.16	---	---
12	17.46	---	19.08	19.71	20.17	20.15	19.27	18.56	18.50	19.10	---	---
13	17.44	18.31	19.16	19.74	20.08	19.92	19.22	18.61	18.55	19.11	---	---
14	17.42	---	19.06	19.73	20.01	20.05	19.21	18.60	18.60	19.14	---	---
15	17.46	18.34	19.30	---	20.03	20.09	19.13	18.53	18.59	19.12	---	---
16	---	---	---	19.72	20.06	20.06	19.10	18.56	18.56	19.12	---	---
17	---	18.35	---	19.79	20.08	20.07	19.06	18.57	18.58	19.14	---	---
18	---	18.50	19.62	---	20.19	20.13	19.07	18.54	18.68	19.11	---	20.63
19	17.57	---	---	---	20.14	20.16	19.10	18.52	18.71	19.10	---	---
20	17.68	18.46	19.35	---	20.07	20.13	19.06	18.58	18.68	---	---	---
21	17.63	18.52	19.37	19.90	20.10	19.93	19.01	18.55	18.70	---	---	---
22	17.77	18.59	---	19.93	20.14	19.86	18.97	18.49	18.76	---	---	---
23	17.81	18.68	19.45	19.83	20.10	19.93	18.91	18.53	18.79	---	---	---
24	17.61	18.69	19.33	19.80	20.21	19.94	18.86	18.56	18.75	---	---	---
25	17.76	---	19.47	19.91	20.02	19.97	18.92	18.60	18.77	---	---	---
26	17.76	---	19.41	19.93	20.08	19.94	18.87	18.55	18.73	---	---	---
27	17.81	18.62	19.34	19.86	20.13	19.97	18.80	18.50	18.83	---	---	---
28	---	18.77	19.35	20.01	20.07	19.98	18.85	18.53	18.90	---	20.13	---
29	---	18.78	19.41	19.99	---	19.91	18.88	18.55	18.94	---	---	---
30	---	18.78	---	19.81	---	19.67	18.78	18.50	18.99	---	---	---
31	17.91	---	19.45	19.91	---	19.74	---	18.49	---	---	---	---
MEAN	17.49	18.35	19.19	19.75	20.09	20.01	19.21	18.57	18.63	19.09	20.13	20.63
MAX	17.91	18.78	19.62	20.01	20.21	20.16	19.73	18.76	18.99	19.16	20.13	20.63
MIN	17.11	17.93	18.83	19.48	19.94	19.67	18.78	18.49	18.38	18.92	20.13	20.63



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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.--June 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 19...	1200	9813	1028	.4	8.3	190	12.6	--	--	--	--
NOV 16...	1100	9813	1028	.5	8.3	192	11.8	--	--	--	--
DEC 13...	1000	9813	1028	.5	8.0	188	11.5	26.9	3.51	2.60	4.4
JAN 2001 18...	1000	9813	1028	.8	7.8	114	11.8	--	--	--	--
FEB 27...	1200	9813	1028	.7	8.1	191	12.1	--	--	--	--
MAR 28...	1100	9813	1028	.8	7.9	190	12.2	27.9	3.22	2.54	4.1
MAY 03...	1230	9813	1028	.5	8.0	188	12.5	--	--	--	--
29...	1300	9813	1028	.6	8.2	185	12.8	--	--	--	--
JUN 26...	1100	9813	1028	.9	8.1	183	13.0	30.8	3.50	2.65	4.3
JUL 19...	1100	9813	1028	.4	7.2	187	12.7	--	--	--	--
AUG 28...	1100	9813	1028	.5	8.1	187	12.6	--	--	--	--

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 19...	79	--	--	--	--	--	--	<.020	<.02	<.06
NOV 16...	74	--	--	--	--	--	--	<.020	<.02	<.06
DEC 13...	89	<.20	2.9	<.2	17.4	13.2	118	<.020	--	<.06
JAN 2001 18...	78	--	--	--	--	--	--	<.020	<.02	<.06
FEB 27...	72	--	--	--	--	--	--	<.020	<.02	<.06
MAR 28...	69	<.20	3.0	<.2	15.4	13.0	202	<.020	--	<.06
MAY 03...	74	--	--	--	--	--	--	<.020	<.02	<.06
29...	83	--	--	--	--	--	--	<.020	<.02	<.06
JUN 26...	85	<.20	3.1	<.2	17.4	13.2	92	<.020	--	<.06
JUL 19...	72	--	--	--	--	--	--	<.020	<.02	<.06
AUG 28...	79	--	--	--	--	--	--	<.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									
19...	<.040	<.040	<.010	<.010	--	--	--	--	--
NOV									
16...	<.040	<.040	<.010	.010	--	--	--	--	--
DEC									
13...	<.040	<.040	<.010	<.010	<1.0	<200	110	22.0	<10
JAN 2001									
18...	<.040	<.040	<.010	<.010	--	--	--	--	--
FEB									
27...	<.040	<.040	<.010	<.010	--	--	--	--	--
MAR									
28...	<.040	<.040	<.010	<.010	<1.0	<200	30	22.0	<10
MAY									
03...	<.040	<.040	<.010	<.010	--	--	--	--	--
29...	<.040	<.040	<.010	<.010	--	--	--	--	--
JUN									
26...	<.040	<.040	<.010	<.010	<1.0	<200	60	21.0	<10
JUL									
19...	<.040	<.040	<.010	<.010	--	--	--	--	--
AUG									
28...	<.040	<.040	.010	<.010	--	--	--	--	--