

**CHESTER COUNTY**

**395052075434501. Local number, CH 5176**  
**(New Garden Township, Chester County, Spray Irrigation Project)**

**LOCATION.**--Lat 39°50'52", long 75°43'45", 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 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 338.6 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of plywood shelf, 3.2 ft above land-surface datum.

**REMARKS.**--In addition to the daily mean water levels shown below, daily maximum and minimum water levels, since July 1998, are also available from the District Office. Other data for this project are presented in tables on pages 318-328 and 426-435.

**PERIOD OF RECORD.**--July 14, 1998 to current year. (discontinued)

**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, 7.83 ft below land-surface datum, Apr. 22, 2000; lowest, 13.47 ft below land-surface datum, Jan. 1-3, 1999.

**EXTREMES FOR CURRENT YEAR.**--Highest water level, 9.69 ft below land-surface datum, Oct. 18; lowest, 10.59 ft below land-surface datum, Jan. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
 INSTANTANEOUS VALUES

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	9.69	NOV 7	10.15	DEC 5	10.36	JAN 10	10.59

**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 December 2001. (discontinued)

WATER-QUALITY DATA, OCTOBER 2001 TO DECEMBER 2001

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (CODE (00028)	AGENCY COL-LECTING SAMPLE NUMBER (CODE (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)
OCT 2001 18...	1000	9813	1028	1.7	6.8	525	12.3	65.2	9.86
NOV 07...	1300	9813	1028	2.4	6.7	516	12.4	--	--
DEC 05...	1130	9813	1028	--	6.7	500	12.5	67.7	10.1

Date	Time	POTAS-SIUM, 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)	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)
OCT 2001 18...	4.89	11.0	97	<.2	40.5	<.20	24.4	26.4	470	
NOV 07...	--	--	140	--	--	--	--	--	--	
DEC 05...	<1.00	10.8	102	<.2	42.3	<.20	27.8	27.3	492	

Date	Time	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)	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)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L) (AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (AS C) (00681)
OCT 2001 18...	<.020	--	17	16.2	.310	.018	.010	<1.0	
NOV 07...	<.020	<.020	16	14.7	.300	.016	<.010	--	
DEC 05...	<.020	--	17	14.4	.270	.016	.013	<1.0	

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WATER-QUALITY DATA, OCTOBER 2001 TO DECEMBER 2001

Date	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)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (µG/L AS CR) (01030)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)
OCT 2001 18...	<2	<4.0	285	<200	<10	<4	<4	40
NOV 07...	--	--	--	--	--	--	--	--
DEC 05...	<2	<4.0	299	<200	<10	<4	<4	<20

  

Date	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	LITHIUM DIS-SOLVED (µG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY DIS-SOLVED (µG/L AS HG) (71890)	NICKEL, DIS-SOLVED (µG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (µG/L AS SE) (01145)	STRONTIUM, DIS-SOLVED (µG/L AS SR) (01080)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
OCT 2001 18...	<1.0	<20	<10	.51	<4.0	<7	240	10
NOV 07...	--	--	--	--	--	--	--	--
DEC 05...	<1.0	<20	<10	<.20	<4.0	<7	260	<10