

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 National Geodetic Vertical Datum of 1929. 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. Other data for this project are presented in tables on pages 318-328 and 426-435.

PERIOD OF RECORD.--September 11, 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, 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, 13.42 ft below land-surface datum, Oct. 11; lowest, 18.79 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 11	13.42	NOV 5	15.50	DEC 3	17.29	JAN 10	18.79

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 December 2001. (discontinued)

WATER-QUALITY DATA, OCTOBER 2001 TO DECEMBER 2001

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	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 AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)		
OCT 2001										
11...	1100	9813	1028	6.4	121	14.0	13.4	2.72		
NOV 05...	1100	9813	1028	6.3	120	11.7	--	--		
DEC 03...	1600	9813	1028	6.4	120	12.3	12.6	2.52		
Date		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										
11...	1.56	5.37	29	<.2	2.3	<.20	21.1	21.0	106	
NOV 05...	--	--	23	--	--	--	--	--	--	
DEC 03...	1.47	4.92	27	<.2	2.4	<.20	19.7	20.2	112	
Date		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										
11...	<.020	--	1.1	.85	<.040	.037	.035	<1.0		
NOV 05...	<.020	<.020	2.3	.86	<.040	.042	.035	--		
DEC 03...	<.020	--	1.2	.86	<.040	.037	.038	<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 11...	<2	<4.0	36.4	<200	<10	<4	<4	<20
NOV 05...	--	--	--	--	--	--	--	--
DEC 03...	<2	<4.0	38.8	<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 11...	<1.0	40	<10	<.20	<4.0	<7	60	<10
NOV 05...	--	--	--	--	--	--	--	--
DEC 03...	<1.0	<20	<10	<.20	<4.0	<7	50	<10