

CHESTER COUNTY

395046075434401. Local number, CH 5180
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION.--Lat 39°50'46", long 75°43'44", 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 32 ft, cased to 30 ft, closed end, screened from 20-30 ft.

INSTRUMENTATION.--Electronic data logger with 60-minute recording interval.

DATUM.--Elevation of land surface is 400.9 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of plywood shelf, 1.3 ft above land-surface datum.

REMARKS.--In addition to the daily mean water levels shown below, daily maximum and minimum water levels, since August 1999, 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.--August 9, 1999 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, 16.85 ft below land-surface datum, Sept. 21, 1999; lowest, 30.00 ft below land-surface datum, Mar. 26, 2001.

EXTREMES FOR CURRENT YEAR.--Highest water level, 22.38 ft below land-surface datum, Oct. 9; lowest, 28.95 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 9	22.38	NOV 6	25.44	DEC 5	27.72	JAN 10	28.95

WATER-QUALITY RECORDS

REMARKS.--Samples collected with disposable bailer or a submersible pump 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.--June 1999 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)	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 AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 2001	11...	9813	1028	2.2	5.7	389	12.8	34.8	20.7
NOV	06...	9813	1028	3.4	5.8	400	13.0	--	--
DEC	05...	9813	1028	--	5.7	417	14.2	34.1	19.0

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	3.54	6.41	30	<.2	79.0	<.20	8.26	26.0	328
NOV	--	--	32	--	--	--	--	--	--
DEC	3.25	6.41	28	<.2	74.1	<.20	9.16	25.8	282

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	.200	--	3.2	2.86	<.040	.031	.027	1.5
NOV	.520	.390	4.7	3.68	<.040	.056	.044	--
DEC	1.08	--	5.0	2.76	<.040	.137	.248	3.2

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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	124	<200	<10	<4	<4	70
NOV 06...	--	--	--	--	--	--	--	--
DEC 05...	<2	<4.0	138	<200	<10	<4	<4	110

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	30	<10	<.20	<4.0	<7	200	60
NOV 06...	--	--	--	--	--	--	--	--
DEC 05...	<1.0	<20	10	<.20	M	<7	240	240