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 372 ft above sea level from a GPS unit. 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 minum water levels, since Sept. 1998, are also available from the land of the contract of th the District Office. Data for this project are presented in tables on pages 308-313 and 499-542.

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, 13.46 ft below land-surface datum, Sept. 30, 1999; lowest, 24.44 ft below land-surface datum, Jan. 13, 14, 1999.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 DAILY MEAN VALUES

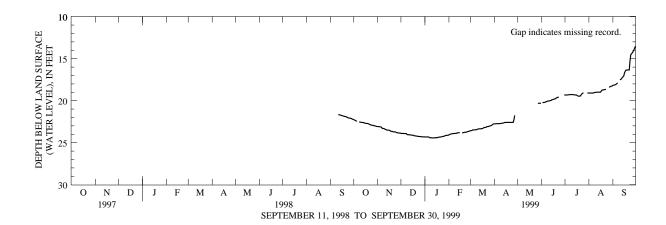
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												21.66
12												21.67
13												21.69
14												21.71
15												21.76
16												21.78
17												21.81
18												21.84
19												21.87
20												21.89
21												21.90
22												21.95
23												22.01
24												22.04
25												22.06
26												22.08
27												22.09
28												22.11
29												22.19
30												22.21
31												
MEAN												21.92
MAX												21.92
MTN												22.21

395048075434702. Local number, CH 5175--Continued

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	22.26 22.30 22.35 22.41 22.45	23.08 23.09 23.10 23.11 23.11	23.89 23.90 23.90 23.90 23.91	24.31 24.32 24.31 24.32 24.32	24.07 24.00 23.99 23.95 23.94	23.57 23.56 23.53 23.47 23.47	22.76 22.75 22.74 22.73 22.73	 	20.25 20.22 20.20 20.20	19.31 19.32 19.32 19.31 19.30	19.09 19.09 19.09 19.09 19.09	18.17 18.15 18.14 18.10 18.05
6 7 8 9 10	22.54 22.54 22.56	23.20 23.30 23.30 23.31 23.38	23.91 23.91 23.92 24.03 24.05	24.32 24.39 24.42 24.40 24.42	23.92 23.91 23.90 23.90 23.89	23.47 23.46 23.46 23.44 23.40	22.73 22.73 22.73 22.71 22.69	 	20.16 20.10 20.07 20.05 20.04	19.29 19.28 19.28 19.27 19.26	19.09 19.09 19.02 19.00 19.00	17.97 17.87 17.50
11 12 13 14 15	22.58 22.60 22.60 22.61 22.66	23.41 23.47 23.49 23.50 23.51	24.06 24.06 24.06 24.09 24.10	24.43 24.42 24.42 24.43 24.39	23.88 23.82 23.82 23.81 23.80	23.36 23.35 23.35 23.35 23.35	22.68 22.66 22.64 22.59 22.58	 	20.02 19.99 19.96 19.89 19.87	19.28 19.29 19.29 19.31 19.31	18.99 18.98 18.98 18.98 18.98	17.46 17.40 17.24 17.15 17.06
16 17 18 19 20	22.69 22.70 22.71 22.71 22.76	23.52 23.57 23.64 23.65 23.66	24.10 24.11 24.16 24.18 24.19	24.40 24.41 24.35 24.34 24.33	23.84 23.82 23.79	23.33 23.29 23.21 23.19 23.19	22.58 22.58 22.58 22.58 22.58	 	19.84 19.80 19.77 19.76 19.66	19.32 19.41 19.45 19.45 19.45	18.98 18.86 18.73 18.72 18.71	16.69 16.48 16.35 16.34 16.34
21 22 23 24 25	22.80 22.84 22.90 22.91 22.91	23.70 23.71 23.71 23.72 23.78	24.20 24.22 24.25 24.25 24.26	24.32 24.31 24.29 24.25 24.24	23.76 23.76 23.75 23.74 23.69	23.16 23.09 23.09 23.07 23.03	22.58 22.58 22.58 22.58 22.58	 	19.62 19.59 19.55 	19.44 19.27 19.18 19.10 19.07	18.69 18.66 18.64 	16.34 16.34 15.32 14.52 14.41
26 27 28 29 30 31	22.93 22.98 22.98 23.02 23.04 23.07	23.80 23.83 23.84 23.85 23.85	24.26 24.29 24.30 24.30 24.31 24.31	24.23 24.17 24.13 24.12 24.11 24.11	23.65 23.64 23.60 	23.01 22.98 22.95 22.87 22.79 22.77	22.29 21.75 	20.31 20.31 20.31 20.30 20.28	19.30	19.09 19.09 19.09	18.38 18.37 18.30 18.27 18.24	14.30 14.15 13.99 13.76 13.52
MEAN MAX MIN	22.70 23.07 22.26	23.51 23.85 23.08	24.11 24.31 23.89	24.31 24.43 24.11	23.83 24.07 23.60	23.24 23.57 22.77	22.60 22.76 21.75	20.30 20.31 20.28	19.91 20.25 19.30	19.28 19.45 19.07	18.83 19.09 18.24	16.40 18.17 13.52

WTR YR 1999: HIGHEST 13.52, SEPTEMBER 30; LOWEST 24.43, JANUARY 11, 14.



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

WATER-QUALITY RECORDS

REMARKS.-- Samples collected with submersible pump from recovery water after well was pumped dry. **PERIOD OF RECORD.**--May 1998 to current year.

WATER-QUALITY DATA, MAY 1998 TO SEPTEMBER 1999

						,					
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)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	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)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
MAY 1998 22	0930	80020	1028		6.3	6.8	125		14	2.4	1.6
OCT											
06 FEB 1999	1145	80020	1028	10.5	6.2	6.7	134	13.5	13	2.4	1.5
17 APR	1010	80020	1028	10.0	6.6	6.7	123	10.5	11	2.3	1.4
28 JUN	1435	80020	1028	11.0	6.0	6.5	133	14.5	12	2.4	1.6
01 28 JUL	1300 1230	80020 9813	1028 1028		6.4 5.9		165 188	12.5 13.5	12	2.2	1.4
26	1600	9813	1028		5.9		129	14.9			
AUG 24	1500	9813	1028		6.8		127	13.0			
SEP 23	1300	9813	1028		6.4		138	14.5	13	2.4	1.5
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	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)	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)
MAY 1998 22	5.7	37	2.5	<.10	20	22	.053	<.10			.613
OCT	6.0	27	2.5	<.10	21	21		.10			
06 FEB 1999							<.020				
17 APR	10	36	2.5	<.10	22	21	<.020	E.06			
28 JUN	10	25	1.5	<.10	21	39	<.020	.16			
01 28 JUL	12	33 32	2.4	<.20	23	21	<.020 <.020		.060	1.0	.770 .790
26 AUG		32					.020		.030	1.2	.830
24 SEP		33					E.050		.050	1.5	.840
23	10	31	2.6	<.20	22	22	<.020			1.3	.910
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	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)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (µG/L AS SB) (01095)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	DIS-
MAY 1998	605		0.1.4	005	010	110	0.1	1.0	1.0		2.0
22 OCT	.627		.014	.027	.010	.118	91	<10	<1.0	<1	39
06 FEB 1999	.818	.92	<.010	E.031	.027	.095	90	<10			
17 APR	.806		<.010	.078	.057	.252	98	<10			
28 JUN	.713	.88	<.010	.095	.052	.271	101	<10			
01			<.040	.082	.072						
28 JUL			<.040	.125	.057		114				
26 AUG			<.040	.126	.044						
24 SEP			<.040	.189	.080						
23			< .040	.148	.064		58		<2.0	<4	34

395048075434702. Local number, CH 5175--Continued

WATER-QUALITY DATA, MAY 1998 TO SEPTEMBER 1999

DATE	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	BORON, DIS- SOLVED (µG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)
MAY 1998										
22 OCT	<1.0	<16		<8.0	1.5	<12	<1.0	<10	<1.0	<4
06 FEB 1999		<16						14		
17 APR		<16						<10		
28 JUN		E9.4						E7.3		
01		 <200	 <.20					 <20		
JUL										
26 AUG										
24 SEP										
23		<200	<.20	<10	<4.0		<4.0	<20	<1.0	<25
DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY DIS- SOLVED (μG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAY 1998 22	NESE, DIS- SOLVED (μG/L AS MN)	DIS- SOLVED (µG/L AS HG)	DENUM, DIS- SOLVED (µG/L AS MO)	DIS- SOLVED (µG/L AS NI)	NIUM, DIS- SOLVED (µG/L AS SE)	DIS- SOLVED (µG/L AS AG)	TIUM, DIS- SOLVED (µG/L AS SR)	DIUM, DIS- SOLVED (µG/L AS V)	DIS- SOLVED (µG/L AS ZN)	ORGANIC DIS- SOLVED (MG/L AS C)
MAY 1998 22 OCT 06	NESE, DIS- SOLVED (µG/L AS MN) (01056)	DIS- SOLVED (µG/L AS HG) (71890)	DENUM, DIS- SOLVED (µG/L AS MO) (01060)	DIS- SOLVED (µG/L AS NI) (01065)	NIUM, DIS- SOLVED (µG/L AS SE) (01145)	DIS- SOLVED (µG/L AS AG) (01075)	TIUM, DIS- SOLVED (µG/L AS SR) (01080)	DIUM, DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (µG/L AS ZN) (01090)	ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAY 1998 22 OCT 06 FEB 1999 17	NESE, DIS- SOLVED (µG/L AS MN) (01056)	DIS- SOLVED (µG/L AS HG) (71890)	DENUM, DIS- SOLVED (µG/L AS MO) (01060)	DIS- SOLVED (µG/L AS NI) (01065)	NIUM, DIS- SOLVED (µG/L AS SE) (01145)	DIS- SOLVED (µG/L AS AG) (01075)	TIUM, DIS- SOLVED (µG/L AS SR) (01080)	DIUM, DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (µG/L AS ZN) (01090)	ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAY 1998 22 OCT 06 FEB 1999 17 APR 28	NESE, DIS- SOLVED (µG/L AS MN) (01056)	DIS- SOLVED (µG/L AS HG) (71890)	DENUM, DIS- SOLVED (MG/L AS MO) (01060)	DIS- SOLVED (µG/L AS NI) (01065)	NIUM, DIS- SOLVED (µG/L AS SE) (01145)	DIS- SOLVED (µG/L AS AG) (01075)	TIUM, DIS- SOLVED (µG/L AS SR) (01080)	DIUM, DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (µG/L AS ZN) (01090)	ORGANIC DIS- SOLVED (MG/L AS C) (00681)
MAY 1998 22 OCT 06 FEB 1999 17 APR 28 JUN 01 28	NESE, DIS- SOLVED (μG/L AS MN) (01056) 51 12	DIS- SOLVED (µG/L AS HG) (71890) <.1 	DENUM, DIS- SOLVED (μG/L AS MO) (01060)	DIS- SOLVED (µG/L AS NI) (01065)	NIUM, DIS- SOLVED (µG/L AS SE) (01145)	DIS- SOLVED (µG/L AG) (01075) <1.0	TIUM, DIS- SOLVED (µG/L AS SR) (01080) 57	DIUM, DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (µG/L AS ZN) (01090) 174 62 201	ORGANIC DIS- SOLVED (MG/L AS C) (00681) 1.2 .80
MAY 1998 22 OCT 06 FEB 1999 17 APR 28 JUN 01 28 JUL 28	NESE, DIS- SOLVED (μG/L AS MN) (01056) 51 12 14	DIS- SOLVED (μG/L AS HG) (71890) <.1 	DENUM, DIS- SOLVED (μG/L AS MO) (01060) <60 	DIS- SOLVED (µG/L AS NI) (01065) 5.0	NIUM, DIS- SOLVED (µG/L AS SE) (01145) 4 	DIS- SOLVED (µG/L AS AG) (01075) <1.0 	TIUM, DIS- SOLVED (µG/L AS SR) (01080) 57	DIUM, DIS- SOLVED (µG/L AS V) (01085) <10 	DIS- SOLVED (µG/L AS ZN) (01090) 174 62 201 182	ORGANIC DIS- SOLVED (MG/L AS C) (00681) 1.2 .80 2.4
MAY 1998 22 OCT 06 FEB 1999 17 APR 28 JUN 01 28 JUL	NESE, DIS- SOLVED (μG/L AS MN) (01056) 51 12 14 13	DIS- SOLVED (μG/L AS HG) (71890) <.1 	DENUM, DIS- SOLVED (μG/L AS MO) (01060) <60	DIS- SOLVED (µG/L AS NI) (01065) 5.0 	NIUM, DIS- SOLVED (µG/L AS SE) (01145) 4 	DIS- SOLVED (µG/L AS AG) (01075) <1.0 	TIUM, DIS- SOLVED (µG/L AS SR) (01080) 57	DIUM, DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (µG/L AS ZN) (01090) 174 62 201 182 <10	ORGANIC DIS- SOLVED (MG/L AS C) (00681) 1.2 .80 2.4