

## Water-Data Report 2007

**404921074335601 Local number 270023 Mt Freedom 2 Obs**

Piedmont and Blue Ridge crystalline-rock aquifers  
Precambrian Erathem

Morris County, NJ

LOCATION.--Lat 40°49'21", long 74°33'56" referenced to North American Datum of 1927, Randolph Township, Morris County, NJ, Hydrologic Unit 02030103, 440 ft north of the intersection of Phyllis Place and Leonard Lane.

**GROUND-WATER RECORDS**

WELL CHARACTERISTICS.--Depth 218 ft. Upper casing diameter 6 in, top of first opening 11 ft, bottom of last opening 218 ft. Drilled observation well.

DATUM.--Land-surface datum is 800 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of base of locking cap, 4.61 ft above land-surface datum, April 1, 1994, to present. The land surface elevation was determined from a digital elevation model.

PERIOD OF RECORD.--Jan. 1964 to current year.

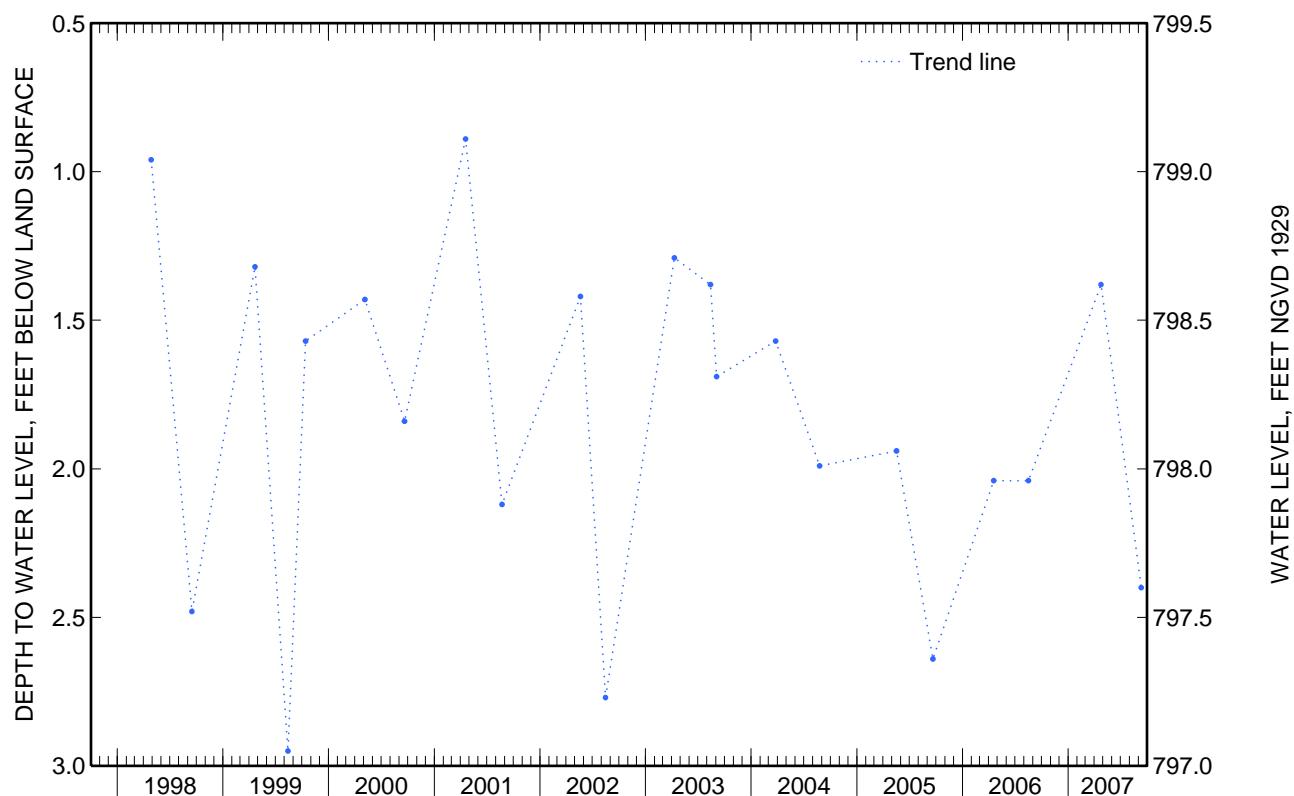
GAGE.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Apr. 1977 to July 1984. Periodic measurements, July 1970 to Apr. 1977. Water-level recorder, Jan. 1964 to July 1970.

REMARKS.--Water level is occasionally affected by nearby pumping.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.02 ft above land surface, between Apr. 3 and July 9, 1984; lowest, 15.29 ft below land surface, between Aug. 26 and Oct. 8, 1980.

**WATER LEVELS IN FEET BELOW LAND SURFACE DATUM  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Date	Water level	Date	Water level
Apr 24	1.38	Sep 10	2.40

**404921074335601 Local number 270023 Mt Freedom 2 Obs—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--WY 2007.

REMARKS.--Middle Proterozoic Metamorphic rock.

COOPERATION.—Water-quality samples were collected as part of the North New Jersey Radionuclide project, in cooperation with the New Jersey Department of Environmental Protection.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Sample type	Turbdty white light, det ang 90+/-30 corrctd	Baro- metric pres- sure, NTRU (63676)	pH, water, unfltrd solved oxygen, mm Hg (00025)	Specif- ic conduc- tance, field, std units	Temper- ature, wat unf μS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor- ide, water, fltrd, mg/L (00940)
Sep 04...	1320	Environmental	2.3	744	5.4	6.7	504	22.0	11.0	53.9	97	86.0
04...	1320	Replicate	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (00608)	Nitrate + nitrite water, fltrd, mg/L (00631)	Ortho- phosphate, water, fltrd, mg/L (00613)	E coli, Defined Substr.	Total coli- form, Tech., water, MPN/ 100 mL (50468)	Arsen- ite, water, fltrd, μg/L as As (50569)	Arsen- ite, water, fltrd, μg/L as As (62453)	Barium, water, fltrd, μg/L (01005)	Iron, water, fltrd, μg/L (01046)	
Sep 04...	27.2	3.49	<.020	2.57	.003	.019	<1	<1	E.2	<.12	<.18	15.1
04...	--	--	--	--	--	--	--	--	--	--	--	--

404921074335601 Local number 270023 Mt Freedom 2 Obs—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Mangan-	Stront-	Alpha radioac	Alpha radioac	Alpha radioac	Ra-226 2-sigma	Ra-226 water, filtrd,	Ra-226 water, filtrd,	Ra-228 water, filtrd,	Ra-228 water, filtrd,	Ra-228 water, filtrd,	Rn-222 count-
	ese, water, fltrd,	ium, water, fltrd,	2-sigma 72 hr, Th-230,	mdc, 72 hr, Th-230,	MDC, water, filtrd, Th-230,	gamma count, pCi/L (99324)	MDC, water, filtrd, pCi/L (50911)	gamma count, pCi/L (99325)	MDC, water, filtrd, pCi/L (50837)	gamma count, pCi/L (50840)	gamma count, pCi/L (99326)	ing error, water, unfltrd (50839) (82302)
Sep												
04...	2.0	168	.82	.7	1	.46000	.19	.47000	E.04	.32	.97000	E.04
04...	--	--	.74	.7	1	--	.38	.47000	E.36	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2006 TO**  
**SEPTEMBER 2007**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Uranium		
	Rn-222, pCi/L (82305)	natural water, filtrd, μg/L (22703)	Data base number
Sep			
04...	1,560	2.27	01
04...	--	--	27