

CITY OF NEWPORT NEWS

371027076335601. Local number, 58F 1 SOW 002.

LOCATION.--Lat 37°10'27", long 76°33'56", Hydrologic Unit 02080206, on shore of Lee Hall Reservoir, 0.15 mi north of intersection of State Highway 105 and U.S. Highway 60, and 0.65 mi northeast of Fort Eustis in Newport News. Owner: City of Newport News.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 431.3 ft, diameter 8 in. from 431.3 to 443 ft, diameter 6 in. from 443 to 497 ft, depth 497 ft, screened 476 to 493 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

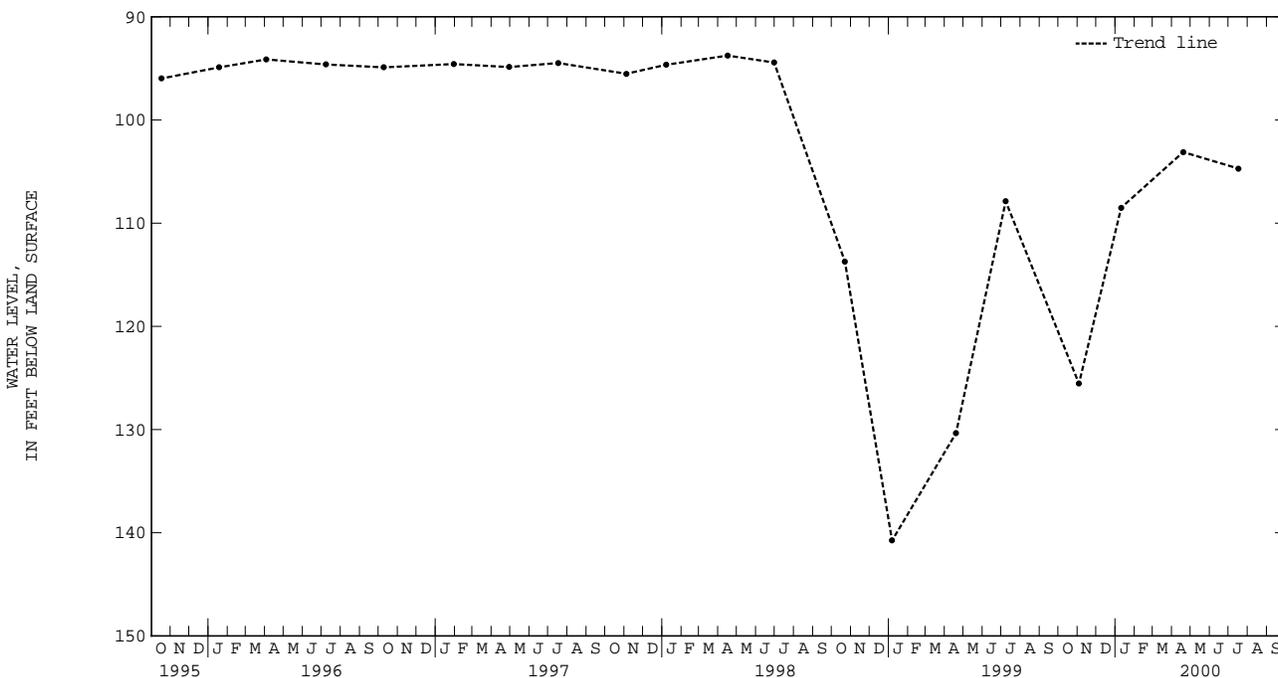
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. This well is known to contain dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--January 1968 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.76 ft below land-surface datum, May 10, 1969; lowest measured, 140.75 ft below land-surface datum, Jan. 6, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|
| NOV 03 | 125.55 | JAN 10 | 108.50 | APR 19 | 103.11 | JUL 17 | 104.71 |
| WATER YEAR 2000 | | HIGHEST | 103.11 | APR 19, 2000 | | LOWEST | 125.55 |
| | | | | | | | NOV 03, 1999 |



GROUND-WATER LEVELS
CITY OF NEWPORT NEWS

371208076341101. Local number, 58F 50 SOW 171A.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,236 ft, screened 1,205 to 1,215 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to May 8, 1997, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.85 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. This well is known to contain dissolved solids greater than 1,000 mg/L.

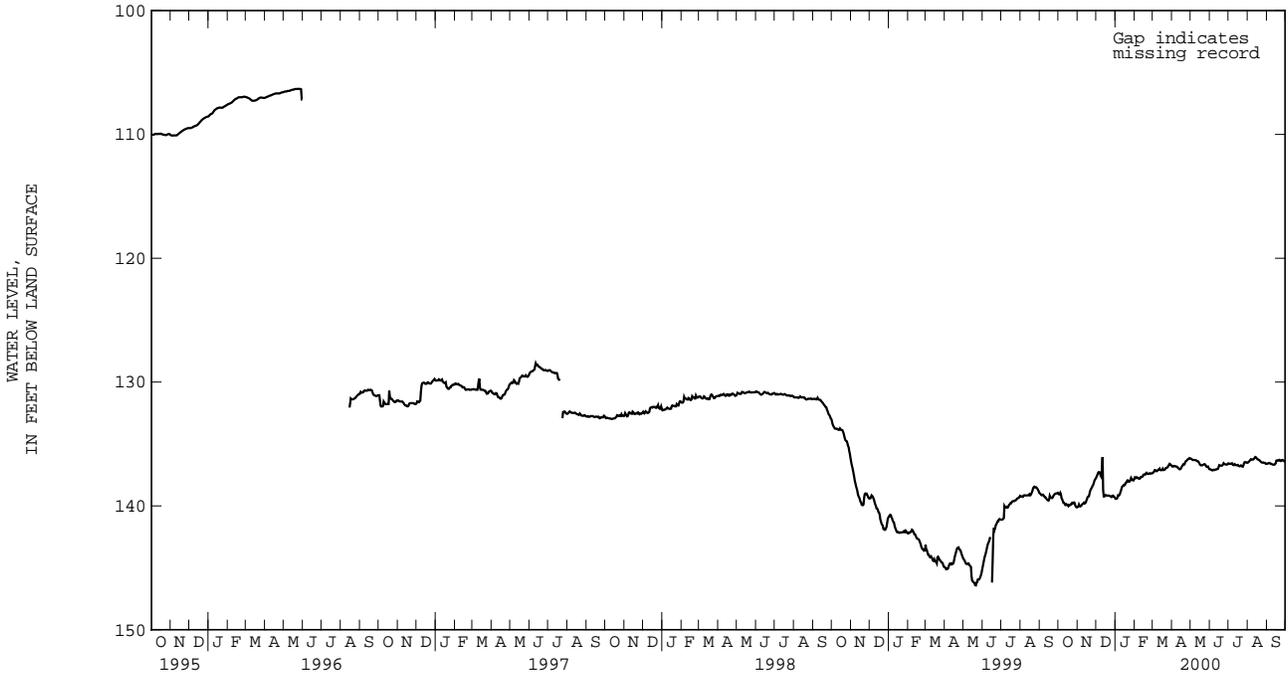
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 106.32 ft below land-surface datum, May 23-27, 1996; lowest recorded, 146.42 ft below land-surface datum, May 21, 1999.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 135.33 ft below land-surface datum, Dec. 12; lowest instantaneous water level, 140.12 ft below land-surface datum, Oct. 31.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | 139.08 | 140.04 | 137.27 | 139.14 | 137.71 | 137.11 | 136.78 | 136.30 | 137.13 | 136.58 | 136.30 | 136.53 |
| 10 | 139.76 | 139.80 | 137.12 | 138.72 | 137.73 | 137.06 | 136.91 | 136.32 | 137.06 | 136.70 | 136.25 | 136.66 |
| 15 | 139.92 | 139.57 | 139.15 | 138.34 | 137.48 | 137.11 | 137.00 | 136.57 | 136.87 | 136.71 | 136.14 | 136.55 |
| 20 | 139.93 | 139.02 | 139.18 | 137.94 | 137.32 | 137.08 | 136.67 | 136.71 | 136.75 | 136.78 | 136.33 | 136.30 |
| 25 | 139.76 | 138.37 | 139.28 | 137.91 | 137.36 | 136.86 | 136.32 | 136.71 | 136.63 | 136.71 | 136.51 | 136.29 |
| EOM | 140.12 | 137.79 | 139.35 | 137.82 | 137.36 | 136.73 | 136.17 | 137.03 | 136.58 | 136.52 | 136.61 | 136.43 |



CITY OF NEWPORT NEWS

371208076341102. Local number, 58F 51 SOW 171B.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 851 ft, screened 820 to 830 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to Apr. 24, 1996, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.80 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. This well is known to contain dissolved solids greater than 1,000 mg/L.

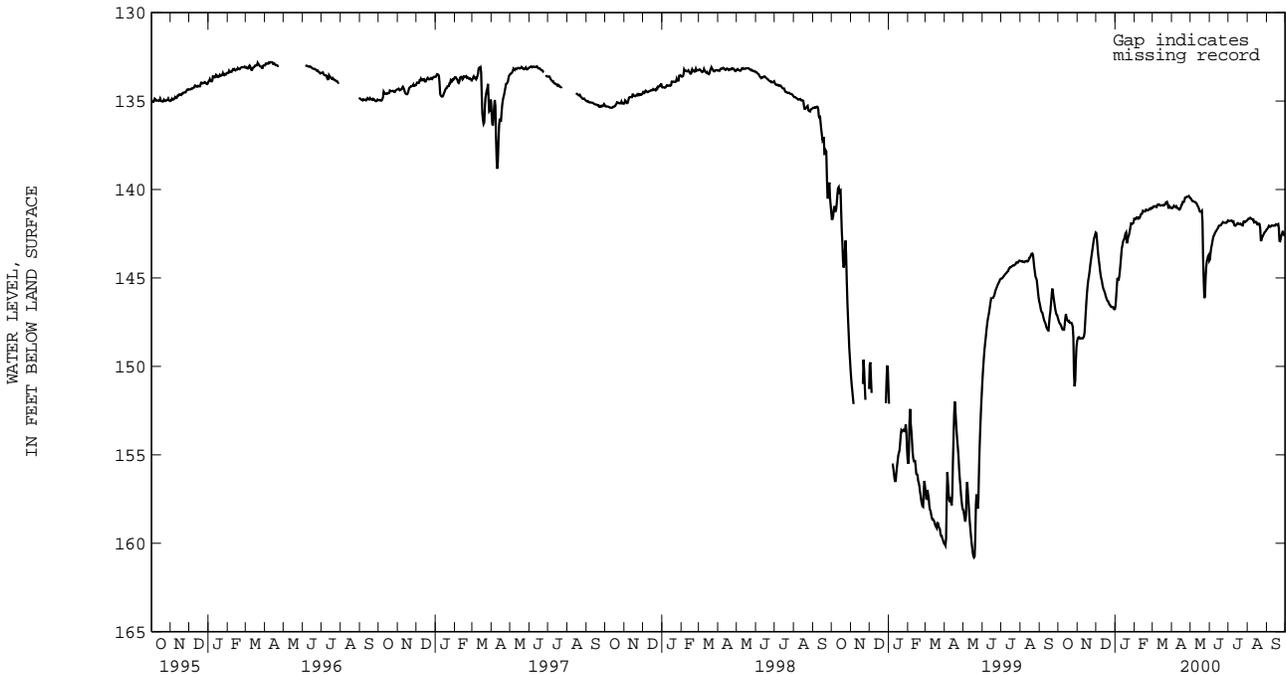
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 126.35 ft below land-surface datum, Mar. 23-25, 1985; lowest recorded, 160.80 ft below land-surface datum, May 18, 1999.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 140.33 ft below land-surface datum, Apr. 25; lowest instantaneous water level, 151.13 ft below land-surface datum, Oct. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | 147.69 | 148.43 | 143.98 | 145.09 | 141.60 | 140.94 | 140.96 | 140.66 | 142.94 | 141.76 | 141.60 | 142.08 |
| 10 | 147.93 | 148.37 | 145.18 | 143.75 | 141.48 | 140.85 | 141.06 | 140.78 | 142.40 | 142.00 | 141.70 | 142.04 |
| 15 | 147.36 | 146.34 | 145.86 | 142.80 | 141.24 | 140.90 | 141.01 | 141.19 | 142.08 | 141.92 | 141.85 | 141.97 |
| 20 | 147.53 | 144.67 | 146.32 | 142.99 | 141.15 | 140.85 | 140.70 | 141.81 | 141.93 | 141.93 | 141.96 | 142.18 |
| 25 | 148.34 | 143.32 | 146.64 | 142.10 | 141.08 | 140.81 | 140.40 | 145.03 | 141.88 | 141.82 | 142.65 | 142.53 |
| EOM | 148.60 | 142.43 | 146.76 | 141.65 | 141.05 | 141.05 | 140.48 | 144.02 | 141.75 | 141.74 | 142.27 | 142.52 |



GROUND-WATER LEVELS
CITY OF NEWPORT NEWS

371208076341103. Local number, 58F 52 SOW 171C.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 537 ft, screened 527 to 537 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 24, 1996, digital recorder 60-minute punch. October 1993 to June 1994, occasional measurement with chalked tape by USGS personnel. Prior to October 1993, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 3.1 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. This well is known to contain dissolved solids greater than 1,000 mg/L.

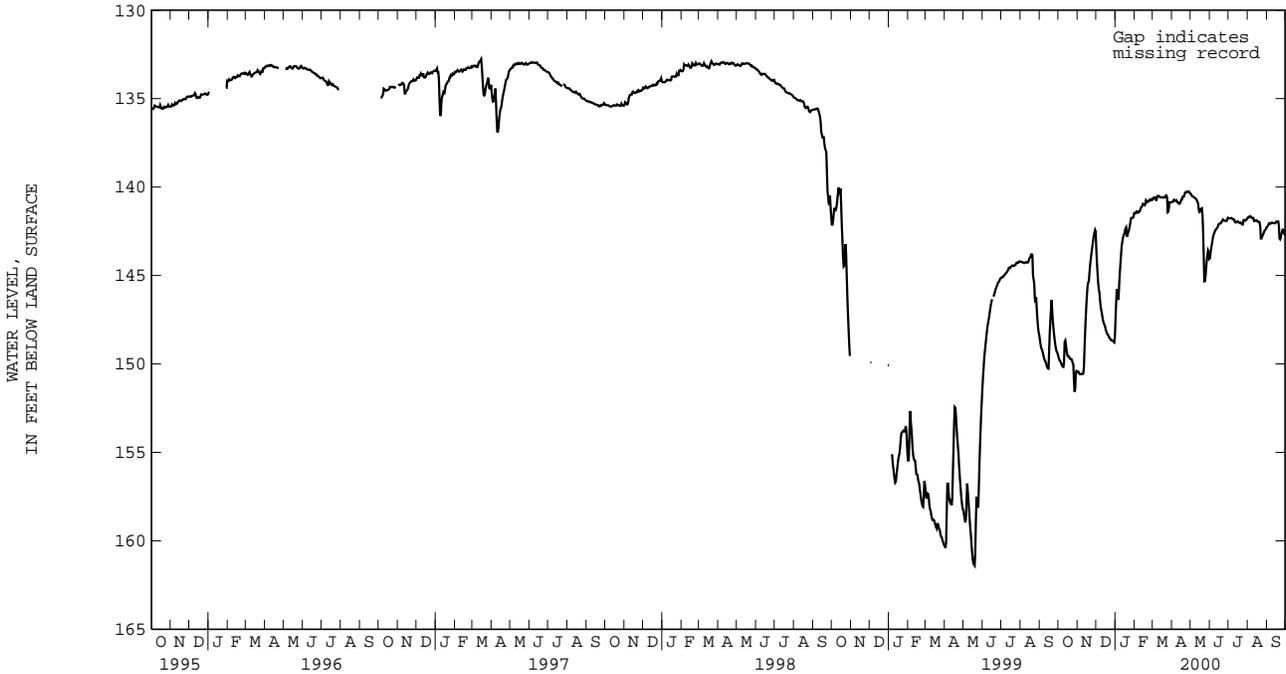
PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 128.12 ft below land-surface datum, Mar. 23, 1985; lowest measured, 161.40 ft below land-surface datum, May 19, 1999.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 140.18 ft below land-surface datum, Apr. 25; lowest instantaneous water level, 151.57 ft below land-surface datum, Oct. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | 149.94 | 150.58 | 145.80 | 146.38 | 141.40 | 140.60 | 140.75 | 140.54 | 143.04 | 141.75 | 141.65 | 142.06 |
| 10 | 149.88 | 150.53 | 147.15 | 143.74 | 141.25 | 140.52 | 140.87 | 140.70 | 142.42 | 141.84 | 141.75 | 142.03 |
| 15 | 149.44 | 146.63 | 147.88 | 142.66 | 140.97 | 140.59 | 140.82 | 141.41 | 142.10 | 141.94 | 141.88 | 141.99 |
| 20 | 149.70 | 144.83 | 148.36 | 142.76 | 140.80 | 140.57 | 140.54 | 141.57 | 141.94 | 142.00 | 141.99 | 142.17 |
| 25 | 150.05 | 143.25 | 148.67 | 141.96 | 140.72 | 141.42 | 140.25 | 144.99 | 141.90 | 141.87 | 142.72 | 142.57 |
| EOM | 150.44 | 142.54 | 148.42 | 141.47 | 140.72 | 140.85 | 140.37 | 144.06 | 141.74 | 141.79 | 142.29 | 142.64 |



CITY OF NEWPORT NEWS

371208076341104. Local number, 58F 53 SOW 171D.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 343 ft, screened 333 to 343 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 2.9 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown and occasional pumpage for water-quality sampling. This well is known to contain dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.18 ft below land-surface datum, Feb. 2, 1985; lowest recorded, 64.98 ft below land-surface datum, Aug. 12, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|
| OCT 06 | 64.34 | DEC 09 | 64.45 | APR 20 | 64.39 | AUG 07 | 64.79 |
| NOV 03 | 64.17 | FEB 16 | 64.40 | JUL 06 | 64.94 | | |
| WATER YEAR 2000 | | HIGHEST | 64.17 | NOV 03, 1999 | LOWEST | 64.94 | JUL 06, 2000 |



GROUND-WATER LEVELS
CITY OF NEWPORT NEWS

371208076341105. Local number, 58F 54 SOW 171E.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 88 ft, screened 78 to 88 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch. Digital recorder was removed from Oct. 18, 1991 to Jul. 8, 1992. During this period, occasional measurements with chalked tape.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Jul. 8, 1992; 1.6 ft thereafter.

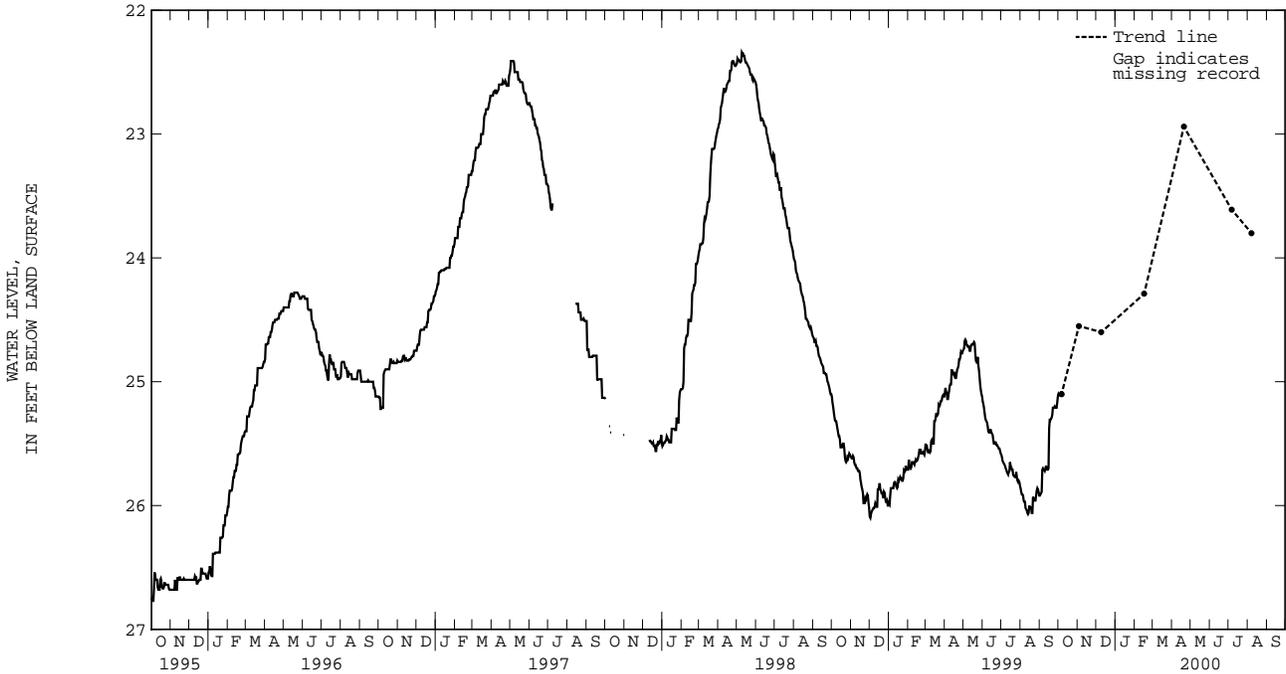
REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling. Occasional stepping in hydrograph due to well not being plum and float rubbing the side of the casing.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.05 ft below land-surface datum, May 20, 21, 1993; lowest recorded, 27.34 ft below land-surface datum, Nov. 1, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------|-------------|--------|--------------|--------|--------------|
| OCT 06 | 25.10 | DEC 09 | 24.60 | APR 20 | 22.94 | AUG 07 | 23.80 |
| NOV 03 | 24.55 | FEB 16 | 24.29 | JUL 06 | 23.61 | | |
| WATER YEAR 2000 | | | HIGHEST | 22.94 | APR 20, 2000 | LOWEST | 25.10 |
| | | | | | | | OCT 06, 1999 |



CITY OF NEWPORT NEWS

371208076341106. Local number, 58F 55 SOW 171F.

LOCATION.--Lat 37°12'08", long 76°34'11", Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.04 ft below land-surface datum, May 21-24, 1993; lowest recorded, 29.12 ft below land-surface datum, Oct. 29, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|
| OCT 06 | 26.23 | DEC 09 | 26.37 | APR 20 | 23.59 | AUG 07 | 25.74 |
| NOV 03 | 25.79 | FEB 16 | 25.29 | JUL 06 | 25.53 | | |
| WATER YEAR 2000 | | HIGHEST | 23.59 | APR 20, 2000 | LOWEST | 26.37 | DEC 09, 1999 |

