

FAYETTE COUNTY

352226089330101. Local number, Fa:R-1.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.2 mi southeast of U.S. Highway 70, near Braden.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Fort Pillow Sand of Wilcox Group of early Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in., depth 1,022.5 ft, cased to 1,008 ft, screened 1,008 to 1,025 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 317.50 ft above NGVD of 1929. Measuring point: Top of casing 3.70 ft above land-surface datum.

PERIOD OF RECORD.--August 1949 to current year. Analog record August 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 64.89 ft below land-surface datum, Aug. 31, 1949; lowest recorded, 76.26 ft below land-surface datum, Dec. 5, 1970; highest water level measured, 73.61 ft below land-surface datum, Apr. 28, 1976; lowest measured, 97.52 ft below land-surface datum, Aug. 1, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|------|-------------|
| OCT 01 | 89.80 | DEC 16 | 89.37 | APR 01 | 88.85 | JUN 28 | 88.71 | SEP 27 | 89.14 | | |
| 28 | 89.47 | JAN 22 | 89.24 | 29 | 88.75 | JUL 28 | 88.80 | | | | |
| DEC 01 | 89.68 | FEB 26 | 89.00 | JUN 01 | 88.46 | AUG 30 | 88.98 | | | | |

WATER YEAR 2004 HIGHEST 88.46 JUN 01, 2004 LOWEST 89.80 OCT 01, 2003

352226089330102. Local number, Fa:R-2.

LOCATION.--Lat 35°22'26", long 89°33'01", Hydrologic Unit 08010209, 80 ft south of State Highway 59, 1.1 mi southeast of U.S. Highway 70, near Braden.
Owner: Tennessee Division of Geology and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 to 4 in., depth 365 ft, cased to 345 ft, screened 345 to 365 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 317.20 ft above NGVD of 1929. Measuring point: Top of casing 4.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1949 to current year. Analog record October 1949 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 37.25 ft below land-surface datum, Mar. 10, 1952; lowest recorded, 42.12 ft below land-surface datum, Nov. 30, 1967; highest water level measured, 39.00 ft below land-surface datum, Mar. 3, 1998; lowest measured, 42.57 ft below land-surface datum, Oct. 1, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|------|-------------|
| OCT 01 | 41.00 | DEC 16 | 40.90 | APR 01 | 40.30 | JUN 28 | 40.23 | SEP 27 | 40.67 | | |
| 28 | 40.85 | JAN 22 | 40.82 | 29 | 40.13 | JUL 28 | 40.32 | | | | |
| DEC 01 | 41.08 | FEB 26 | 40.50 | JUN 01 | 40.02 | AUG 30 | 40.45 | | | | |

WATER YEAR 2004 HIGHEST 40.02 JUN 01, 2004 LOWEST 41.08 DEC 01, 2003

SHELBY COUNTY

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'37", Hydrologic Unit 08010211, at Willowview Avenue and Getwell Road, at Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Fluvial sand and gravel of Pleistocene age and possibly sand of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 91 ft cased to 81 ft, screened 81 to 91 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 260 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing 1.20 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for Memphis municipal water supply.

PERIOD OF RECORD.--August 1948 to September 1994, water-level recorder, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 21.28 ft below land-surface datum, Apr. 2, 1950; lowest recorded, 52.03 ft below land-surface datum, Jan. 13, 1988; highest water level measured, 45.73 ft below land-surface datum, July 6, 1998; lowest measured, 50.91 ft below land-surface datum, Jan. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 01 | 47.22 | DEC 17 | 47.08 | MAR 01 | 46.97 | APR 29 | 46.65 | JUN 28 | 46.38 | SEP 01 | 45.90 |
| 29 | 47.28 | JAN 30 | 47.05 | MAR 30 | 46.83 | MAY 27 | 46.49 | JUL 29 | 46.20 | SEP 27 | 45.99 |
| DEC 03 | 46.94 | | | | | | | | | | |
| WATER YEAR 2004 | | HIGHEST | 45.90 | SEP 01, 2004 | LOWEST | 47.28 | OCT 29, 2003 | | | | |

3501435090005200. Local number, Sh:O-1.

LOCATION.--Lat 35°14'35", long 90°00'52", Hydrologic Unit 08010209, west side of O.K. Robertson Road, 0.4 mi north of U.S. Highway at Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 434 ft, cased to 424 ft, screened 424 to 434 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 228.70 ft above NGVD of 1929. Measuring point: Top of casing, 4.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--September 1940 to current year. Analog record September 1940 to January 1992, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 12.65 ft below land-surface datum, Sept. 3, 1940; lowest recorded, 68.82 ft below land-surface datum, Aug. 24, 1988; highest water level measured, 50.16 ft below land-surface datum, Mar. 29, 1994; lowest measured, 65.75 ft below land-surface datum, Sept. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 02 | 55.81 | DEC 02 | 54.67 | JAN 23 | 53.88 | APR 05 | 52.00 | JUN 03 | 52.57 | JUL 30 | 56.14 |
| 30 | 57.01 | 18 | 54.25 | MAR 04 | 52.92 | 30 | 52.49 | JUL 01 | 53.56 | SEP 01 | 57.89 |
| WATER YEAR 2004 | | HIGHEST | 52.00 | APR 05, 2004 | LOWEST | 57.89 | SEP 01, 2004 | | | | |

SHELBY COUNTY—Continued

350735089593300. Local number, Sh:P-76.

LOCATION.--Lat 35°07'35", long 89°59'33", Hydrologic Unit 08010210, at Central Avenue and Tanglewood Street, at Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 286.70 ft above NGVD of 1929. Measuring point: Top of casing 1.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply in the Memphis area.

PERIOD OF RECORD.--October 1928 to current year. Analog record October 1928 to September 1997, periodic tape measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 58.65 ft below land-surface datum, Apr. 3, 1933; lowest, 147.31 ft below land-surface datum, June 30, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL |
|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 29 | 119.41 | DEC 17 | 116.13 | MAR 01 | 115.89 | APR 29 | 111.67 | JUN 29 | 116.66 | SEP 02 | 117.75 |
| DEC 04 | 115.08 | FEB 03 | 116.12 | APR 01 | 114.05 | MAY 26 | 111.05 | JUL 29 | 118.24 | SEP 27 | 115.23 |

WATER YEAR 2004 HIGHEST 111.05 MAY 26, 2004 LOWEST 119.41 OCT 29, 2003

352112089571200. Local number, Sh:U-1.

LOCATION.--Lat 35°21'12", long 89°57'12", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville, Owner: Mrs. T. S. Welch

AQUIFER.--Fort Pillow Sand of Wilcox Group of early Eocene age

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 to 16 in., depth 1,558 ft, cased to 1,497 ft, screened 1,497 to 1,558 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 264.20 ft above NGVD of 1929. Measuring point: Top of casing 0.60 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply at Millington and Memphis.

PERIOD OF RECORD.--August 1946 to current year. Analog record March 1948 to January 1971, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 35.5 ft below land-surface datum, Apr. 11, 1948; lowest recorded, 60.42 ft below land-surface datum, Dec. 20, 1970; highest water level measured, 33.20 ft, Apr. 21, 1947; lowest measured, 90.00 ft below land-surface datum, Aug. 29, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL |
|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 02 | 83.29 | DEC 02 | 82.15 | JAN 23 | 81.06 | APR 05 | 81.79 | JUN 03 | 82.72 | JUL 30 | 83.57 |
| 30 | 82.66 | 18 | 81.77 | MAR 04 | 81.37 | 30 | 81.58 | JUL 01 | 82.86 | SEP 01 | 83.96 |

WATER YEAR 2004 HIGHEST 81.06 JAN 23, 2004 LOWEST 83.96 SEP 01, 2004

SHELBY COUNTY—Continued

352112089571300. Local number, Sh:U-2.

LOCATION.--Lat 35°21'12", long 89°57'13", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville. Owner: Mrs. F. E Byrd

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 18 to 12 in., depth 440 ft, cased to 360 ft, screened 360 to 440 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 268.70 ft above NGVD of 1929. Measuring point: Top of casing 1.60 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for municipal and industrial water supply at Millington and Memphis.

PERIOD OF RECORD.--June 1953 to current year. Analog record June 1953 to December 1970, periodic tape measurements or monthly maximum-minimum recorder thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.59 ft below land-surface datum, June 29, 1953; lowest, 64.88 ft below land-surface datum, Sept. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|--|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 02 | 59.54 | DEC 02 | 59.20 | JAN 23 | 58.24 | APR 05 | 57.10 | JUN 03 | 56.92 | JUL 30 | 57.92 |
| 30 | 59.62 | 18 | 58.74 | MAR 04 | 57.70 | 30 | 56.93 | JUL 01 | 57.03 | SEP 01 | 59.39 |
| WATER YEAR 2004 HIGHEST 56.92 JUN 03, 2004 LOWEST 59.62 OCT 30, 2003 | | | | | | | | | | | |

CRITTENDED COUNTY, AR

350344090130000. Local number, Ar:H-2.

LOCATION.--Lat 35°03'44", long 90°13'00", Hydrologic Unit 08020203, 0.7 mi east of Millers. Owner: Memphis Light, Gas, and Water Division, City of Memphis, and U.S. Geological Survey.

AQUIFER.--Memphis Sand of Claiborne Group of middle Eocene age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 502 ft, cased to 482 ft, screened 482 to 502 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface datum is 211 ft above NGVD of 1929, from topographic map. Measuring point: Inside top of shelter base plate, 3.30 ft above land-surface datum.

REMARKS.--Well affected by pumpage in the Memphis, Tennessee area. Records good.

PERIOD OF RECORD.--May 1983 to current year. Analog record from May 1983 to October 1995, periodic measurements thereafter.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.28 ft below land-surface datum, May 30, 31, 1983; lowest, 33.39 ft below land-surface datum, Oct. 31, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|--|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|
| OCT 30 | 29.48 | DEC 22 | 27.59 | FEB 27 | 26.98 | APR 30 | 24.88 | JUN 29 | 24.83 | AUG 31 | 28.33 |
| DEC 04 | 27.55 | JAN 30 | 27.13 | MAR 31 | 25.92 | MAY 27 | 25.30 | AUG 03 | 26.93 | SEP 28 | 27.92 |
| WATER YEAR 2004 HIGHEST 24.83 JUN 29, 2004 LOWEST 29.48 OCT 30, 2003 | | | | | | | | | | | |