

FAYETTE COUNTY

352226089330101. Local number, Fa:R-1.

LOCATION.--Lat 35°22'27", long 89°33'03", 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 1,025 ft, cased to 1,012 ft, screened 1,012 to 1,026 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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	89.44	DEC 20	90.34	FEB 28	90.04	APR 27	90.12	JUN 27	91.46	AUG 30	92.19
NOV 30	89.87	FEB 04	90.42	MAR 29	90.04	JUN 01	90.67	AUG 03	92.15	SEP 27	92.79
WATER YEAR 2005		HIGHEST	89.44	OCT 28, 2004	LOWEST	92.79	SEP 27, 2005				

352226089330102. Local number, Fa:R-2.

LOCATION.--Lat 35°22'27", long 89°33'02", 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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	40.75	DEC 20	40.36	FEB 28	39.60	APR 27	39.22	JUN 27	40.00	AUG 30	40.20
NOV 30	40.43	FEB 04	40.07	MAR 29	39.68	JUN 01	39.68	AUG 03	40.32	SEP 27	40.66
WATER YEAR 2005		HIGHEST	39.22	APR 27, 2005	LOWEST	40.75	OCT 28, 2004				

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY

350002090054400. Local number, Sh:J-001.

LOCATION.--Lat 35°00'04", long 90°05'46", Hydrologic Unit 08010211, at Weaver Road about 1,800 feet south of West Holmes Road near Whitehaven. Owner: Memphis Light, Gas and Water Division, City of Memphis.

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

WELL CHARACTERISTICS.--Drilled observation artesian well, depth 334 ft, cased to 327 ft, screened 327 to 334 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 240.50 ft above NGVD of 1929. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level measured, 35.07 ft below land-surface datum, Apr. 29, 1961; lowest measured, 71.81 ft below land-surface datum, Aug. 29, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL										
OCT 29	67.26	DEC 21	64.60	MAR 01	61.14	APR 28	61.67	JUN 29	66.16	AUG 30	69.93
DEC 01	65.30	JAN 25	62.94	MAR 30	60.85	MAY 26	63.00	AUG 05	67.50	SEP 29	69.56

WATER YEAR 2005 HIGHEST 60.85 MAR 30, 2005 LOWEST 69.93 AUG 30, 2005

350658089560100. Local number, Sh:K-045.

LOCATION.--Lat 35°06'58", long 89°56'01", Hydrologic Unit 08010210, at the corner of Zach Curlin St and Walker Ave, at Memphis. Owner: Memphis Light, Gas and Water Division, City of Memphis

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

WELL CHARACTERISTICS.--Drilled observation artesian well, depth 1282 ft, cased to 1,228 ft, screened 1,228 to 1,282 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 284.20 ft above NGVD of 1929. Measuring point: Top of casing 1.40 ft above land-surface datum.

PERIOD OF RECORD.--December 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.32 ft below land-surface datum, Dec. 31, 1945; lowest measured, 128.75 ft below land-surface datum, Sep. 6, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL										
OCT 29	117.28	DEC 21	116.30	MAR 04	113.98	APR 27	114.83	JUN 28	119.96	AUG 30	121.50
DEC 01	116.11	FEB 01	114.78	MAR 31	114.01	JUN 01	117.03	AUG 04	120.35	SEP 27	121.36

WATER YEAR 2005 HIGHEST 113.98 MAR 04, 2005 LOWEST 121.50 AUG 30, 2005

SHELBY COUNTY—Continued

350724089555600. Local number, Sh:K-066.

LOCATION.--Lat 35°07'24", long 89°55'52", Hydrologic Unit 08010210, 250 ft north of Central Ave and about 0.4 miles west of Goodlet Street, 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 observation artesian well, depth 499 ft, cased to 438 ft, screened 438 to 499 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 302.70 ft above NGVD of 1929. Measuring point: Top of casing 2.10 ft above land-surface datum.

PERIOD OF RECORD.-- January 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 99.09 ft below land-surface datum, Mar. 7, 1946; lowest measured, 171.05 ft below land-surface datum, Sep. 6, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL										
OCT 29	144.50	DEC 21	137.85	MAR 04	133.74	APR 27	131.99	JUN 28	149.31	AUG 30	147.99
DEC 01	136.42	FEB 01	133.48	MAR 31	131.09	JUN 01	145.83	AUG 04	147.05	SEP 27	143.39

WATER YEAR 2005 HIGHEST 131.09 MAR 31, 2005 LOWEST 149.31 JUN 28, 2005

350514089553700. Local number, Sh:K-75.

LOCATION.--Lat 35°05'14", long 89°55'35", 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 259 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, 44.70 ft below land-surface datum, June 29, 2005; lowest measured, 50.91 ft below land-surface datum, Jan. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL										
OCT 29	45.98	DEC 21	45.99	MAR 04	45.67	APR 27	45.20	JUN 29	44.70	AUG 30	44.92
NOV 30	46.02	FEB 01	45.85	MAR 31	45.20	JUN 01	44.76	AUG 05	44.79	SEP 27	45.06

WATER YEAR 2005 HIGHEST 44.70 JUN 29, 2005 LOWEST 46.02 NOV 30, 2004

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY—Continued

351435090005200. Local number, Sh:O-1.

LOCATION.--Lat 35°14'37", long 90°00'46", Hydrologic Unit 08010209, west side of O.K. Robertson Road, 0.4 mi north of U.S. Highway 51 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, 49.75 ft below land-surface datum, Mar. 4, 2005; lowest measured, 65.75 ft below land-surface datum, Sept. 7, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	56.96	DEC 20	52.60	MAR 31	51.02	JUN 27	56.73	SEP 28	61.22		
28	56.92	FEB 04	50.81	MAY 02	51.64	AUG 03	59.11				
DEC 02	54.61	MAR 04	49.75	JUN 01	54.86	30	60.94				
WATER YEAR 2005		HIGHEST	49.75	MAR 04, 2005	LOWEST	61.22	SEP 28, 2005				

351320089535800. Local number, Sh:P-001.

LOCATION.--Lat 35°13'20", long 89°54'01", Hydrologic Unit 08010210, 500 ft northeast of Yale and Scheibler Roads and about 0.4 miles east of Austin Peay Highway near Raleigh. Owner: Memphis Light, Gas and Water Division, City of Memphis.

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

WELL CHARACTERISTICS.--Drilled observation artesian well, depth 342 ft, cased to 332 ft, screened 332 to 342 ft.

INSTRUMENTATION.--Periodic measurements by USGS personnel.

DATUM.--Elevation of land-surface is 299.80 ft above NGVD of 1929. Measuring point: Top of casing 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1940 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.41 ft below land-surface datum, Sep. 30, 1940; lowest measured, 133.88 ft below land-surface datum, Nov. 01, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	120.76	DEC 20	118.17	FEB 28	116.00	APR 28	116.82	JUN 27	123.81	AUG 30	126.49
NOV 30	118.92	JAN 24	117.75	MAR 29	115.97	MAY 25	119.63	AUG 03	124.65	SEP 29	125.12
WATER YEAR 2005		HIGHEST	115.97	MAR 29, 2005	LOWEST	126.49	AUG 30, 2005				

SHELBY COUNTY—Continued

350735089593300. Local number, Sh:P-76.

LOCATION.--Lat 35°07'32", 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.

WELL CHARACTERISTICS.--Drilled unused artesian well, depth 488 ft, screened 428 to 488 ft.

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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	115.57	DEC 20	109.51	MAR 01	109.51	APR 27	108.27	JUN 29	114.88	AUG 30	121.68
NOV 30	107.87	JAN 25	110.75	29	110.30	MAY 25	112.03	AUG 04	119.01	SEP 29	118.89
WATER YEAR 2005		HIGHEST	107.87	NOV 30, 2004	LOWEST	121.68	AUG 30, 2005				

352112089571200. Local number, Sh:U-1.

LOCATION.--Lat 35°21'13", long 89°57'09", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloansville.

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

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 to 16 in., depth 1,538 ft, cased to 1,453 ft, screened 1,453 to 1,530 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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	83.55	DEC 20	83.47	MAR 31	82.81	JUN 27	85.06	SEP 27	87.38		
28	83.71	FEB 04	82.83	MAY 02	82.94	AUG 03	85.93				
DEC 02	83.55	MAR 04	82.77	JUN 01	84.16	30	86.42				
WATER YEAR 2005		HIGHEST	82.77	MAR 04, 2005	LOWEST	87.38	SEP 27, 2005				

PERIODIC MEASUREMENTS OF GROUND-WATER LEVELS

SHELBY COUNTY—Continued

352112089571300. Local number, Sh:U-2.

LOCATION.--Lat 35°21'13", long 89°57'09", Hydrologic Unit 08010209, 3 mi west of Millington at Shelby Road and Shake Rag Road, Sloanville.

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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL								
OCT 01	59.27	DEC 20	57.58	MAR 31	55.64	JUN 27	57.72	SEP 27	61.18		
28	59.53	FEB 04	55.95	MAY 02	55.51	AUG 03	59.25				
DEC 02	58.72	MAR 04	55.51	JUN 01	56.36	30	60.56				

WATER YEAR 2005 HIGHEST 55.51 MAR 04, 2005 LOWEST 61.18 SEP 27, 2005

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.--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 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL										
OCT 29	28.42	DEC 21	25.18	MAR 01	22.85	MAY 02	23.24	JUN 29	25.98	AUG 31	29.58
DEC 01	27.08	JAN 25	22.31	30	23.84	JUN 01	24.19	AUG 04	28.24	SEP 29	30.60

WATER YEAR 2005 HIGHEST 22.31 JAN 25, 2005 LOWEST 30.60 SEP 29, 2005