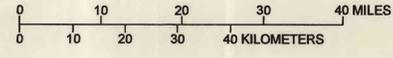


ZONE OF TRANSITION WHERE CANE RIVER FORMATION  
OR EQUIVALENTS CHANGE FACIES FROM CLAY TO  
SAND—MARKS SOUTHERN LIMIT OF MEMPHIS AQUIFER  
(Hosman and others 1968)

**EXPLANATION**

-  APPROXIMATE RECHARGE AREA OF THE SPARTA AQUIFER
-  100 — POTENTIOMETRIC CONTOUR—Shows altitude at which water level would have stood in tightly cased wells. Dashed where approximately located. Hachures indicate depression. Contour interval 25 feet. Datum is sea level
-  WELL COMPLETED IN SPARTA OR MEMPHIS AQUIFER—Measurement made in the fall of 1996 and spring to summer of 1997
-  WELL COMPLETED IN SPARTA OR MEMPHIS AQUIFER FOR WHICH HYDROGRAPH IS PRESENTED—Letter corresponds to hydrograph



NOTE: The potentiometric contours are generalized to portray synoptically the head in a dynamic hydrologic system, not taking into account the variation in well depth, non-simultaneous measurements of water level, variable effects of pumping, and changing climatic influence. The potentiometric contours may not conform exactly with individual measurements of water level.

**POTENTIOMETRIC SURFACE OF THE SPARTA AQUIFER IN EASTERN  
AND SOUTH-CENTRAL ARKANSAS AND NORTH-CENTRAL LOUISIANA,  
AND THE MEMPHIS AQUIFER IN EAST-CENTRAL ARKANSAS,  
OCTOBER 1996–JULY 1997**  
Robert L. Joseph  
1997