Uplands above 400 feet with 30 to 100 feet of Holly Springs sand covered by 5 to 26 feet of gravel and loess. Good quality water in quantities suitable for domestic use is obtained from three horizons. At depths of about 33 feet, water of good quality can sometimes be obtained from the stream, but depths usually exceed 60 feet. Water of high quality is obtained from the stream at depths of about 100 feet, but only about 20 percent of the area is covered by gravel or larger sediments. Water of high quality can be obtained from the stream at depths of about 300 to 400 feet, water may be obtained from sandstone in the Paducah area. The water in the Paducah formation is generally harder and higher in iron content than that in the Holly Springs sand.

Hills slopes and valleys between altitudes of 330 and 550 feet with as much as 30 feet of Holly Springs sand covered by a thin mantle of gravel and loess.

A few shallow wells obtain water of good quality from the Pleasant Hill gravel. At depths of 15 to 30 feet, water, although generally higher in iron content, can be obtained from the Holly Springs sand. At depths of about 300 to 600 feet, water may be obtained from sandstone in the Paducah area. The water in the Paducah formation is generally harder and higher in iron content than that in the Holly Springs sand.

River bottoms and lowlands below 200 feet altitude which are underlain chiefly by Quaternary alluvium. The Paducah area is underlain by the alluvium in almost all of the area. At depths of 20 to 100 feet, water of fair quality in quantities suitable for domestic use can be obtained from the alluvium. Depths to water range from 5 to 25 feet. The water is generally hard and may have a high iron content. At greater depths, water under water but higher in iron content can be obtained from sandstone in the Paducah area. Depths to water in the Paducah formation range from about 100 to 250 feet. Water from this formation is generally higher in iron content than that in the Holly Springs sand. Some of the wells in the Paducah formation produce enough water for small industrial supplies.

Upstream area in the eastern and northeastern part of the Paducah area in which the Paducah area occurs at altitudes of 130 to 300 feet. A small expanse of this Paducah formation is at the north edge of the area. A blanket of gravel 25 to 50 feet thick covers the Paducah area.

Good quality water in amounts large enough for household use can be obtained from the gravel at depths of 40 to 60 feet. Most wells probably encounter the water near the base of the gravel and additional filtration from the clay suite assists in water purity. At greater depths, water of similar quality, although higher in iron content, can be obtained from the Creek area. Depths to the Creek area formation range from about 90 feet at Ballard to 300 feet in the southern part of the area.

MAP OF PADUCAH AREA, KENTUCKY, SHOWING THE AVAILABILITY OF GROUND WATER

1 0 2 Miles