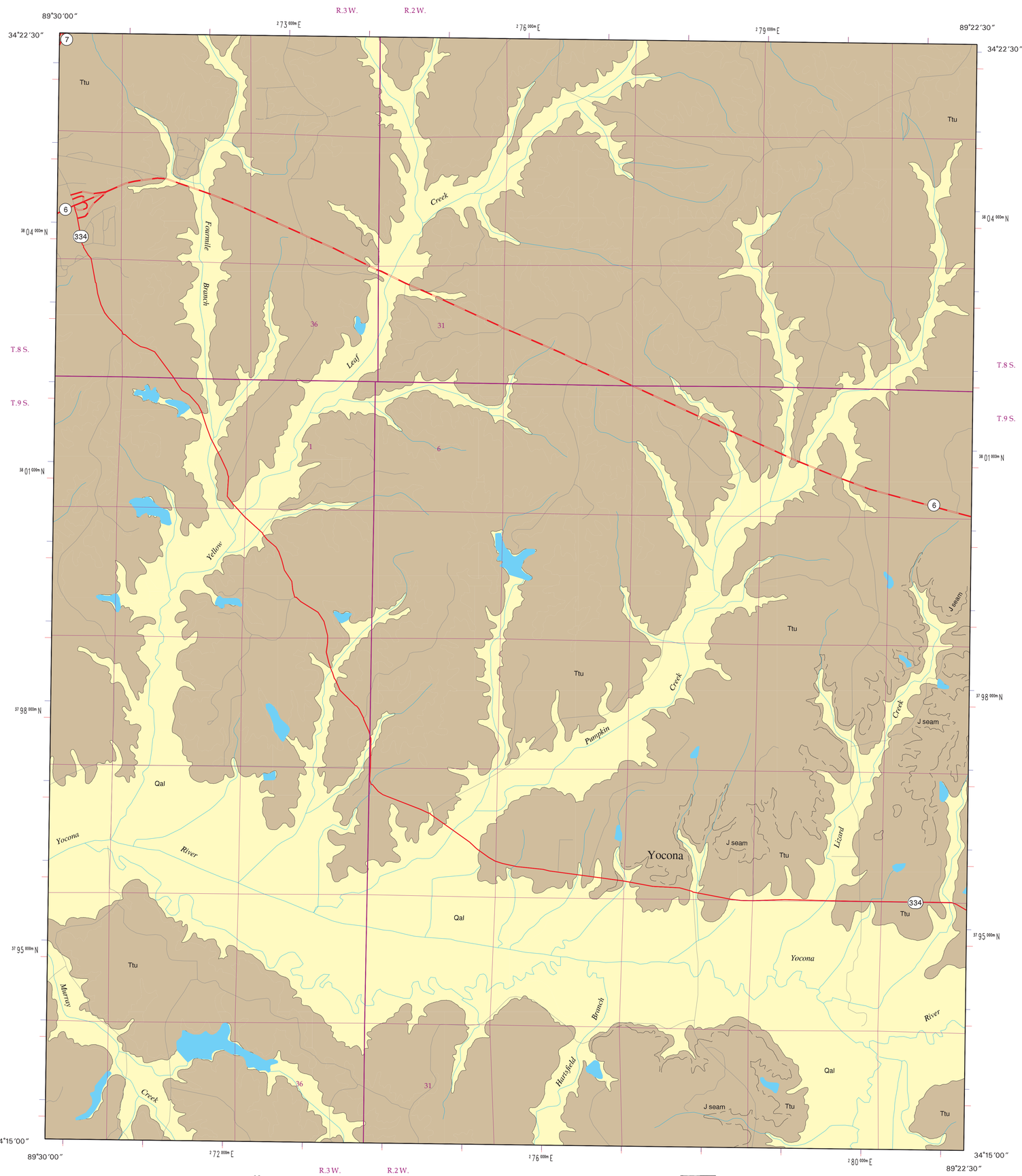

MISSISSIPPI OFFICE OF GEOLOGY
OPEN–FILE REPORT 83

GEOLOGIC MAP
of the
YOCONA QUADRANGLE
Lafayette County, Mississippi

Geology by David E. Thompson

1999

DESCRIPTION OF MAP UNITS

QUATERNARY — HOLOCENE

Qal — ALLUVIUM

Sand, flood plain sands and silts.

TERTIARY — PALEOCENE — WILCOX GROUP

Ttu — TUSCAHOMA FORMATION

Sand, dark greenish gray to light gray, weathers reddish orange to pale yellow orange, very fine- to coarse-grained, quartzose, micaceous, carbonaceous, glauconitic. Interbedded to interlaminated with clay and silt, light olive gray to brownish black, weathers to various shades of red, gray, brown, or white; lignite, contains Red Hills Mine equivalent lignite seams H through L. Total thickness is 430 feet; the maximum thickness present in the quadrangle is approximately 390 feet in the southwestern region. Basal sandy interval constitutes the Middle Wilcox Aquifer.

J seam

An informal boundary which marks the Top of the J-seam, Red Hills Mine equivalent. While the lignite seam is not always present, clay, silt, and lignite at that horizon are typically overlain by a sand unit. The thickness of the J-seam lignite, when present, is up to six feet.

GEOLOGIC MAP

YOCONA QUADRANGLE

Lafayette County, Mississippi

N
W E
S

SCALE 1:24 000

1 .5 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

Geology field checked in 1998 using the 1980 U.S. Geological Survey 7.5-minute topographic quadrangle, 1927 North American datum, contour interval 20 feet.

Mississippi Transverse Mercator projection. 1983 North American datum. GRS80 spheroid. 1000-meter Universal Transverse Mercator grid ticks, zone 16; 1983 datum shown in red, 1927 datum shown in blue.

Sources: Road and water features, USGS Digital Line Graph data, 1:100,000 scale. Public Land Survey System, Mississippi Automated Resource Information System (MARIS), 1:24,000 scale.

Geographic Information System by Daniel W. Morse.