

STOP 6—FRENCH LAKE DAM

Transitional Quanah Granite intrusive into Glen Mountains Layered Complex, French Lake Dam. NW¼ sec. 20, T. 3 N., R. 14 W., Comanche County, Oklahoma. **M. C. Gilbert.**

Introduction

This stop is best approached by starting from the parking area for French Lake and taking the footpath around the southeastern side of the lake to the

dam (fig. 137). Location W-917 is on the north side of West Cache Creek, which requires crossing the dam. At this location, clear evidence can be seen for intrusion of the Quanah Granite into the Glen Mountains Layered Complex (N Zone?) (fig. 138). The importance of these relations is to correct the interpretation of faulting previously held for these two units, as displayed on the State geologic map (Miser, 1954) and carried forward by Havens (1977). Gilbert (1978a, 1981a, 1982) recently discussed this revision.

EXPLANATION			
PERMIAN	Hennessey Group	Post Oak Conglomerate	Includes minor amounts of soil cover and Quaternary alluvium, undifferentiated
CAMBRIAN	Wichita Granite Group	Quanah	Normal facies Contact facies (distinctly porphyritic with inclusions of Mount Scott, metabasites, metasediments, and Carlton Rhyolite) Hybridized and contaminated
		Mount Scott	Partially recrystallized and invaded by Quanah Granite
		Glen Mountains Layered Complex	Hydrothermally altered N Zone (?)
CAMBRIAN TO PROTEROZOIC (?)	Raggedy Mountain Gabbro Group		
			x W913 Sample locality

Geology by M. C. Gilbert, after Chase (unpublished data in OGS files)
Base from U.S. Geological Survey, Quanah Mountain, 1:24,000, 1956
Photorevisions as of 1975