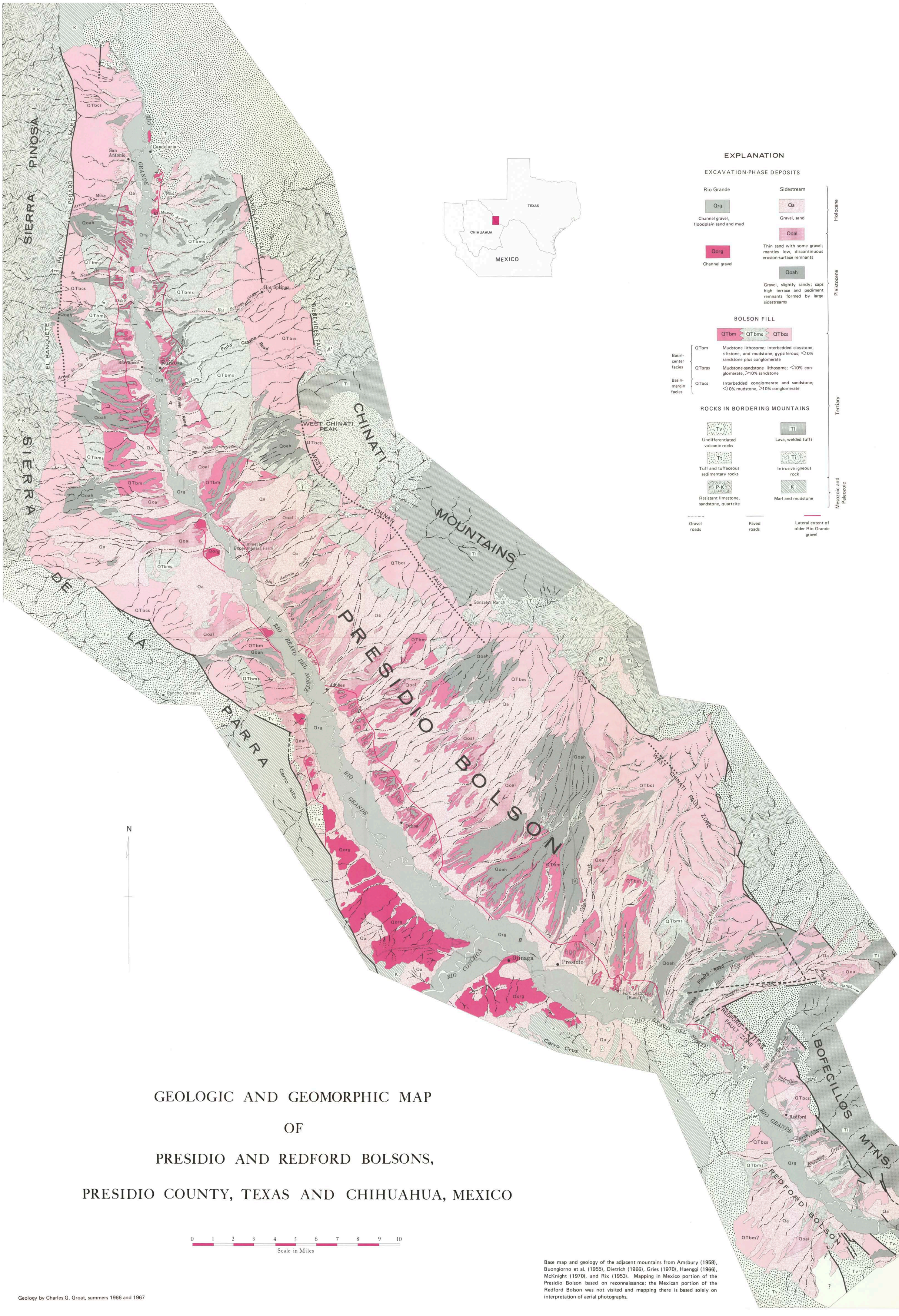
THE UNIVERSITY OF TEXAS AT AUSTIN
BUREAU OF ECONOMIC GEOLOGY
W. L. FISHER , DIRECTOR



EXPLANATION

EXCAVATION-PHASE DEPOSITS

	Rio Grande	Sidestream	
Holocene	Qrg — Channel gravel, floodplain sand and mud	Qa — Gravel, sand	
	Qorg — Channel gravel	Qoal — Thin sand with some gravel; mantles low, discontinuous erosion-surface remnants	
Pleistocene		Qoah — Gravel, slightly sandy; caps high terrace and pediment remnants formed by large sidestreams	

BOLSON FILL

QTbm | QTbms | QTbcs

Basin-center facies	QTbm	Mudstone lithosome; interbedded claystone, siltstone, and mudstone; gypsiferous; <10% sandstone plus conglomerate
	QTbms	Mudstone-sandstone lithosome; <10% conglomerate, >10% sandstone
Basin-margin facies	QTbcs	Interbedded conglomerate and sandstone; <10% mudstone, >10% conglomerate

ROCKS IN BORDERING MOUNTAINS

		Mesozoic and Paleozoic
Tv — Undifferentiated volcanic rocks	Tl — Lava, welded tuffs	Tertiary
Tt — Tuff and tuffaceous sedimentary rocks	Ti — Intrusive igneous rock	Tertiary
P-K — Resistant limestone, sandstone, quartzite	K — Marl and mudstone	Mesozoic and Paleozoic

Gravel roads — Paved roads — Lateral extent of older Rio Grande gravel

GEOLOGIC AND GEOMORPHIC MAP
OF
PRESIDIO AND REDFORD BOLSONS,
PRESIDIO COUNTY, TEXAS AND CHIHUAHUA, MEXICO

0 1 2 3 4 5 6 7 8 9 10
Scale in Miles

Geology by Charles G. Groat, summers 1966 and 1967

Base map and geology of the adjacent mountains from Amsbury (1958), Buongiorno et al. (1955), Dietrich (1966), Gries (1970), Haenggi (1966), McKnight (1970), and Rix (1953). Mapping in Mexico portion of the Presidio Bolson based on reconnaissance; the Mexican portion of the Redford Bolson was not visited and mapping there is based solely on interpretation of aerial photographs.