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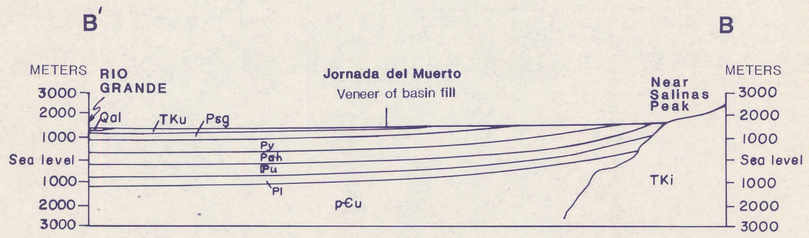
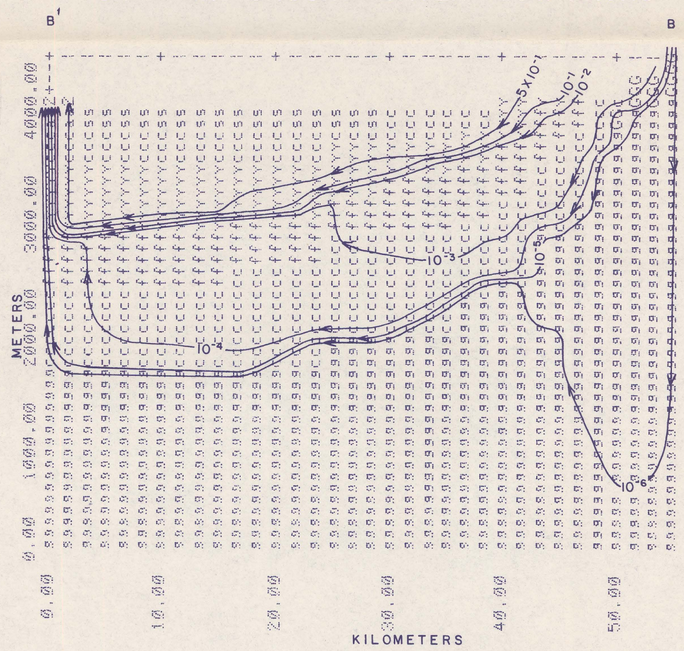
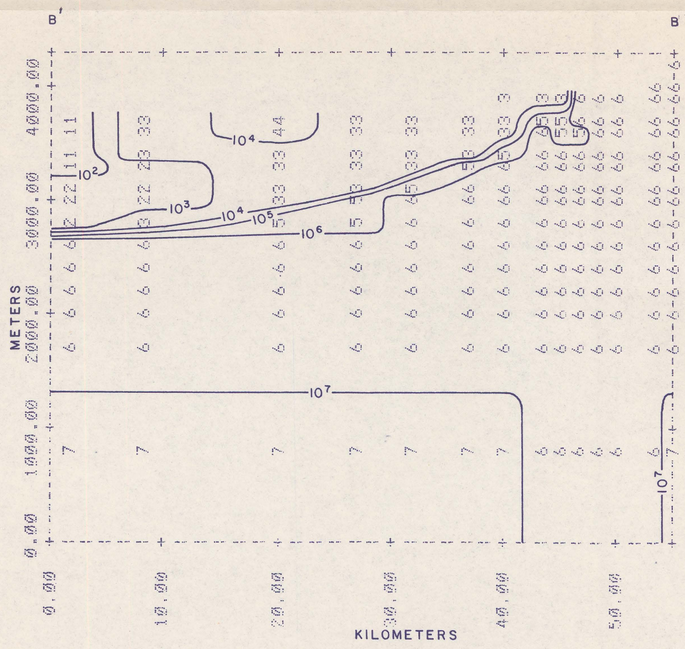
GEOLOGIC SECTION



HYDROGEOLOGIC SECTION--MODELED HYDROGEOLOGIC UNITS AND GROUND-WATER FLOW PATHS



PLOT OF TRAVELTIME



EXPLANATION

HYDROGEOLOGIC SECTION

SYMBOL	HYDROGEOLOGIC UNITS	SYMBOLS ON GEOLOGIC SECTIONS
a	COARSE-GRAINED BASIN FILL	-- Qal and QTab
A	FINE-GRAINED BASINE FILL	-- QTab and PPu in central part of section
s	COARSE-GRAINED CLASTIC ROCKS	-- TKu, Psa, Pg, and Py, and Pa in northern Tularosa basin
c	CARBONATE ROCKS	-- Psa, MDSu, OЄu, and Py, Pah, and PPu in southern part of section
g	CRYSTALLINE ROCKS, LOWER PART OF SECTION	-- pЄu and TKi
G	CRYSTRALLINE ROCKS, UPPER PART OF SECTION	-- TKi

—— 10^{-2} —— DIRECTION OF GROUND-WATER FLOW.--Number indicates relative volume of flow in section below flow line

—— 10^{2} —— RELATIVE TIME OF TRAVEL FROM POINTS ON LINE TO DISCHARGE AREA.--Areas of longest traveltime are surrounded by areas of shorter traveltime. However, some areas of longest traveltime are too small to portray at the scale shown

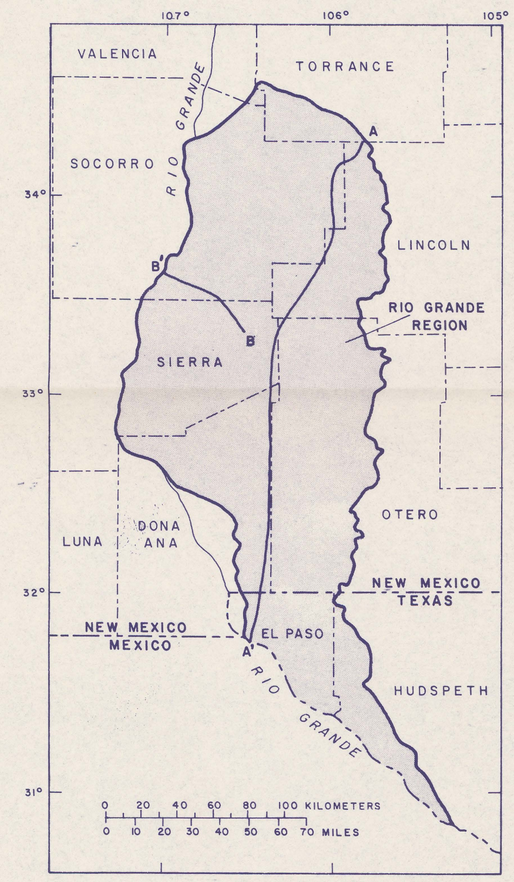
EXPLANATION

GEOLOGIC SECTIONS

Qal	BASIN FILL (QUATERNARY)	-- Terrace, fan, eolian, floodplain, and a few thin basalt flows
QTab	BASIN FILL (QUATERNARY AND TERTIARY)	-- Sand and gravel deposits grading to silt and clay deposits toward the center of the basin
TKu	TERTIARY AND CRETACEOUS ROCKS	-- Sandstone, shale, conglomerate, mudstone, and tuffaceous sediments
TKi	RHYOLITE INTRUSIVES (TERTIARY AND CRETACEOUS)	-- Occurs as stocks and laccoliths in Gallinas Peak vicinity
Psa	SAN ANDRES LIMESTONE (PERMIAN)	-- Limestone
Pg	GLORIETA SANDSTONE (PERMIAN)	-- Sandstone
Psg	SAN ANDRES LIMESTONE AND GLORIETA SANDSTONE, UNDIFFERENTIATED	-- Limestone and sandstone
Py	YESO FORMATION (PERMIAN)	-- Sandstone and gypsum in the northern part of the Tularosa basin, grading southward into progressively more limestone
Pah	ABO FORMATION AND HUECO LIMESTONE (PERMIAN)	-- Abo Formation, shale, and limestone in northern Tularosa basin, interfingers southward with Hueco Limestone
PPu	PENNYSLVANIAN ROCKS, UNDIFFERENTIATED	-- Sandstone and limestone in northern Tularosa basin, grading southward to shale and limestone
MDSu	MISSISSIPPIAN, DEVONIAN, AND SILURIAN ROCKS, UNDIFFERENTIATED	-- Thin formations of dolomite, limestone, and sandstone
OЄu	ORDOVICIAN AND CAMBRIAN ROCKS,	-- Dolomite, limestone, and sandstone
Pl	LOWER PALEOZOIC ROCKS	-- Sedimentary rocks
pЄu	PRECAMBRIAN ROCKS, UNDIFFERENTIATED	-- Phyllite, quartzite, amphibolite, and schist and lesser quartz monzonite, granite, syenogranite, rhyolite, diabase to diorite sills, shale, sandstone, siltstone, limestone, and talc

——— GEOLOGIC CONTACT

⇋ FAULT.--Arrows show relative direction of movement



LOCATION OF MODELED HYDROGEOLOGIC SECTIONS, RIO GRANDE REGION, NEW MEXICO AND TEXAS