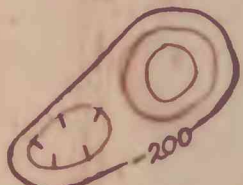


EXPLANATION



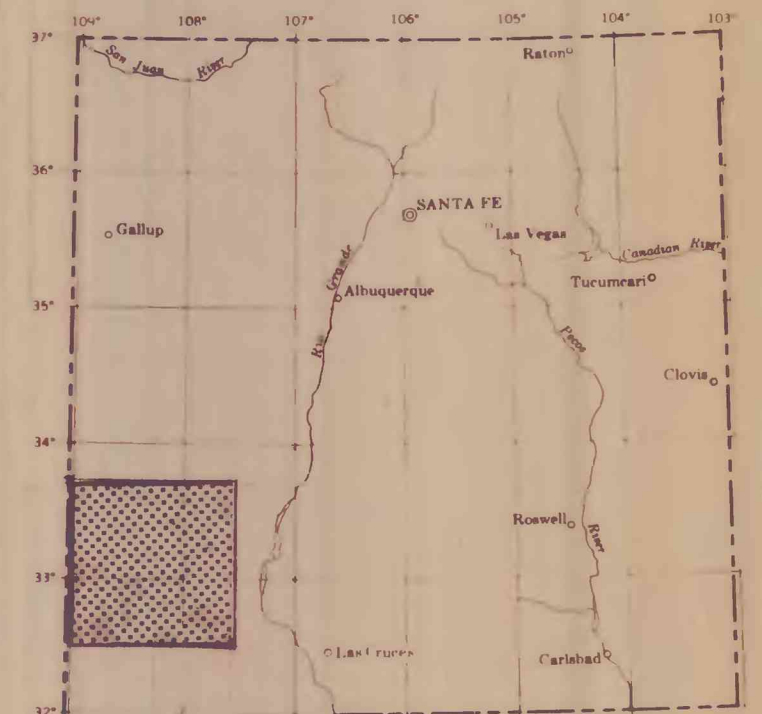
Gravity contours

Contour interval 2.5 mgals. Hachured contours indicate areas of low gravity closure. The gravity map was prepared from 1,030 stations, from data gathered by both the U.S. Geological Survey and the U.S. Army (TOPOCOM).

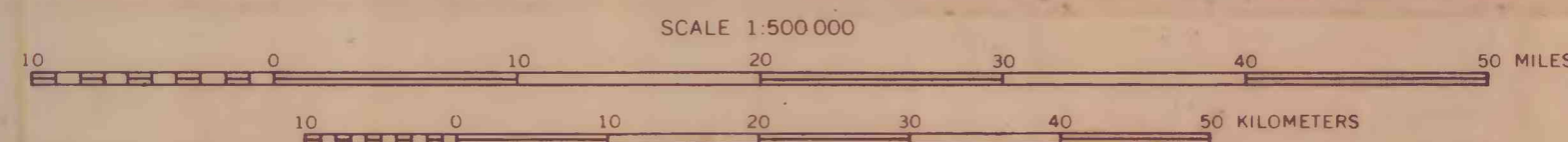
A density of 2.67 g per cm³ was assumed in reducing the data to the complete Bouguer anomaly. Theoretical gravity was computed from the International Ellipsoid 1930. All gravity data were corrected for terrain effects out to a radius of 166.7 km by a method described by Plouff (1966). All stations were referenced to either the U.S. Air Force base at the Silver City, NM post office with a value of 979020.217 mgals, or U.S. Army (TOPOCOM) bases at the Glenwood, NM post office with a value of 979104.264 mgals, and at the Truth or Consequences, NM post office with a value of 979168.062 mgals (R. B. Beruff, 1970, written communications).

REFERENCE

Plouff, Donald, 1966, Digital terrain corrections based on geographic coordinates [abs.]: *Geophysics*, v. 31, no. 6, p. 1208.



INDEX MAP OF NEW MEXICO
SHOWING LOCATION OF THIS REPORT



This map is preliminary and has not been edited or reviewed for conformity to Geological Survey standards.

BOUGUER GRAVITY MAP OF THE MOGOLLON-SANTA RITA-TYRONE REGION,
SOUTHWESTERN NEW MEXICO

BY
GORDON P. EATON, DONALD L. PETERSON, AND MICHAEL W. WEBRING