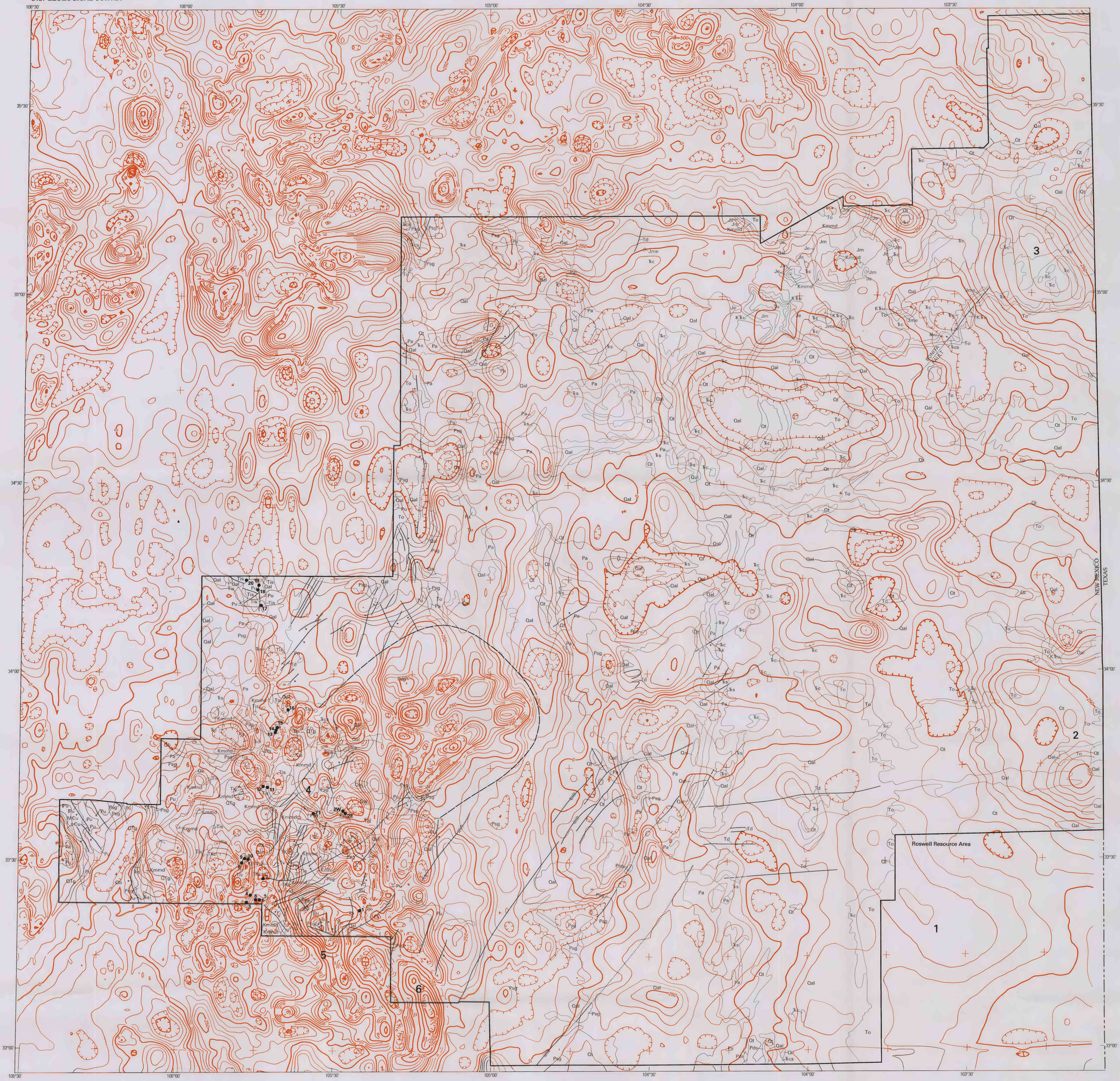
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

BULLETIN 2063
PLATE 5



EXPLANATION

- **Magnetic contours**—Dashed where inferred. Hachures indicate closed areas of low values. Contour interval 20 nanoteslas (nT)
- **6** **Magnetic anomaly discussed in text**
- **21** **Sample locality used in susceptibility measurement**—See table 1
- **Boundary of short-wavelength magnetic anomalies indicating presence of intrusive rock at shallow depth**

LIST OF MAP UNITS

- Qal **Alluvium and gravel, colluvium, loess, dune, pediment, and terrace deposits (Quaternary)**
- Qb **Basalt flows (Quaternary)**
- Qt **High-terrace gravel and pediment deposits (Quaternary)**—Includes Pleistocene Gatuna Formation
- QTg **Intermountain gravel of northern Tularosa Valley (Quaternary and Tertiary)**—Locally includes Ogallala Formation
- To **Ogallala Formation (Tertiary)**
- Tis **Alkalic intrusive stocks and laccoliths (Tertiary)**
- Tv **Volcanic flows, Sierra Blanca Igneous Complex, and dike swarms Tertiary)**
- Td **Intrusive dike (Tertiary)**
- TKc **Cub Mountain Formation (Tertiary and Upper Cretaceous)**
- Kmmd **Mesaverde Formation, Mancos Shale, and Dakota(?) Sandstone, undivided (Upper Cretaceous)**
- K**T**ku **Cretaceous and Triassic rocks, undivided**—Includes Pajarito Shale, Mesa Rica Sandstone, and Tucumcari Shale (Lower Cretaceous) and Redonda Formation (Upper Triassic). East of long 104°15' N. and north of lat 34° N.
- Jm **Morrison Formation (Upper Jurassic)**
- Je **Exeter Sandstone (Middle Jurassic)**
- Jme **Morrison Formation (Upper Jurassic) and Exeter Sandstone (Middle Jurassic), undivided**—East of long 105° W. and north of lat 34°45' N.
- Trc **Chinle Formation (Upper Triassic)**—Includes Redonda Formation
- Trs **Santa Rosa Sandstone (Upper Triassic)**—Locally in Tucumcari Basin, as old as Middle Triassic
- Trcs **Chinle Formation and Santa Rosa Sandstone (Upper Triassic), undivided**—On upthrown side of Bonita fault on the Canadian River. Locally in Tucumcari Basin, Santa Rosa is as old as Middle Triassic
- M**e**u **Mesozoic rocks, undivided**—Includes undivided Cretaceous, Jurassic, and Triassic rocks on downthrown side of Bonita fault on the Canadian River
- Pds **Dewey Lake Redbeds and Rustler and Salado Formations (Upper Permian)**—Southernmost Pecos River valley
- Pa **Artesia Group (Upper Permian)**—Includes Tansill, Yates, Seven Rivers, Queen, and Grayburg Formations
- Psg **San Andres Formation and Glorieta Sandstone, undivided (Lower Permian)**—San Andres includes Fourmile Draw, Bonney Canyon, and Rio Bonito Members
- Pu **Lower Permian rocks, undivided—**Includes Yeso, Abo, Hueco, and Bursum(?) Formations
- P**e**u **Pennsylvanian rocks, undivided**—West of long 106° W.
- M**e**u **Mississippian to Cambrian rocks, undivided**—West of long 106° W.
- p**e**u **Precambrian rocks, undivided**—West of long 106° W.

- **Contact**
- **Fault**—Dashed where approximately located; dotted where concealed. Bar and ball on downthrown side where relative movement known; opposed arrows show relative horizontal movement where known
- **Sink**—Collapse structure

SCALE 1:500 000

10 0 10 20 30 40 50 MILES

10 0 10 20 30 40 50 KILOMETERS

1995 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 10½° EASTERLY FOR THE CENTER OF THE WEST EDGE TO 9½° EASTERLY FOR THE CENTER OF THE EAST EDGE

Geology modified from New Mexico Geological Society (1982) by E.J. LaRock and S.L. Moore, 1991

COMPOSITE RESIDUAL TOTAL INTENSITY AEROMAGNETIC MAP OF THE ROSWELL RESOURCE AREA AND VICINITY, NEW MEXICO

(From Cordell, 1983)

By
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1995