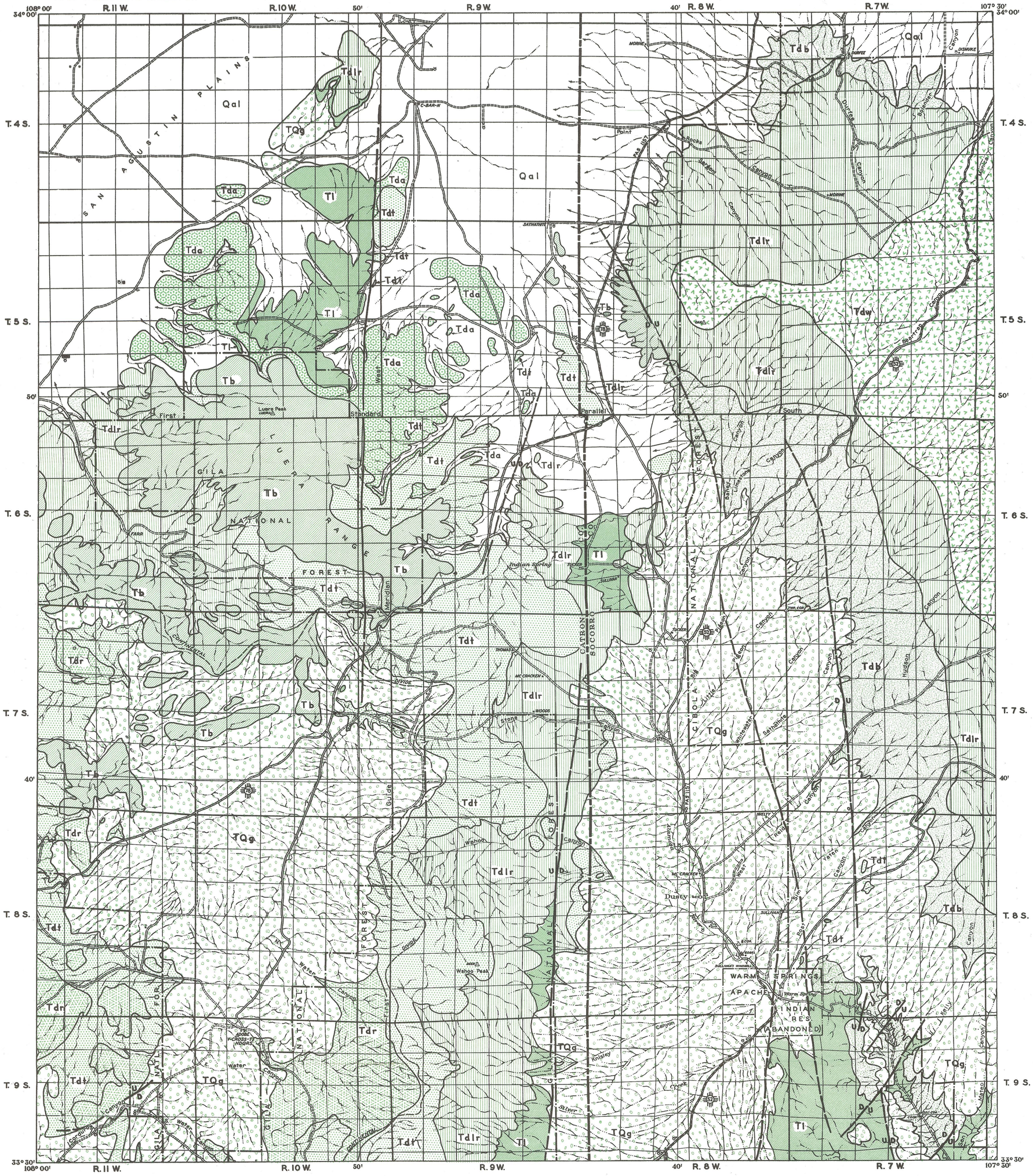
STATE BUREAU OF MINES
AND MINERAL RESOURCES
A. J. THOMPSON, DIRECTOR

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY
E. J. WORKMAN, PRESIDENT

GEOLOGY
LUERA SPRING QUADRANGLE
NEW MEXICO

THIRTY-MINUTE QUADRANGLE SERIES-NO. 2



EXPLANATION

QUATERNARY

Qal

Alluvium

Includes some lake sediments in the San Agustin Plains area.

TQg

Gila conglomerate-Santa Fe group

Made up largely of locally derived conglomerates and sandstones. Equivalent, in part, to "Winston beds" in the adjacent quadrangle to the south.

UNCONFORMITY

Tb

Basalt and basaltic andesite flows

Black to medium-gray, aphanitic, commonly vesicular; locally a flow breccia; characteristically contains scattered reddish-brown crystals of iddingsite.

UNCONFORMITY (?)

TERTIARY

Datil formation

Tdr

Porphyritic rhyolite flow facies

White to light-gray, well-developed phenocrysts of sanidine and smoky quartz; locally tin-bearing.

Tdt / Tdw

Rhyolite tuff facies

Light-colored bedded pumiceous and crystal tuff and tuff breccia. Characteristically massive; locally has developed columnar jointing (Tdt). Welded rhyolite tuffs and crystal tuffs (Tdw) in San Mateo Mountains. Banded reddish-brown and brown; abundant "phenoclasts" of quartz and sanidine, in part equivalent to Hells Mesa member of Puertecito area.

Tdlr

Latite-rhyolite facies

Interlayed porphyritic flow-banded rhyolite and dark- to light-gray flow-banded latite porphyry. Includes thin rhyolite tuff and welded tuff beds; east of Indian Spring many small greenish-gray vitrophyric intrusions.

Tda

Andesite-basaltic andesite facies

Gray to black, vesicular, coarsely porphyritic; contains lathlike feldspar phenocrysts as much as half an inch long.

Tdb

Rhyolite tuff breccia facies

Massive light-colored pumiceous tuff and interlayed tuff breccia that includes angular fragments of reddish-brown and gray latite; locally welded.

UNCONFORMITY (?)

Tl

Lower volcanic group

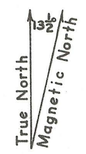
Black to greenish-black to purple basaltic andesite and andesite; locally includes porphyritic reddish-brown banded latite. Characteristically the group is highly altered.

Contact
Approximately located

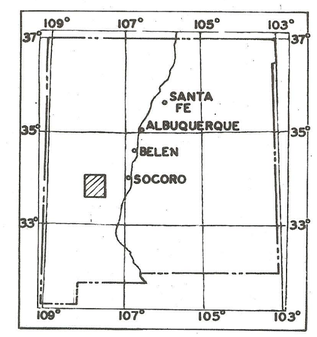
Fault
Dashed where approximately located
D, downthrown side; U, upthrown side.

Base from Luera Mountains quadrangle of New Mexico State Highway Department.

Geology Mapped in 1956.
Geologic cartography by E. S. Holman.



Approximate mean declination, 1952



INDEX MAP OF NEW MEXICO

RECONNAISSANCE GEOLOGIC MAP OF LUERA SPRING THIRTY-MINUTE QUADRANGLE

By Max E. Willard

Scale: 1:126720

1 0 1 2 3 4 5 6 7 8
Statute Miles

1957