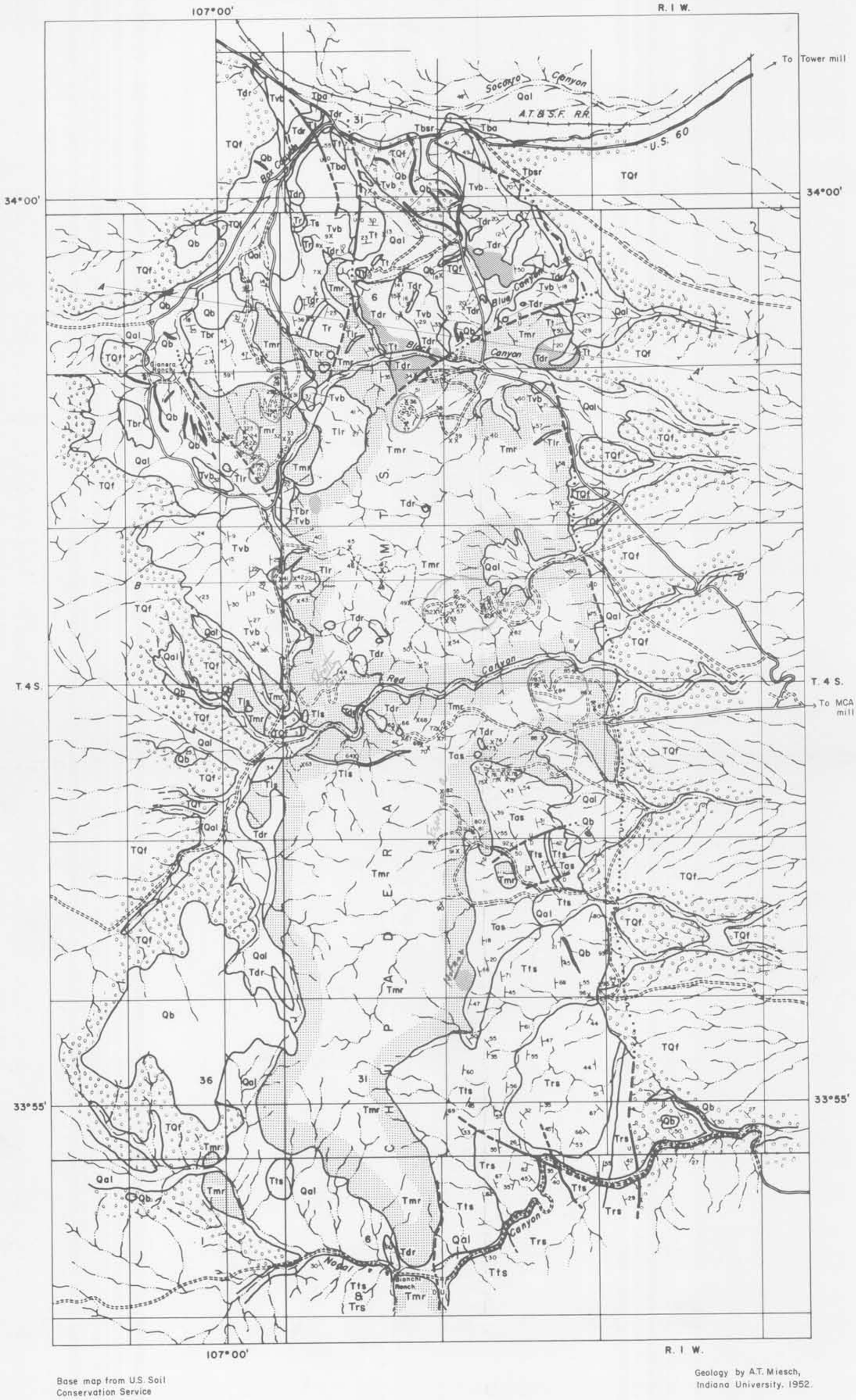


EXPLANATION

QUATERNARY

Qal — Alluvium

Qb — Basalt (plugs, dikes, sills)

TQf — Fanglomerate

Tlr — Late rhyolite (plugs, dikes)

Tmr — Massive rhyolite

Tr — Rhyolite

Ts — Sandstone

Tbsr / Tvb / Tba / Tbr — Volcanic breccia (Tvb), with interlayered units of spherulitic rhyolite (Tbsr), porphyritic andesite (Tba), and rhyolite (Tbr)

Tdr — Dark rhyolite (flows, dike)

Tt — Tuff

TERTIARY

Southern part of area ↓

Tls — Latite (dikes)

Trs — Rhyolite

Tas — Augite andesite (flow, dike)

Tts — Tuff

PROSPECT AND MINE NUMBERS

1-2	Prospect pits
3	Old mine tunnels
4-11	Prospect pits
12	Development pit
13-22	Prospect pits
23	Development pit, some ore mined.
24-26	Prospect pits
27	Gianero mine
28	Barrett mines
29	Old mine tunnel
30	Tower mine (open pit)
31	Development pit
32	Bulldozer cut
33	Old mine tunnel
34	Bulldozer cut
35	Prospect pit
36-37	Bursum mine
38-40	Prospect pits
41	Torres mine
42-43	Prospect pits
44	Development cuts
45-51	Prospect pits
52	Development cut
53-56	Prospect pits
57	Development cut
58-59	Prospect pits, some ore mined
60	Development cut
61	Prospect pit
62	Development cut
63-68	Prospect pits
69	Development pit some ore mined
70-71	Prospect pits
72	Development pit, some ore mined
73-75	Prospect pits
76	Development pit
77	Prospect pit
78	Development pit, some ore mined
79-82	Prospect pits
83-85	Open pit mines
86-87	MCA mine (open pits)
88-89	Prospect pits
90	Development shaft
91-96	Prospect pits

33 — Strike and dip of beds

50 — Strike and dip of joints

Geologic contact

Fault (showing dip) (dashed where inferred) (dotted where concealed)

x 21 — Manganese mine

x 60 — Manganese prospect

Silicified rock

Paved road

Improved dirt road

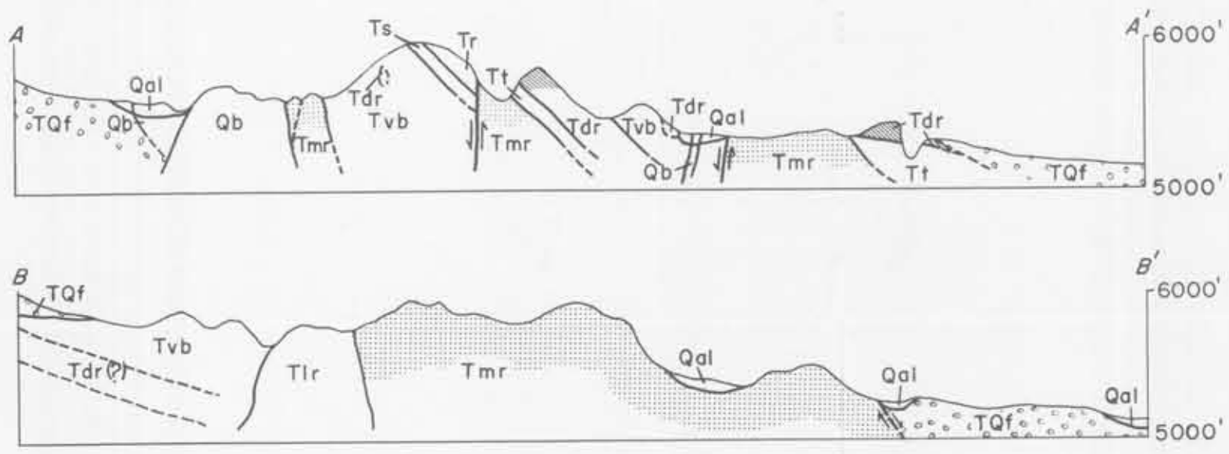
Unimproved dirt road

Trail

Note: Prospect pits may be drilled and blasted or simply bulldozed pits. Nearly all are small. At development pits considerable effort has been expended to find mineable ore. Mines are areas where active ore removal and sale has taken or is taking place.

Base map from U.S. Soil Conservation Service sheets 296 and 297.

Geology by A.T. Miesch, Indiana University, 1952.



Index Map showing location of area mapped.

APPROXIMATE MEAN DECLINATION, 1952

Scale: 1/31,680

1/2 0 1 MILE

GEOLOGIC MAP AND SECTIONS OF THE LUIS LOPEZ MANGANESE DISTRICT, SOCORRO COUNTY, NEW MEXICO