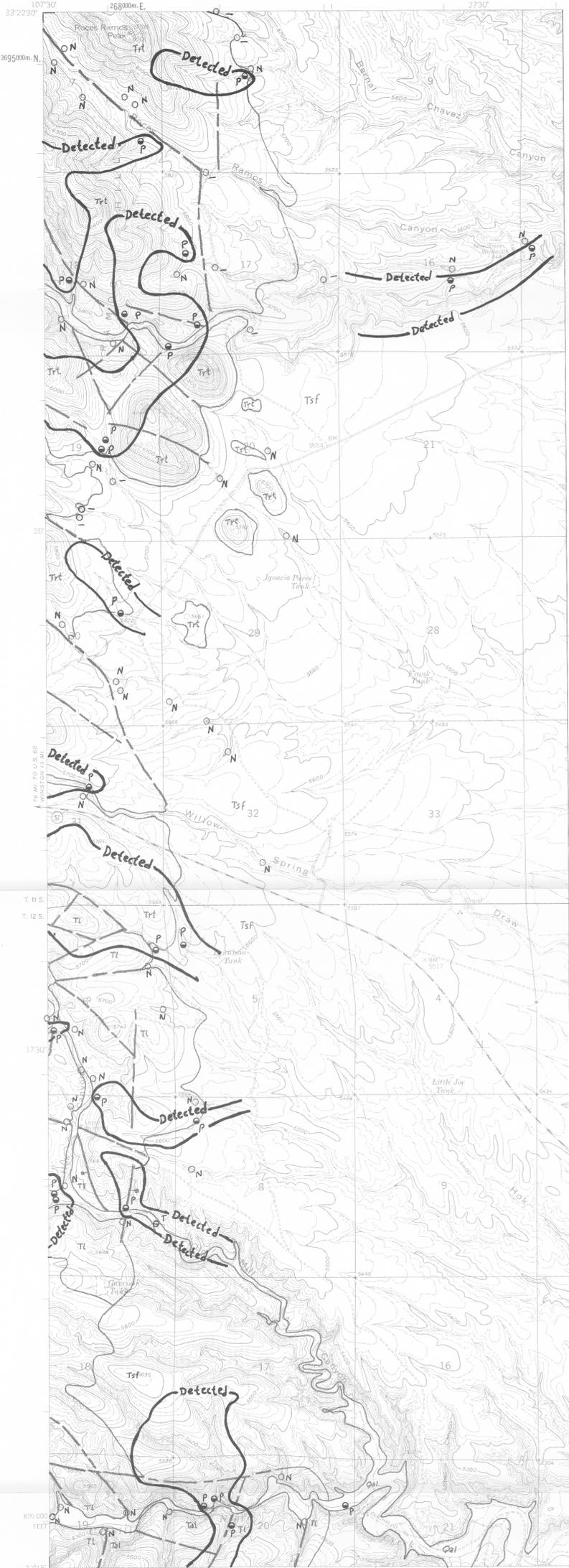


DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY



EXPLANATION

- | | |
|---|------------------------|
| <p>QUATERNARY</p> <p>Qal
Alluvium</p> <p>Qb
Late basalt flow</p> <p>TsF
Santa Fe Group as used by Kelley (1955)
Pediment alluvium, conglomerate, and volcanic
sediments; includes Palomas Gravel</p> <p>Tir
Intrusive rhyolite
Dominantly plugs and dikes</p> <p>Ti
Dike
Unknown composition</p> <p>Trt
Late rhyolite flows and ash-flow tuff
Medium gray; porphyritic, with phenocrysts of
quartz and sanidine; tin bearing</p> <p>Tim
Intrusive monzonite porphyry
Sills, dikes, and laccoliths</p> <p>Tl
Biotite latite and biotite-quartz latite tuff,
flows, and related breccia</p> <p>Tvr
Volcanic rocks
Eastern side of Black
Range and adjacent
areas</p> <p>Tr
Early rhyolitic tuff
Eastern side of Black
Range and adjacent
area</p> <p>Tal
Early andesite and subordinate latite flows,
flow breccia, tuff and agglomerate</p> <p>Pzr
Paleozoic rocks
Dominantly limestone of the Pennsylvanian
Magdalena Group and Permian red beds</p> <p>pCm
Precambrian metamorphic rocks</p> | <p>TERTIARY</p> |
|---|------------------------|

- | | |
|--|---|
| <p>—————
Contact</p> <p>— · — · —
Normal fault
Dashed where approximately located;
dotted where concealed; bar and ball
on downthrown side</p> <p>— · — · —
Lineament traced from aerial photographs</p> <p>↘ ↙
Strike and direction of dip of beds and foliation</p> <p>—————
Quartz vein</p> | <p>Relative fluorite content of the heavy NM-1 fraction of concentrates
panned from the total stream sediment and separated in bromoform.
The NM-1 fraction is that portion of the gold pan and bromoform-
concentrated sample not magnetic at a 1.0-ampere setting on a
Franz Isodynamic Separator (forward slope 25°, side slope 15°)</p> |
|--|---|

Stream-sediment sample
 The NM-1 fraction of pan-concentrated stream sediment was visually
 scanned under the binocular microscope prior to pulverization and
 analysis; fluorite was identified and its relative abundance estimated.
 Letter beside sample-locality symbol represents the relative
 abundance. Circle with dash indicates no data on sample at that
 locality. N is fluorite not detected. T, shown by circle with bar,
 is fluorite detected in trace amounts. P, shown by half-filled circle,
 is moderate amount of fluorite. Ab is abundant fluorite and is shown
 by filled circle.

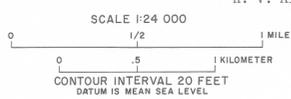
— Detected —
 Approximately delineates area in which fluorite is detected in the
 NM-1 fraction of stream-sediment concentrates.

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- Kelley, V. C., compiler, 1955, Geologic map of the Sierra County
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south-central New Mexico, 1955: In pocket.

Base from U.S. Geological Survey, 1961

Reconnaissance and photogeology by
H. V. Alminas and K. C. Watts



WEST PART OF THE PRIEST TANK QUADRANGLE
MAPS SHOWING FLUORITE DISTRIBUTION IN THE WINSTON AND
CHISE QUADRANGLES AND IN THE WEST PART OF THE PRIEST TANK
QUADRANGLE, SIERRA COUNTY, NEW MEXICO

By
Henry V. Alminas, Kenneth C. Watts, and David L. Siems

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