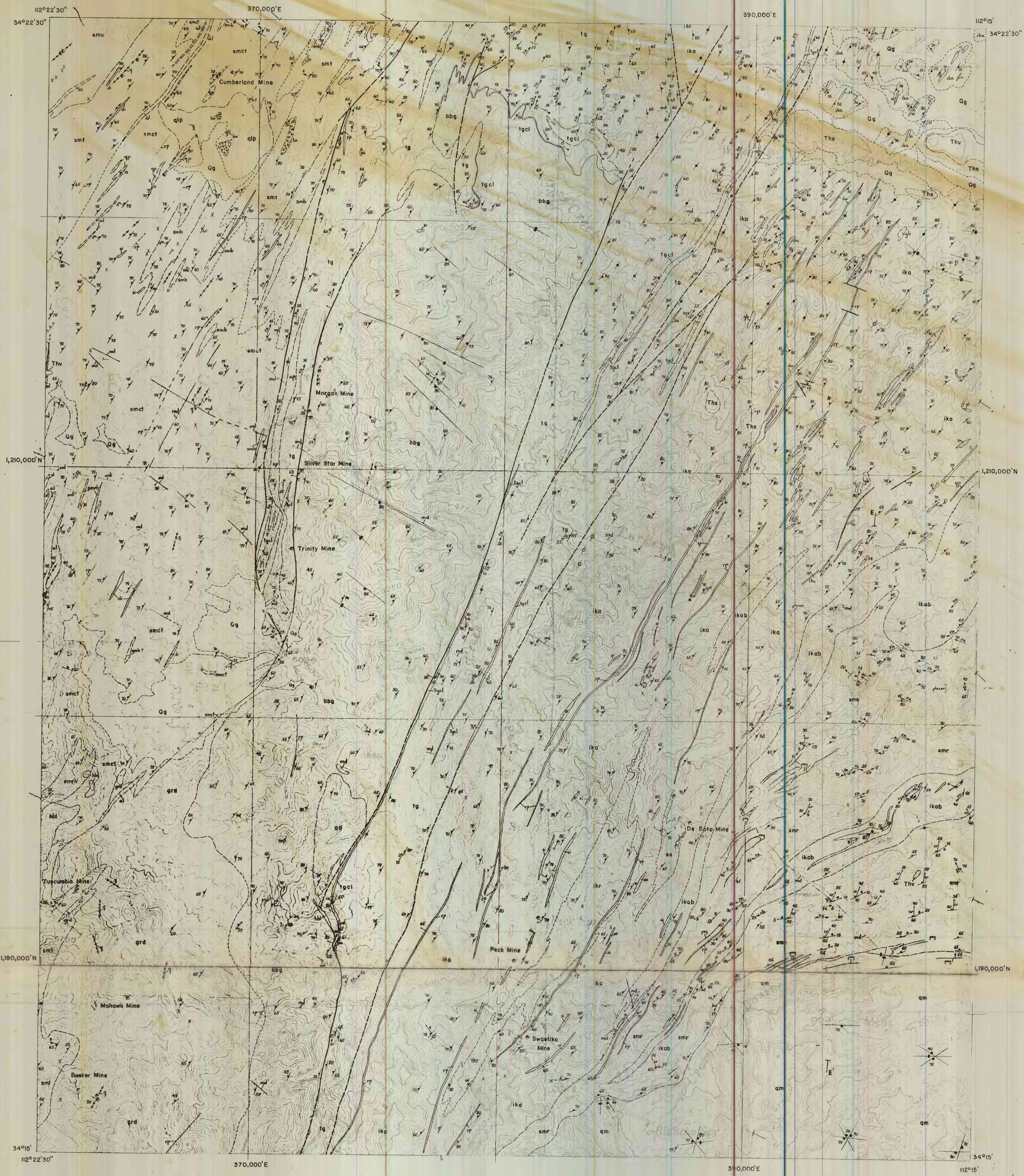


EXPLANATION



- PLIOCENE (?) QUATERNARY
- Qg Reddish gravels and alluvium
- MESOZOIC (?) EARLY TERTIARY
- HICKEY FORMATION
- Ths poorly consolidated conglomerate and sandstone
 - Thv basaltic flows and isolated plugs
- qip Rhyolite to granodiorite porphyry dikes, and quartz latite porphyry
 - md Alkalic mafic and lamprophyre dikes
 - Pegz Granite pegmatite and aplite dikes
 - qm Quartz monzonite south of Crazy Basin Creek, medium- to coarse-grained with porphyritic facies, some granite.
 - grd Porphyritic granodiorite of Tuscumba Mountain, coarse-grained, except for medium-grained nonporphyritic marginal facies.
 - qd Medium-grained biotite quartz diorite
 - al Medium-grained alaskite
 - Ad Fine- to medium-grained diorite, intensely altered or recrystallized
 - Ggb Medium-grained gabbro, recrystallized
 - hbl Coarse-grained hornblende, recrystallized
 - ap Albititic porphyry, recrystallized
 - qp Fine-grained quartz porphyry, variably sheared and altered to a schistose quartz-sericite rock with quartz phenocrysts
- PRECAMBRIAN
- Alder Group of the Yavapai Series
- IRON KING VOLCANICS
- ika, pillow and amygdaloidal basalt and andesite, with intercalated mafic tuff, recrystallized to amphibolitic schist.
 - ikc, thinly interlayered chert, ferruginous chert, magnetite-hematite and phyllite, locally constituting itabirite
 - ikr, schistose meta-rhyolite and rhyolitic tuff
 - ikab, sedimentary breccia of mixed volcanic and non-volcanic debris, with intermixed pillow basalt and mafic tuff.
- SPUD MOUNTAIN VOLCANICS
- smr, bedded rhyolitic tuff and volcanoclastic rocks, recrystallized to staurolite schist and quartz-feldspathic semischist
 - smt, bedded fine-grained andesitic tuff and tuffaceous sediment
 - smu, undifferentiated hornfelsed andesitic tuff, complexly mixed with mafic flows and intrusive diorite or gabbro
 - smb, andesitic breccia and interbedded tuffaceous sedimentary rock
 - smct, massive bedded dacitic crystal tuff
 - smh, massive rhyolitic flows or shallow intrusives, some tuff(?)
- TEXAS CULCH FORMATION
- tg, arkosic sandstone, slate and phyllite, and bedded rhyolitic tuff
 - tgcl, pebble-cobble conglomerate, and a basal boulder conglomerate (dots)
- BRADY BUTTE GRANODIORITE
- bbg Medium- to coarse-grained gneissic granodiorite, with recrystallized biotite and plagioclase.
 - Qh Quartz lenses and pods, mostly jaspery, includes recrystallized chert, and hydrothermal silica.
 - ss Silicified and sericitized, hydrothermally altered rock.

Contact: long dashes where approximately located; short dashes where indefinite or inferred; dots where concealed

Fault: long dashes where approximately located; short dashes where inferred; dots where concealed; arrow indicates dip

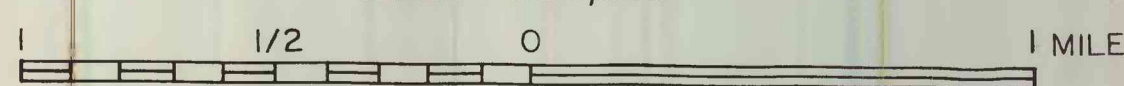
- Planar Elements:
- Strike and dip of bedding, dashed if approximate
 - Bedding vertical
 - Bedding tops determined
 - Bedding overturned
 - Strike and dip of foliation, with lineation
 - Foliation vertical
 - Strike and dip of jointing
 - Jointing vertical
 - Pillow structure, tops undetermined
 - Pillow tops face semicircle
- Lineations:
- Plunge of minor fold axes
 - Cleavage-bedding intersection
 - Plunge of elongated pebbles
 - Mineral streaking
 - Crenulated foliation (S-S intersection)
 - Chevron-type minor folds
 - Warped foliation
 - Houdinage
 - Strike of horizontal lineation
 - Dip of fault, contact, or dike

- Quartz vein
- Breccia or pebble dike
- Breccia zone or pipe
- Mine adit
- Prospect
- Shaft, tick indicates an incline
- Trench

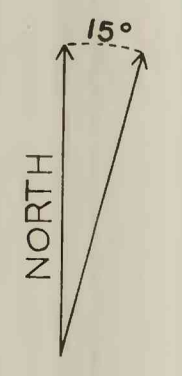
GEOLOGIC MAP OF THE SE 1/4 MOUNT UNION QUADRANGLE, YAVAPAI COUNTY, ARIZONA

BY P. M. BLACET

SCALE 1:24,000



CONTOUR INTERVAL 50 FEET



PLEASE REPLACE IN BOXES IN BACK OF BOOKS VOLUME

GEOLOGY BY P. M. BLACET 1961-64

THIS MAP IS PRELIMINARY AND HAS NOT BEEN EDITED OR REVIEWED FOR CONFORMITY WITH U.S. GEOLOGICAL SURVEY STANDARDS AND NOMENCLATURE.