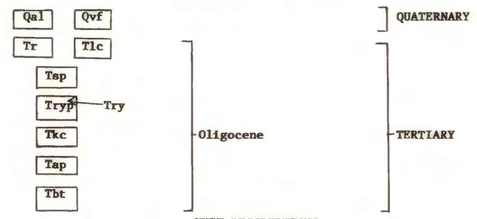
EXPLANATION

CORRELATION OF MAP UNITS



UNIT DESCRIPTIONS

Qal **Alluvium (Quaternary)**—Well-sorted alluvium. Locally includes alluvial fan deposits

Qvf **Valley fill (Quaternary)**—Undifferentiated alluvial and colluvial deposits, poorly to moderately sorted. Locally includes landslide debris

Tr **Rhyolite (Oligocene)**—White, red, or gray crystal-poor rhyolite flow-dome complexes. Contains phenocrysts up to 3 mm of plagioclase, alkali feldspar, biotite, and quartz in a high-potassium devitrified groundmass

Tlc **Tuff of Lunar Cuesta (Oligocene)**—Brown to blue-gray, partly to densely welded quartz latitic ash-flow tuff. Contains up to 10 percent fragments of volcanic rock. Phenocrysts consist of plagioclase, quartz, alkali feldspar, biotite, and hornblende (Quinlivan and Rogers, 1974)

Tsp **Shingle Pass Tuff (Oligocene)**—Pink, red, and purple crystal-poor nonwelded to densely welded ash-flow tuff. Generally contains less than 10 percent phenocrysts of plagioclase, alkali feldspar, biotite, quartz, opaques, orthopyroxene and clinopyroxene

Try **Rhyolite (Oligocene)**—White, gray, and red crystal-rich rhyolite flows and intrusions. Phenocrysts consist of plagioclase, quartz, alkali feldspar, biotite, and hornblende (Quinlivan and Rogers, 1974)

Tryp **Pyroclastic debris (Oligocene)**—White, gray, and buff partly welded ash-flow tuff. Contains 10 to 50 percent lithic inclusions of rhyolite (unit Try). Locally reworked by water prior to deposition of overlying units (Quinlivan and Rogers, 1974)

Tkc **Tuff of Kiln Canyon (Oligocene)**—Gray to purple, rhyolitic to quartz latitic ash-flow tuff. Contains 1 to 10 percent lithic inclusions up to 10 cm long that are similar to those in the tuff of Big Ten Peak (Tbt). Phenocrysts consist of plagioclase, quartz, alkali feldspar, biotite, and hornblende (Quinlivan and Rogers, 1974)

Tap **Ash and pumice (Oligocene)**—White, gray, and buff rhyolitic airfall tuff and waterlaid tuffaceous sediments. Tuff consists of ash; shards; pumice; occasional fragments up to 15 cm of volcanic, plutonic, and metamorphic rocks, and minor crystals up to 2 mm of quartz, plagioclase, alkali feldspar, and biotite. Conglomerate lenses up to 3 m in thickness composed of latite and basalt cobbles are interbedded locally in the unit

Tbt **Tuff of Big Ten Peak (Oligocene?)**—White, buff, and orange nonwelded lithic-rich ash-flow tuff containing crystal fragments of plagioclase, alkali feldspar, and biotite. Contains up to 50 percent lithic fragments of shale, limestone, quartzite, granitic rock, volcanic flow rock, and exotic welded tuffs which average approximately 2 cm in large dimension. Lithic fragments tend to decrease in size stratigraphically upward. Megabreccia blocks (up to 500 m in long dimension) consisting largely of exotic tuffs and lavas occur in this unit

BIG TEN PEAK CALDERA

The major portion of the Big Ten Peak caldera lies west of this quadrangle (Keith, 1986) and is outlined by the zone of megabreccia blocks. At present, the location of that portion of the caldera boundary north of the breccia blocks in this quadrangle is unknown. Earlier mapping in this area has been done by Kleinhampl and Ziony (1984, 1985).

Contact—Dashed where approximately located

Fault—Dashed where approximately located, dotted where hidden, bar and ball on downthrown side

Compaction foliation in tuff

Inclined

Vertical

Horizontal

Joints

Zone containing megabreccia blocks

REFERENCES CITED

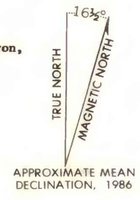
Keith, W.J., 1986, Preliminary geologic map of the Big Ten Peak quadrangle, Nye County, Nevada: U.S. Geological Survey Open-File Map 87-7, scale 1:62,500.

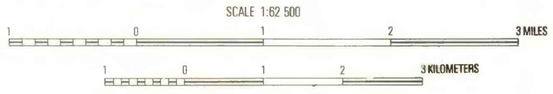
Kleinhampl, F.J., and Ziony, J.I., 1984, Mineral resources of northern Nye County, Nevada: Nevada Bureau of Mines and Geology Bulletin 99B, 243 p.

Kleinhampl, F.J., and Ziony, J.I., 1985, Geology of northern Nye County, Nevada: Nevada Bureau of Mines and Geology Bulletin 99A, 172 p.

Quinlivan, W.D., and Rogers, C.L., 1974, Geologic map of the Tybo quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-821, scale 1:48,000.

Base from U.S. Geological Survey, 1:24,000, Georges Canyon Rim, Georges Canyon Rim SE, McCann Canyon, McIntyre Summit, 1971





Geology done in 4 man months from 1982 to 1985.

PRELIMINARY GEOLOGIC MAP OF THE MC CANN 15'-QUADRANGLE, NYE COUNTY, NEVADA

By

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1987

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.