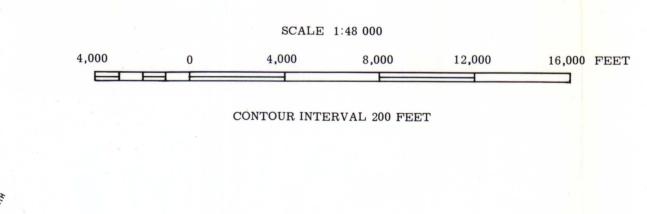
1:250,000, 1956

APPROXIMATE MEAN DECLINATION, 1970

## 151° 30' Pleistocene and Holocene Surr Mountain Early Upper Devonian 67° 30' Middle(?) Devonian Base enlarged from U. S. Geol. Survey, Wiseman quadrangle,

Geochemical sampling and geology by E. R. Chipp, assisted by R. S. Kunter, 1969. Geology, ages and unit names adapted in part from Brosge' and Reiser, 1960, 1971.



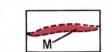
PROJECT LOCATION

## EXPLANATION



Surficial deposits

- Qal, Recent alluvium; mostly poorly sorted stream silt, sand, gravel and boulders.
- Qls, Landslide debris.
- Ogl, Glacial drift; morainal deposits of sand, gravel and boulders.



Greenstone and greenschist

Greenstone sills and dikes in southern area are dark green, granoblastic with actinolite-albite-epidote-quartz-sphene; greenschist at base of thrust in southern area is dark green with  $chlorite-albite-calcite-biotite \ \ and \ \ locally \ \ abundant \ \ magnetite$ octahedrons.



**Phyllite** 

Black to medium-gray phyllite; locally schistose or slaty, with carbonaceous material, quartz, muscovite (sericite) and rare chlorite; near Eagle Rock, phyllite is highly crenulated and banded with thin quartz veinlets. Limestone nodules are abundant near limestone contacts.



Phyllite and schist

- Medium-gray to tan, quartz-chlorite-muscovite-albite schist, rare calc-schist; phyllite contains sericite-quartz-chlorite to sericite-chlorite-calcite-quartz; between Surr Creek and Wild Lake phyllite is locally light brown with quartz-sericitecalcite and abundant carbonaceous and limonitic material; highly crenulated in many areas and more calcareous near Skajit Limestone contacts.
- D<sub>6L</sub>, Limestone and dolomite; lenticular beds of light-gray, thickly bedded limestone and tan to orange dolomite; dolomite contains euhedral crystals of albite up to 5 mm long and minor muscovite and chlorite.



DEVONIAN

Schist and phyllite

- D7. Light-gray, brown, or green quartz-chlorite-sericite schist to quartz-carbonate-muscovite-albite schist. Phyllite beds are dark gray or green-gray with quartz-chlorite-sericite and local magnetite; minor areas of dolomitic and pyritic calc-schist, and quartz-chloritoid-muscovite-chlorite schist.
- D7a, Dominantly light-brown, carbonaceous quartz-muscovitechlorite-calcite schist to phyllite with elongate nodules of limestone and schist up to five inches.



Skajit Limestone

Light-gray, finely crystalline, thin bedded to massive, locally carbonaceous; includes minor schist and greenschist; greenschist may in part be metatuff with chlorite-albite-biotitecalcite-quartz; limestone is commonly thin bedded, argillaceous and highly folded in lower part, grading into more massive limestone or marble in the upper part; locally dolomitic with chlorite

Contact Long dashed where approximately located, short dashed where inferred, queried where doubtful.

Fault

Long dashed where approximately located, short dashed where inferred. D on downthrown side.

## 

Thrust fault

Dashed where approximately located, dotted where concealed, sawteeth on upper plate.

32

Strike and dip of beds 24

Strike and dip of foliation

Strike and dip of axial plane of minor folds and crenulations showing direction of plunge of fold axes.

72 Strike and dip of joints

Stream-sediment or soil sample with number

Anomalous stream-sediment or soil sample with number and

anomalous element.

Rock geochemical sample with number

Quartz or quartz-carbonate vein \*

Placer mine

Cabin

## REFERENCES

- Brosge, W. P. and Reiser, H. N., 1960, Progress map of the geology of the Wiseman quadrangle, Alaska: U. S. Geol. Survey open-file map 200.
- Brosge, W. P. and Reiser, H. N., 1971, Preliminary bedrock geologic map of the Wiseman and eastern Survey Pass quadrangles, Alaska: U. S. Geol. Survey open-file map 479.

Cartography by C. M. Renaud