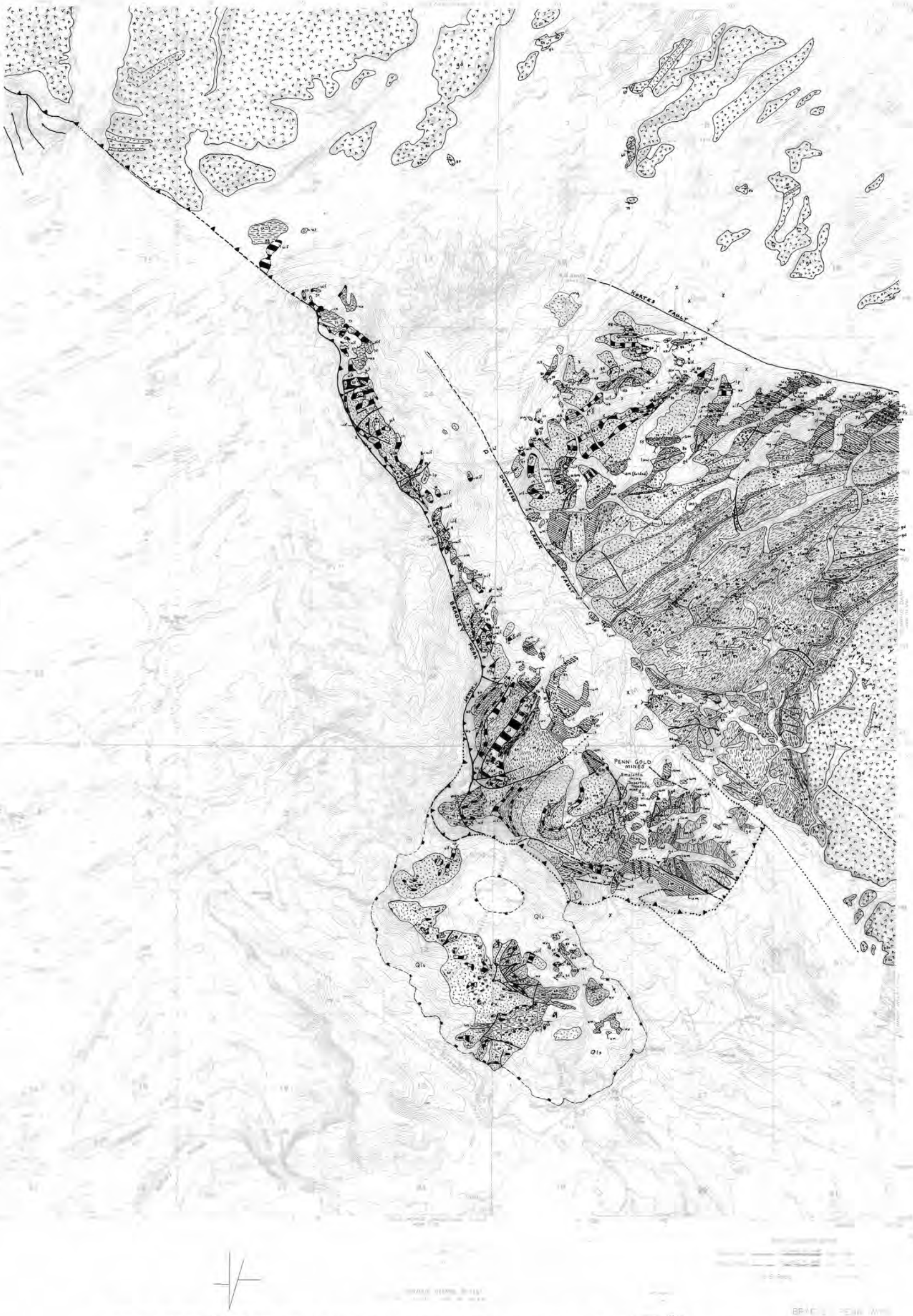
GEOLOGICAL SURVEY OF WYOMING
Gary B. Glass, State Geologist

OPEN FILE REPORT 91-3



EXPLANATION

PHANEROZOIC ROCKS UNDIVIDED

PRECAMBRIAN INTRUSIVE ROCKS

- Proterozoic mafic dikes (Pd).
- Archean granodiorite (gd). (>2.6 Ga)[1]
- Archean (?) porphyritic metagabbro "leopard rock" (lp). Contains coarse-grained plagioclase phenocrysts in fine-grained diabasic groundmass.
- Archean metagabbro & metadiabase (mg). Fine- to medium-grained mafic dikes with ophitic to subophitic texture.

ARCHEAN SUPRACRUSTAL ROCKS (>2.7 Ga[1])

Upper metasedimentary & metavolcanic unit

- Felsic metavolcanic & volcaniclastic rocks (fv). Fine-grained tan schists with andesite and dacite compositions.
- Metasedimentary rocks (chloritic & pelitic schist) (us).
- Banded quartz-magnetite-grunerite iron formation (uif).[2]
- Mafic metavolcanic & volcaniclastic schists & amphibolites (uv).
- Ultramafic schist (uum). Serpentinite & tremolite-talc-chlorite schist.

Bradley Peak ultramafics[3]

- Mafic & ultramafic metavolcanic rocks (um). Serpentinite, metaperidotite, tremolite-talc-chlorite schist, & amphibolite. Spinifex, aphyric, & cumulates textures preserved in several ultramafic flows.
- Interflow magnetite iron formation (if).

Lower metavolcanic unit

- Mafic metavolcanic & volcaniclastic schists & amphibolites (lmv). Lined pattern approximates foliation trends.
- Serpentinite (lum).
- Pelitic schist (lms).
- Banded quartz-magnetite-grunerite iron formation (lif).

MAP SYMBOLS

Bedding & Foliation

- trend of inclined beds
- trend of inclined foliation
- trend of vertical beds
- trend of vertical foliation
- trend of joints

Minor Folds

- plunge of isoclinal fold
- plunge & dip of isoclinal fold axis
- plunge of open fold
- plunge of chevron fold
- antiform
- synform

Faults

- Fault, dashed where approximated, dotted where projected under alluvial cover. Ball on Downthrown.
- Shear zone.
- Thrust Fault, dashed where approximated, dotted where projected. Sawteeth on upper plate.

Prospect Symbols

- shaft
- prospect pit
- trench
- adit
- trend of inclined quartz vein
- gossan

Miscellaneous

- Qls — Landslide
- Breccia

REFERENCES

[1] Snyder, G.L., Hausel, W.D., Klein, T.L., Houston, R.S., and Graff, P.J., 1989, Precambrian rocks and mineralization, southern Wyoming Province, in 28th International Geological Congress Field Trip Guidebook T332: American Geophysical Union, Washington D.C., 48p.

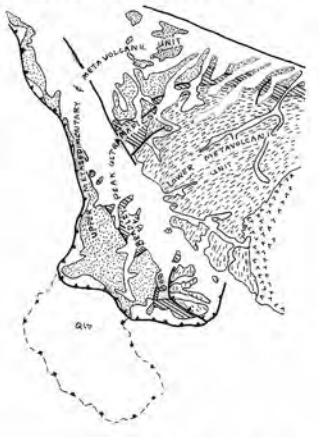
[2] Lovering, T.S., 1929, The Rawlins, Shirley, and Seminoe iron-ore deposits Carbon County, Wyoming: U.S. Geological Survey Bulletin 811-D, p.203-235.

[3] Klein, T.L., 1981, The geology and geochemistry of the sulfide deposits of the Seminoe district, Carbon County, Wyoming: PhD dissertation, Colorado School of Mines, Golden, 232p.

[4] Blackstone, D.L., Jr., 1965, Gravity thrusting in the Bradley Peak and Seminoe Dam quadrangles, Carbon County, Wyoming: Geological Survey of Wyoming Preliminary Report 6, 13p.

Bayley, R.W., 1968, Geologic map of the Bradley Peak Quadrangle, Carbon County, Wyoming: U.S. Geological Survey Geologic Quadrangle GQ-773, Scale 1:24,000.

GENERALIZED GEOLOGIC MAP



ACKNOWLEDGMENTS

I am indebted to Charlie and Donna Kortes for their assistance with historic mine records and claims. I would also like to thank John France and the Miller Estate Company for access. The U.S. Bureau of Land Management (Rawlins district) provided aerial photography to aid mapping. I also thank D. L. Blackstone, Jr., for critically reviewing this map.

A colored copy of this map is available for examination at the Geological Survey of Wyoming Metals and Precious Stones Division office in Laramie.

PRECAMBRIAN GEOLOGY OF THE SEMINOE MOUNTAINS (IRON-GOLD) MINING DISTRICT, BRADLEY PEAK QUADRANGLE, CARBON COUNTY, WYOMING

by W. Dan Hausel

1991