

**EXPLANATION**  
 The values of copper and zinc in rocks are expressed as ratios (Cu/Zn) after the data were treated as follows: The data were gridded to a rectangular coordinate system with mesh points 1,000 feet (305 m) apart. The original data points were transferred to grid coordinates or mesh points by drawing a circle of radius 800 feet (244 m) around each mesh point, and shifting the coordinates of data points within each circle to the coordinates of the mesh point. Accompanying the shift of coordinates each point was weighted according to its distance from the mesh point; as a result, close-lying data points had more influence than outlying data points on the final value used at the mesh point. After data points were weighted and projected to a mesh point, the multiplicity of values created at the mesh point was removed by averaging.

**MINE WORKINGS**  
 ISOPLETHS—Areas where the copper: lead ratio is more than 1, 5, 10, 20, or 50. Dashed where inferred. No isopleths less than 1 or more than 50 shown.

Concentrations of copper were determined by atomic absorption analyses (Ward and others, 1969). Determinations were made by R. W. Leinz, R. L. Turner, and R. B. Tripp.

Concentrations of lead were determined by atomic absorption (Ward and others, 1969). Determinations were made by R. W. Leinz, R. L. Turner, and R. B. Tripp.

**REFERENCES**  
 Ward, F. N., Nakagawa, H. M., Harms, T. F., Van Sickle, G. H., 1969, Atomic-absorption methods of analysis useful in geochemical exploration. U.S. Geol. Survey Bull. 1289, 45 p.

Base from U.S. Geological Survey, 1:62,500, Kingston, Kellogg, Burke, St. Joe, Calder, and Wallace, 1957; Cooper Gulch and Salties, 1956.

SCALE 1:62,500

0 1 2 3 4 MILES

0 1 2 3 4 KILOMETERS

Area of this report

APPROXIMATE MEAN DECLINATION, 1979

**EXPLANATION**

Qal	Holocene	Yws	Wishards sill	Yr	Yrb	Revvett and Burke Formations	Yp	Prichard Formation
Og	Pleistocene	Ysp	Striped Peak Formation	Yb	Yrb	Yr, Revvett Formation	Yp	Prichard Formation
QTog	QUATERNARY AND TERTIARY	Yw	Wallace Formation	Yb	Yrb	Yb, Burke Formation	Yp	Prichard Formation
Km	CRETACEOUS	Ys	St. Regis Formation	Yb	Yrb	Yb, undifferentiated	Yp	Prichard Formation

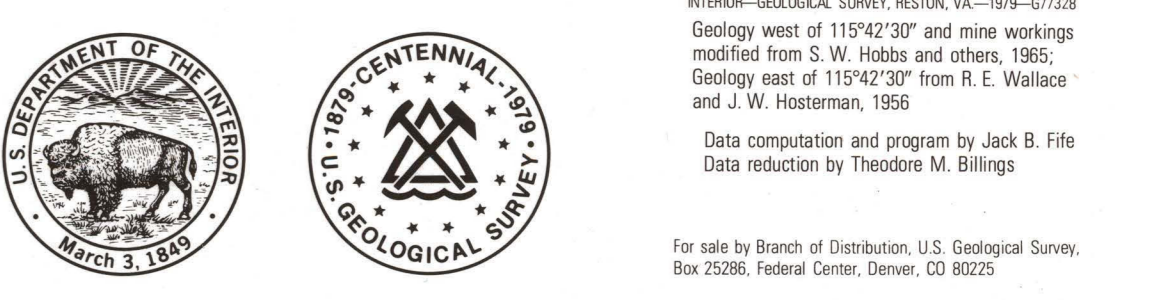
PRECAMBRIAN Y Belt Supergroup  
 PRECAMBRIAN Y Revvett and Burke Formations  
 PRECAMBRIAN Y Prichard Formation

Contact  
 Fault  
 Dashed where approximately located, dotted where concealed

**C. DISPERSION PATTERNS FORMED IN ROCKS BY THE RATIO OF COPPER: LEAD**

**DISPERSION PATTERNS IN ROCKS FORMED BY THE RATIO OF Cd/Zn, Pb/Zn, AND Cu/Pb IN THE COEUR D'ALENE DISTRICT, IDAHO AND MONTANA**

By  
**Garland B. Gott and John B. Cathrall**  
 1979



INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—599-67329  
 Geology west of 115°42'30" and mine workings modified from S. W. Hobbs and others, 1965; Geology east of 115°42'30" from R. E. Wallace and J. W. Hosterman, 1956.  
 Data computation and program by Jack B. Fife  
 Data reduction by Theodore M. Billings

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