



EXPLANATION

The values of antimony and silver as the sum of enrichments in rocks are shown 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. The sum of the enrichments of antimony and silver was derived according to the formula:

$$\text{Sum of the Enrichments} = \left[\frac{\text{Sb (ppm)}}{\text{Sb median for the district (ppm)}} \right]^2 + \left[\frac{\text{Ag (ppm)}}{\text{Ag median for the district (ppm)}} \right]^2$$

MINE WORKINGS

ENRICHMENT ISOPLETHS—Areas where the sum of the enrichments is more than 5, 10, 20, 50, or 100. Dashed where inferred. No isopleths less than 5 or more than 100 shown.

Concentrations of antimony were determined by colorimetry (Ward and others, 1963). Determinations were made by J. H. Turner, S. Truesdell, E. P. Welsch, and V. Mello.

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

REFERENCES

Ward, F. N., Lakin, H. W., Conroy, F. C., 1963, Analytical methods used in geochemical exploration by the U.S. Geol. Survey, U.S. Geol. Survey Bull. 1152, 100 p.

Base from U.S. Geological Survey, 1:62,500, Kingston, Kellogg, Burke, St. Joe, Cater, and Wallace, 1957, Coeur d'Alene and Selkirk, 1956.

SCALE 1:62,500

0 1 2 3 4 MILES

0 1 2 3 4 KILOMETERS

Area of this report

MONTANA

IDAHO

INTERPOLATED MEAN DECLINATION, 1979

EXPLANATION

Qal	Holocene	Yws	Wishards sill	Yr	Revet and Burke Formations
Og	Pleistocene	Ysp	Striped Peak Formation	Yb	Yr, Revett Formation
QTog	QUATERNARY AND TERTIARY	Yw	Wallace Formation	Yp	Yb, Burke Formation
Km	Channel and terrace gravels	Ys	St. Regis Formation	Yf	Yb, undifferentiated
	Monzonite and associated rocks			Yg	Prichard Formation

PRECAMBRIAN (BRIAN, Yf)

Belt Supergroup

PRECAMBRIAN Y

Contact

Fault

Dashed where approximately located; dotted where concealed

Underground workings

From Hobbs, Griggs, Wallace and Campbell (1965, pls. 1-5)

C. SUM OF THE ENRICHMENTS OF ANTIMONY AND SILVER

THE SUM OF ENRICHMENTS IN ROCKS ABOVE THE DISTRICT MEDIAN VALUES FOR Cu, Sb, Ag, AND S; Sb, Ag, AND Mn; AND Sb AND Ag IN THE COEUR D'ALENE DISTRICT, IDAHO AND MONTANA

By
Garland B. Gott and John B. Cathrall
1979



Geology west of 115°42'30" modified from Hobbs, Griggs, Wallace, and Campbell (1965); geology modified east of 115°42'30" modified from Wallace and Hosterman (1956).

Data computation and program by Jack B. Fife

Data reduction by Theodore M. Billings