EXPLANATION

Value of lead in rocks and soils expressed in parts per million (ppm) 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 transposed 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 weighed 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

ROCK ISOPLETHS—Areas where samples contain more than 50, 100, 300, or 500 ppm of lead. Dashed where inferred. No isopleths less than 50 or more than 500 ppm shown

SOIL ISOPLETHS—Areas where samples contain more than 50, 100, 300, or 500 ppm of lead. Dashed where inferred. No isopleths less than 50 or more than 500 ppm shown

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 Saltese, 1956

SCALE 1:62 500

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

APPROXIMATE MEAN DECLINATION, 1961

Area of this report

EXPLANATION

Qal — Alluvial deposits	Holocene	Yws — Wishards sill	PRECAMBRIAN Y
Qg — Glacial and glaciofluvial deposits	Pleistocene	Ysp — Striped Peak Formation	Belt Supergroup, PRECAMBRIAN Y
QTog — Channel and terrace gravels	QUATERNARY AND TERTIARY	Yw — Wallace Formation	
Km — Monzonite and associated rocks	CRETACEOUS	Ys — St. Regis Formation	
		Yr, Yrb — Revett and Burke Formations; Yr, Revett Formation; Yrb, Burke Formation; Yrb, undifferentiated	
		Yp — Prichard Formation	Belt Supergroup, PRECAMBRIAN Y

Contact

Fault — Dashed where approximately located; dotted where concealed

A. AFTER POST-ORE FAULTING

EXPLANATION

Value of lead in rocks expressed in parts per million (ppm) 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 transposed 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 weighed 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

SUPERPOSITION OF POST-ORE FAULTS

TRACE OF DOBSON PASS FAULT AT DEPTH

UNDERGROUND WORKINGS—Open symbols where reconstructed position of mine workings are projected vertically to the surface through hanging wall of the Dobson Pass fault

ROCK ISOPLETHS—Areas where samples contain more than 50, 100, 300 or 500 ppm of lead. Dashed where inferred. No isopleths less than 50 or more than 500 ppm shown

SCALE 1:62 500

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

B. BEFORE POST-ORE FAULTING

MAPS OF DISTRIBUTION OF LEAD IN ROCKS, COEUR D'ALENE DISTRICT, IDAHO AND MONTANA

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1980—G79053

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