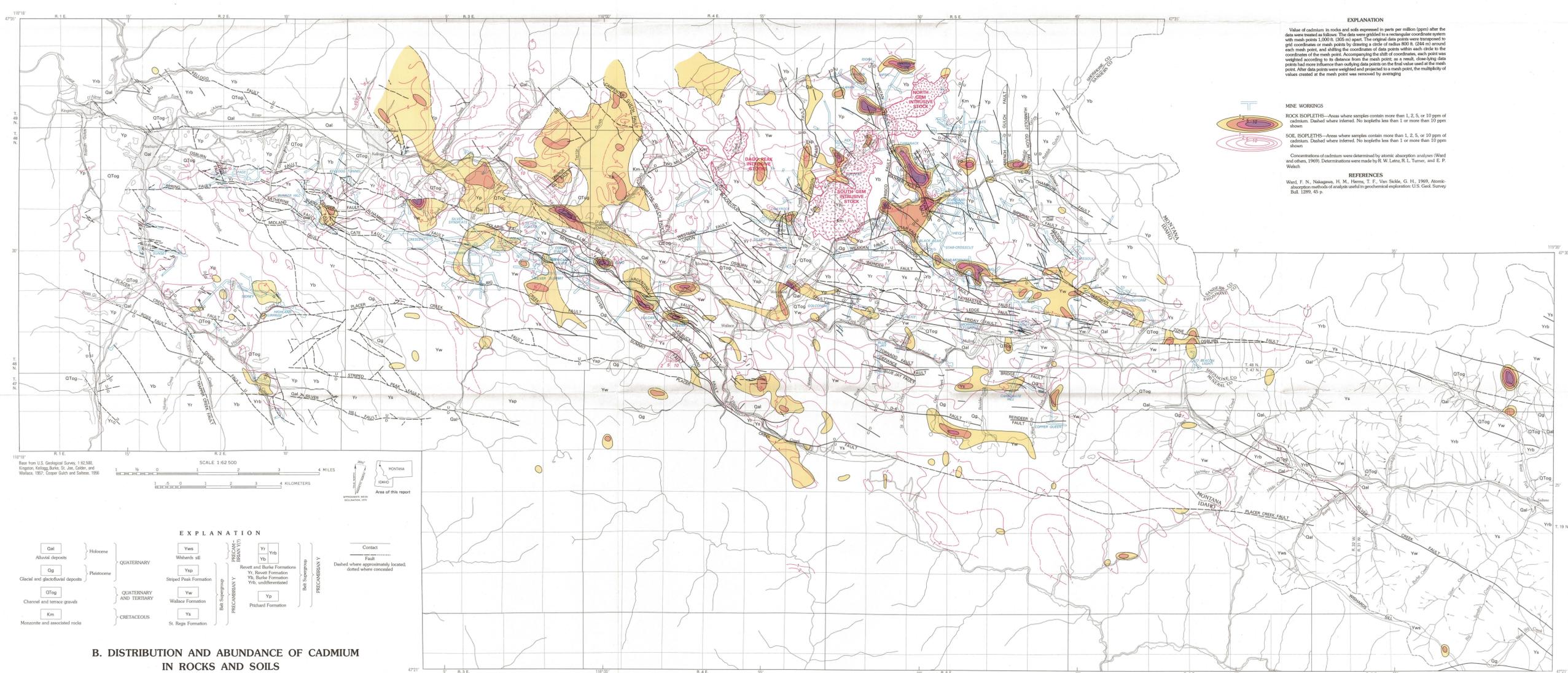


**A. DISTRIBUTION AND ABUNDANCE OF ZINC
IN ROCKS AND SOILS**



**B. DISTRIBUTION AND ABUNDANCE OF CADMIUM
IN ROCKS AND SOILS**

GENERAL DISTRIBUTION OF ZINC AND CADMIUM IN ROCKS AND SOILS IN THE COUER D'ALENE DISTRICT, IDAHO AND MONTANA

By
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1979

EXPLANATION
Value of zinc 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 transferred to grid coordinates or mesh points by drawing a circle of radius 800 ft (244 m) around each mesh point, and adding 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, 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 200, 300, 500, or 1,000 ppm of zinc. Dashed where inferred. No isopleths less than 200 or more than 1,000 ppm shown.
SOIL ISOPLETHS—Areas where samples contain more than 200, 300, 500, or 1,000 ppm of zinc. Dashed where inferred. No isopleths less than 200 or more than 1,000 ppm shown.

Concentrations of zinc were determined by atomic absorption (Ward and others, 1969). Determinations were made by R. W. Letz, 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 used in geochemical exploration, U.S. Geol. Survey Bull. 1289, 45 p.

EXPLANATION
Value of cadmium 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 transferred to grid coordinates or mesh points by drawing a circle of radius 800 ft (244 m) around each mesh point, and adding 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, 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 1, 2, 5, or 10 ppm of cadmium. Dashed where inferred. No isopleths less than 1 or more than 10 ppm shown.
SOIL ISOPLETHS—Areas where samples contain more than 1, 2, 5, or 10 ppm of cadmium. Dashed where inferred. No isopleths less than 1 or more than 10 ppm shown.

Concentrations of cadmium were determined by atomic absorption analyses (Ward and others, 1969). Determinations were made by R. W. Letz, R. L. Turner, and E. P. Walsh.

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