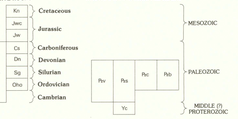
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
MAINE GEOLOGICAL SURVEY,
OFFICE OF THE NEW HAMPSHIRE STATE GEOLOGIST,
AND VERMONT GEOLOGICAL SURVEY

MISCELLANEOUS INVESTIGATIONS SERIES
MAP I-1898-B (SHEET 2 OF 2)

CORRELATION OF MAP UNITS



EXPLANATION OF MAP UNITS

INTRUSIVE ROCKS

Kn **Alkalic rocks (Cretaceous)**—Granite, syenite, and quartz syenite of New England–Quebec Intrusive Suite. Includes diabase at Choate Hill

Jwc **Conway Granite (Jurassic)**—Includes parts of White Mountain batholith, Pilot-Pliny plutons, and Gore Mountain plutons

Jw **Granitic rocks (Jurassic)**—Granite and associated alkalic intrusive rocks and volcanic rocks of White Mountain Plutonic-Volcanic Suite exclusive of Conway Granite. Includes Monadnock Mountain stock and parts of White Mountain batholith, Pilot-Pliny plutons, and Gore Mountain plutons

Cs **Granite (Carboniferous)**—Includes granite of Sebago batholith

Dn **Granitic rocks (Devonian)**—Granite to quartz diorite of New Hampshire Plutonic Suite. Includes Averill pluton, Bretton Woods pluton, Bromley pluton, most of Echo Pond pluton, part of Flagstaff Lake plutons, Gorham pluton, Lexington batholith, Long Mountain pluton, Mooselookmeguntic batholith, and Umbagog pluton

Sg **Granitic rocks (Silurian)**—Granite to granodiorite. Includes East Inlet pluton and Moody Ledge pluton

Oho **Granitic rocks (Ordovician)**—Granite to quartz diorite of Highlandcroft Plutonic Suite and Oliverian Plutonic Suite. Highlandcroft includes Adamstown pluton, Attean pluton, Catheart Mountain pluton, Sally Mountain pluton, and Skinner pluton; Oliverian includes Jefferson batholith and Owls Head pluton

Pzm **Gabbroic rocks (Paleozoic)**—Androscoggin Lake pluton (Carboniferous); part of Echo Pond pluton (Devonian), Pierce Pond pluton (Devonian), Sugarloaf pluton (Devonian), part of Flagstaff Lake plutons (Devonian), sill at Bean Brook Mountain (Devonian); Chickwolnepy intrusions (Ordovician); and gabbro, diorite, and ultramafic rocks of Bol Mountain Complex (Cambrian? to Lower Ordovician?); also includes trondhjemite of Bol Mountain Complex, tonalite of Chickwolnepy intrusions, and syenite of Androscoggin Lake pluton

STRATIFIED METAMORPHIC ROCKS

Pzv **Mixed metavolcanic and metasedimentary rocks (Paleozoic)**—Variable proportions of metavolcanic and metasedimentary rocks (Devonian to Cambrian); compositions of metavolcanics range from felsic to mafic

Pzs **Siliciclastic metasedimentary rocks (Paleozoic)**—Predominantly marine (Devonian to Cambrian)

Pzc **Calcareous metasedimentary rocks (Paleozoic)**—Predominantly marine (Devonian to Ordovician)

Pzb **Sulfidic metasedimentary rocks (Paleozoic)**—Marine, black sulfidic metashale (Devonian to Ordovician)

Yc **Diamictite (Middle? Proterozoic)**—Massive to poorly stratified diamictite of Chain Lakes massif

Contact

Fault

Mineralized area, mine, or prospect—Number refers to area, mine, or prospect listed in table 2

8 **Mineralized area**

x10 **Mine or prospect**

EXPLANATION FOR MAP *B*

Raw data—Values given in ppm; percentiles given within parentheses

△ 44–830 (2·95)

△ 35–43 (90–94)

Gridded data—Values given in ppm and rounded to two significant figures; percentiles given within parentheses

70 (99)
37 (95)
31 (90)
24 (75)
18 (50)

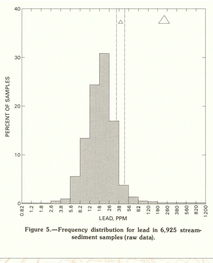


Figure 5.—Frequency distribution for lead in 6,925 stream-sediment samples (raw data).

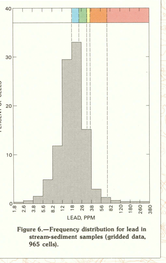


Figure 6.—Frequency distribution for lead in stream-sediment samples (gridded data, 965 cells).

Map B. Lead distribution

CORRELATION OF MAP UNITS

EXPLANATION OF MAP UNITS

INTRUSIVE ROCKS

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Yc **Diamictite (Middle? Proterozoic)**—Massive to poorly stratified diamictite of Chain Lakes massif

Contact

Fault

Mineralized area, mine, or prospect—Number refers to area, mine, or prospect listed in table 2

8 **Mineralized area**

x10 **Mine or prospect**

EXPLANATION FOR MAP *C*

Raw data—Values given in ppm; percentiles given within parentheses

△ 130–860 (2·95)

△ 110–129 (90–94)

Gridded data—Values given in ppm and rounded to two significant figures; percentiles given within parentheses

200 (99)
120 (95)
94 (90)
70 (75)
49 (50)

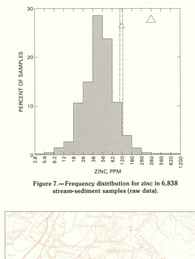

Figure 7.—Frequency distribution for zinc in 6,838 stream-sediment samples (raw data).

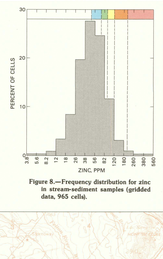

Figure 8.—Frequency distribution for zinc in stream-sediment samples (gridded data, 965 cells).

Map C. Zinc distribution

Base from U.S. Geological Survey,
Lewiston, 1956–72; Sherbrooke, 1961
10,000 Meter Universal Transverse Mercator Grid Zone 19

SCALE 1:250 000

5 0 5 10 15 20 25 MILES
5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 100 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology modified from Moench (1984)

MAPS SHOWING THE DISTRIBUTION OF COPPER, LEAD, AND ZINC IN STREAM SEDIMENTS, SHERBROOKE AND LEWISTON 1° × 2° QUADRANGLES, MAINE, NEW HAMPSHIRE, AND VERMONT

By

Gary A. Nowlan, Frank H. Howd, Frank C. Canney, and James A. Domenico

1990