PRELIMINARY SERIES

SHEETS 11D, E, 21A AND H (PARTS OF)

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS

MAP 33-1959

GEOCHEMISTRY

Heavy Metals in Stream Sediments, Northern Mainland of Nova Scotia

SHEET 1

Scale: One Inch to Four Miles = $\frac{1}{253,440}$

4 2 0 4 8 12 Miles

LEGEND

Sampling point, showing heavy metal concentrations of 8 parts per million (ppm) and over . . . . . •8

Heavy metal isograd for 5 ppm (dots indicate lower side of isograd) 5

Field work by R. H. C. Holman, 1957-1958

Interprovincial boundary . . . . . — ·· — ·· —

County boundary . . . . . — · — · —

Cartography by the Geological Survey of Canada, 1959

Approximate magnetic declination, 22° 57' West

NOTE

Samples of sediments were collected from the beds of most streams accessible by road or track. The samples were tested for citrate-soluble heavy metals, zinc, lead, and copper, shortly after collection while still wet, using a modification of the technique for copper described by R.H.C. Holman in 'A Method of Determining Readily-soluble Copper in Soil and Alluvium', Bull. I.M.M. vol. 66, Part 1, 1956-7, pp. 7-16. The technique was modified to determine zinc, lead, and copper by (1) using an alkaline citrate solution (pH 8.5), (2) benzene as the dithizone solvent, and (3) zinc standards for colour comparisons; reacting metals have therefore been expressed as zinc.

The 5 ppm isograd has been drawn to indicate regional changes in the heavy metal contents of the stream sediments. Local concentrations of 8 ppm and greater are recorded as spot highs. Other figures have been omitted for simplicity. All data are on open file and may be inspected at the Geological Survey of Canada, Ottawa.

For geology see the Geological Map of the Maritime Provinces, Geol. Surv., Canada, Map 910A. Topographic maps on the scale of 1 inch to 4 miles covering this area may be secured from the Dept. of Mines, Nova Scotia.

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COPIES OF THIS MAP MAY BE OBTAINED FROM THE DIRECTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA

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MAP 33-1959
SHEET 1

Adjoins Sheet 2