



# British Columbia Geological Survey Geological Fieldwork 1979

## REGIONAL GEOCHEMICAL SURVEY

(92 O, P)

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The Ministry of Energy, Mines and Petroleum Resources conducted a regional geochemical survey of NTS map-areas 92O (Taseko Lakes) and 92P (Bonaparte River) during the 1979 field season.

The Regional Geochemical Survey, an ongoing program of the Geological Division, is patterned after the Uranium Reconnaissance Program. Previous areas covered by these programs and the 1979 sampling area are shown on Figure 61.

Stream sediment and water samples were collected from 1 747 sites in the Taseko Lakes and Bonaparte River map-areas for an average sample site density of one per 14 square kilometres. Excluded from the survey was an area of 5 800 square kilometres near the mutual boundaries of the two map-areas where poorly developed drainage is due to extensive overburden and plateau basalt cover. About half the sites were accessible by road, the remainder were sampled using helicopter support. A six-person sampling crew was provided by Bema Industries Ltd. of Langley and was under the supervision of T. E. Kalnins, Ministry representative.

Sample preparation was done by Kamloops Research and Assay Laboratory Ltd. Stream waters were analysed for uranium, fluorine, and pH by Min-En Laboratories, while stream sediment analyses were performed by Chemex Labs Ltd. and included the determination of zinc, copper, lead, nickel, cobalt, silver, manganese, iron, molybdenum, tungsten, mercury, and arsenic. Uranium analyses of stream sediments will be carried out by Novatrack Analysts Ltd.

Data processing will be done by Resource Geophysics and Geochemistry Division of the Geological Survey of Canada. Release of analytical results is scheduled for late May 1980.

Figure 61 shows map-areas for which data were released in 1979. Two releases in June included the Jennings River—McDame (104 O and P) map-areas, covered by the Uranium Reconnaissance Program, and the Terrace—Nass River (103 I—J, O—P) areas, representing the Accelerated Geochemical Survey of 1978. Stream sediments collected during 1977 Uranium Reconnaissance Program surveys in 82 F and K (Nelson and Lardeau) were re-analysed for tin and tungsten and sediments from 104N (Atlin) were analysed for tin. The results were released in mid-September.