



MINFILE NTS 094G – TRUTCH

*Original release date: May 1992
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The Trutch map area, located in northeastern British Columbia, contains 36 recorded mineral occurrences. Physiographically from west to east, the area encompasses the eastern most ranges of the Northern Rocky Mountains, the Rocky Mountain Foothills, and the Alberta Plateau.

The Rocky Mountains are predominantly underlain by folded and thrust faulted carbonate strata of Lower to Middle Paleozoic age. The carbonates, deposited along the Ancestral North America terrane continental shelf as platformal reefs and turbidites, host most of the mineral occurrences contained within the map sheet. Devonian to Carboniferous Besa River Formation shale represents a marine transgression onto the reef facies, perhaps caused by tectonic subsidence due to rifting activity to the west. Unlike the age equivalent Earn Group shale to the west, the Besa River Formation is barren of mineral deposits with the exception of the **Petrie** (094G 019) massive barite occurrence. The majority of the mineral occurrences are lead-zinc deposits, hosted within a northwest trending belt of carbonates of the Middle Devonian Dunedin Formation, Middle to Lower Devonian Stone Formation and Silurian Nonda Formations. Within this belt, there are two areas that have a high concentration of mineral deposits. The **Redfern Lake area**, characterized by exhalative (Mississippi Valley-type) lead-zinc mineralization (094G 002, 012, 018, 019, 027, 034, and 036), and the **Richards Creek area**, hosting lead-zinc(-copper) deposits that may be replacement (Manto-type) or exhalative in character (094G 003, 010 (**Ric**), 011, 016, 026 (**Bunker Creek**), 028, 029, 030, 032, and 035). The **Cay** prospect (094G 017), north of Richards Creek, contains substantial amounts of germanium within brick-red sphalerite. The **Lad** lead-zinc prospect (094G 014), south of Redfern Lake on Mount McCusker, has an indicated length of mineralization of 750 metres.

The Rocky Mountain Foothills, underlain by folded Mesozoic and Paleozoic sediments and carbonates, are host to phosphate-bearing strata (**Richards Creek** (094G 022)).

Cretaceous clastic sediments of the Alberta Plateau contain native sulphur (**A-25-D** (094G 023) and **C-97-D** (094G 024)) and coal deposits (**Pink Mountain** (094G 021)).

SELECTED REGIONAL REFERENCES (NTS 094G - TRUTCH)

- J. Dixon (1999): Isopach Maps of Triassic units in the Trutch (94-G) map sheet, Geological Survey of Canada, Open File 3765, 20 p., 9 colour sheets.
- Cecile, M.P., Khudoley, A.K., Currie, L.D., et al.: Composite geological map of Marion Lake (94G/3), Mount Withrow (92G/6), and Minaker River (94G/11), northeastern B.C., Geological Survey of Canada, Open File 3879, 1 map sheet.