



MINFILE NTS 094E – TOODOGGONE RIVER

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The Toodoggone River map area lies in the north-central part of British Columbia and contains 236 documented occurrences. Most of the map sheet is dominated by the Omineca-Cassiar mountains and the Finlay, Toodoggone and Stikine rivers. The Toodoggone district is situated within a Mesozoic volcanic arc assemblage which lies along the eastern margin of the Intermontane Belt, a northwest trending belt of Paleozoic to Tertiary sediments, volcanics and intrusions. This belt is bounded to the east by the Omineca Belt and to the west and southwest by the Sustut and Bowser basins.

For the past decade, the Toodoggone district has been an active area of mineral exploration and has recently become an important area of gold and silver production. The district contains one of British Columbia's largest gold-silver mines (**Lawyers**, 094E 066), as well as smaller scale past producers (**Shasta**, 094E 050 and **Baker**, 094E 026). Several gold deposits have drill indicated reserves and await production decisions (e.g. **Mets**, 094E 093), and numerous other gold-silver-copper prospects are in various stages of exploration. The most economically significant deposits exhibit characteristics typical of epithermal alteration and mineralization of both adularia-sericite and acid-sulphate affinities. The former class of deposits is represented by the Lawyers AGB and Cliff Creek zones and the Shasta deposit, and the latter by the **Bonanza** deposit (094E 079).

Other deposits consist of gold-rich porphyry-style deposits (**Kemess North**, 094E 021 and **Kemess South**, 094E 094), deep-seated precious and base metal bearing stockworks and veins, and near-surface replacement-type gold mineralization. The Kemess South deposit, with estimated open pit mineable reserves of 200.4 million tonnes grading 0.22 per cent copper and 0.63 gram per tonne gold and 0.008 per cent molybdenum, began production in May 1998.