



MOSQUITO CREEK

(93H/4E)

By G. H. Klein

The Mosquito Creek gold property is located 3 kilometres north of the town of Wells, 88 kilometres east of Quesnel. The Mosquito Creek Gold Mining Company Limited was formed in 1971 to explore 29 Crown-granted mineral claims and two placer leases. The claims encompass Mosquito and Red Gulch Creeks, which have been sites of placer gold mining since the 1860's. The property is on strike northwesterly from Island Mountain (Aurum) and Cariboo Gold Quartz, both former producing mines. The property partially overlaps the lower workings of the Island Mountain mine.

Bulldozer trenching and geological mapping in 1971 led to a surface percussion and diamond drilling program in 1972 and 1973. The drilling indicated gold mineralization similar to that of the former producers and a three compartment shaft was sunk to 157 metres in 1974. Four levels were established, the lowest of which is the 4100, which is 240 metres above the former workings. The property lay dormant from April 1975 until July 1977, when underground exploration and diamond drilling resumed.

Late in 1979, the construction of a 100-tonne-per-day mill, crusher, and cyanidation plant was in progress. A tailings pond has been completed and production is scheduled for early 1980.

Lower Cambrian (or earlier) phyllites, quartzites, and limestone host the gold mineralization. These rocks have been intensely deformed by folding, and the mineralization lies in the overturned limb of an anticlinorium which strikes northwest and plunges 22 degrees to the northwest.

Crossfaulting does occur on the property but its relationship to the mineralized zone is not yet known. No igneous intrusions are known.

Exploration has been concentrated near the contact between dark quartzites and phyllites of the Rainbow member, and the lighter, calcareous Baker member, as this contact was known from the Island Mountain mine as being the zone of best mineralization.

Gold is associated with medium to coarse-grained pyrite, both in quartz veins and as replacement lenses. No visible gold has been found to date. The quartz veins are gash veins found mainly in the more brittle Rainbow member while replacement lenses are found in the softer, calcareous Baker rocks. The quartz veins tend to be of limited extent, and have not been fully explored. The one replacement lens found to date has been explored between the 4100 and 4200 levels. This lens, consisting of pyrite which is locally massive in a quartz and calcite matrix, plunges 22 degrees to the northwest, parallel to the plunge of the anticlinorium. Contacts of the lens are erratic, suggesting selective replacement. Three grab samples of this mineralization returned 88, 35, and 102 grams gold per tonne. This limited sampling indicated no correlation between gold and iron content.

The mineralization found to date is similar to that mined previously at the Island Mountain mine (*see* Sutherland Brown, 1957). Stated mining reserves from exploration and development are 19 400 tonnes at 26 grams gold and 8 grams silver per tonne.

REFERENCES

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- Sutherland Brown, A. (1957): Geology of the Antler Creek Area, Cariboo District, British Columbia, *B.C. Ministry of Energy, Mines & Pet. Res.*, Bull. 38.

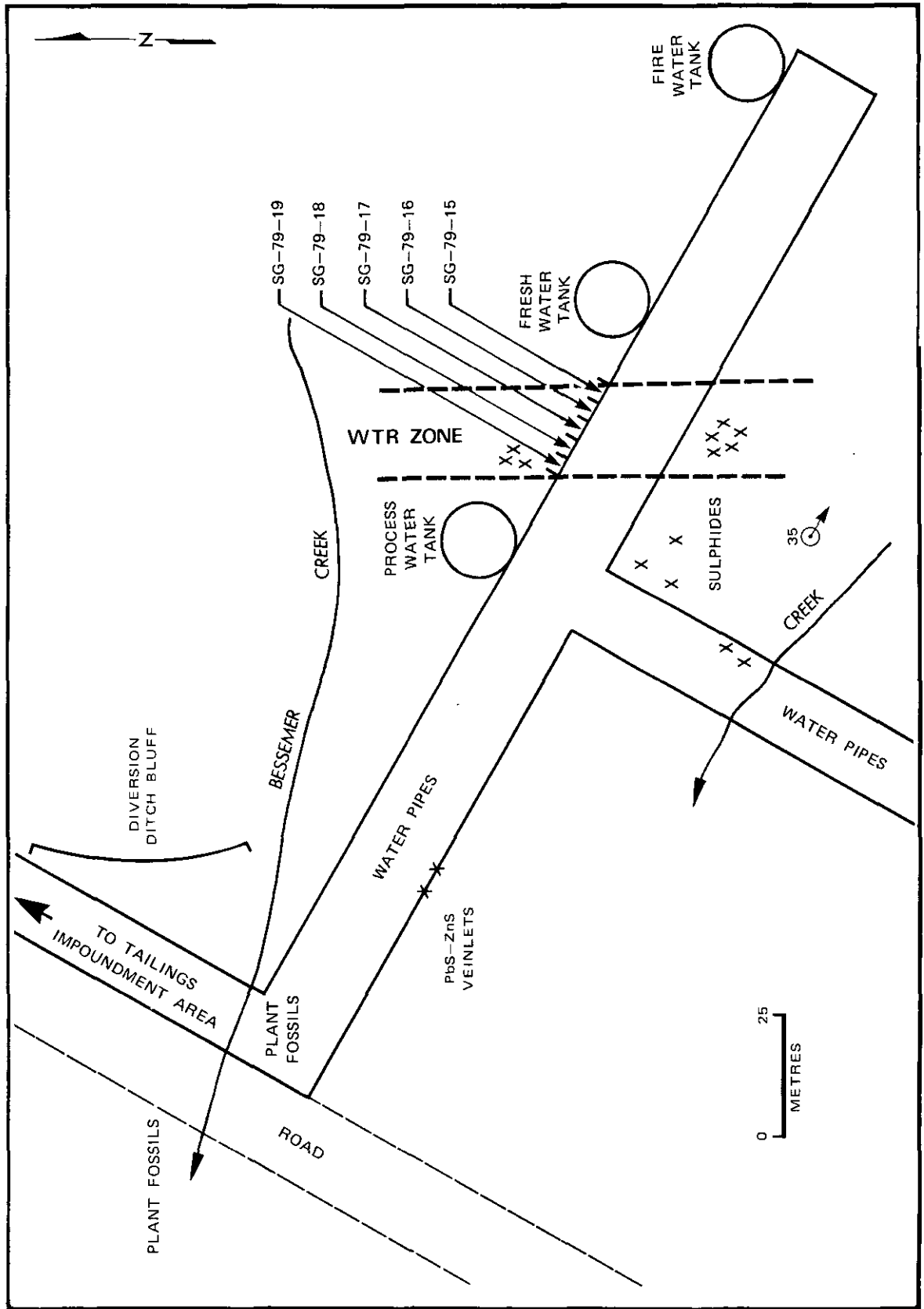


Figure 37. Sketch map of W-T-R zone, Sam Goosly.