

Minerals North Apr. '91

→ SILVER BUTTE

Development of the Facecut-35 Zone SB Property: 887519
A Westmin - Tenajon Joint Venture

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On March 5, 1991 Westmin Resources Limited announced that it will proceed to put the Facecut-35 Zone on the SB Property into production. Westmin will operate the project which is scheduled to start underground development in May 1991, and complete mining in November of 1991, subject to regulatory approval. Rapid development and mining are possible because existing underground development gives access to the ore zones and because the mill and tailings facilities of the Westmin-controlled Premier Gold Project will be used to process the ore.

Geologically, the Facecut-35 Zone occurs in subvertically dipping Jurassic Hazelton Group stratigraphy in a siliceous unit at the contact between a strongly plagioclase porphyritic andesite flow and a sequence of generally non-porphyritic andesite flows and tuffs. The siliceous unit contains concentrations of sulphides ranging from trace amounts up to 50% consisting of pyrite, sphalerite, galena and chalcopyrite in general order of decreasing abundance.

In many instances it appears that there is an asymmetry to the mineralization within the siliceous unit such that sulphides are abundant at the western edge (base?) of the silica unit with stringers of sulphides extending to the west into the andesites. The eastern contact between the siliceous unit and sulphides is often sharp and sulphides occasionally exhibit banding. Metal zoning is evident in high Zn concentrations and high Ag/Au ratios at the north end of the deposit. These features suggest an exhalative character to the mineralization.

Diluted proven and probable geological reserves for the Facecut-35 Zone are 96,209 metric tonnes at a cut grade of 9.91 g/t Au, 65.9 g/t Ag, 0.32% Cu, 0.67% Pb and 3.85% Zn. Gold and silver will be recovered from a cyanidation carbon-in-leach circuit by feeding batches of ore into the existing mill facilities. The feasibility of adding a froth floatation circuit to the mill to produce a zinc concentrate from the tails of the cyanidation circuit is being investigated.

The short life of the project will necessitate the contracting out of development and mining. The mining method is a modified long hole method in which close-spaced sublevels in ore (~10m intervals) will be used as a platform for blasthole ring drilling. Above the existing main level an alimak raise will provide access to the sublevels and below this level the sublevels will be accessed from a ramp.

The mine plan calls for all waste rock excavated during development to be placed back underground as stope fill. Once the mining is complete the workings will be sealed and allowed to flood. These measures will ensure minimal surface disturbance from mining.

prevent the need for waste dump construction, and eliminate the possibility of acid-mine drainage from mine or waste dumps.

Permitting and environmental studies for the project have been underway since October 1990 and it is expected that regulatory approval can be obtained to allow a May 1991 start-up. The small size of the project, minimal environmental impact, and use of existing permitted facilities, including the Premier mill and tailings pond, should make this start-up date feasible.