

DOLMAGE CAMPBELL LTD. CONSULTING ENGINEERS



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June 9, :1988

Mr. Robert Beaupre, President Beau Pre Explorations Ltd. 1027 Pandora St. Victoria, B.C. V8V 3P6

Dear Mr. Beaupre:

Re: Valentine Gold Property, Sooke, B.C.

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I have reviewed the available geological and assay data from the Valentine gold property and have considered various exploration programs which could allow gold reserves to be determined. This preliminary letter report summarizes my conclusions and recommendations on the subject.

Gold Occurrences

The Valentine property presents a classic example of the difficulty in dealing with the so-called nugget effect when attempting to obtain a representative sample. Enough information is available to draw several conclusions about the occurrence of gold on the property. First, native gold has been introduced into the metasandstone and related host rocks from an outside source, i.e., it is of epigenetic origin. This is apparent from field observations where gold-bearing quartz veins cut across metamorphic banding (relict bedding) of the host rocks, albeit at a very Second, gold is erratically distributed along these planar low angle. features over widths of a few cm and exhibits sharp cutoff grades in adjacent wallrocks. Third, there is little or no alteration of the wallrocks in the vicinity of the veins which would expand or enhance the exploration target. Finally, though the veins are narrow, they can be continuous planar features for hundreds of metres along strike. Their down-dip extensions are confirmed by drilling to 200 metres and are open at depth.

Sampling Results

In past years a fairly intensive drilling program was undertaken in the so-called Discovery Zone between sections 800E and 1400 E. Holes were designed to intersect one or more veins or zones of interest. Out DOLMAGE CAMPBELL & ASSOCIATES (1975) LTD. _ 7 -

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of a total of thirty drill holes, two intersected high grade gold. The remaining holes commonly registered anomalous gold values as they intersected the veins. These were not economically significant in terms of establishing ore reserves, though they were useful in confirming the locations of veins at depth. A success ratio of only one in fifteen (6.7%) indicates that diamond drilling is not an effective method for determining reserves under these geological conditions.

Channel sampling across veins at surface has also been less than satisfactory. The reason for this is primarily due to the erratic N^0 distribution of gold in the veins, i.e. the probability of intersecting and recovering gold in a 5 cm wide channel sample is similar to the probability of a drill hole doing so.

Surface trenching of the gold veins at the Valentine property by trenching has met with only limited success. This is not surprising because mining downward on narrow gold veins is extremely difficult, not only because overbreak is hard to control but also because free gold tends to work its way downward into available openings during excavation.

larget Ore Tonnages and Grade

Though diamond drilling completed to date in the Discovery Zone has not provided sufficient data on which ore reserves can be calculated with has nonetheless produced much confidence, it extremely useful information. It is concluded from core assays, geology and surface sampling that the veins have lateral continuity for at least 400 m and down-dip continuity for at least 200 m. It is also known that two out of approximately 30 pierce points scored gold "hits" of ore grade, namely: DDH 6 intersected 7.5 o.p.t. Au over 0.5 m and DDH 88-11 (100 metres west of DDH 6) intersected 7.29 o.p.t. Au over 0.26 m. Recalculating these grades across minimum stoping widths of 1.5 m results in 2.5 o.p.t. Au and 1.3 o.p.t. Au, respectively, for an average of 1.9 o.p.t. (or 2.0 o.p. tonne).

Very little is known about the shape or areal extent of individual oreshoots. However, the above limited sampling suggests a probability of about 7% (2+30×100) that a given vein pierce-point will be in ore grade material. There is, therefore, a basis for hypothesizing that about 7% of the veins comprise ore grade material over a mining width of 1.5 m.

Present knowledge about the two main veins ("3600" and "3650") in the Discovery Zone indicates they have an aggregate strike-length of at least 800 m and a down-dip extension of at least 200 m. Using these dimensions across a stoping width of 1.5 m and a S.G. of 2.65 results in a total of 636,000 tonnes ($800\times200\times1.5\times2.65$) of which 44,500 tonnes (7%) could be expected to contain 89,000 troy ounces of gold (2 o.p. tonne).

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Similarly, if the first mining level was 40 m below surface (760 Level) the total vein material above the level would be about 130,000 tonnes of which 9,000 tonnes (7%) could be expected to contain 18,000 troy ounces of gold.

The statistics underlying the above extrapolations are weak because of the limited number of samples. The true reserves could be much lower or much higher than those stated. However, the virtual two-dimensional nature of the target, locally poor core recovery and other related factors suggest that the above figures are much more likely to understate rather than overstate the in-place reserves.

Exploration Discussion

Additional diamond drilling of the Discovery Zone (and elsewhere on similar vein structures on the rest of this large property) will gradually increase the confidence of grade and tonnage projections of the above type but will not be cost effective in establishing proven reserves.

The alternative to diamond drilling from surface is to undertake an underground exploration program. Such a program could provide continuous vein exposures for mapping and sampling during initial lateral development. This would be followed by raising and sub-drifting on individual oreshoots, supported by short underground diamond drill holes. Reserves in the proven and probable categories could be calculated from such a program.

As shown in Figure 1, a portal could be collared north of the tailings dam at the 760 m level (South Portal). This location has the advantage of being near an existing road. The adit would be expected to intersect the high grade vein, as projected to the 760 Level after driving about 270 m.

An alternate portal could be collared at 1110N, 1440E at the same 760 m level (North Portal). This adit would be expected to intersect the vein system, as projected to the 760 Level after driving about 160 m. The North Portal location would be advantageous if lower adits, say at the 700 Level, were required for future mining.

Recommendations

For reasons stated, it is strongly recommended that a program of phased underground exploration be initiated in the Discovery Zone for the purpose of establishing proven reserves. The underground layout should be designed to accommodate future mining of the vein system and the various headings should be prioritized. First priority headings should be driven during the phase 1 program and second priority headings should be part of a contingent phase 2 program. Such a layout is shown diagrammatically in Figure 1. Lateral development on the 760 Level is summarized in Table 1.

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Cost of Recommendations

The following costs are estimates based on the writer's initial impressions of the site and rock conditions. It is assumed that minimal rock support will be required and that the South Portal will be used for access to the 760 Level.

Phase 1

(a) Underground Exploration

Establish South Portal	\$ 6,000
Establish Waste Dump, ore stockpile areas	8,000
Drive adit 270 m @ \$1,100	297,000
Main drift 150 m @ \$1,100	165,000
Raising 50 m @ \$2,000	 100,000
Sub-total	576,000

(b) Engineering

Consulting engineer 40 days @ \$500	20,000
Site engineer 3 months @ \$5000	15,000
Engineering assistant 3 months @ \$4000	12,000
Living expenses 7 man months @ \$1000	7,000
Communication, shipping, transportation	10,000
Equipment, supplies	5,000
Sampling, assaying, 500 samples @ \$12	6,000
Environmental monitoring, reporting	5,000
Drafting, secretarial	5,000
Sub-total	85,000

(c) Contingency 15%

Total Phase 1

99,000

\$ 760,000

Phase 2

(a) Underground Exploration

	Extend main drive 270 m @ \$1,100 Drive 1st priority crosscut 45 m @ \$1,100 Sub-drifting 100 m @ \$1,100 Raising 80 m @ \$2,000				297,000 49,500 110,000 160,000
			Sub-total		616,500
(ь)	Engineering	15% of (a)			92,500
(c)	Contingency	15%			106,000
			Iotal Phase 2	\$_	815,000
			Iotal Phase 1 & Phase 2	\$1 =	,575,000 ========

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Conclusions

The Discovery Zone of the Valentine gold property contains four or more narrow veins which contain local concentrations of crystalline native gold. Two of the veins appear to be at least 400 metres in strike length and extend-down dip at least 200 m. Attempts to establish ore reserves by surface sampling, trenching and diamond drilling have met with limited success because of the erratic gold distribution or "nugget effect". However, the limited drilling (sampling) that has been done suggests that seven percent of the vein material will grade 2.0 o.p. tonne over a mining width of 1.5 m. This would result in a volume of ore on the order of 9,000 tonnes containing about 18,000 troy ounces of gold above the 760 m level. Furthermore, there is reason to believe that this extrapolation understates rather than overstates the gold potential of the vein system.

The nature of the oreshoots in the Discovery Zone is such that ore projections for the purpose of calculating reserves is likely to be restricted to relatively short intervals. This means that at any given time during mining of the veins, proven reserves will be small compared to those in the probable and possible categories. Many gold mines have operated for thirty years or more in this way, with only a year or two of proven reserves acknowledged. If the Valentine vein system is explored and developed with close geological control and mined carefully so as to keep dilution to a minimum, it could be a small but lucrative producer for many years.

It is concluded that an underground exploration program is required for the purpose of establishing proven and probable gold reserves initially above the 750 m Level. Phase 1 of such a program would explore the high grade zone and is estimated to cost \$760,000*. The second (contingent) phase would explore adjacent vein structures and is estimated to cost \$815,000*.

Respectfully submitted,

DOLMAGE CAMPBELL LTD.

J.A. Chamberlain, PhD., P.Eng.

* If Dolmage Campbell Ltd. was to assume overall responsibility for management of the project, a service charge would be required to be added to most of these costs.

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TABLE 1

PROPOSED UNDERGROUND EXPLORATION, 760 LEVEL Lateral Development in Metres Using "South Portal"

SOUTH ADIT AND MAIN DRIFT (1.8 x 2.4 m)		CROSSCUIS (1.8 x 2.4 m)		TOTALS	
PRIORITY 1	PRIORITY 2	SECTION	PRIORITY 1	PRIORITY 2	
420	270	900 E 1000 E 1100 E 1200 E 1300 E	45 N	140 N 50 N 50 N 50 N 70 N 45 S	875 50 50 50 115
420	270		45	405	1140

