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MEMO

To go with letter to Ballin
June 20/87.

Date: June 4, 1987

To: J.C. Stephen
From: Ellen Lambert

Re: Kalum property visit; changes and final recommendations.

Recommendations

1. Major mineralization on the Kalum property occurs in the vicinity of the old shaft, the south-adit dump and the Road Show. In contrast, surface exploration + drilling to the east has revealed minimal mineralization. Because of this, it is recommended that future exploration be concentrated around the shoreline mineralization.
2. Because the three areas of significant mineralization (shaft, S-adit dump + Road Show) line up in a $\sim 160^\circ$ alignment, it has been suggested by me, in an earlier report, that this may represent a mineralized trend. Major fractures are commonly observed all over the property in this same orientation. It has been observed that the north adit + south adit exhibit no mineralization within them, + were suggested by me to lie too far east of this trend. Very little to no outcrop exists west of the trend as a result of the lake. I recommend an investigation into the possible westward extension of mineralization, under the lake. A series of drill holes collared along the highway and dipping steeply to moderately westward should explore this trend + should also be done in such

a way to penetrate the resistance met at depth by previous drilling operations ((see point 4 under Comments on Drilling + Sampling, below) } ^{leave out.}

3. Andesite and mafic tuffs appear to be the host for the most significant mineralization. Because only a narrow portion of the overall geology of the Kalam property is underlain by these units, a thorough investigation of them should be conducted. Hole K87-4 did result in some mineralization within the andesites, and a few soil samples from Conino + Bill Howell indicated the presence of gold, both of which ~~support~~ ^{support} the idea that the andesites host some mineralization east of the shoreline mineralization. The magnetometer survey helps to delineate the extent of the andesite in overburden-covered areas. Soil surveys at closer spacings may help to delineate targets for further drilling in these areas.

4. It is my opinion that the presence of free gold and assays over 1 oz/ton cannot be ignored. There has been zero investigation to the west of known high-grade mineralization. The shoreline mineralization could conceivably be the eastern edge of a major structure occurring in the lake. More drilling would confirm or refute this, after which a decision to drop the property would be better substantiated, should the latter turn out to be true.

Ellen Lambert
June 4, 1987

Memo: ~~To: J.C. Stephen's Exploration, Ltd.~~

~~From: Ellen Lamm +~~

~~Re: Katum property visit; changes and ^{final} recommendations~~

Comments on Drilling + Sampling

1. K87-2 - Should sample core continuously from 28m to E.O.H.
2. K87-3 - Should sample core continuously from 3m to E.O.H.
3. K87-6 - From 12-14m, there is only 1m of core represented in 3m of intersection. This is the zone of interesting mineralization and possibly a fault or shear. Careful drilling through this zone may have resulted in more core recovery + better representation of mineralization.
4. K87-2 and 3, and Loutitt's 2 drill holes in the same vicinity, met extreme resistance at the same depth, causing all holes to be abandoned. Extreme squeezing stops drilling.

Comments on Drill Sections

1. K87-1 - possible fault from 23.5 - 26.0, represented by chipped-up core. Orientation unknown, but drawn on ~~one~~ section at a steep angle, dipping westerly. Based on local Terrace geology, i.e. graben structure along Kitsumkatum lake.
2. K87-4 - 5m wide quartz vein at surface, east of drill collar, dissipates almost immediately at depth or suddenly changed dip. Two small quartz veins occur in the core at 4.5m and 14.3m, which may be the dissipated quartz (over) →

ven, as drawn on the section

3. K87-6 - From 12-14m, only 1m of core was recovered. A fault may exist here whose orientation is unknown. Drawn steeply, dipping west, as # K-87-1 fault (see above).

Comments on Drill Section

1. K87-1 - possible fault from 22.5 - 25.0 represented by shined-up core. Orientation unknown, but shows on core section of a steep angle, dipping westerly. Based on local terrain geology is problem structure along strike-slip fault.
2. K87-4 - 5m with quartz veins at surface, east of drill collar, disintegrates almost immediately at depth a suitably changed dip. Two small quartz veins occur in the core at 4.5m and 14.3m, which may be the distributed quartz (over)

Changes in report

1. Figure 2 - added a few features
2. Drill Sections
 - added E-W and N-S to topography
 - added topography on Figure 3
 - changed map units on sections, deleted some contacts, added some contacts
 - changed legend
 - added geology + mag to surface topography
3. Drill logs
 - A. K87-1 = 57.0 m ; delete contact, G, and G description
 - B. K87-2 = 1-25 m, change all R's to G₁ and all G's to G₂
= 42 m, Change C to K + description
 - C. K87-3 = 9.81 m, add Au next to Br, mal, and add "free gold specks" after "magnetite".
 - D. K87-5 = 1-13 m, change C to A
13.5-15.5 m, change C to E, and description
15.5-25 m, change C to A
25-28.95 m, change C to S, and description
28.95-29.05, " C to A
29.05-30.86, " G to C, and the word "andesite" to "siltstone".
30.86-35.0, change C to A
35.0, put in a contact line + unit C
54.0 m, add: mal →
83.75-83.90 - delete contacts + G + G description
108.5 - delete contact + the G above it + the G description
113.5-115.3 m, change C to E + description
115.3 m - add "andalusite porphyroblasts" to descr.

changes, cont'd.

E. K87-6 12-14m, 9' of intersection is only represented
by 3' of core.