TAS Property: Porphyry copper-gold system with associated high-grade gold veins.

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<u>Summary</u>

The Tas property, approximately 50 km north of Fort St. James, B.C., hosts a porphyry copper-gold system with associated high-grade gold vein mineralization (Figure 1). The deposit is hosted within the Takla Group Volcanics, which was intruded by Omineca intrusions of Upper Mesozoic age (Nelson 1991). Potential porphyry coppergold mineralization has been identified through geophysical surveys and limited diamond drilling. In addition, one free gold zone and at least five zones of high-grade gold mineralized shear zones, up to 20 meters wide and strike length of over 120 meters, have been located on the Tas (Figure 1). Each of these zones remains open laterally and vertically. The Au mineralization probably represent replacement type massive sulphides and sulphide stringer zones in shear/fracture structures peripheral to the porphyry copper gold mineralization. The East zone (Figure 1), the focus of most of the exploration programs, has had tonnage defined (Goldcap 1987) and was bulk sampled in 1993 (Halleran 1993). The two East Zone bulk samples suggest that the Tas shear zones have high grade ore that can be economically shipped directly to the Silbak Premier Mill in Stewart and and also contains large tonnage (100,000s of tonnes) of Au mineralized ore that could be leached on site. The direct shippeable ore could provide cash flow and capital to build an on site gold mill.

History

The original Tas claims were staked in 1984 by A.D. Halleran and A.A.D. Halleran to cover copper mineralization and silicified outcrop associated with aeromagnetic highs. Noranda optioned the property in 1985 after identifying visible gold in quartz-carbonate altered tuffs (the Freegold zone; Figure 1). Soil geochemical surveys conducted by Noranda outlined intense gold anomalies kilometers long along the ridge immediately north of the Freegold zone (the ridge zone; West to East Zone)(Figure 1). Follow-up trenching and drilling of the Ridge zone by Noranda and other (Goldcap, Blackswan, and Tyler Resources) discovered five areas of shear and fracture controlled sulphide-gold mineralization hosted within volcaniclastic rocks peripheral to copper-gold porphyry mineralization. In total 14,292 feet of drilling has been completed in 61 holes by 1989. In 1992, due to a disagreement between the operating companies, the option was allowed to lapse. During the summer of 1993 the East Shear Zone was chosen to be investigated through bulk sampling to provide information on style, and grade of Au mineralization and mining economics of the shear zone.

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Au Vein Mineralization and Grade

The Ridge zone contains the East, Mid, 21, 19 and West shear zones (Figure 1) which are fracture and shear controlled gold-rich sulphide and magnetite veins hosted within fine grained andesite tuffs. The majority of the exploration work has been done on the East zone in an effort to identify the style and grade of mineralization. Once substantial Au ore is defined for the East Zone it is thought that the remaining 4 zones should be very similar and tonnage could be 5 times. The results are discussed below. Summaries of the other Ridge gold mineralized shear-zones are also included.

East Zone

Previous workers (Noranda, Blackswan, etc) interpreted the **gold rich massive sulphide** mineralization as discreet pods separated by gold bearing sulphide stringer zones within a north trending shear zones that individually can be up to 7 meters wide. The gold mineralization is traced along strike for over 100 meters and intersected 40 meters below the surface by drill holes. In 1987 Goldcap inferred **91,700 tonnes of ore at 6.7 gpt Au** for the East zone based on limited drilling. Since 1987 additional work suggests substantially more tonnage with higher grade.

Within the East Zone are two continuous, subvertical dipping, 0.2 to 0.6 meter wide massive sulphide veins, A and B respectively, separated by 2 to 7 meters of stringer mineralization within silicified (+/- chlorite) andesite tuff (Figure 2). Bulk samples from veins A and B were hand cobbed, crushed to minus 0.6 cm and trucked to Westmin's Silbak Premier Mill in Stewart, B.C (Table 1). Sample A consisted of **16.54 tonnes of 51.20 gpt Au** and sample B consisted of **15.888 tonnes of 19.07 gpt Au**. Samples of the different types of stringer mineralization were taken from >200 kg of hand cobbed, sorted and crushed to minus 0.6 cm material. Assays were **5.69 gpt Au** from quartz with fine stringer of sulphides (<10%) to **4.59 gpt Au** from dark green chloritic rocks with 1-2% disseminated pyrite. Additional assays of specific material are listed in table 2. Gold recovery by cyanide leach was 93.8% for both bulk samples. Milling cost were \$50/tonne and reagent costs were \$29.54/tonne (NaCN and lime) Trucking costs were \$75/tonne.

The different grade of Au mineralization between bulk sample A and B reflects the different types of massive sulphide mineralization. Vein A is a 0.2 to 0.6 metres wide, banded, often vuggy, and predominantly pyrite-pyrrhotite rich (averaging over 80%) silicified vein. Minor chalcopyrite and magnetite are disseminated throughout the vein. Vein A is exposed on surface for 120 meters along strike. Oxidized vein material occurs approximately 30 meters south of the trench along the road leading to camp representing a southern extension of this vein.

Vein B is 0.2 to 0.5 meters wide and comprises silvery-white pyrrhotite, magnetite, specular hematite and lesser pyrite. It is typically massive with minor banding and rare crystal-lined vugs. The oxidized surface exposure of V B can be traced for about 40 meters southwards towards the lower pit. To the north it is beneath a thin layer of gravel.

Both veins are strongly oxidized. Oxidation extends 1 to 2 meters below the bedrock surface. Linear traces of oxidized vein material east and west of the trenched area indicates the presence of additional veins.

Other Zones

The mid zone (Figure 2) is approximately 180 meters west of the East zone. On surface the mineralization is found in fractures and shears over a 20 by 30 meter area and is open in all directions. The mineralization is best described as anamatosing veins and fracture fillings. Chip sampling of the zone assayed up to 24.3 gpt Au over 0.4 meters and 20.2 gpt over 1.0 meter. Drill intersections ranged up to 60.33 gpt Au over 2.4 meters, and extended the zone significantly in all directions.

The 21 zone (Figure 2) is 370 meters west of the East zone. Mineralization is also hosted within shears and fractures. Drill intersections range up to 26.6 gpt Au over 1.5 m. This showing has had very limited exploration.

The 19 zone is 130 meters west of the 21 zone and 500 meters west of the East zone. Chip samples across massive sulphide zones within silicified andesite tuffs assayed up to 53.00 gpt Au over 0.5 m. Drill intersections returned values of up to 36.40 gpt Au over 1.6 m. The mineralization can be followed on surface for 120 meters along strike and was intersected 42 meters below the surface. The zone is open along strike and to depth.

The West zone is 950 meters west of the East zone. Mineralization is exposed for 100 meters along strike. Numerous east-west shears cause small (1 meter) offsets of the mineralization to the northwest. Chip samples of the zone ranged up to **37.86 gpt Au over 1.5m.** Drill intersections returned **8.07 gpt over 4.5 meters**. The zone is open to depth and along strike.

CONCLUSION

The Tas prospect hosts 5 high grade gold mineralized shear zones over 950 meters. Two bulk samples from the East Zone, 15 and 16 tonnes of vein material, returned 19 and 51 gpt Au respectively while the hosting mineralized shear zone contains > 4 gpt Au. Cyanide leaching achieved 93.8% recovery of the Au. Exposed strike lengths of the East Zone mineralized shear exceeds 100 meters and down dip extensions >40 meters, width is up to 7 meters. In 1987 92,000 tonnes of 6.7 gpt Au was defined for the East Zone by limited drilling and chip samples over a restricted area. If the full strike length, depth and width of mineralization were taken into consideration the tonnage would substantially increase. In addition, if a lower grade, but still leachable, could be used on site potential tonnage again would increase. Finally it must be remembered that there are 5 shear zones discovered todate with additional shear zones indicated by soil geochemistry and geophysics on the flanks of the ridge. The resulting tonnage could be very large.

The Tas property has the grade, tonnage and location to be brought into production quickly. This property has high grade material for direct shipping and instant cash flow which can be used to finance the project. Lower grade material mined during high grade operations can be stock piled for an on site leaching process. The capitalization of the leaching project could be funded by the high grade cash flow. It is recommended a large bulk sample should be collected from the East zone to establish overall grade of the surface exposure. (vein and stringer shear material combined). Samples similar in size to those taken from the East zone should be collected from the other zones to determine grades. The largest single cost of trucking the oar to the Stewart Mill can be reduced by; 1) an ore concentration step, 2) a trucking contract for a large amount of tonnage, and/or 3) an on site gold recovery plant. Access to the Tas is excellent as Fort St. James is only an hours drive away on a good all weather road with power and rail close by. Due south is the old pinchi mercury mine with mill. If interested I can arrange a meeting to view all the date (drilling,, geology, geophysics, geochemistry ect.) of which there are volumes. In addition we can view the property in a short time, as short as 1 day from Calgary, as access is very good. Contact me at

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We are looking for

On signing	\$30,000
1 year anniversary	\$20,000
2 year anniversary	\$50,000
3 year anniversary	\$50,000
4 year anniversary	\$100,000

After payment of the C\$250,000, which are advanced royalties, 100% of the property becomes yours except for a 3% NSR if by the 5th year the property is put into production. Production to be defined between parties before signing. Inaddition, all assessment must be filed and the property left in good standing for at least one year if returned.

TABLE 1

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Bulk sample flow sheet

Ore was hand sorted and crushed to a 0.6 cm size and stored in 20 tonne bins. The ore was trucked to Silbak Premier Mines 765 km away, in two shipments by a 20 tonne dump truck. Cost for trucking varies from \$10 to \$40 a tonne.

Premier Gold Project Mill Flow Sheet

Treatment Charge	\$/mt	Shipment #1 50	Shipment #2 5()	Total 50
Hold back	Au %	7	7	7
Reagent Charge NaCN Lime	C\$/mt C\$/mt	20.93 8.60	20.93 8.60	20.93 8.60
Tonnes	dmt	16.54	15.888	32.428
Au Head Au Head Au Tail Au Recovery Au Recovery	g/t g g/t C/c g	51.2 846.8 3.17 93.8 794.3	19.07 303.0 1.18 93.8 284.2	35.46 1149.8 2.20 93.8 1078.5
Price - Au Rate Conversion Price - Au	US\$/oz C\$/US\$ g/oz C\$/g	376 1.2979 31.1035 15.69		376 1.2979 31.1035 15.69
Financial Account				
Treatment Charge Holdback Au Reagent Charge - NaCN Reagent Charge - Lime	SC SC SC SC	827 930 346 142	794 333 332 137	1621 1263 679 279
Gross Value Recovered Value Total Charge Net Value Treatment Charge (as % of gross value)	\$C \$C \$C \$C %	13287 12463 2245 10218 18.90	4754 4459 1596 2863 33.58	18041 16922 3842 13081 21.29

TABLE 2

Sample TO-1	Description Fine material left on table after sorting	Results 64.05 gpt Au
TO-2	>40% quartz vein material from lower pit	27.98 gpt Au
TO-3	Magnetite rich material from crosscutting veins lower pit	77.69 gpt Au
TO-4	Lower pit sulphides mineralization with <40% quartz	67.78 gpt Au
TO-5	Magnetite ore from upper pit (vein B)	31.65 gpt Au
ТО-6	Sulphide mineralization from upper pit (vein A)	50.26 gpt Au



