

SNOWBIRD PROPERTY

PROPERTY SUMMARY

Target:	Gold
Location:	NTS 93K/7, 8, 15km west of Fort St., James, B.C. Road access to property.
Acreage:	Approximately 6,667 acres in 108 units in the Snowbird Group Approximately 6,050 acres in 98 units in the Sowchea Group
Interest:	X-Cal 100% interest subject to a 3% NSR to Pipawa Exploration Ltd.
Work Commitment:	Government: \$41,200/year. Property in good standing until 1996.

PROPERTY HISTORY

Massive stibnite in a shear zone was first reported in 1920 by prospectors examining placer gold creeks in the area of the present Snowbird Property. Underground development and production resulted in the shipment of 54 tons of antimony ore in 1937. Pioneer Gold Mines Ltd. optioned the Snowbird property in 1939. Pioneer sank an inclined shaft to a depth of 45m on what was called the "MAIN VEIN" and also drove an adit and drifted for 45m on the massive stibnite "Cross Vein", a separate and cross cutting structure. Thirty-six tons of ore were shipped during that time.

The property was examined briefly by several companies during the war years, but little exploration was done. Cominco intersected 5 feet of 0.24 oz/t gold near the inclined shaft, but did not follow with any other work. A further shipment of massive stibnite totalling 66.1 tons from the "Cross Vein" was made in 1947.

The showings were mapped by the G.S.C. as part of the Fort St. James map area. They reported high grade gold occurring in a carbonated zone 46m wide, which is intersected by a stockwork of quartz veins and lenses. This zone strikes northwesterly, dips 40-50° northeast and was followed for about 500 feet along strike. Further extensions are hidden by lacustrine sediments. The one ore shoot exposed at that time was 95 feet in length, at least 135 feet deep and 3 feet wide. This shoot averaged 0.25 oz/t gold and 9.2% antimony. Another shoot 300 feet to the northwest was reported which contained up to 0.52 oz/t gold over narrow widths. Other veins are reported in the immediate area. It is significant to note that two structural directions were noted by the G.S.C., a major northwest carbonated shear and

northeast carbonated and highly mineralized vein-filled faults.

The property lay dormant until 1970 when a geochemical survey was undertaken on a portion of the claims. Small drill programs were completed on the quartz stringer zones in 1974 and 1980 which produced gold intersections of 0.12 oz/t over 4 feet, and 0.35 oz/t over 5 feet.

X-Cal optioned the property in 1985 and completed a trenching, geochemical sampling, and a 10-hole diamond drilling program in 1986. The drill holes were aimed at the northwest trending alteration zone which was known to host two mineralized veins: the MAIN VEIN and the PEGLEG VEIN, together called the SNOWBIRD ZONE. All holes intersected the quartz-ankerite-mariposite alteration. Hole 86-2 contained 4.25m of 0.27 oz/t gold, and Hole 86-6 intersected a spectacular vein 15cm wide containing visible gold which assayed 248.16 oz/t gold and 84.58 oz/t silver, but little antimony. These veins were followed 400 feet along strike. The significance of these high grade gold intersections was apparent in that the mineralogy was different from what was previously known. A separate mineralizing event was suggested.

During 1987, a comprehensive geophysical survey comprising I.P., horizontal loop EM, VLF-EM, and magnetics was completed over the northwest portion of the claim group. The I.P. located the known zone of alteration and extended the strike length of this zone to 2,000m; the zone was still open to the northwest and southeast. Both the I.P. and magnetics suggested north to northeasterly trending fault zones are present on the property.

X-Cal undertook a 25-hole diamond drill program in the same area as in 1986 to further

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delineate the gold intersections found in the earlier program. Gold values in drill core were detected, but were below economic concentrations. A percussion drilling program during 1987 was designed to penetrate the clay overburden and sample basal till and bedrock in the areas designated an anomalous by the geophysical program. Twenty-five of the fifty-seven holes encountered quartz-ankerite-mariposite alteration; the alteration zone was extended an additional kilometre along strike. Twenty of these holes encountered highly anomalous gold concentrations. The presence of an additional structure east of the SNOWBIRD ZONE was suggested by the results, and called the EAST ZONE.

An additional diamond drill program in early 1988 was designed to test the strike extension of the SNOWBIRD ZONE alteration. This program was successful in extending the gold mineralized portion of the structure an additional 370m. Intersections included 2.65m of 0.226 oz/t, 3m of 0.109 oz/t, 6.12m of 0.319 oz/t (which includes 1m of 1.412 oz/t), and 1m of 0.298 oz/t gold. Deep drilling intersected the alteration zone at 400m, indicating that the zone remains continuous to depth. This new area of significant gold mineralization was designated the "NORTH ZONE".

Drilling continued in 1989 with activity concentrated on the NORTH and EAST ZONES. Six holes intersected significant gold concentrations in the MAIN ZONE, producing a combined block 150m along strike and 120m down dip. The mineralized intersections in the nine widely spaced holes in this block averaged 2.4m in width, produced an estimated reserve of 305,980 tons of 0.219 oz/t gold, including the SNOWBIRD ZONE. Two holes placed in the EAST ZONE intersected a new quartz-carbonate-mariposite alteration zone and a mineralized felsic intrusive.

A prospecting program discovered two new areas of highly altered volcanics more than a kilometre north of the previously last known showing. In addition, a granite intrusive was found on the peninsula east of what is thought to be the main Sowchea shear zone. This intrusive is well fractured and mineralized. Soil samples over the intrusive contain up to 6800ppb gold.

Prospecting on the remainder of this large property is continuing.

PROPERTY GEOLOGY

The claims are underlain by Triassic age chert, argillite, slates, and andesites of the Cache Creek group. These sediments and volcanics have been intruded by alpine-type ultramafics and a blue schist

metamorphic assemblage. The ultramafics have been altered to serpentinite, then hydrothermally altered to an ankerite-quartz-mariposite assemblage known as listwanite. Diorite dykes are common. A granite intrusion occurs on the eastern side of the property.

A major northwest trending fault, known as the Sowchea Shear Zone, crosses the property along the shore of the Stuart Lake. This structural feature is considered to be related to the main Pinchi Fault located several kilometres to the east. Extensive brecciation and fracturing accompanies the trace of the Sowchea Shear Zone and its splays. Cross faults and flat faults are common and may be mineralized.

Hydrothermal alteration within the ultramafics includes conversion of significant volumes of rock to talc. The listwanite assemblage is most often spatially associated with gold mineralization. Silicification, sericitization and chloritization are also common.

The gold mineralization found to date appears to post-date the main hydrothermal alteration. Two types of mineralization are evident: mineralized quartz veins with pyrite and arsenopyrite; and sulphide enriched fracture zones with quartz or quartz ankerite stringers. Sulphides can include pyrite, arsenopyrite, and minor stibnite. Quartz veins can be ribboned and contain appreciable wall rock fragments which may also be mineralized.

The geological setting of the Snowbird property is similar to the Bralorne camp of British Columbia and the Motherlode gold camp of California. The main control on mineralization appears to be structural preparation of the host rocks.

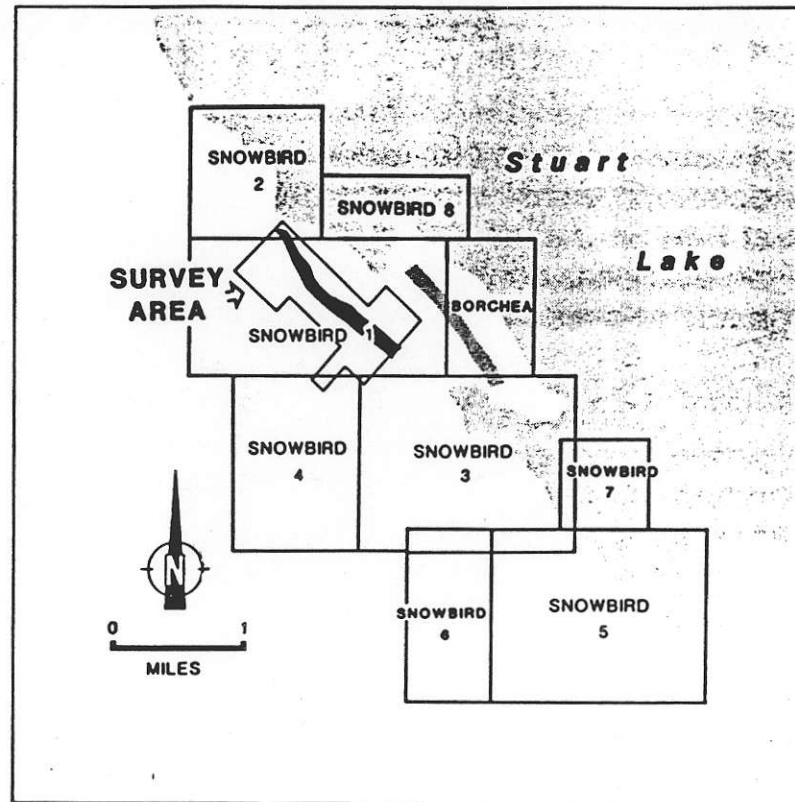
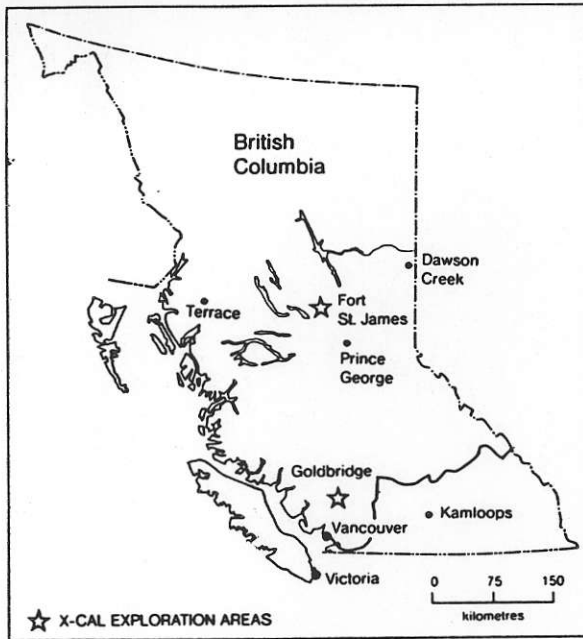
RECOMMENDED PROGRAM

The grid on the Snowbird Property should be extended to cover the remaining portions of the claim group which has yet to be examined. An induced polarization, VLF-EM and magnetic survey should be done to further delineate alteration zones and structure. Emphasis should be placed on understanding the role of the northeasterly striking and flat faults which appear to play a controlling role in the localizing of gold mineralization.

In addition, trenching and detailed sampling should be completed on the new GRANITE ZONE in the vicinity of the granite intrusive. Prospecting should continue.

A geochemical orientation survey should be undertaken in areas of clay overburden to better understand what sampling methods, if any, are applicable.

These data should be assimilated prior to undertaking further drilling.

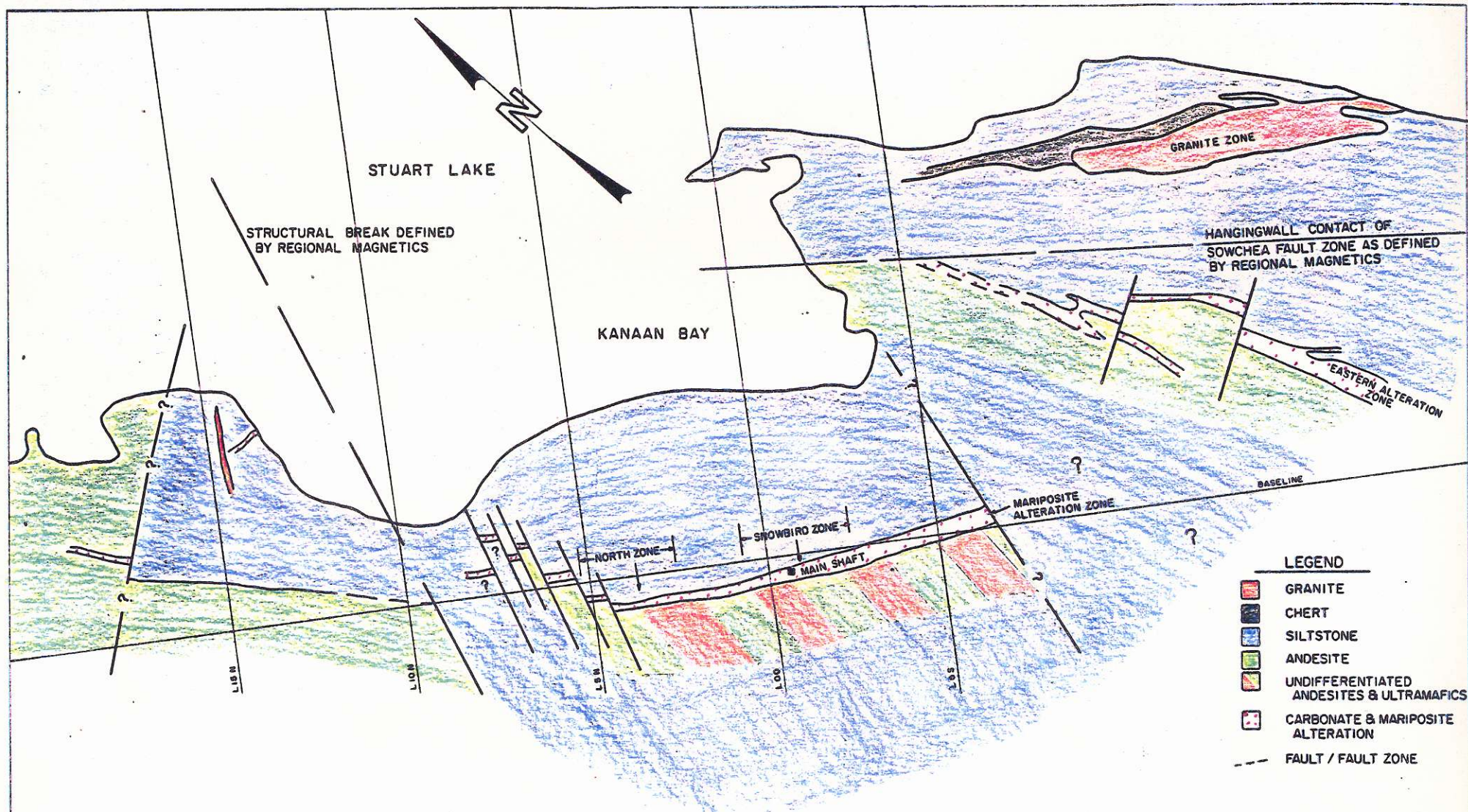


SNOWBIRD PROPERTY – CLAIM MAP

KASAAN BAY, STUART LAKE, FORT ST. JAMES AREA – OMINECA MINING DIVISION, B.C.

Significant Snowbird Zone Drill Hole Assays		
Hole	Width (ft.)	Grade (oz/ton)
86-2	13.9	0.27
86-6	5.0	23.0
86-7	3.28	0.715
C-1	5.0	0.27
C-2	5.0	0.35
P-6	3.0	0.698
P-7	8.0	0.58

Drill Hole Intersections North Zone, Snowbird Property Fort St. James, B.C.				
Hole #	Depth		Interval (ft.)	Au (oz/ton)
	from (ft.)	to (ft.)		
X 88-6	272.49	281.18	8.69	0.226
	309.00	318.85	9.85	0.109
X 88-9	272.65	275.93	3.28	0.298
	333.35	337.12	3.77	0.110
X 88-13	356.15	376.23	20.08	0.319
	281.12	291.29	10.17	0.0897
X 89-2	192.56	195.84	3.28	0.114
	212.15	217.99	5.84	0.351
X 89-3	325.51	335.58	10.07	0.264
X 89-4	263.96	271.50	7.54	0.189
X 89-9B	362.55	365.17	2.62	0.128
	496.71	504.58	7.87	0.124
X 89-10	514.30	520.99	6.69	0.152
	527.94	537.43	9.49	0.204
X 89-11	506.52	521.58	15.06	0.136



LEGEND

- GRANITE
- CHERT
- SILTSTONE
- ANDESITE
- UNDIFFERENTIATED ANDESITES & ULTRAMAFICS
- CARBONATE & MARIPOSITE ALTERATION
- FAULT / FAULT ZONE

X - CAL RESOURCES	
SNOWBIRD PROSPECT GENERAL GEOLOGY CENTRAL MINERALIZED AREA	
Scale 1:10000	Date MARCH 1990
Author G. JONES	FIGURE 5