Yellowjacket
889841
104N/12E 104NO43

HOMESTAKE MINERAL DEVELOPMENT COMPANY

and

CANOVA RESOURCES LTD.

YELLOWJACKET PROPERTY

HISTORY

The Yellowjacket Property is located in the historic gold mining camp of Atlin, British Columbia. This camp is known for its past and presently producing placer deposits. Throughout its history, the lode gold potential of the camp has attracted attention. Most of the lode propects in the Atlin camp are small discontinuous quartz veins.

The first evidence of lode potential on the Yellowjacket Property was recognized in 1899 when several outcropping quartz veins carrying spectacular free gold were discovered along the course of Pine Creek by placer miners. The Nimrod Syndicate optioned the discovery claims from several individuals. Shallow shafts were reportedly sunk on the Yellowjacket prospect, the Rock of Ages prospect, and the Red Jacket prospect. Development work on the gold discoveries was discontinued in 1903 or 1904 due to a combination of legal and development problems. There was no appreciable production from these prospects although a five stamp mill was shipped to the property from England in 1901.

In the years that followed, all surface features related to the early lode mine development were obliterated by the hydraulic and dredge mining of gravels along Pine Creek. The exact locations of the original lode gold discoveries on Pine Creek are unknown, although it is suspected that the Yellowjacket discovery is actually the original Yellowjacket prospect.

Placer gold production from the gravels of Pine Creek and a tributary, Spruce Creek, has been significant, with recorded production of 138,144 ounces and 262,603 ounces, respectively. The majority of the placer production on Pine Creek is in the area of the Yellowjacket discovery, Rock of Ages and Red Jacket prospects. Actual production from these creeks is undoubtedly greater than reported.

In 1983, local prospectors staked the area of the old discoveries. The claims were optioned to Canova Resources and Tri-Pacific Resources of Vancouver. These companies carried out programs of ground geophysics, diamond drilling and rotary drilling in 1984 and 1985. Canova discovered the original gold mineralization in drilling. Homestake optioned the property in late 1985 and conducted significant exploration programs in 1986 and 1987. Homestake has the right to earn an 80% interest in the joint venture by completing $1.8 million in exploration expenditures.

GEOLOGY

The Yellowjacket Zone lies on or immediately adjacent to the contact of the serpentinized ultramafics of the Atlin Intrusions to the north with the andesite of the Cache Creek Group to the south. These ultramafics most probably occur as sheets emplaced within the Cache Creek Group rocks by low angle thrust faults. Folding and later faulting have steepened the angle of dip of most faults to sub-vertical.

Within the Yellowjacket Zone, the utramafic-andesite contact is a fault melange consisting of pods and slivers of andesite, basalt and mafic dykes hosted by variously altered serpentinite. The predominant structural trend in the area is 070°, as evidenced by the trend of the Yellowjacket Zone. A second, less common structural trend cross cuts the zone at approximately 110°-140°. Movement along these fault systems has resulted in the brittle rocks, such as basalt and andesite, fragmenting whilst the serpentinite, due to its soft, ductile nature, "flowed" around these fragments. As a result the mafic rocks appear as a series of discontinuous pods and blocks within the serpentinite.

Hydrothermal activity along the fault systems resulted in alteration of most lithologies. CO_2 and Ca were introduced to the system and they combined with Fe and Mg liberated from the ultramafics to form the carbonates present in the area. Silica was either derived from outside sources with the CO_2 and Ca or was liberated from the ultramafics through progressive alteration. The silica and carbonate material filled open fractures in the mafic rocks and after further fracturing of the brittle carbonatized serpentinites provide evidence of a complex history of veining throughout the zone.

Reactivation of fault zones appears to have occurred up to recent geological time. The North and South Fault Zones bound the altered package hosting the Yellowjacket Zone while the low angle cross fault apparently truncates the silicified zone and the basalts to the east.

Within the mineralized zones, mineralization invariably occurs as coarse gold hosted in multiple quartz veinlets. The veinlets are typically blue gray and generally less than two centimeters in thickness. Within the volcanic rocks, a thin one centimeter carbonate bleached envelope surrounds the quartz vein. This bleaching is not present adjacent to veins within altered serpentinite.

In many instances the veining becomes sufficiently frequent to form stockworks. These stockwork systems contain in excess of 3.0 grams Au/tonne over sub-economic to economic widths. Some of the gold is visible and the majority is at least 150 microns in size.

Diamond drilling has intersected a number of significant mineralized zones with values as high as 15.01 g Au/tonne over a true width of 2.0 meters (see table). Significant gold intersections have been encountered over a strike length of 250 m. and a depth of 150 m. To date, continuity of ore grade intersections have been difficult to demonstrate due to the complex geology. Additional drilling is planned for 1988.

Hole		From	To	Core Length	Estimated True Thickness (m)	Grade (gpt)
85-4		58.50	61.90	3.40	1.20	7.90
85.6		77.70	78.30	0.60	0.20	4.50
		84.40	85.00	0.60	0.20	13.60
		104.50	109.10	4.60	1.60	7.30
		112.10	112.80	0.70	0.20	4.30
		121.60	122.20	0.60	0.20	4.20
86-6		76.70	80.80	4.10	2.10	1.39
		85.30	88.40	3.10	1.50	17.93
		108.80	111.90	3.10	1.50	4.70
86-7		41.60	44.50	2.90	1.45	7.78
86-9		50.80	54.10	3.30	1.70	10.73
87-20		26.00	29.00	3.00	1.50	7.70
87-21		74.00	78.00	4.00	2.00	2.21
		82.00	84.00	2.00	1.00	1.03
		90.00	92.00	2.00	1.00	4.05
		105.00	107.00	2.00	1.00	1.29
87-23		55.00	59.00	4.00	2.00	15.01
	includes	55.00	57.45	2.45	1.25	24.28
		63.00	65.00	2.00	1.00	10.73
87-24		24.00	26.00	2.00	1.00	8.99
		96.00	97.00	1.00	0.50	2.85
		126.50	127.00	0.50	0.25	18.82
87-25		69.0	73.0	4.00	2.00	1.32
87-26		155.0	156.0	1.00	0.50	1.20
87-29		144.0	145.0	1.00	0.63	3.50
87-31		128.0	129.0	1.00	0.50	1.00
87-32		69.0	73.0	4.00	2.70	1.05