8284 Mollycot Property

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PROGRESS REPORT - THE MOLLYCOT PROPERTY - for Stellar Metals Ltd. (N.P.L.)
by Allen Geological Engineering Ltd. - January 12th 1968

The Mollycot Property is composed of one Crown Granted mineral claim and ten adjoining located claims. The Mollycot showings and workings are on this group. In addition there are 50 located claims tied onto this group, and apart from the manganese deposit little or no work has been done on the many showings located thereon.

The main showings are one mile west of the small settlement of Olalla, on B.C. Provincial Highway #3. This is 230 miles from Vancouver, 25 miles southwest of Penticton and 4 miles north of Keremeos.

The entire area has been prospected intermittently since 1900. Numerous copper, molybdenum, gold, silver, iron and manganese showings have been stripped, trenched and in some instances drilled or had short prospect tunnels driven on them over the years.

The Mollycot deposit was tested by three adit tunnels in the 1930's and again in the 1950's. The deposit is a fissure vein type containing heavy shoots of copper and molybdenum mineralization.

Excellent grade sulphide deposits were opened up on what is termed the Dave #1 adit tunnel and some high grade material was stoped therefrom for mill-test and metallurgical research purposes. A new low-level adit, the Joe #1, currently being driven, has intersected the deposit 275 feet below the Dave #1 tunnel. The zone at the lower elevation is considerably wider than in the shallower tunnels and where first intersected somewhat lower grade, but the first rounds of hangingwall and footwall drifts have encountered similar heavy chalcopyrite and molybdenite mineralization.

GEOLOGY

Sedimentary and volcanic Permian and Triassic rocks have been invaded by dioritic and alkaline stocks and dykes in and around a large body of pyroxenite. Late Eocene volcanic and sedimentary rocks cover sizeable but scattered areas. The pyroxenite outcrops on both sides of Olalla and Keremeos creeks and measures 2 miles east-west by 1½ miles north-south.

MINERAL SHOWINGS

On the Tap #2 claim there is a manganese deposit in the Old Tom formation about 1,500 feet east of diorite intrusive. Veins of rhodonite appear to grade into bands of hard black manganese. The deposit has had a considerable amount of exploration work completed on it including short tunnels and some diamond drilling.

On the North Star claim there are showings of magnetite, magnetite with chalcopyrite, and quartz-calcite veins containing chalcopyrite along with silver and gold values. Detailed information on these and numerous other showings will be forthcoming after a planned prospecting and geological mapping programme is completed.

The main copper-molybdenite deposit is not strongly evident on the surface, but has been exposed by adit tunnels over a vertical distance of 400 feet. It is a fissure-vein type of a deposit and contains sizeable zones of chalcopyrite, pyrite, molybdenite with minor pyrrhotite, magnetite and other minerals. The host rock is pyroxenite and is erratically strongly magnetite, hence preliminary chain and Brunton Compass surveys made to date are inaccurate and show only the approximate location of the tunnels.

Until recently the main showings were in the Dave #1, tunnel, where in 450 feet of drifting there is 333 feet of heavy mineralization in 4 closely spaced shoots. These shoots are as follows, from portal-end to face:-

No.	Width	Length	Copper %	MoS2 %
1	2	115	1.58	0.81
2	2	30	4.03	0.84
3	2	38	1.88	0.70
4	3	150	3.88	1.46

The mineralized zones, within the general zone of shearing, are irregular in both strike and dip and appear most heavily mineralized where there is warping and cross shearing. Gangue minerals are chiefly quartz, calcite, mica, feldspars and graphitic material.

The new lower level adit tunnel is named the Joe #1. It is a crosscut south to southwesterly through pyroxenite. The fissure vein was intersected 574 feet from the portal and is 30 feet thick. It is strongly sheared and is laced with quartz-calcite and quartz-feldspar veins in and near which are chalcopyrite, pyrite, molybdenite and magnetite. The altered host rock contains biotite, sericite, pyroxenes and minor amounts of brick red and light brown minerals also noted in the upper levels. An 18-foot drift has been driven on the footwall and a 6-foot one started on the hanging-wall. Where intersected by the adit tunnel the zone is not as high grade as the mineralized zones in the upper Dave #1 tunnel but there is good chalcopyrite and some molybdenite through-out the 30-foot of width. In both drifts on the footwall and hangingwall, however, both the chalcopyrite and molybdenite are present in amounts similar to the better sections in the upper workings. On the footwall of the zone, for a distance of 12 feet to the present tunnel face, the pyroxenite is brecciated and contains patchy disseminations and fracture fillings of pyrite and chalcopyrite. Insufficient sampling has been done on this zone as the drifts are currently just being started, but by visual inspection it appears that excellent grade for both copper and molybdenite is present and the zone is about 10 times as wide as in the Dave #1 adit 275 feet above.

MOLLYCOT WORKINGS

On the Voight mineral claim there are 4 adit tunnels which explore the strong copper-molybdenum-bearing vein system. The top tunnel, named the Eric #1, is a 170 foot crosscut east at an elevation of 2,845 feet which did not intersect the fissure vein. It appears that a short drift to the south should intersect the zone.

Below, at an elevation of 2,796 feet, the Eric #2 adit tunnel was driven along a shear zone 60 feet southwesterly, and then 22 feet southeasterly where it intersected the fissure vein. It was then driven southeasterly on the vein for 127 feet. Fifty feet from the face it was connected with the Dave #1 tunnel by a raise on the mineralized vein. The vein in the Eric #2 tunnel has not been mapped and sampled by the writer, but was reported by MacDougal P. Eng., to average about 2 feet wide and be similar to that developed 125 feet below in the Dave #1 adit tunnel, that is heavily mineralized with chalcopyrite and molybdenite.

Dave #1 Adit, elevation 2,675 feet above sea level

A crosscut driven southerly for 90 feet intersected the shear zone where it is thin and only weakly mineralized. It was continued for an additional 200 feet beyond without any intersections of importance. The shear zone was drifted on for 100 feet easterly where heavier shearing containing sulphide mineralization was encountered. The tunnel is then directed southeasterly 450 feet on the shear zone and 333 feet of this length is through heavy sulphide mineralization. Near the face the shear is warped and the vein swings over from one side of the tunnel to the other. This change of attitude may be significant of a favourable zone ahead and the tunnel should be extended.

Joe #1 Adit, elevation 2,400 feet above sea level

This recently located adit crosscut was colared 275 feet below the Dave #1 tunnel on the south side of the creek. It was directed a few degrees west of south for 180 feet and then turned to the southwest for 436 feet at time of writing. What appears to be the downward extension of the main fissure vein was encountered at 574 feet and passed through at 604 feet. The tunnel face is in brecciated pyroxenite with minor patchy chalcopyrite disseminations, and should be extended.

If additional mineralized zones are encountered when the tunnel is driven southwesterly these can be investigated. In the meantime the exposed zone should be tested by drifts both to the northwest and southeast and crosscuts through the zone every 50 feet. Two drifts have been started, one on the footwall which will be continued northwesterly and one on the hangingwall to test this section for a short distance. The footwall drift is in 18 feet and the hangingwall drift 6 feet, and both are in heavy chalcopyrite, molybdenite mineralization similar to that exposed in the upper tunnels.

A diamond drill station could be advantageously located 250 feet back from the face to allow for drilling to test the downward extension of the zone. Plans should be made to intersect it at depths of 125 and 250 feet below the Joe #1 adit level.

CONCLUSIONS

The Mollycot Property is a first class prospect upon which the newly driven Joe #1 adit tunnel has located the downward extension of the heavily mineralized zone 275 feet below the former bottom level.

Where intersected the zone is 30 feet thick and two short drifts on each wall shows it to be mineralized with chalcopyrite and molybdenite similar to that on the Dave #1 tunnel level.

It is concluded that a major step in the successful development of the Mollycot Property has been realized and vigorous underground work should be expedited forthwith.

RECOMMENDATIONS

The following works programme is herewith recommended to carry through until the spring season:-

		Estimated Cost
1.	Have a chain and transit survey made of the Mollycot workings and surrounding area, and make a plan map with contours sketched at 20-foot intervals	$ 2,500.00
2.	Advance the new number 4 (Joe #1) adit tunnel southwesterly	10,000.00
3.	Drift northwest and southeast on the mineralized zone encountered in the adit between 574 and 604 feet from the portal	17,500.00
4.	Cut a diamond drill station about 250 feet from the present face of the lower adit tunnel and drill two holes to intersect the mineralized zone 125 and 250 feet below the level. If satisfactory mineralization is encountered fan holes to the right and left to intersect the zone 100 feet to the right and left of each of the first two holes	25,000.00
5.	Prospect the Rap, Tap, Cap and Moll claims, and make a preliminary geological survey of the entire property in the spring when weather permits	10,000.00
6.	Office, legal, accounting, engineering and overhead	15,000.00
7.	Contingencies funds	5,000.00
	TOTAL	$ 90,000.00

Respectfully submitted,

Per "Alfred R. Allen" P. Eng.
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"SEAL"

1115-409 Granville Street
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