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admit geochem.

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November 12th, 1968.

The President and Directors,  
Ajax Mercury Mines Ltd.,  
115 - 815 W. Hastings St.,  
Vancouver, 1, B.C.

Dear Sirs:

Exploration work which started early this summer has been continued at your Highland Silver property during the latter part of September and the month of October. This consisted of prospecting, further chip sampling in the Rambler, Standard and Buster workings, tractor trenching on a selected area of the Rambler Fraction, and geological evaluation of results. Surface geology has been partially mapped, with attention being paid to the delineation of the contact between the diorite and the Wallace sediments.

*section attached* A study of the mapping completed in the Rambler mine *(see)* shows that, in all likelihood, two and possibly three faults, striking northeasterly and dipping northwesterly at  $30^{\circ}$  to  $65^{\circ}$ , have displaced a single vein, producing four segments. The vein segments are steep, narrow (rarely more than one foot) and are exposed in the workings for a length of about one hundred and thirty feet (for each segment). *silver* Erratic values have been obtained in chip samples taken at approximately ten to twenty foot intervals across the most promising looking parts of the veins. *(6)*

After careful examination of the various vein segments, with particular reference to continuity between samples, it is our opinion that nothing of economic significance has been indicated to date. More closely spaced chip sampling of the veins should be undertaken to confirm this statement. One or two surface diamond drill holes across the strike of the vein segments would ascertain whether a fifth (or even sixth) segment exists.

Underground diamond drilling done to explore possible upward and downward extensions of veins in the Standard workings met with negative results.

Chip sampling of the Buster vein produced values too low to be of any importance. One short section of the vein on which a twenty foot winze has been sunk appears to constitute the sole possibility for further exploration.

Two narrow veins, each about one foot to a maximum of two feet in width, extending about fifty feet along strike, were discovered by Mr. W. Knox during careful surface prospecting, and were stripped by a tractor. Sampling produced low values, however, considering the width of the veins.

#### CONCLUSIONS & RECOMMENDATIONS

In spite of the fact that exploration work to date has not outlined any ore shoots, the general geological setting remains favourable, i.e. several veins and vein segments with silver, lead and zinc values in the diorite near its contact with the Wallace sediments.

Further close sampling of vein segments in the underground workings should be carried out to complete the data.

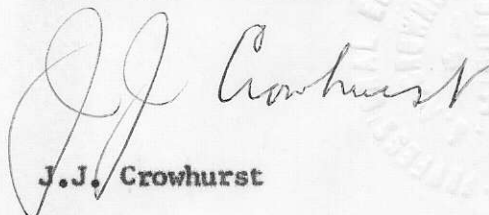
The veins are striking in the same direction as those in the lower workings of the Mastodon-Highland Bell mine which is situated four to five thousand feet northwesterly. The veins on the Highland Silver property have been displaced by similar faults and have not been explored to any extent in the contact area. It is recommended therefore that a geochemical soil survey over the entire claim group be carried out in the same manner as that undertaken during 1967 on the nearby Highland Bell property under supervision of Dr. W.R. Bacon. Dr. Bacon, at that time, was Exploration Manager for Mastodon-Highland Bell Mines Ltd. This work resulted in the discovery of one and, it is understood, possibly two new veins containing commercial values. This method of exploration is relatively inexpensive and can be carried out quickly; moreover, it has been proven successful as noted above.

Based on the results of this proposed geochemical work, tractor trenching and surface diamond drilling should be initiated to search for new veins or extensions of the presently known ones. The cost of this program is estimated to be as follows:

(1) Surface prospecting & chip sampling		\$1,500
(2) Geochemical program -		
20 line miles @ \$100/line mile	\$2,000	
Analysis - 1000 samples @ \$1.20/sample	1,200	
Labour, expediting & general	<u>600</u>	
		3,800
(3) Tractor rental re stripping 50 hrs. @ \$20/hr.		1,000
(4) Surface diamond drilling		
(a) Extension of known veins - 1,500		
(b) Geochemical anomalies - 1,500		
Total	<u>3,000</u>	
Contractor cost - 3000' @ \$8.00/ft.	24,000	
Hauling water & general expense	<u>1,000</u>	
		25,000
(5) Vehicle expense		500
(6) Core boxes - delivered - 200 @ \$5 each		1,000
(7) Sampling & assaying 100 samples @ \$5 total		500
(8) Board & room loss - equivalent of 2 men 60 x <del>30</del> days x \$8/day		480
(9) Surveying & mapping		700
(10) Supervision		1,000
(11) Consulting fees - 10 days @ \$150/day		<u>1,500</u>
		\$36,980
Plus contingencies @ 10%		<u>3,700</u>
		\$40,680

Respectfully submitted,

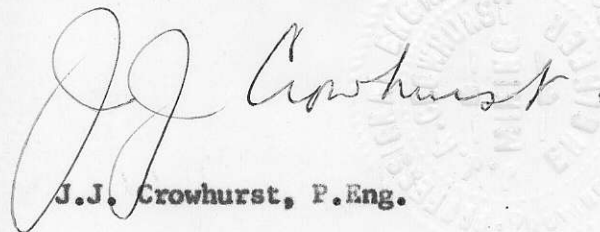
BACON and CROWHURST

  
J.J. Crowhurst

CERTIFICATE OF QUALIFICATIONS

I, John James Crowhurst, do hereby certify that:

- (1) I am a practising mining engineer with Bacon and Crowhurst, Ste. 102, 1111 West Georgia Street, Vancouver, 5, B.C.
- (2) I am a graduate of the University of British Columbia and have been granted the degree of Bachelor of Applied Science.
- (3) I have been practising my profession as a mining engineer for 26 years.
- (4) I am a member of the Association of Professional Engineers of British Columbia, Registration No. 2120.
- (5) On the 22nd of October 1968 I visited the property at Beaverdell optioned by Ajax Mercury Mines Ltd.
- (6) I was employed by Highland Bell Mines Ltd. as General Manager during the period 1960-1967 and as part of my duties visited the Beaverdell mine at frequent intervals.
- (7) I nor any member of my firm have directly or indirectly received or expect to receive any interest direct or indirect in the property of the company or any affiliate nor do I nor any member of my firm beneficially own directly or indirectly any securities of the company or any affiliate.

  
J.J. Crowhurst, P.Eng.

