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This for filing in V.S.E. 80082 re application to addid underwriting ROOM 1, 425 HOWE STREET VANCOUVER 1. B.C.

March 5th, 1969.

The President and Directors, Molymine Explorations Ltd. (N.P.L.), 201 - 535 Thurlow Street, VANCOUVER 5. B.C.

Gentlemen,

INTERIM GEOLOGICAL REPORT M69-1 MINERAL HILL EXPLORATION PROGRAMME VICINITY OF HOUSTON, B.C., OMINECA M.D.

The Company's Mineral Hill property, comprising a general 2 by 2 mile block of 48 full and 6 fractional claims locates closely east of Highway 16 at some 8 miles northwest of Houston, B.C. All claims are held in good standing by virtue of the considerable amount of exploratory work accomplished and recorded.

The writer's formal report of March 5th, 1968 provides detailed descriptions of the general geology, local geology and mineralization and of exploration accomplished to that date; the included recommendations for further geophysical, trench and diamond drill exploration within parts of the 'North' and 'South' principal prospect zones still apply, but with some modifications.

The South (alaskite-hornfels) zone has general dimensions of 1200 by 1500 feet - all more or less mineralized by fracture-filling, and disseminated Fe-Mo-Cu sulphides. Within this, a more closely-spaced pattern of trenches and inclined diamond drill holes has indicated a 400 by 1500 westerly (alaskite) area with an average grade approximately 0.10% MoS2, 0.05% Cu, and minor silver-zinc content. Detailed correlations of trench and drill-hole fracturing and assay sections lead to the inference of a more strongly mineralized, steeply-dipping fracture panel striking northeasterly through central and southerly alaskite exposures, the central hornfels section and, possibly, the northwesterly corner and 'tail' of the main granite stock. The trench, and drill-indicated grade of this specific section is estimated at approximately 0.15%

MoS<sub>2</sub>, 0.05% plus Cu over widths ranging from 50 to, possibly, 200 feet. As quartz veining and general silicification may well increase below presently drilled horizons of the alaskite-hornfels-porphyry panel, the zone is considered to have considerable depth potential for still higher-grade MoS<sub>2</sub> mineralization.

Similar Fe-Mo-Cu sulphide mineralization occurs over the generally explored 800° by 1500° area comprising the North (quartz-breccia) zone; the overall average grade is substantially less than that of the better mineralized South zone (alaskite-hornfels) complex. However, a more substantially mineralized section has been tentatively outlined, by percussion and diamond drill hole intersections, over a 400' by 4001 area to the south of the (O-N) creek bisecting the zone several drill intersections ranging between 0.10 - 0.20% MoS2, with minor, to appreciable Ag and Cu values. The above noted creek gully has been rather firmly interpreted as reflecting the course of a strong, N.E.-trending zone of shearing and fracturing; further substantiation of this derives from the occurrence of several near-parallel mineralized shears and fractures within trenches and other exposures situated within 400' - 600' north and south of the creek. The creek fault is consequently inferred as the controlling structure for the local Mo-Aq-Cu mineralization. Geological-geochemical evidence indicates northeasterly (and southwesterly) continuity for 1500 or more feet into areas of relatively heavy overburden.

The 1968 exploration programme was restricted, for financial reasons, to 'follow-up' exploration of some potentially mineralized areas indicated via geochemical-geological reconnaissances performed in 1967. The zone of Ag-bearing quartz veins located 3/4 to 1 mile east of the main porphyry stock was investigated by trenching, mapping and sampling; numerous mineralized quartz veins were noted over a fractionally exposed E-W width of 1500 feet. This vein system, or zone, occurs within the general contact zone of a diorite stock and adjacent hornfelsized volcanics and sediments. The individual veins, ranging from 4 inches to 4 feet wide are, in general, sparsely mineralized by Fe-Cu-Pb-Zn sulphides - with variable amounts of tetrahedrite. More significantly, several occurrences of disseminated Fe-Cu sulphide mineralization were noted within the local diorites and gabbros - indicating a possible potential for the occurrence of bulk-type Cu-Ag mineralization.

During 1968, detailed geological mapping, sampling and trenching were carried out within the area of the 'Merkley' showings - these being situated at some 4000 feet S.S.E. of the porphyry stock, and lying mainly within Huber #8 claim.

The principal, or shaft, showing comprises a strong quartz vein within a section of sheared volcanics and hornfels,

Silicified and guary-veined

mineralized by chalcopyrite, pyrite and, locally, magnetite and The Merkley shaft is now inaccessible; a grab sample hematite. of well mineralized dump material assayed 1.83% Cu. mineralization is reported to occur over the full width of the shaft. The shaft vein and subordinate parallel veins all appear to be structurally affiliated with a major, northerly-trending fault zone which abuts the east end of the porphyry stock; hence, the presently inferred 2-mile length of the structure (zone) comprises a major exploration target.

A second mineralized zone, situated some 1400 feet east of the shaft zone, and thus far explored by only three old hand-trenches, comprises an E-W trending quartz-breccia vein with Pb-Zn-Cu sulphides, and a subordinate magnetite-hematite vein trending N.N.W. - both within a section of variably altered volcanic rocks.

The writer recommends the following, continued, staged exploration programme to allow more conclusive evaluations of indicated mineralized zones within the 'South' and 'North' main prospect zones, and to further assess the mineral potential of easterly and southerly mineralized areas delineated in preliminary fashion during the 1968 field season:

#### STAGE I

#### South Zone:

trenching and deep cross-sectional diamond drilling. - precede the Explore lateral and depth extensions of the inferred

drilling from transh

#### North Zone: B.

- (1)Extend I.P. (7.5 KW.) survey to the northeast and southwest of the quartz-breccia area, with the (O-N) creek as survey axis.
- (2)Corollary exploration of the inferred N.E.trending fracture panel via a series of crosssectional diamond drill holes to shallowintermediate depths.

#### STAGE II

### Easterly (quartz-silver-copper) Zone:

- (1)Carry out reconnaissance-to-detailed geochemical soil survey of full potentially-mineralized zone.
- Provide for follow-up I.P.-magnetometer and/or E.M.-magnetometer surveys of probable geochemically-anomalous areas.

# B. Southerly (copper-lead-zinc) Zone:

- (1) As per A(1).
- (2) As per A(2).

## ESTIMATED COSTS:

STAGE I - A	Ripper bulldozer, 8 days @ \$300.00	\$2,400.00
	Diamond drilling - 2100 lin. ft. @ \$12.00	25,200.00 3,210,00
- B(1)	I.P. Survey, 4 mi. @ \$625.00	2,500.00
- B(2)	Diamond drilling, 1800 lin. ft. @ \$12.00	21,600.00
	al provision, engineering and vision	3,300.00
- Provi	sion, omissions and contingencies	5,000.00
	TOTAL, STAGE I	\$60,000.00
	26	
STAGE II - A(1)	Geochemical surveys	\$5,000.00
- A(2)	Geophysical surveys	15,000.00
- B(1)	& (2) Geochemical and geo- physical surveys	20,000.00
8	TOTAL, STAGE II	\$40,000.00
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Respectfully submitted,

W.M. SHARP, P.Eng.

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