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Coranex

FROBEX LIMITED

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Dr PWR

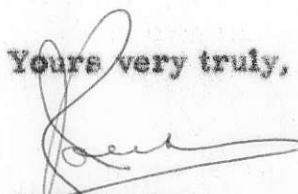
November 23, 1965.

Dome Exploration (Canada) Ltd.,
360 Bay Street,
Toronto 1, Ontario.

Dear Sirs:

I enclose herewith a report by Mr. J.R. Woodcock
on his visit to the Gem Molybdenum prospect dated October 4,
1965.

Yours very truly,



J. J. Rankin
Manager - Coranex Project

JJR:lmz

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PROPERTY VISIT

NAME: Gem Explorations (molybdenum prospect) MAP SHEET: 92 N-12 (Hope)

LOCATION:

The prospect is on the northeast side of the head of Clear Creek at a latitude 49° 43 minutes, longitude 121° 44 minutes. Clear Creek runs into Big Silver Creek which in turn runs into the east side of Harrison Lake. The property can be reached via the logging roads up the east side of Harrison Lake and Clear Creek.

OWNERSHIP:

The property is owned by Gem Explorations Limited and is under option to Utah Construction Limited.

The writer was shown the property by geologists Maurice Young and Charles Aird on September 24th.

EXPLORATION WORK:

The work done by Gem Explorations consisted mostly of building a difficult access road and driving an underground adit on a small high-grade molybdenum-bearing quartz vein. Utah Construction have mapped the property geologically; they have run a few lines of I.P.; and they have drilled six holes with B.X. core size.

The drill holes as shown on the appended sheet are plotted on the map sketch.

REGIONAL GEOLOGY:

Harrison Lake lies along a northwesterly trending fault within the south end of the coast range batholith. Jurassic and Cretaceous rocks are exposed along the lake and to the southwest of the fault. Pennsylvanian rocks are exposed in a fairly large area along the east side of Harrison Lake and extending northward up Big Silver Creek.

GEOLOGY AT MINERAL DEPOSIT:

In the vicinity of the mineral deposit the regional country rock consists of gneissic granodiorite, gneisses and schists. In the vicinity of the property, the gneissosity has a regional fold that plunges off to the northeast with dips from 40 to 80 degrees.

Clear Creek, in the vicinity of the property, lies along a fault which strikes N E.

A granitic stock, 3500 feet north-south by 1800 feet east-west intrudes the gneisses along the northwest side of Clear Creek. An intrusive breccia, 1200 feet in diameter, composed of quartz monzonite porphyry (fragments and matrix) occurs within the north-east part of the granite stock and is partly in contact with the gneisses. A different phase of the quartz monzonite breccia or a

separate intrusion about 500 feet x 200 feet occurs between the quartz monzonite intrusive breccia and the gneiss at the northeast corner of the stock. This smaller breccia consists largely of gneissic granodiorite fragments.

Veinlets of relatively coarse wuggy quartz form a sparse stockwork throughout the granite intrusive. These veinlets contain coarse flakes (mostly between 1/16th and 1/4") of molybdenite. The quartz veinlets are particularly conspicuous in the vicinity of diamond drill hole No. 3. Some pieces of float were noted in which there was a good stockwork of closely-spaced barren quartz veinlets.

In addition to the molybdenite in the quartz veinlets there are molybdenite flakes in the gneiss at the contact of the stock. These fairly coarse flakes are mixed with or replace the biotite crystals and generally contribute to any enriched zones encountered in drill holes. In some places the coarse molybdenite flakes occur along the contact of breccia fragments.

Many of the quartz veinlets have K-feldspar along their contacts. The K-feldspar is mostly in the form of euhedral crystals which project into the quartz veinlets. The quartz veinlets with their euhedral K-feldspar crystals and the molybdenite, mostly in rosettes and prevalent near the contacts of the veinlets, have more of a pegmatitic appearance than do the veinlets usually found in stockwork molybdenite deposits. The granitic rock itself also has textures that are almost graphic.

A small amount of hydrothermal alteration, mostly sericitization, has been encountered in the northeast part of the stock in hole #6.

The diamond drill holes are shown on the accompanying sketch and listed above under "Exploration Work". To date, hole #3 yielded the best results. About 300 feet at the upper part of the hole graded about 0.1% MoS₂. This included a 50-foot section that graded better than .2% MoS₂. The 50-foot section included a few 5-foot sections that graded up to .75% MoS₂. The better grade sections occur in the gneiss outside the granite contact and are dependent on the abundance of molybdenite flakes mixed with the biotite crystals.

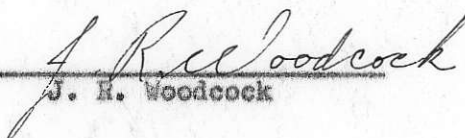
The quartz vein which was worked on by Gem Explorations contains molybdenite flakes (1/16th inch to 1/4 inch across) that occur in seams (like asbestos). The seams are parallel to and adjacent to the contacts of the veins. In places there is also fine powdery molybdenite; however it appears that this powdery molybdenite occurs only on slip surfaces and is probably the result of movement

which ground up the coarser flakes. A piece of the quartz vein which is at the geological office on the property contains scattered, very coarse (over 1/2") rosettes of molybdenite scattered along both contacts of the vein.

CONCLUSIONS:

One might describe this deposit as a quasi-stockwork type. It contains many features that are closer to the pyrometamorphic types than the hydrothermal types of molybdenum deposits. The coarseness and pegmatitic nature of the quartz in the veinlets and the texture of the molybdenite (coarse flakes often in rosettes) are pyrometamorphic features. The small stock, the intrusive breccia, the abundant small quartz veinlets and the limited hydrothermal alteration are features characteristic of regular stockwork molybdenite deposits.

It is likely that this deposit will remain a teaser for a long time. However, the deposit does have significant grades and knowledge of it serves as a warning when using only one criterion (coarseness of molybdenite flakes) in negatively judging a molybdenite prospect.



J. R. Woodcock

October 4th, 1965

DIAMOND DRILL HOLES

<u>Hole No.</u>	<u>Grid Location</u>		<u>Bearing</u>	<u>Dip</u>	<u>Depth</u>
	<u>North</u>	<u>East</u>			
#1	9,555	9,190	N 5° E	-15°	1058'
#2	9,380	9,350	N 60° E	-40°	370'
#3	10,266	9,930	N 29° W	-10°	907'
#4	10,377	9,922	S 18° E	-53°	337'
#5	11,200	9,200	N 60° W	-50°	570'
#6	11,180	10,640	S 64° W	-20°	550'+

