

# GM 26504

ASBESTOS HILL OREBODY, A BRIEF GEOLOGICAL DESCRIPTION

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Québec 

ASBESTOS HILL OREBODY

(A Brief Geological Description)

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Information Compiled

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SERVICE DES GITES MINÉRAUX

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I. LOCATION

The Asbestos Hill orebody is located in the Ungava area of Northern Quebec, some thirty miles southeast of Deception Bay on Hudson Strait. The orebody is located approximately at the intersection of latitude  $61^{\circ}49'$  and longitude  $73^{\circ}58'$ .

II. GENERAL GEOLOGY OF AREA

The Asbestos Hill orebody is located near the western end of an elliptical shaped ultrabasic sill complex. This elongated complex trends in a northeasterly direction, is some fifteen miles long and four and one-half miles wide. The sill is composed of alternating layers of pyroxenite, serpentine and serpentized pyroxenite rock and has an approximate average thickness of three thousand feet.

The ultrabasic sill is enclosed by rocks of the Povungnituk group of metamorphosed sediments and volcanics. The rocks overlying the sill are mainly lavas, and those underlying the sill are sericite and chlorite schists and quartzites. The sill has a general synclinal structure ("U" shaped) with the limbs of the sill dipping at 20 to 70 degrees or steeper. Where the ultrabasic rocks outcrop (i.e. in the area of the main orebody) the serpentines and pyroxenite rocks stand out in topographic relief some two hundred feet higher than the enclosing sedimentary and volcanic rocks.

### III. DETAILED GEOLOGY (MAIN OREBODY)

The main orebody is located stratigraphically some one to two hundred feet from the bottom of the ultrabasic sill. Following are the main rock types comprising the sill:

|     | <u>Rock Types (Proterozoic Age)</u>                | <u>Thickness</u> |
|-----|--|------------------|
| Top |  |                  |
|     | G Pyroxenite                                       | +1000 feet       |
|     | F Serpentine                                       | + 600 "          |
|     | E Pyroxenite (partially<br>serpentinized)          | 600 "            |
|     | D Serpentine (with some<br>fibre)                  | 190 "            |
|     | C Pyroxenite (partially<br>serpentinized)          | 200 "            |
|     | B Serpentine ( <u>contains main<br/>ore zone</u> ) | 230 "            |
|     | A Pyroxenite (partially<br>serpentinized)          | 100 "            |

The approximate overall dimensions of the orebody are:

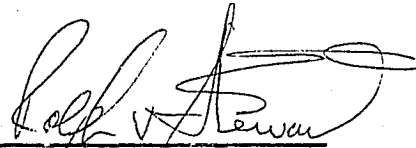
length : 2000 feet  
width : 200 "

The principal axis of the orebody strikes approximately N 40° E and plunges to depth toward the northeast (below barren rock) at about 20 - 30 degrees. The ore zone has been drilled intersected to a maximum vertical depth of 1200 feet below surface. Ore probably continues below this depth.

The main ore zone contains gash type cross fibre veins, varying in length from several inches to several feet. The main vein direction is parallel to the "underlying" bedding, with secondary directions perpendicular to this bedding. In addition to the "gash" fibre veining a considerable amount of mass fibre also appears to be present. Fibre length distribution appears to be quite consistent throughout the orebody (length of the fibre veins generally vary from 1/16 inch to 1/4 inch, but widths less and greater than these are also present).

IV. ESTIMATED ECONOMIC VALUE

Diamond drilling to date has outlined approximately 18,738,000 tons of open pit and underground ore. Total gross value of this ore tonnage in terms of 1970 prices is estimated to be \$338,504,620.



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