

DESCRIPTIVE MODEL OF SERPENTINE-HOSTED ASBESTOS

By Norman J Page

APPROXIMATE SYNONYM Quebec Type (Shride, 1973).

DESCRIPTION Chrysotile asbestos developed in stockworks in serpentinized ultramafic rocks.

GEOLOGICAL ENVIRONMENT

Rock Types Serpentinities, dunite, harzburgite, pyroxenite.

Textures Highly fractured and veined, serpentinized ultramafic rocks.

Age Range Paleozoic to Tertiary.

Depositional Environment Usually part of an ophiolite sequence. Later deformation and igneous intrusion may be important.

Tectonic Setting(s) Unstable accreted oceanic terranes.

Associated Deposit Types Podiform chromite.

DEPOSIT DESCRIPTION

Mineralogy Chrysotile asbestos ± magnetite ± brucite ± talc ± tremolite-actinolite.

Texture/Structure Stockworks of veins in serpentinized ultramafic rocks.

Alteration None associated with ore, but silica-carbonate, talc may be developed,

Ore Controls Two periods of serpentinization, an earlier pervasive one and a later period near the end of intense deformation accompanied by hydrothermal activity perhaps as a function of intrusion of acidic, igneous rocks highly dependent upon major faulting, and fracture development.

Geochemical signature None.

EXAMPLES:

Thetford-Black Lake, CNQU (Riordon, 1957)

GRADE AND TONNAGE MODEL OF SERPENTINE-HOSTED ASBESTOS

By Greta J. Orris

COMMENTS Long and short fibers are combined. Some literature did not specify if reported production was tons of fiber or tons of ore. In these cases, production was assumed to be tons of ore which may have led to underestimation of some deposit tonnages. See Figs. 27, 28.

DEPOSITS

<u>Name</u>	<u>Country</u>	<u>Name</u>	<u>Country</u>
Abitibi	CNQU	Lafayette	CNQU
Advocate	CNNF	Lake Asbestos	CNQU
Asbestos Hill	CNQU	Las Brisas	CLBA
Asbestos Island	CNQU	Lili	CNQU
Belvidere	USVT	McAdam	CNQU
Black Lake	CNQU	Midlothian	CNON
British Canadian	CNQU	Moladezhnoye	URRS
Caley	CNYT	Munro	CNON
Carey/East Broughton	CNQU	National	CNQU
Cana Brava	BRZL	Nicolet Asbestos	CNQU
Cassiar Mine	CNBC	Normandie/Penhale	CNQU
Clinton Creek	CNYT	Pontbriand	CNQU
Continental	CNQU	Qala-el-Nahl?	SUDN
Courvan Mine	CNQU	Reeves	CNON
Cranbourne	CNQU	Rex	CNYT
Daffodil	CNON	Roberge Lake	CNQU
Eagle	USAK	St. Adrien Mtn.	CNQU
Gilmont	CNQU	St. Cyr	CNQU
Golden Age	CNQU	Santiago Papalo	MXCO
Havelock Mine	SWAZ	Shihmien	CINA
Jefferson Lake	uSCA	Steele Brook	CNQU
Jeffrey Lake	CNQU	Thetford Group	CNQU
Kinlock	SAFR	Windsor	CNQU
Kolubara-Azbest	YUGO	Woodsreef Mine	AUNS
Kudu Asbestos Mine	ZIMB	Zindani	GREC

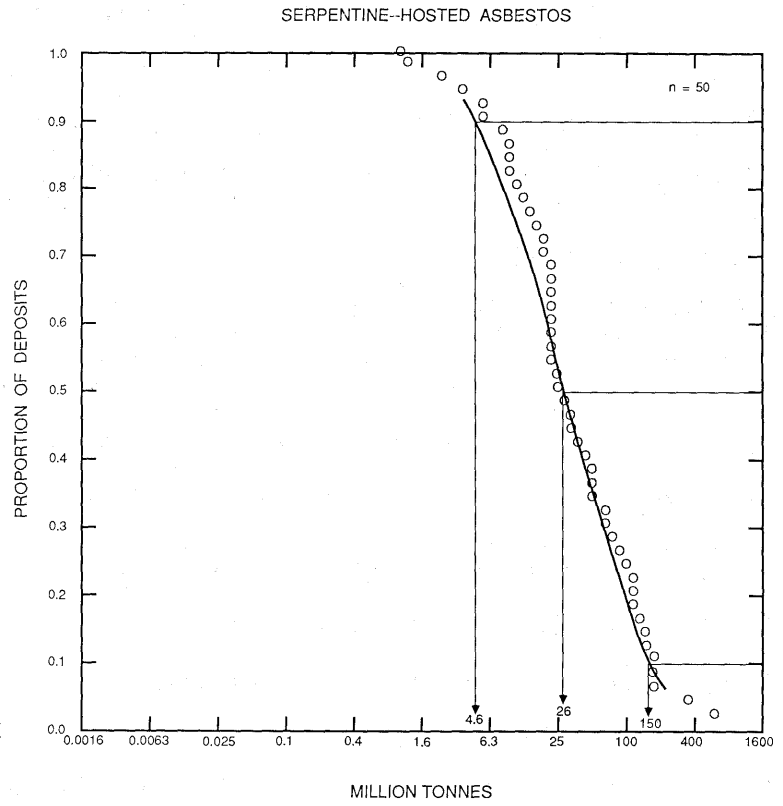


Figure 27. Tonnages of serpentine-hosted asbestos deposits.

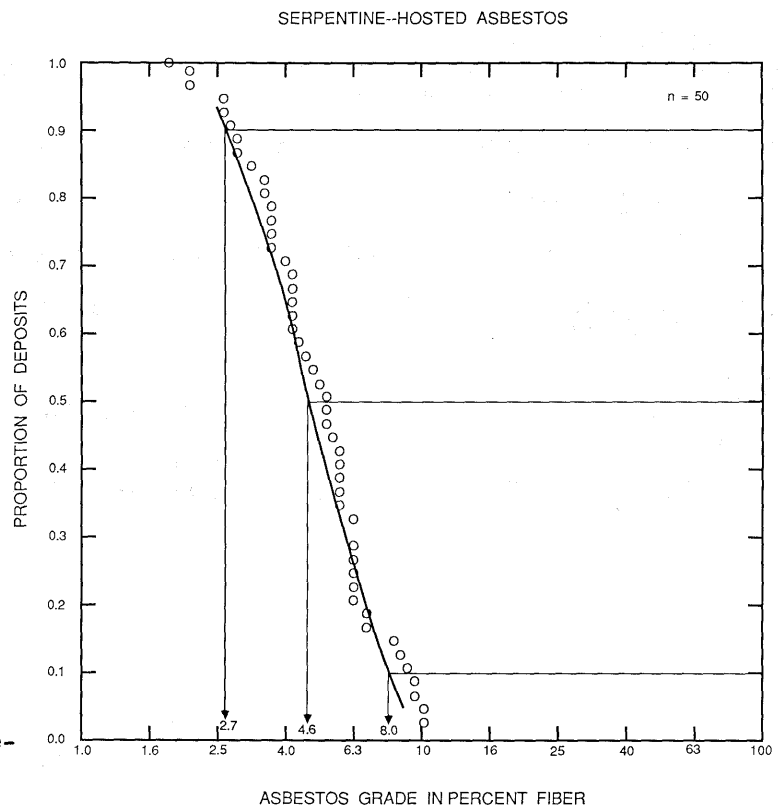


Figure 28. Asbestos grades of serpentine-hosted asbestos deposits.