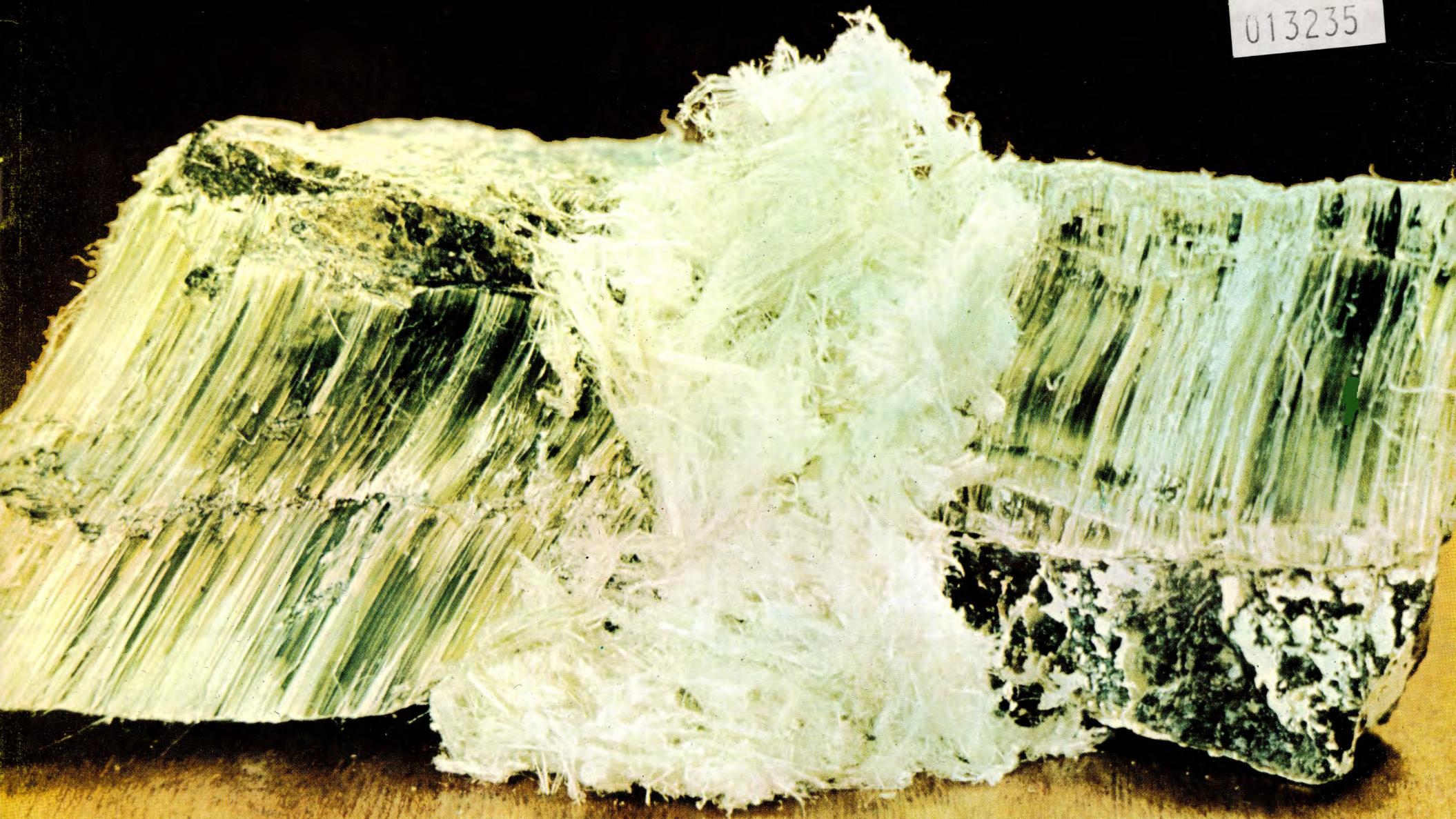
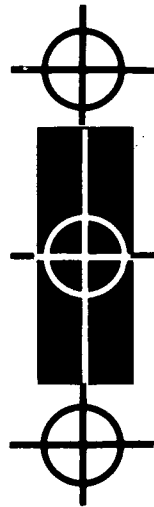


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THE MAGIC MINERAL



OFFICERS:

PRESIDENT: H. A. BRIDEN
SECRETARY: S. DAVID ANFIELD

BOARD OF DIRECTORS:

H. A. Briden, Geologist
S. David Anfield, Barrister & Solicitor
R. H. D. Philp, Professional Engineer
R. A. Pollock, Executive

SPHERE DEVELOPMENT CORPORATION LTD. (N.P.L.)

AUDITORS: Gunderson, Stokes, Walton & Co., Vancouver, B.C.

TRANSFER AGENT: National Trust Company Limited, Vancouver, B.C.

SOLICITORS: British Columbia — Anfield & Company, Vancouver, B.C.
Yukon Territory — Hudson & Neilsen, Whitehorse, Y.T.

CAPITALIZATION: 10,000,000 shares at 50c par value.

REGISTERED & ADMINISTRATIVE OFFICES:

846 West Hastings Street, Vancouver 1, B.C.

CONSULTING ENGINEER: Gordon P. E. White, P.Eng.

THE MAGIC MINERAL

ASBESTOS, a unique and unusual mineral, has been referred to as the "magic mineral" and used for over 2,500 years.

Even today few people are familiar with **asbestos**, and most are amazed at the versatility of this silky, fibrous mineral when they first come in contact with it.

In ancient times it was used in a wide variety of situations. The Romans used it in cremation cloths; the Emperor Charlemagne was believed by his enemies to possess supernatural powers when he threw his asbestos tablecloth into a fire and recovered it unharmed; the Venetian explorer Marco Polo described a piece of unburnable cloth he was shown in Siberia; asbestos cloth was used for armour in battle in the 15th century. During this period, and until the late 17th century, asbestos was regarded as an object of superstition and curiosity, based on its fibrous and heat resistant qualities.

It wasn't until the discovery of the Canadian asbestos deposits that its true value as a mineral commodity and its many unique properties and uses were realized. Asbestos in Canada was first noted by Sir William Logan in 1847, then Director of the Geological Survey of Canada. Asbestos in Thetford, Quebec, was discovered by Joseph Fecteau in 1877, and small scale mining operations commenced the following year. Since that year the asbestos industry has continued to grow with Canada maintaining a leading position throughout the world. From an initial production of about 50 tons in 1878 the industry in Canada has grown to approximately 1.4 million tons in 1965 or approximately 40% of the world output, having doubled in the past 15 years. For most of this period nearly the entire production has been from Quebec. Recently, however, British Columbia has become an important contributor of asbestos to domestic and world markets.

Asbestos production in Western Canada, all of which comes from the Cassiar Asbestos Corporation Mine in northern British

Columbia commenced in 1953 and has continued to grow since that date.

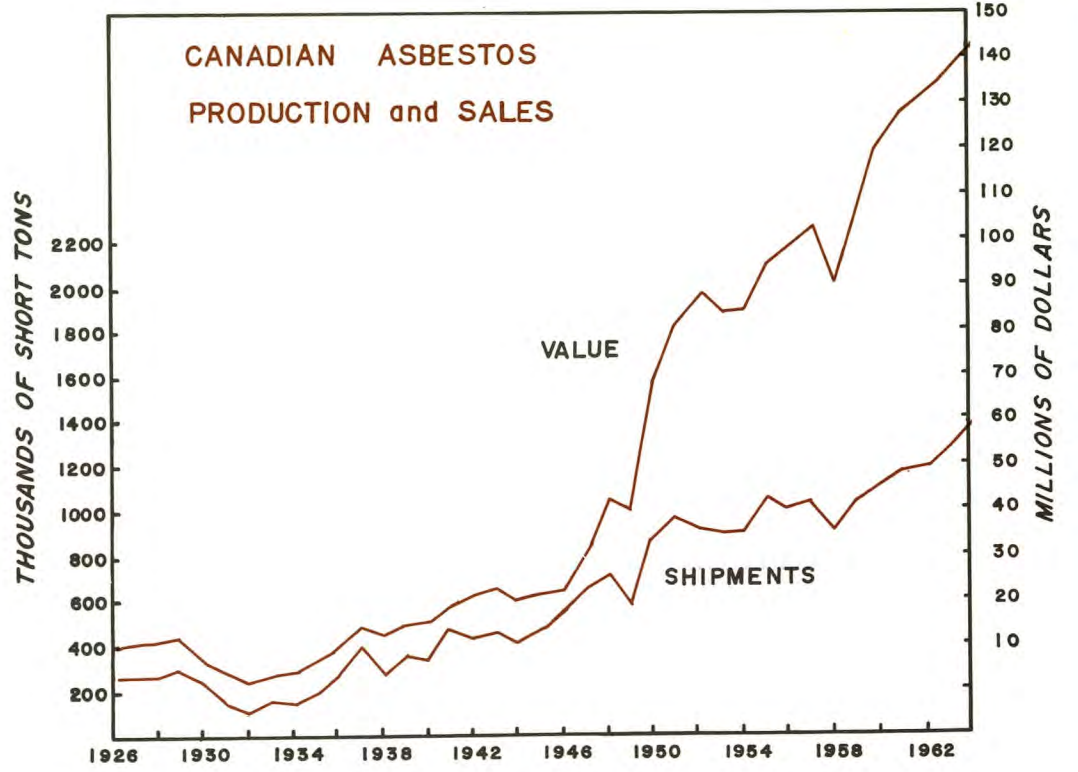
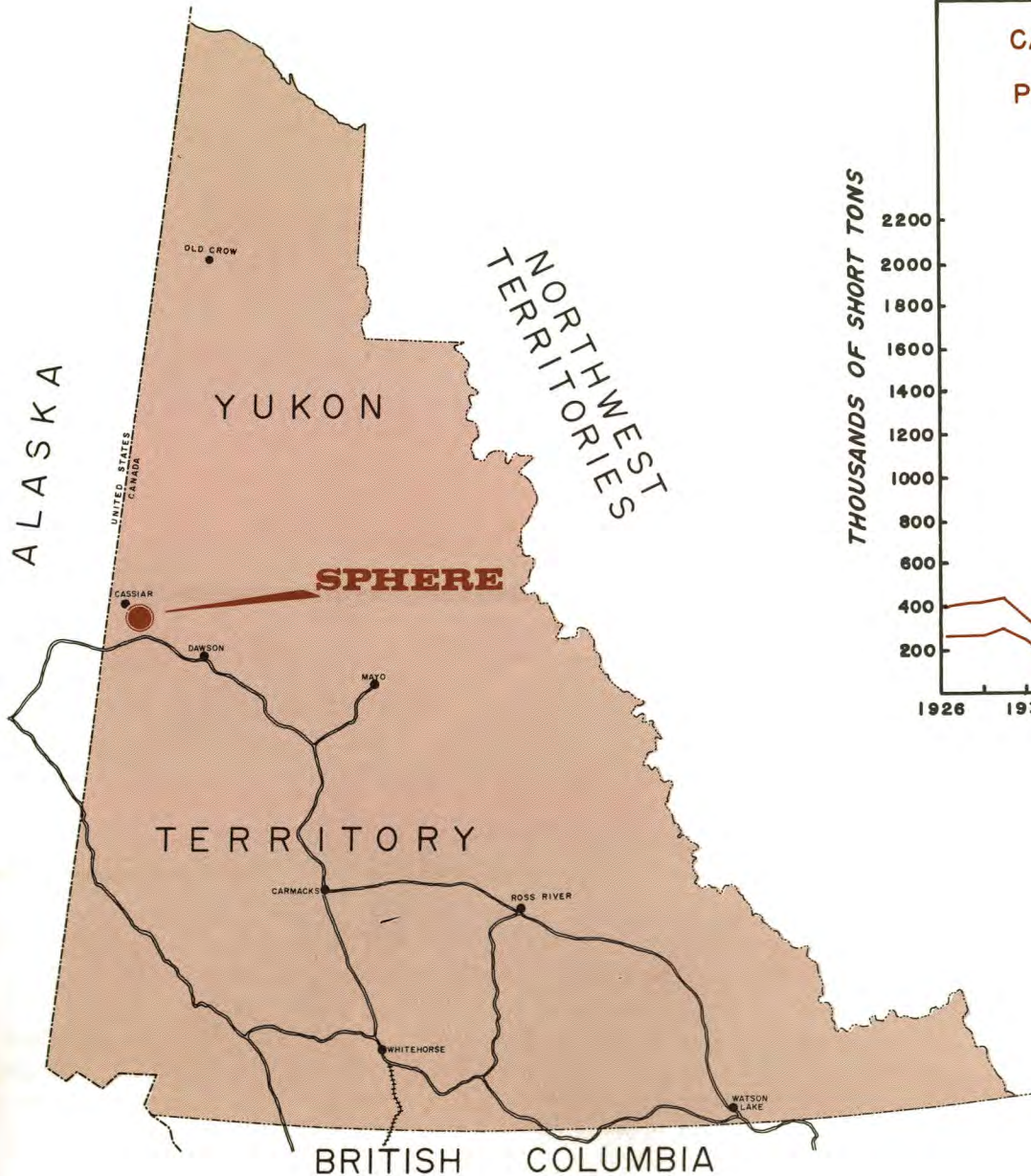
TECHNOLOGY OF ASBESTOS

The name asbestos applies to a number of natural fibrous minerals of which chrysotile, or white asbestos, is the most important and provides 90% of the world's asbestos fiber. Other asbestos minerals are crocidolite, amosite, tremolite and anthophyllite.

Chrysotile is found in veins with fibres from a fraction to several inches in length, but most commonly less than 1/2 inch long in ultrabasic rocks (serpentine, peridotite, dunite) in two principal modes of occurrence - either as cross fibre or slip fibre. In the former the fibres lie across the veins and in the latter they lie along the fracture walls. **Cross fibre, by far the most valuable of the two, is the variety being mined or under development in Western Canada.**

Individual chrysotile fibres are extremely fine - between one and one ten-millionth of an inch in diameter - and cannot be picked out by the most powerful optical microscopes. Physical properties that give asbestos its important position in modern industry are the combination of fibrous structure, low heat conductivity, high electrical resistance and chemical inertness. It can withstand temperatures of several thousand degrees Fahrenheit and possesses a tensile strength comparable to that of steel.

Asbestos is mined by both open pit and underground methods, the former method being the most common in Canada. The serpentine rock is crushed and broken up, separating the chrysotile from the rock. This chrysotile is then fiberized, which separates and fluffs up the fibres, graded as to length, and is ready for its industrial application.



64°30'

140°45'

64°30'

CASSIAR ASBESTOS CORPORATION



140°00'

12 Claims

SPHERE

SPHERE

49 Claims

SPHERE

15 Claims

SPHERE

17 Claims

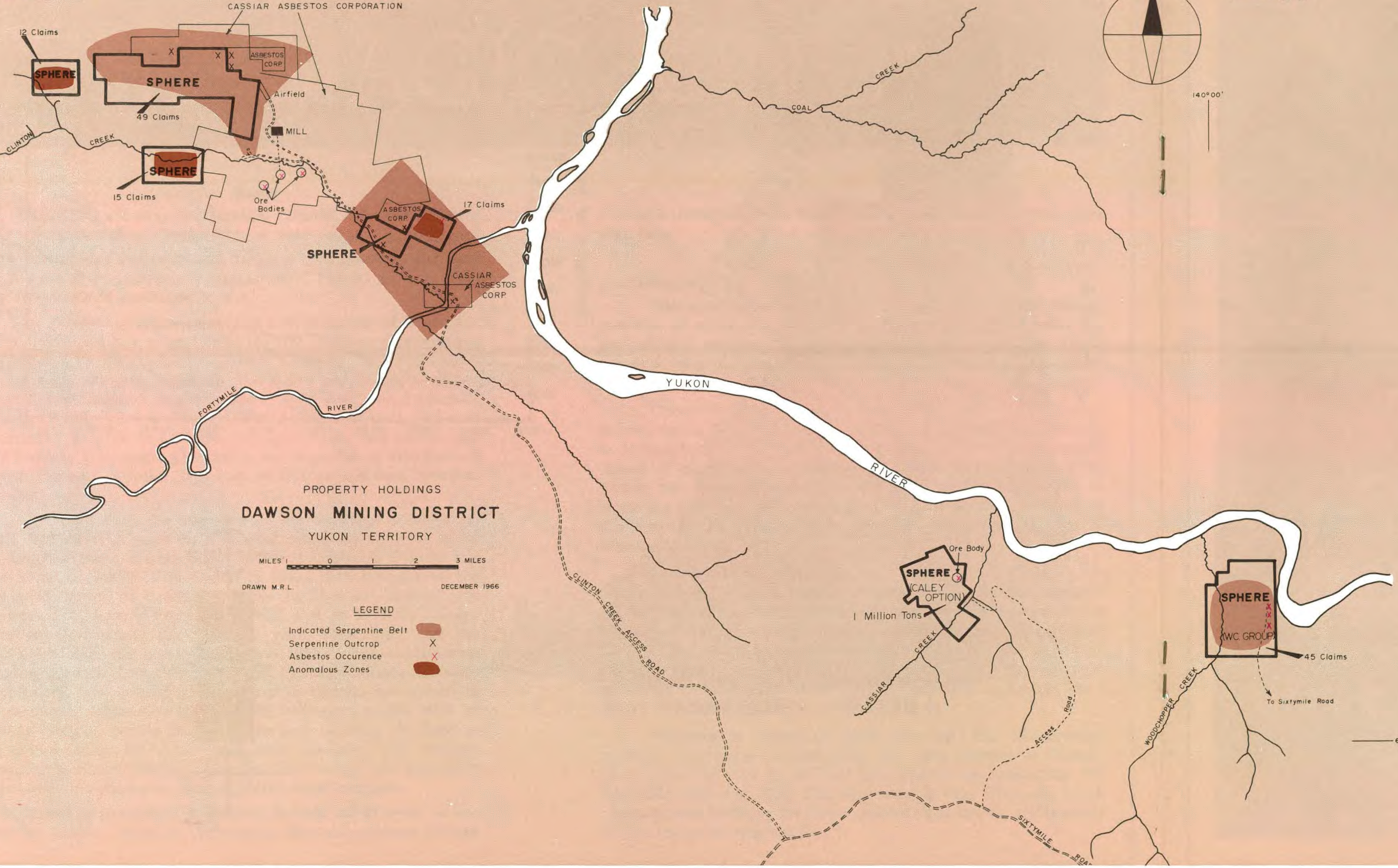
PROPERTY HOLDINGS
DAWSON MINING DISTRICT
YUKON TERRITORY

MILES 0 1 2 3

DRAWN M.R.L. DECEMBER 1966

LEGEND

- Indicated Serpentine Belt
- Serpentine Outcrop
- Asbestos Occurrence
- Anomalous Zones



64°15'

Panning for gold is today largely a tourist attraction throughout the Yukon. A few placer claims are still being worked by individuals and families.



USES OF CHRYSOTILE ASBESTOS

Asbestos is utilized in a large and ever increasing number and variety of products. Long, silky, spinning grade fibre can be carded, spun and woven into fabrics used for fireproof clothing, lagging cloth, electrical insulation products and conveyor belts.

At the present time, the largest use of asbestos is in the production of asbestos-cement construction materials. These include pipe, shingles, wallboard, corrugated sheets, roofing tile and mill-board. Uses of asbestos-cement products, which combine medium-grade asbestos with portland cement, have increased rapidly in recent years.

Shorter grades of chrysotile are combined with various materials in the manufacture of asbestos paper, molded brake linings, clutch facings, pressure gaskets, asphalt and plastic floor tiles, and protective coatings.

Uses for asbestos, especially those grades used in asbestos-cement materials, are expected to continue to expand in future years.



Gold dredge on Bonanza Creek near Dawson City. Machinery such as this is fast disappearing from the Yukon scene as gold-bearing gravel is worked out.



THE DAWSON AREA

Founded on the Klondike Gold Rush of 1898 (the greatest gold rush the world has seen), Dawson was built around and supported by placer gold mining since that time, and has enjoyed probably as exciting a history as any Canadian city. At the peak of the gold rush, Dawson had 40,000 inhabitants. The population dropped considerably after the "Rush", but Dawson has remained one of the principal centres of the Yukon.

Now, with the last gold dredges ceasing production the search is on for a new mineral—*asbestos*—which will replace gold as the economic mainstay of this part of the Yukon. *Asbestos* is found in a belt extending from east of Dawson to Alaska, in the same geological environment as the gold before it. Already, before production has begun, over 300 million dollars worth of *asbestos* has been proven and indicated at Cassiar's Clinton Creek mine alone.

A view of low mountains as seen along the Sixty-Mile road, a scenic route leading from Dawson City into Alaska and return to the Alaska Highway. From Sixty-Mile various roads have been pushed into *asbestos* exploration properties.



Dawson City as seen from Midnight Dome high above the Yukon River. Clinton Creek, some 40 miles downriver, is the centre of activity for mining companies searching for *asbestos*.



ASBESTOS IN THE DAWSON AREA

Asbestos was first discovered on Clinton Creek, 40 miles northwest of Dawson City in the Yukon Territory in 1957. Surface and underground exploration by Cassiar *Asbestos* Corporation in 1958 proved 5.3 million tons of ore. On the basis of geological and geophysical surveys and drilling undertaken in 1963 and subsequent years, the ore reserves have been expanded to 24 million tons proven and indicated by the end of 1965. This company is currently preparing for production in early 1968 and recently announced a 50% increase in the starting rate of production.

This part of the Yukon is one of the few unglaciated areas in Canada and, as such, overburden cover is extensive. Numerous other serpentine bodies have been found in the ultrabasic belt that extends from east of Dawson City along the Yukon River valley into Alaska. Most of these ultrabasic masses – the host rocks to chrysotile *asbestos* – remain hidden beneath the overburden and can only be discovered and investigated by trenching and geophysical means.

With a new mine being brought into production in the area, access and communications are being vastly improved with the aid of the Federal Government. Improvements have been made to the Sixtymile road between Dawson and Alaska, and an access road has been completed to the Clinton Creek area with a bridge built across the Fortymile River.

SPHERE DEVELOPMENT CORPORATION HOLDINGS

Sphere Development Corporation Ltd. holds 138 claims by location and 30 under option in the Dawson Mining Division, Y.T.

CLINTON CREEK AREA:

Four separate groups consisting of a total of 93 claims are located in the Clinton Creek area, within 3 miles of the Cassiar Asbestos Corp. property currently being prepared for production. These all lie within the favourable 'serpentine' belt. Serpentine float, or outcrop, has been noted on three of the groups. In addition, preliminary geophysical surveys indicate serpentine masses to underlie each of the claim groups. During preliminary prospecting, chrysotile asbestos was also found in serpentine on the "Mon" and "Chin" groups. **Access to these properties is excellent . . . all lying adjacent to or within 4 miles of existing roads.**

Sphere Development Corporation plans to carry out additional geophysical work, in the form of detailed magnetometer surveys to fully outline the serpentine masses and possible chrysotile zones within these, followed by surface stripping and diamond drilling to assess these zones.

W.C. GROUP:

The W.C. Group, consisting of 45 mineral claims, is situated on the south shore of the Yukon River, 23 miles northwest of Dawson City. Serpentine has been found in two areas – approximately one mile apart – on the claim group. Bulldozer trenching by previous interests has exposed chrysotile asbestos in highly sheared serpentine at one of these localities.



Future work will include a magnetometer survey to completely outline this very large serpentine mass indicated by preliminary work, plus detailed surveys to outline any potential fiber zones, followed by diamond drilling.

This property is connected to the Sixtymile Road by a previously established access road that is to be re-opened.

CALEY OPTION:

This highly regarded property has received considerable exploration work by previous operators. Originally staked in 1956, Cassiar Asbestos Corporation obtained an option on it and carried out a program of surface stripping and bulk sampling from two adits they drove. Subsequent to this, Canadian Johns-Manville Co. held an option on the property and carried out a geological, geophysical and diamond drilling program. The combined exploration of these two companies has indicated an ore body of one million tons of medium grade milling fibre. Additional serpentine bodies have been found on the property, and it is the intention of Sphere Development Corporation to further explore and prove the present ore zone and search for repetitions in this and adjacent serpentine masses. Sphere Development Corporation is very fortunate in having acquired this exceptional property on which fibre of similar quality to that of the Clinton Creek deposit has already been outlined, and which holds considerable promise for future exploration.

“The miracle mineral of antiquity may yet prove to be the flame that will bring new and lasting heat to the economy of the Yukon and a long-lasting source of supply to help meet world demand for nature’s most versatile mineral – asbestos.”

◀ Sphere Development's Caley asbestos property. An adit is shown at the left. There are two adits on the property at present. One is at an elevation of 1947 feet with the face 401.5 feet in from the portal. The other is at an elevation of 1816 feet with the face 530.5 feet from the portal.

