GIANT MASCOT MINES

L. P. STARCK FEB. 1974

REPORT ON

GIANT MASCOT MINES LIMITED

AND ITS SUBSIDIARIES AND ASSOCIATE

UP TO FEBRUARY 28, 1974

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This report is based on the writer's personal knowledge of the activities and properties of Giant Mascot Mines Limited and its subsidiaries and associates over a period of twenty-two years, and contains information derived from engineering and geological reports, studies and records prepared by others under the direction of the writer (other than in the case of historical data relating to work carried out on properties and in mining areas by predecessors and others), and financial, corporate and other records of Giant Mascot Mines Limited, and, in the case of the section relating to Panarctic Oils Ltd., contains information published by Panarctic, including Annual Reports issued by Panarctic to its shareholders (including Giant Mascot) and others, and a publication issued by the Canadian Petroleum Association of Canada dated November 12, 1969.

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March 26, 1974

A MEMORANDUM ON GIANT MASCOT MINES LIMITED

In view of the British Columbia Government's indicated interest in direct participation in the mining industry, the possibility of an equity interest in an active mining and exploration company such as Giant Mascot Mines Limited could well be attractive. Giant Mascot is a British Columbia company which has concentrated its efforts in the Province and is well regarded by the mining and financial community for its expertise as a low cost operator and its constructive approach to the exploration potential of former producing areas. As a junior British Columbia mining company, it is also unique in holding approximately a 4.5% interest in Panarctic Oils Ltd., which, with the Federal Government as a 45% participant, is engaged in the search for hydrocarbons in the Arctic Islands of Canada. The Company's requirement for funds to carry out its exploration programs in various sectors of the Province will be accentuated by the loss in earnings if the probable closure of the producing Giant Nickel Mine at Hope becomes a reality. Any such closure would be the result of the lack of available ore reserves for continuous mining and not by the exhaustion of exploration possibilities as it is believed that with the extension of exploration in previously untested areas of the property new ore could be found which would extend the life of the property.

Participation in the Company on an equity basis could offer the Government a number of opportunities, both present and future. In the near term there are two of particular merit: the opportunity to assist the community of Hope, which will be directly affected by the loss of a steady payroll if production from the Giant Nickel Mine is suspended; and the participation with the Federal Government in an oil and gas venture of national importance.

The probable closure of the 1,850 ton per day Giant Nickel, nickel-copper operation on or about September 30, 1974 would have a very serious effect on the community of Hope and surrounding area as the mine presently employs some 200 people with a payroll in the order of 2.2 million dollars per annum, which is the largest and probably the only year round payroll in that community which is otherwise dependent on the tourist industry, logging and construction, all of which are of a seasonal nature. Hope is well aware of the importance of the mine to its economy. The mine had been closed for a year before Giant Mascot reopened it in

1959 and the effect of that closure was felt throughout the community. However, Hope is not the only part of British Columbia that would be affected; any such closure would also be felt by many small and large suppliers of goods and services and various individuals throughout the Lower Mainland and, for that matter, in other areas of the Province. Furthermore, the loss of earnings from the Giant Nickel Mine could also affect other communities as Giant Mascot's exploration and development ventures would be reduced or eliminated. This could apply to Stewart, Greenwood, Harrison Lake and Hedley where the Company has been carrying on or is planning to undertake exploration programs which could possibly lead to the establishment of producing mines. An indirect, but nevertheless important, effect of the closure of the mine would be the potential loss of income tax and the 5% provincial sales tax from both the Company and its employees, as well as the reduction of school and land taxes paid by the Company in the Hope area.

The Company and its predecessors, unfortunately, have shut down other properties in the past, namely, the Hedley Mascot at Hedley, the Silver Giant at Golden and the Giant Soo at Cranbrook. The management is therefore aware of the hardship and unsettling effect of a mine closure on employees and the community at large. These closures referred to were primarily due to the fact that the properties had been mined out and their exploration potential exhausted. Such would not be the case at Giant Nickel where, although ore reserves may be diminished, the exploration potential is considered excellent, particularly in the face of high copper and rising nickel prices.

It is believed that with expanded exploration the Giant Nickel Mine could be kept in production and also that with further exploration the Giant Copper property, which lies some 30 miles to the east of Hope, could in the longer term be brought into production, either as a supplement to or a replacement for the Giant Nickel Mine if its closure were unavoidable. Giant Copper, due to its large low-grade copper potential, could possibly provide even greater employment and returns to the Province than Giant Nickel. Similarly, other Company properties, such as the Motherlode-Greyhound (copper-gold) at Greenwood, the Nickel Plate (gold-copper) at Hedley, and the Big Missouri (lead-zinc-copper) at Stewart, offer promising exploration potential.

It is appreciated that the productive life of a mine such as Giant Nickel must come to an end as mineralization is not a replaceable commodity. When a decision is made to close a mine the question always arises whether further exploration could have developed additional commercial tonnages of ore which could otherwise be lost when the mining and concentrating facilities are removed. If there is a potential, as there is believed to be, at the Giant Nickel Mine, then that potential mineral production could be lost for all time due to the possibility that although metal prices and mining technology may change or improve, the quantities of the reserves or the condition of the workings could be such that it would not be economic to reconstruct the facilities for the resumption of production once the plant is removed.

The Giant Nickel Mine is the only producing nickel mine west of Manitoba. Nickel is a metal that has not been found in commercial quantities elsewhere in the Province. Furthermore, it is a metal that would be of great importance to any integrated steel industry which might be developed in British Columbia. Certainly the nickel concentrates from the property have been shipped outside the Province for processing, but the long term objective of the Company has been to develop sufficient reserves which would warrant a hydrometallurgical plant to produce a powdered nickel or other form of finished nickel product. The establishment of such a plant could lead to the production of other metal products that would result in a new field or secondary industry in British Columbia.

The present shortage of funds for exploration and development is not the result of the Company having paid out its earnings by way of dividends. Rather it has utilized virtually all its profits for exploration on its own properties and in the search for new mining situations in the Province, and also in its participation in Panarctic Oils Ltd., a venture of national importance to Canada. In the matter of equity financing, Giant Mascot is somewhat of an oddity in the mining industry as in the 24 years since it was formed in 1950 as a result of the merger of Hedley Mascot Gold Mines Limited, formed in 1934, and Silver Giant Mines Limited, it has only raised public funds on two occasions. Some $100,000 was raised in 1959 as working capital to reopen the Giant Nickel Mine and $3,000,000 in 1970 by way of private placement from Cemp Investments Ltd. The proceeds of that private placement were employed for the most part in the Company's participation in Panarctic and the reconstruction of the Giant Nickel plant, destroyed by fire in August 1970. Otherwise, the Company's mining operations have generated the funds used for exploration in the Province, in turn generating employment.

Giant Mascot is at a crossroads in its corporate history. A rights offering, guaranteed in part by its major shareholder, is scheduled for this spring, which will meet the Company's obligations and provide certain exploration funds. Those funds, however, will not be sufficient to carry out the full program of exploration which would otherwise be planned for the Giant Nickel and Giant Copper properties at Hope and the Company's three other major exploration properties.

There are a number of alternatives open to the Company. Consideration can be given to merging with another company having the cash flow to support the Company's programs. The Company could endeavour to raise further funds through public financing, but present market conditions could well result in serious dilution, particularly as it is difficult to finance any mining venture oriented to operations in British Columbia by public subscription due to the apprehension on the part of investors in response to recent and proposed legislation.

On the other hand, the Provincial Government might perhaps consider subsidizing the Company to carry on the exploration of its two properties in the Hope area in order to bolster the economy of that community by exploration loans against future production, as is done in the United States. Alternatively, the Government might be interested in an equity participation through the acquisition of treasury shares, which might possibly be combined with the purchase of additional shares presently held by the public generally or by the Company's major Eastern shareholder.

It is believed that the Company has much to offer the Provincial Government if the Government is interested in participating directly in the mining industry, including:

1. The five promising exploration properties, of which two, Giant Nickel and Motherlode-Greyhound, are equipped with 2,000 ton mining and concentrating plants, one suitable for underground and the other for open pit mining. In the case of either of these two properties, a minimum ore discovery of 500,000 to 1,000,000 tons could, in the first case, ensure continuation of, and in the second case, justify resumption of, production, which would have an immediate beneficial effect on the communities in which they are situated. The plants could also be available for other mining situations or ones that might be developed. All five of the Company's major properties are in or near communities that would benefit by a stable mining payroll.

2. The fact that a position in Giant Mascot would give the Provincial Government a participation in Panarctic Oils Ltd., in company with the Federal Government. It would be one of the first, if not the first, instance of participation, although indirect, by a Provincial Government in a joint venture with the Federal Government and industry to explore for and develop natural resources on a national scale outside its Provincial boundaries.

3. The Company's experience as a low cost operator and its present technical staff of geologists, mining engineers and operators who could form a nucleus for a provincially oriented group to undertake exploration and mining activities within the Province, and could be of assistance to the Government in providing mining evaluations by people who are actively involved in mining activities on a day to day basis and who are therefore familiar with current operating conditions and costs.

4. The possibility that the Giant Nickel plant at Hope, with only minor changes, could be developed as a custom milling plant for southern British Columbia, which would provide a facility not presently available in the Province where the prospector, lessor and small company could ship their production of raw ore for beneficiation prior to treatment by a smelter. Such a custom concentrator could further the development of new mines and the utilization of mineral deposits which might otherwise be high graded or abandoned and could result generally in a more economic exploitation of the mineral deposits in the Province. Possibly the Motherlode plant at Greenwood would be a preferable location for this type of facility as it is more centrally located. This concept of a custom minerals beneficiation plant could be expanded to include a pilot plant, metallurgical testing facilities and an analytical laboratory where the prospector or the smaller company could obtain metallurgical reports on the ores from their properties and possibly other advice.

If the Provincial Government wishes to participate actively in the mining industry this is a method to which consideration could be given. Such a participation would represent a new relationship between the Provincial Government and the resource-based industries which could well be of benefit to the entire mining industry in the Province, paralleling, as it would, the Federal Government's participation in Panarctic.

Yours very truly,

GIANT MASCOT MINES LIMITED

L.P. Starck, P.Eng.
President and Managing Director

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SUMMARY

Giant Mascot Mines Limited is a Canadian mining company primarily engaged in the mining and processing of nickel-copper ore at its Giant Nickel Mine, Hope, British Columbia, and exploring for various minerals, principally in British Columbia. It also has a major interest in the exploration for petroleum and natural gas in Canada's Arctic Islands through its 4.484% participation in Panarctic Oils Ltd., a consortium organized by private industry and the Canadian Government.

The Company was incorporated under the laws of the Province of British Columbia on June 7, 1950 to operate a lead-zinc mine at Spillimacheen in the East Kootenay area of British Columbia. The Company presently has an authorized capital of 15,000,000 no par value shares of which 8,693,728 shares are issued.

In 1959 the Company acquired an interest and later control of the Giant Nickel nickel-copper mine at Hope, B.C., which has been in virtually continuous production since that date, except for a ten month period in 1970 and 1971 when the plant was under reconstruction as the result of a fire that destroyed most of the surface facilities on August 2, 1970. Production has been at rates of up to 1,850 tons per day, but due to diminishing ore reserves, the production has been reduced to 1,500 tons per day and may be cut back further. The reduction in ore reserves could well result in the phasing out of the operation by September 30, 1974 unless new ore discoveries are made and developed to production by that date, thus depriving the Company of its only source of revenue.

As in the case of most underground mines, exploration to determine the further ore potential of the Giant Nickel Mine has been carried out on a continuing basis as it became physically possible and economically feasible to do so in terms of the progressive advancement of underground workings in the normal course of mining operations. Until recent date such exploration has successfully maintained ore reserves.

The exploration, however, has been concentrated mainly in the southwesterly one-third of the largest of the largest of four masses of ultrabasics, which fifteen years' of operating experience has established as being favourable to the deposition of nickel and copper sulphides. Furthermore, such exploration has been carried out almost exclusively in the portion of the mountain that lies between the surface (the highest point of which is at elevation 4500 above sea level), and the main haulage level (elevation 2600 feet). In this segment of the main ultrabasic

mass above the main haulage level a total of 26 ore bodies have been discovered from which 4,643,768 tons have been mined. It was reasonable, therefore, to postulate that an extended exploration program could well result in the discovery of additional ore bodies. Accordingly, such a program was instituted in June, 1973, and is continuing.

Since its incorporation, the Company has engaged in various mining and exploration ventures and presently owns outright, holds a majority interest in, or has under option, five non-producing mineral prospects in British Columbia on which it is carrying out, or proposes to carry out, or which warrant, exploration.

In August, 1973, the Company's wholly-owned subsidiary, Mascot Mines & Petroleums Limited, acquired the Motherlode-Greyhound property near Greenwood, B.C. for its exploration potential. With the property it acquired the 2,000 ton per day concentrating and open pit mining plant on the property which could readily be utilized if exploration was successful or, alternatively, could either be sold to recoup the substantial part of the Company's acquisition cost or used at another location.

The existence of such a plant, of course, also enhanced the merit of the property as an exploration prospect as it could make economic lower grades and tonnages of mineralization than might normally be the case.

To test the previously indicated reserves of copper-gold mineralization in or near the two existing open pits and the potential of other exploration targets as determined by the Company, the Company, following the acquisition of the property, commenced an exploration program in the fall of 1973, which is to be resumed during the 1974 field season.

The second of these properties is the Big Missouri, Stewart, B.C., which was operated as an underground mine in the 1930's at a grade of some 0.07 ounce of gold. This property, which is under option to the Company, is of interest because of the open pit potential of surface showings of lead, zinc, copper with precious metals which, due to metal prices, may not have been of interest at the time the property was operated as a gold producer. In addition, there could be tonnages of gold mineralization remaining underground as old reports indicate that less than half the original estimated 1.8 million tons of reserves were extracted. A limited exploration program is scheduled for this property in the summer.

The third property is the Giant Copper, Allison Pass, B.C., which is owned outright by the Company. Work on it to date has disclosed that there are at least six areas of interest, of which the two main ones are the A.M. and Invermay breccia zones. The A.M. zone has drill-indicated reserves of some 2.8 million tons grading 1.35% copper with minor values in precious metals, and an inferred geologic potential of some 10 to 20 million tons of 0.6% copper, or as much as 90 million tons of 0.3% copper. In the Invermay zone there are indications of a possible low grade porphyry copper deposit. The Company is not presently planning to carry out further exploration at this time. However, a major mining group is interested in undertaking a phased exploration program on Giant Copper whereby they would earn a major interest in the property by expending in excess of the 2.5 million dollars that the Company has spent to date, and once such interest had been earned, Giant Mascot could maintain a substantial interest by sharing in expenditures on a pro rata basis thereafter.

The fourth of these properties, a former gold producer known as the Nickel Plate, is owned by Mascot Nickel Plate Mines Limited (a 75% owned subsidiary). Gold and copper mineralization encountered in the course of programs carried out under the Company's direction since 1967, although not economic, is significant in the light of the past record of production and the current price of gold and warrants further exploration of the property. Some $40,000 was spent in respect of the property in 1973 but nothing has been budgeted for exploration of it this year.

The fifth exploration prospect, known as the Nickel Syndicate property, is owned by one of the Company's wholly-owned subsidiaries as to a 50% interest and by Giant Explorations Limited (N.P.L.) as to the remaining 50% interest. Giant Explorations is a public British Columbia mining company formed by the Company in 1965 with the intent that it would act as the Company's exploration affiliate and would concern itself with primary exploration prospects. The Company presently holds a 28% equity interest in, and effectually controls, Giant Explorations. The Nickel Syndicate was formed as a joint venture in 1969 to carry out reconnaissance exploration in an area which in part adjoins the Company's Giant Nickel Mine, using techniques developed in the field by Giant Explorations. Following the initial prospecting, the Nickel Syndicate acquired a substantial number of mineral claims by location and from 1969 to date has carried out preliminary exploration. Work to date has disclosed a number of target areas for nickel-copper mineralization. No exploration work is planned for 1974.

In addition to these five prospects which are all considered to warrant further work, the Company also owns the former producing silver-lead-zinc Giant Soo property, Cranbrook, B.C., and the lead-zinc Lead Mountain group, Golden, B.C.

There is no known economic concentration of mineralization on any of the five prospects or the Giant Soo property or the Lead Mountain group.

The Company, through its wholly-owned subsidiary, Mascot Mines & Petroleums Limited, also has a 10% beneficial interest in a 1.9999% working interest in an oil production unit in the Pembina Field in Alberta.

The Company's major "outside" exploration venture is its participation in Panarctic Oils Ltd., which has been engaged in the search for hydrocarbons in the Canadian Arctic Islands north of the 71st Parallel since 1967.

Panarctic is a consortium of major mining and oil companies, which, with the Canadian Government as a 45% partner, is engaged in the largest exploration program for petroleum and natural gas in the Arctic Islands. Of the 19 participants from the private sector, Giant Mascot is one of five, each of whom holds a 4.484% interest. The only participants in the consortium which have a larger interest are two, who each hold 9.68%.

Six significant gas fields have been discovered in the Arctic Islands since 1969. Of these, five, namely Drake Point, King Christian, Kristoffer Bay, Hecla and Thor, were found on lands in which Panarctic holds an interest.

In addition, crude oil has been disclosed in drill-stem tests at three Panarctic locations. The most recent discovery, early in February, 1974 at Bent Horn on Cameron Island, is important as it is the first recovery of live crude oil from the older Paleozoic formations.

During 1973 some 26 wells were drilled or were being drilled on lands in which Panarctic holds an interest. Six of these wells were drilled at no cost to Panarctic and the costs of a further sixteen were partially paid for by others.

A Fifth Expansion Agreement to raise a total of 25 million dollars for further exploration by Panarctic is now proposed.

A group of four partners, consisting of a large Canadian gas transmission company, a major Canadian transportation company, a group of American gas companies and Panarctic, have formed the "Polar Gas Project" to undertake research for a means to deliver Arctic Island gas to markets in Eastern Canada.

With a view to diversification, Giant Mascot is also studying situations where existing plant and equipment, if available, could be profitably employed, and is continuing to investigate new properties and ventures, both in the industrial and natural resource fields.

Once it was concluded in 1973 that the Company would obtain financing by way of a rights offering guaranteed by its major shareholder, Cemp Investments Ltd., the Company proceeded with the extended exploration program at the Giant Nickel Mine, the acquisition and initial exploration of the Motherlode-Greyhound property, a commitment to Panarctic's next financing, the modest program at the Nickel Plate and the investigation of other properties.

For those purposes, the Company, pending such financing, obtained a capital bank loan. This loan, which Cemp guaranteed, is to be repaid with part of the proceeds from the proposed rights offering to raise some $3,675,000, which has been guaranteed by Cemp as to two million dollars plus any short-fall of monies from other shareholders and the funds required to finance the Panarctic expenditures in the 1974 fiscal year and any portion of the Company's commitments remaining outstanding after 1974 under the Panarctic Fifth Expansion Agreement.

HISTORY OF THE COMPANY

Giant Mascot Mines Limited was incorporated in British Columbia on June 7, 1950 to acquire the assets of Hedley Mascot Gold Mines Limited, a B.C. company formed in 1934, and Silver Giant Mines Limited, and to place the latter's lead-zinc property in production. The assets of Hedley Mascot consisted of cash, a mining and concentrating plant and a former producing property at Hedley, whereas the assets of Silver Giant comprised the partially developed lead-zinc property with proven and probable ore reserves at Spillimacheen, B.C.

The Spillimacheen property was placed in commercial production in 1951 and was successfully operated at a rate of up to 550 tons per day until June, 1957 when the ore reserves were exhausted. During this period the Company employed some 150 men and produced lead and zinc concentrates that were shipped to Cominco, Trail, B.C., except for a short period when Cominco was short of accommodation and the lead concentrates were shipped to Bunker Hill, Kellogg, Idaho, and the zinc concentrates to Asarco, Helena, Montana. In 1958 the concentrating plant was converted to the production of barite from the lead-zinc tailings. This product was sold to the oil and gas industry for drilling mud.

In August, 1959 the surface facilities, mineral claims and crushing and grinding equipment were sold to Baroid of Canada Limited, which has operated the property for the production of barite since that date.

The former Hedley Mascot Gold Mine, comprising 46 claims on Nickel Plate Mountain, Hedley, B.C., was sold to a subsidiary, Nighthawk Gold Mines Limited, in late 1953. Giant Mascot sold its controlling interest in Nighthawk to other interests in early 1960.

In 1959 the Company acquired a share interest in Camp McKinney Gold Mines Limited, by participating in financing the installation of a surface plant and the development of the underground workings on a former gold producing property near Rock Creek, B.C. The siliceous gold development ore was shipped, without prior treatment, to Cominco, Trail, B.C. In 1963 Giant Mascot sold its interest in McKinney, which was then known as McKinney Gold Mines Limited, to other interests.

In the spring of 1959, Giant Nickel Mines Limited was formed by Giant Mascot as to 51% and Pacific Nickel Mines Limited as to 49% to acquire the assets of Western Nickel Limited, which was jointly owned by Newmont Mining Corporation, an American company, and Pacific Nickel. The assets of Western Nickel consisted of a nickel-copper property at Hope having limited ore reserves, and a 750 ton per day concentrating and mining plant that had been shut down in 1958 due to high operating costs, restricted markets and lower metal prices. The consideration paid by Giant Nickel to Western Nickel for its property and plant was $560,000 in income notes plus cash payments totalling $33,350. The income notes were subsequently sold by Western Nickel to Giant Mascot for the sum of $367,500.

Giant Nickel started commercial production in July, 1959. In February, 1961 Giant Mascot purchased Pacific Nickel's 49% interest in Giant Nickel for $475,000 and Giant Mascot then acquired the property and plant as a going concern from Giant Nickel and that company was placed in voluntary liquidation. The Giant Nickel Mine has been in nearly continuous production since 1959, except for a ten month period in 1970 and 1971 when production was suspended due to the loss of the surface facilities and the concentrating plant by a fire that occurred on August 2, 1970.

The Company in 1961 and 1962 participated in the dewatering of the "Iron Mask" property of Kamloops Copper Company Limited (N.P.L.), Kamloops, B.C., which adjoins the present Afton property, and carried out a geophysical and geological program including diamond drilling. Insufficient commercial grade mineralization was found and Giant Mascot disposed ot its share interest in Kamloops Copper.

In 1964 the Company participated with General Resources Limited in a limited exploration program in Australia which involved the examination of 24 properties and the diamond drilling of one. This program represented an expenditure in the order of $30,000.

In June, 1964 Giant Mascot undertook an examination option of the A.M. and Invermay properties of Canam Copper Company Limited, Allison Pass, B.C., and carried out an extensive diamond drilling and raising program. A feasibility report was prepared on the property in 1965 and in 1966 the Company acquired the mineral claims and surface structures outright for 1,084,997 shares of Giant Mascot and the payment of Canam's indebtedness to Mogul Mining and Lorado Uranium Mines, amounting to $217,790. The property is now known as Giant Copper. Since its acquisition a series of exploration programs, including underground development, diamond drilling and geological, geophysical and geochemical surveys, have been carried out on it.

In 1966 the Company earned a 60% interest in Giant Soo Mines Limited (N.P.L.) for placing the Estella property, Cranbrook, B.C., of Copper Soo Mining Co. Limited (N.P.L.) into commercial production by the installation of a 150 ton per day concentrating plant and surface establishment. The property was operated until October, 1967 and the production of lead-zinc concentrates was shipped to Cominco, Trail, B.C., and Bunker Hill, Kellogg, Idaho. In 1968 the Company acquired the minority interest of 40% in Giant Soo from Copper Soo for a consideration of a 2½% net smelter royalty on any production from the Estella, now known as Giant Soo. Since then Giant Soo was placed in voluntary liquidation and all its assets transferred to Giant Mascot, which dismantled and and removed the plant and equipment.

In 1967, the Company, through its wholly-owned subsidiary, G.M. Explorations Limited (N.P.L.), acquired an option on the former producing Nickel Plate property, Hedley, B.C., from Burden Investors Services, Inc. After completing its exploration obligations under this option, G.M. Explorations acquired a 75% interest in the property, subject to a royalty. A new company, Mascot Nickel Plate Mines Limited, was formed to own the property.

In 1970 the Company acquired the interest of Cemp Investments Ltd. in Panarctic Oils Ltd. by purchasing Eagle Ridge Petroleum Ltd., a wholly-owned subsidiary of Cemp, for one million dollars in cash and 3,000,000 shares of Giant Mascot at an attributed price of $3 per share. The Company also undertook to repay to Cemp the funds that it had expended on the Second

Panarctic Expansion Agreement to the date of acquisition and assumed the balance of Cemp's obligations under that agreement. In 1971 all the shares of Panarctic held in the name of Eagle Ridge Petroleum (then a wholly-owned subsidiary of the Company) were transferred to Giant Mascot.

In August, 1973 Giant Mascot acquired, as an exploration venture, the Motherlode-Greyhound property near Greenwood, B.C., which was equipped with a 2,000 ton per day concentrator, open pit mining plant and other ancillary structures, for some $600,000 plus certain adjustments and royalty payments.

CAPITAL STOCK

The present capitalization of the Company is 15,000,000 shares with 8,693,728 shares outstanding. The initial capitalization when the Company was formed on June 7, 1950 was 100,000 shares of $10 par value and this was increased to 3,000,000 shares in May, 1951 when 2,939,222 shares were issued to the shareholders of Hedley Mascot and Silver Giant on a 55 to 100 and 104 to 100 basis, respectively. The capitalization was increased to 3,500,000 shares in 1953. In 1959 500,000 shares were underwritten at an average price of 20 cents to provide the initial working capital for the Giant Nickel operation. In 1963 the capitalization was increased to 5,000,000 shares and in 1966 to 6,000,000 shares when 1,084,977 shares were issued to acquire the assets of Canam Copper Company Limited. Further changes were made in the capitalization in 1968 when it was increased to 7,500,000 shares. In April, 1970, 1,000,000 shares were sold by way of a private placement at $3.00 per share to Cemp Investments for a lump sum subscription of $3,000,000. In July, 1970 the authorized share capital was increased to 10,000,000 shares to permit the Company to issue the 3,000,000 shares required to complete the purchase of Eagle Ridge Petroleum Ltd., which held a 4.52% interest in Panarctic Oils Ltd. In March, 1973, the capitalization was increased to 15,000,000 shares. Plans have been made for a rights offering to raise some $3,675,000 which will result in further shares being issued.

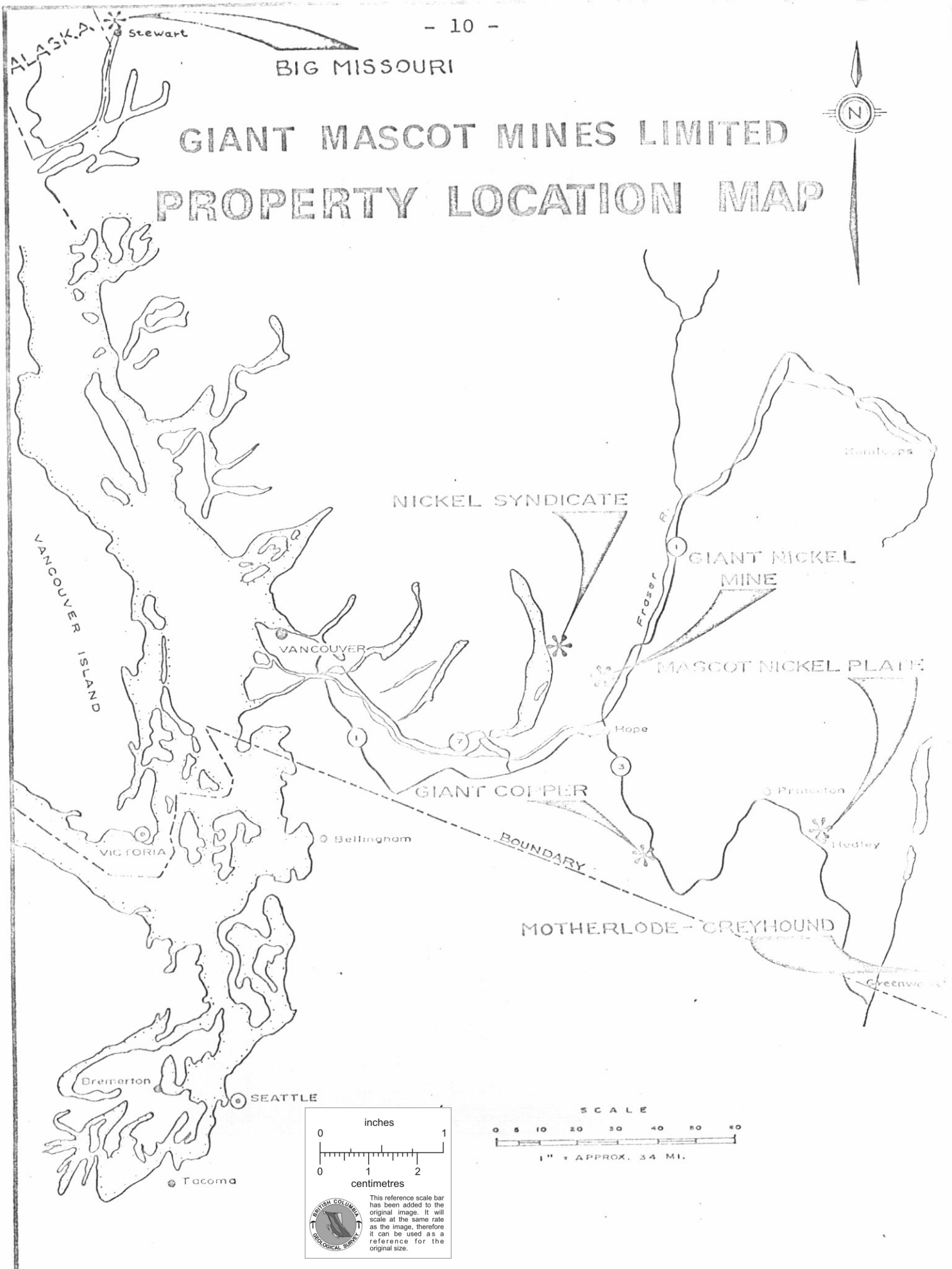
The price range of the stock has been as follows:

Year	High	Low	Year	High	Low
1951	$1.20	$0.85	1963	$0.94	$0.65
1952	1.10	0.36	1964	1.83	0.75
1953	0.65	0.33	1965	1.75	1.10
1954	0.58	0.38	1966	1.43	0.82
1955	0.95	0.50	1967	1.60	0.98
1956	1.05	0.20	1968	3.25	1.11
1957	0.27	0.08½	1969	4.10	2.00
1958	0.15	0.08½	1970	4.10	2.40
1959	0.33	0.09	1971	5.85	3.40
1960	0.35	0.09	1972	6.20	4.50
1961	0.80	0.26	1973	5.45	1.55
1962	1.10	0.65			

The shares of the Company were listed on the Vancouver Stock Exchange on July 6, 1951 and on the Toronto Stock Exchange on January 21, 1957.

DIVIDENDS

Giant Mascot paid an initial dividend of 1½ cents per share on January 3, 1956 and payments of a like amount were made on April 2, July 3 and October 1, 1956. Dividends were then discontinued until December 28, 1962 when a 5 cent dividend was paid, followed by 3 cents on June 30, 1963. Dividends were then paid semi-annually at the rate of 8 cents per share per annum from December 28, 1963 to June 28, 1965, inclusive. In lieu of the cash dividend payable at the 1965 year end the Company distributed a stock dividend of one share of Giant Explorations Limited (N.P.L.) for every ten shares of Giant Mascot held. No dividends have been paid since that date.


ALASKA
Stewart
BIG MISSOURI
GIANT MASCOT MINES LIMITED
PROPERTY LOCATION MAP
N
NICKEL SYNDICATE
GIANT NICKEL MINE
Fraser R.
VANCOUVER ISLAND
VANCOUVER
MASCOT NICKEL PLATE
Hope
GIANT COPPER
Princeton
Hedley
VICTORIA
Bellingham
BOUNDARY
MOTHERLODE - GREYHOUND
Bremerton
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inches
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This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
SCALE
0 5 10 20 30 40 50 60
1" = APPROX. 34 MI.

GIANT NICKEL MINE

GIANT MASCOT MINES LIMITED

PROPERTY, DESCRIPTION AND LOCATION

The Giant Nickel Mine is situate in the New Westminster Mining Division, Kamloops Land District, Province of British Columbia. The property consists of 92 Crown-granted claims, 56 claims held by location and two mineral leases.

The property is located between elevations 1,500 and 4,500 feet above sea level. It lies about five miles west of the Trans-Canada Highway at Choate, some 8.5 miles north of the Town of Hope, B.C. Hope is 90 miles east of Vancouver, British Columbia's largest city and Canada's major seaport on the Pacific.

ACCESS, CLIMATE AND SERVICES

The Canadian National and Canadian Pacific Railways, Canada's two transcontinental railways, service Hope. The town is also at the junction of the Trans-Canada Highway and the Southern Trans-Provincial Highway. The location, therefore, is excellent both for the delivery of supplies to the Giant Nickel Mine and the shipment of its concentrates to any part of North America or overseas.

The climate is typical of the southern British Columbia coastal mountain region. Precipitation is moderate to heavy during the fall and winter months, with snow commencing at the plant site elevation of 2,600 feet above sea level in early November and continuing until April. Average annual snowfall at this elevation is in the order of 32 feet, but extremes may be experienced. Such heavy snowfalls aggravate the normal problems attendant upon operating in the mountains, but as a result of experience in dealing with these conditions, and through the use of suitable snow removal equipment, their effect is minimized.

Electric power for the operation is supplied by the British Columbia Hydro & Power Authority by way of a 12,000 volt Company line from the Authority's main line at the Trans-Canada Highway five miles to the east of the property. The main supply of water for the camp and plant facilities is obtained from several creeks and mountain streams which are tributaries of Texas Creek, and from a consistent flow of water underground.

HISTORY OF THE PROPERTY

Nickel-copper mineralization was first discovered on the property in 1923. From 1927 to 1952 exploration and development was carried out successively by B.C. Nickel Company Limited, B.C. Nickel Mines Limited and Pacific Nickel Mines Limited. In 1952, Newmont Mining Corporation Ltd. and Pacific Nickel Mines Limited formed Western Nickel Mines Limited to operate the property. Up to 1954, approximately 23,000 feet of drifting and raising and 157,000 feet of diamond drilling were completed on the 2600, 3275 and 3550 adit levels. By January, 1958, when production was commenced under the management of Granby Mining and Smelting Company Ltd., an internal inclined shaft had been driven to connect the 2600 and 3550 Levels, and intermediate levels were established at the 2,950 and 3,250 foot elevations. Production at a rate of 750 tons per day continued until July, 1958 when the mine was closed down. During the period from January to July, 1958, 131,133 tons of ore were treated.

As a result of transactions in 1959 and 1961, the Company obtained sole ownership of the Giant Nickel Mine by acquiring successively the respective interests of Newmont Mining Corporation Ltd. and Pacific Nickel Mines Limited. Production was resumed under the Company's management in July, 1959 and the capacity of the original plant was gradually increased from 750 to 1,550 tons per day until it was destroyed by fire.

From July, 1959 to September 30, 1973, production amounted to 4,391,704 tons, containing 53,528,581 pounds of nickel and 26,454,197 pounds of copper. A fire on August 2, 1970 destroyed all major plant and surface facilities, with the exception of the machine shop, main sub-stations, bunkhouse and cookhouse. Reconstruction was completed and production was resumed in mid-May, 1971.

GEOLOGY

1. Regional

The mine is situated in a norite-diorite ultrabasic complex along the eastern edge of a granite, granodiorite and diorite intrusive mass, which is related to the Coast Range Batholith and a belt of acid intrusives extending southerly into Washington State. These ultrabasic rocks intrude northerly trending regionally metamorphosed Paleozoic sediments.

One of the main structural features of the Hope area is a regional north-northwesterly trending fault zone which extends from Lillooet southeasterly down the Fraser River to Boston Bar, and from there to a point ten miles due east of Hope and thence on strike into Washington. The serpentine band along this fault signifies the strength of this structure. Parallel faulting has been observed at Laidlaw, ten miles west of Hope, and its northerly extension may be generally inferred by a series of serpentine and ultrabasic masses as far north as Cogburn Creek to the east of Harrison Lake. Northeasterly trending faults have been mapped at Laidlaw and as far southeast as the Giant Copper property, and also are probably represented by Emory, Yale and Cogburn Creeks. Prominent north-south faulting related to the main Fraser River fault occurs about midway between the mine and the Fraser River and marks the contact of the Paleozoic and Mesozoic rocks in this area. All of these fault directions have been recognized underground at the mine.

There is also a northwesterly trending zone of fracturing which is of particular interest because of its apparent association with ore bodies at the Giant Nickel Mine and mineralization at the Giant Copper property. The surface expression of this zone of fracturing may be represented by the Nicolum Creek-Sumallo River Valleys from Hope to the Giant Copper property to the southeast. In a northwesterly direction the trend is from Hope through the Giant Nickel Mine and thence to the ultrabasic masses south of Cogburn Creek.

2. Local

The surface extent of the main ultrabasic intrusive mass is approximately 1.8 miles in an east-west direction and 1.4 miles in a north-south direction. At least three satellite ultrabasic bodies have been located on the property, one of which lies 2,000 feet, another 10,000 feet northwesterly of the main mass, and the third, some 3,000 feet to the south of it. Exploration carried out by the Nickel Syndicate northwesterly to Harrison Lake has revealed additional areas of ultrabasic intrusion. In addition to detailed geological studies of the surface of the property, geochemical and geophysical surveys, including magnetometer, self potential, induced polarization and other methods, have been carried out over part of the areas considered to be ultrabasic. The most detailed geological information has been obtained in the underground workings which are in the westerly third of the main intrusive complex, where its north-south dimension decreases to between 1,000 and 2,500 feet. Some geophysical work has also been done underground.

The ultrabasic rocks vary from a dark green, almost black, peridotite to pyroxenites which range from a bronzititic, brownish-green, medium-grained rock through to a hornblendic greenish-black medium to coarse-grained variety. Both the peridotite and pyroxenites are ore hosts. Hornblendites, which to date have not hosted ore bodies, constitute some one-third of the main ultrabasics, and occur as masses, or more commonly in dyke form. As dykes they may cut across other ultrabasics and sulphide mineralization.

There is very little evidence of secondary alteration within the intrusive complex. Exceptions to this are the development of secondary actinolite, talc, chlorite, serpentine and in some cases, magnetite in direct association with shearing and faulting and the development of talc and biotite in the "crumbly alteration" areas, mainly within peridotites.

The recognition of ore controls is of primary importance as, compared with the extent of the ultrabasic intrusive complex, the horizontal dimensions of individual ore bodies are relatively small. Examination of mine plans points up the obvious distribution of ore shoots in relation to embayments in and proximity to diorites and norites. The chemical and mineralogical environment of the ore bodies has been studied but as yet no workable criteria are evident, although further continued study in this direction may contribute to the interpretation of ore controls.

The widespread faulting throughout the underground workings is apparent, and although individually the faults may be of minor intensity with probably little post-ore movement, they show continuity. The relationship of intersecting fault systems with known ore bodies and mineralized zones is considered significant.

The feldspathic rocks consist of both norite and diorite. The norite is grey-green to pinkish and is equigranular, and at times difficult to differentiate from a pyroxenite. The norite may be the most acid phase of the ultrabasic intrusive complex. The diorite, on the other hand, appears to have been intruded by the ultrabasics, although some conflicts in apparent contact relationships suggest that there may be more than one stage of diorite intrusion. Although no ore shoots have been found in either of these rock types, there are instances where norites and diorites do contain sulphide (pyrrhotite) mineralization.

The metamorphic rocks consist of schists, hornfels and quartzites. Their only importance seems to be indirect in that they simply provide information on regional structural conditions.

Faulting, which is widespread throughout the underground workings, may be grouped into three broad categories. The first group strikes N 45 - 50° W and dips 50 - 75° northeast. The second strikes from N 25° W to N 25° E with steep dips to the east or west. It is believed that these two fault systems represent final adjustments of zones of weakness which may have controlled intrusion of the ultrabasic rocks and that the areas where the two fault systems intersect could control the deposition of sulphides in economic concentrations. Faults in the third group are quite strong in appearance, usually associated with eight inches to two feet of crushed wall rock and gouge material, and are often characterized by the introduction of feldspathic and carbonate minerals, with bleaching. This third group is considered to be later in age than the other two groups, and exhibit post ore movement.

At least five northwesterly trending fault zones have been traced over strike lengths up to 2,000 feet and all are associated with mineralization. The Brunswick ore occurrences are cut by three northwesterly trending faults, as well as numerous generally north-south striking structures. It is of interest that mineralized ultrabasic rocks have been intersected southeast of the Brunswicks along these fault structures in areas previously believed to be occupied by non-productive diorites. Similar extensions of favourable areas may be found along the northwesterly structural trend that is closely associated with the 4600, 4400, 1900, 1600 and 1500 ore occurrences. The Chinaman ore zone lies between two strong structures striking N 30° W and N 50° W, respectively. Further evidence of structural control is that although ore bodies may occur in either peridotite or pyroxenite, the only obvious reason for selection appears to be the presence of faulting and fracturing. The plunge or rake of the ore bodies in most instances have been variable which suggests changes in the ore controls from one intersecting fault system to another.

The general conclusions which may be drawn to date are that structural trends, as exemplified by present fault patterns, have influenced the intrusion of the ultrabasic host rocks, and that further controls on economic sulphide deposition have been exerted by the intersection of the two main fault directions. There is also an obvious relationship of known ore bodies to the diorite-ultrabasic contacts, particularly in the case of embayments in the diorites. Although no chemical or mineralogical reasons for ore deposition have been determined, it is possible that such factors may have effected some control. It is also postulated that massive sulphide concentrations may represent magmatic sulphide injection and that disseminated deposits may constitute hydrothermal replacement.

Twenty-six ore bodies have been mined, varying considerably in overall dimensions, attitude, host rock and character of mineralization. Horizontal dimensions range from 50 feet to 350 feet in one dimension by up to 200 feet in the other. In vertical continuity they have varied from 200 feet to 1,200 feet, and in total tonnage extracted from 50,000 to 1,000,000 tons. The vertical dimension is normally greater than the horizontal, resulting in pipe-like ore shoots which are steeply inclined to the vertical. This inclination, or rake, is variable and may change within an ore body. Although the ore host rock and character of mineralization do vary considerably, it is nevertheless convenient to group certain of the ore occurrences which have been mined or are being mined.

The Brunswick and 2663 ore occurrences, in which the chief host rock is peridodite, are clustered in an area somewhat in excess of 500 feet by 700 feet through a vertical range of 1,400 feet. In these zones the sulphide mineralization varies from fine-grained, high-grade disseminated pentlandite and chalcopyrite to massive sulphides. None of the individual ore shoots was far from the ultrabasic-diorite contact.

The Pride of Emory ore occurrences varied from massive to disseminated sulphides in peridotite and, although they are several hundred feet from other groups of ore zones, there are probable structural relationships.

Another group of ore zones, referred to as the 4600, 4400, 4300, 1900, 1600, 1500 and 1400, are centrally located along a northwesterly structural trend. The host rock for these zones, except the 1500, is pyroxenite with negligible amounts of the nickel-copper values in peridotite. The 1500 occurrence, which had a higher than normal percentage of massive sulphides present in the lower horizons, is in peridotite. The proximity of these ore zones to the diorite contacts is notable except in the case of the 4600, 4400 and 4300 zones and all show evidence of structural control.

Further to the east the 2200, 2000, 1800, 1700 and Climax No. 1 occurrences are hosted by both peridotite and pyroxenite. The Climax ore body consists of high-grade massive sulphides in pyroxenite in the upper sector from just above the 3050 level and lower-grade disseminated sulphides in peridotite in the lower sector. Again, the importance of structural controls is indicated.

The Chinaman occurrence has an established vertical extension from elevation 3425 down to 2600 with interruptions due to cross-faulting above the 2600 level and again above elevation 3100. This is a brecciated zone with both massive and disseminated mineralization interspersed by blocks of waste and low grade. The 6800 zone of mineralization, which lies to the west of the Brunswick zones, has also proved to be brecciated and for this reason is not of economic interest.

EXPLORATION POTENTIAL

The exploration potential of the main ultrabasic mass, which is some 5,000 acres in horizontal extent, falls into two separate categories, as follows:

1. Normal exploration targets in geologically favourable areas encountered in the course of on going development and exploration of the mine workings, which are in the westerly one-third of the main ultrabasic mass on and above the 2600 (main haulage) level.

2. Extended exploration targets:

   (a) in the remaining two-thirds of the main ultrabasic mass on and above the 2600 level, where there are a number of geophysical and geochemical anomalies, mineralized occurrences and favourable geological structures, and

   (b) in the whole of the main ultrabasic mass below the 2600 level: a number of the known ore zones extend down to this level but only four have been tested below it, and of those, three showed downward continuity.

In addition, three other masses of ultrabasics, which have been identified on the property to date and are considered to be satellites of the main mass, are regarded as having exploration potential.

The initial phase of the extended exploration program consists of expanded surface and underground geological studies, geophysical and geochemical surveys and diamond drilling. Successive phases of the program would entail similar work and, in addition, would require lateral extensions of drifts and crosscuts above the 2600 level and possibly shaft sinking and horizontal development below that level and new openings outside the immediate environs of the present workings.

MINE WORKINGS

The mine is developed by four adits at elevations 2600, 3050, 3275 and 3550 above sea level. The main haulage and principal adit is the 2600 level which extends from Texas Creek some 7,700 feet into the mountain. An internal shaft, inclined at 50 degrees, connects the internal 2950, 3250 and 3450 levels with the 2600 and 3550 adit levels. The 3050 and 3275 adit levels are internally connected by manways and ore passes from the 2600 adit level, as are all the other levels.

MINING METHODS

Because of the wide variation in size and attitude of the ore bodies, the mining plan for each ore body has had to be developed individually. The ground is reasonably competent and is suited to longhole open stoping, provided that the stopes are not kept open over long periods. Very little timbering is required.

Once an ore zone has been indicated, the practice is to raise in, or as close as possible to, the apparent footwall of the mineralization. From such raises horizontal rings of diamond drill holes are then drilled at 50 foot vertical intervals to obtain the information required to plot the horizontal cross-sections of the zone to formulate the mining plan. Raises for longhole drilling and blasting are then driven in, or adjacent to, the ore body. The number of such raises in each ore body depends on its horizontal extent, as it is desirable that percussion longholes not exceed 70 feet. The boundary between ore and waste may either be gradual or distinct. Consequently, stopes are mined to an assay cutoff that strikes the best possible balance between grade, tonnage and practical mining considerations, such as the optimum longhole pattern, the establishment of breaking faces and the desired rill of the stope muck. Modifications in this basic method are made in response to ground conditions, government regulations and other related considerations.

Broken ore is drawn from the stopes through mucking machine, slusher and load-haul-dump drawpoints whence it is moved either directly by such loading equipment or via rail cars to the ore pass system or the coarse ore bin. In some instances, the ore is drawn directly into the ore pass system through bulldoze chambers.

Ore from the ore pass system is loaded on rail cars either through chutes or by mucking machines and transported to the coarse ore bin. The main transportation system for the mine consists of electric trolley and diesel locomotives and Granby type rail cars, but load-haul-dump units are used on the 3050 level.

BENEFICIATION PLANT

The original beneficiation plant, the capacity of which had progressively been expanded to 1,550 tons per day, and the ancillary surface facilities were destroyed by fire on August 2, 1970. Reconstruction of a comparable plant in the same location was started immediately. These new facilities are capable of a production rate of up to 2,000 tons per day but at present, due to diminishing ore reserves and a restricted number of working stopes, it is being operated at 1,500 tons per day.

Differential nickel concentrates grading approximately 10% nickel and 1.5% copper and copper concentrates grading approximately 28% copper and 0.5% nickel are produced.

The ore is trammed on the main haulage level in five-ton Granby type cars to a 440 ton concrete coarse ore bin, into which they are automatically dumped. The ore is withdrawn from the bottom of this bin by a reciprocating pan feeder into a 30 inch by 42 inch jaw crusher which reduces it to a size which will pass through a six inch ring. The crushed product is then transported by three successive 30 inch rubber belt conveyors to a 50 inch by 8 foot Symons vibrating grizzly deck screen, with bars set to permit minus two inch particles to drop through. The oversize particles are crushed in a Symons 4¼ foot standard cone crusher and rejoin the undersize particles from the grizzly screen. The product from this crusher and the grizzly undersize is then transferred by two 30 inch conveyors to a Symons vibrating 5 foot by 12 foot rod deck screen with a three-eighths inch spacing between the longitudinal screen rods. The oversize particles from this screen are crushed in a Symons 5½ foot short head cone crusher, set at three-eights inch, and the product is returned to the rod deck screen by way of three 30 inch conveyors. Finally, all particles three-eighths inch or less are conveyed from the rod deck screen by two 30 inch conveyors to any one of three fine ore bins in the concentrator building.

To prevent damage to the screens and cone crushers, scrap steel is removed by an electromagnet suspended over one belt ahead of the first screen. Dust is collected and passes into a central collecting system which mixes the dust in water and feeds it as a slurry to the grinding circuit.

The fine ore from the crushing plant is stored in three laminated-wood bins, each having a capacity of 1,400 tons. It is drawn by feeders onto a conveyor which is equipped with a weightometer, and conveyed to the grinding circuit. The grinding circuit

consists of two Hardinge Tri-cone ball units. The primary mill treats the whole of the plant feed and a portion of the coarse product returned from the cyclones which are installed in closed circuit with the ball mills. The second ball mill treats the balance of the coarse particles from the cyclones. The discharge from both ball mills is pumped by an 8 inch by 6 inch SRL pump to a bank of three cyclones. The coarse sands from the cyclones return by gravity to the mills for further grinding and the cyclone overflow of fine particles is fed to a conditioner. From the conditioner the pulp goes to a bank of thirty No. 30 Denver flotation cells in series. Part of the product from the first 26 of these cells (roughers) is pumped to the differential nickel-copper circuit and the balance to the cleaner circuit. The product from the last four of these cells in series (scavengers) is pumped to the fourteenth cell and recycled. The underflow from the last scavenger cell is the final tailings. The cleaner circuit consists of ten No. 21 Denver cells connected in series. The product from the cleaner cells is fed to four No. 21 cells and eight No. 18 cells where differential nickel and copper concentrates are produced. The tailings from the cleaner cells join with the product from the scavenger cells and are pumped to the fourteenth rougher cell for recycling. In the differential circuit the flotation froth is the finished copper concentrate and the tailings are the finished nickel concentrate. The only reagents used are posassium amyl xanthate, Dowfroth 250 and lime.

The nickel concentrate is pumped to the filter buildings where it is dewatered in a 28 foot thickener by thickening and filtering by a disc type 8 foot diameter by 7 leaf filter. The filter cake is then dried to 5% moisture in an oil fired rotary kiln. The dried nickel concentrates are then transferred by a series of conveyors to the concentrate bin, ready for transportation by truck to Silver Creek, three miles west of Hope, for loading onto rail cars and shipment to the hydrometallurgical smelter of Sherritt Gordon Mines Limited at Fort Saskatchewan, Alberta.

The copper concentrate is pumped directly to a four disc filter for dewatering and then conveyed to a storage bin where it is loaded onto trucks for haulage to storage facilities at Vancouver for shipment by sea to Sumitomo Metal Mining Co., Limited in Japan.

The tailings from the plant are pumped into a pipeline and flow under pressure and by gravity down to the tailings settlement area. The tailings pond is some two miles from the plant and 800 feet below it. The clear water discharge from the pond is monitored and tested on a regular basis for any biological and chemical content.

SURFACE ESTABLISHMENT

Hydroelectric power is transmitted over five miles of 12,000 volt line owned by the Company to transformer stations at the plant site which step the voltage down to 110/220, 440 and 2,200 volts for on-site distribution.

The compressor house is equipped with three electric powered compressors, having a total capacity of 4,750 cubic feet per minute of air. A changehouse provides facilities for 125 men, including a first aid room and lamp room and offices for mine supervision. The office and warehouse are in a two storey building. The analytical laboratory, core storage, core splitting and sample preparation facilities are all housed in one building. Electrical, welding and machine shops are located in a separate building which was recently erected to replace the original building that was destroyed by snow.

ORE RESERVES

Based on present ore reserve estimates it is doubtful whether the mineable ore reserves will sustain production after September 30, 1974, but production will certainly be continued if the present exploration programs result in the discovery of reasonable tonnages of ore-grade mineralization, and provided always that operating costs do not escalate faster than metal prices. However, there would, in all probability, have to be a pause in, or scaling down in the rate of, production because of the lead time required to prepare new discoveries for production. In this connection, it should be recalled that the property was considered uneconomic before it came under the Company's management in 1959, and since that date 4,512,035 tons of ore have been discovered and mined profitably.

As ore reserve calculations now have to be revised on an increasingly more frequent basis to give effect to changing conditions, including new Provincial mineral lands taxation and accelerating inflation, no estimate of ore reserves is included in this report.

PERSONNEL

At the Giant Nickel Mine the Company employs a total of 200 salaried and hourly-rated employees, most of whom live in Hope. Bus transportation to and from Hope is furnished by an independent contractor. A 32 man bunkhouse, 8 man staff-house, three trailers and cookhouse facilities are available for employees wishing to live in camp. The Company also owns four houses in the Hope area which are rented to employees.

The United Steelworkers of America are certified to represent the hourly rated employees at the Giant Nickel property and the current agreement is subject to renegotiation at the end of June of this year.

MARKETING OF CONCENTRATES

The nickel concentrates are sold to Sherritt Gordon Mines Limited under a five year agreement which provides for the sale of up to 2,000 dry short tons per month. This agreement was effective from March 1, 1973. The copper concentrates are marketed to the Sumitomo Group under a two year agreement which provides for the sale of up to 6,000 wet tons per annum up to February 28, 1975.

MOTHERLODE-GREYHOUND PROPERTY

MASCOT MINES & PETROLEUMS LIMITED

PROPERTY, DESCRIPTION AND LOCATION

Mascot Mines & Petroleums Limited (formerly known as Eagle Ridge Petroleum Ltd.), a wholly-owned subsidiary of Giant Mascot Mines Limited and referred to in this section as "the Company", purchased the Motherlode-Greyhound property in August, 1973. The property, which consists of 13 Crown-granted mineral claims, five mineral leases and 25 recorded claims, is located in the Greenwood Mining Camp some 3.5 miles by road from the town of Greenwood. It has a 2,000 ton concentrating plant with ancillary buildings and services, and an open pit mining plant complete except for compressors and drills. In addition, the Company owns the surface rights in respect of three of the mineral claims, and, in Greenwood, eight land lots, a warehouse and a house. The Company has also obtained options on eleven adjoining claims which have either mineral exposures or geophysical anomalies or both.

ACCESS, CLIMATE AND SERVICES

Greenwood is on the Southern Trans-Provincial Highway and Canadian Pacific Railway, some 21 miles west of Grand Forks and 350 miles east of Vancouver. The property is at elevation 3900 feet above sea level and some 950 feet in elevation above Greenwood. Temperature ranges up to 100 degrees in summer and down to minus 20 degrees in the winter and the average snowfall is one to two feet.

HISTORY OF THE PROPERTY

The Motherlode claim, which to date has produced most of the ore, was located in 1891 and shaft sinking and level development was started in 1898. Production was undertaken in 1901 and during the 17 year period to 1918 a total of 3,904,569 tons grading 0.84% to 1.34% copper and 0.045 ounces gold were mined by underground methods from the Motherlode claim, and 135,781 tons from the Sunset claim, all of which was smelted without prior concentration in the smelter formerly in Greenwood.

The original Motherlode operation was shut down in 1918 due to economic conditions generally and dilution of the ore reserves caused by mining techniques. After 1918 some sporadic leasing operations of a minor nature were carried out.

In 1955 the property was purchased from Apex Gold Mines Ltd. by Surety Oils and Minerals Limited, which subsequently changed its name to Woodgreen Copper Mines Ltd. Production was started in March, 1957 with a 1,000 ton flotation concentrator that treated 101,284 tons grading 0.64% copper before it closed down in August of that year due to a drop in metal prices. In the mid 1960's the property was operated by Consolidated Woodgreen Mines Ltd. and 542,701 tons were milled prior to the closure of the operation and the removal of the plant. By way of a summary, during the 50's and 60's a total of 643,985 tons grading 0.65% copper, 0.02 ounces gold and 0.086 ounces silver were mined by open pit methods from the Motherlode claim, with recoveries in the order of 82% in copper.

In 1967 A.R. Allen, consulting engineer, estimated reserves of 2,336,000 tons grading 0.65% copper and 748,225 tons grading 0.78% copper in the Motherlode and Greyhound pits, respectively. In 1968 the Motherlode and adjoining Greyhound property were reactivated by Aabro Mining & Oils Ltd. which undertook a limited exploration project on the combined properties in conjunction with Pechiney Development Limited (N.P.L.). Pechiney withdrew from the venture and in 1969 Aabro started construction of a beneficiation plant and ancillary buildings. In 1970 a new company was formed, Greyhound Mines Limited, which was jointly owned by Aabro, which transferred the property and the construction in progress to Greyhound, and Cadillac Explorations Limited, which provided some 2.5 million dollars to Greyhound to complete construction and to provide an open pit mining plant.

During the period from August to December, 1970, a total of 169,817 dry tons of ore grading 0.454% copper was mined by open pit methods from the Greyhound pit. Early in January, 1971, the operations were shut down due to prevailing copper prices. To secure funds for both capital and operating purposes, Greyhound had issued various debentures to Cadillac and others which were foreclosed in 1972 and Central Liquidation (Canada) Limited was appointed its Receiver.

In November, 1972, R.W. Hunstone, a Vancouver mining executive and prospector, obtained an option to purchase the Motherlode-Greyhound property, plant and equipment for a cash purchase price of one million dollars and a further one million dollars payable by way of a 15 cent per ton royalty on tonnage treated in the Motherlode-Greyhound concentrator, and the assumption of the obligation to pay an estate a royalty of 15 cents per ton on ore mined from the Greyhound claim until the balance of the purchase price for that claim, in the amount of $187,500, which is payable only in that manner, is fully paid.

In April, 1973, Hunstone presented the proposal to Giant Mascot and in August an agreement was entered into by the Company directly with the principals, namely, Cadillac, Zeus Oils & Holdings Ltd. and Robert A. Kolstad, for the acquisition by the Company, for a cash purchase price of $600,000, of the Motherlode-Greyhound property, plant, equipment and related assets, subject to a royalty payable to Cadillac at the rate of 15 cents per ton up to an aggregate amount of $2,000,000, and to the royalty payable in discharge of the balance of the purchase price for the Greyhound already noted. In addition, the Company also paid, or agreed to pay, an amount of some $25,000 in the aggregate by way of the balance of the purchase price for three Crown-granted mineral claims and for the surface rights of the Greyhound claim, and for waste disposal sites. The Company also agreed that if the property were placed in production, Hunstone would receive $1,000 per month for the first 24 months of production and five percent of the net profits from the operation for the life of the operation.

An independent evaluation on behalf of the Company of the 2,000 ton concentrating and crushing plant, surface shop, office building, pumping, tailings and power supply systems and surface mining equipment by a machinery dealer in July, 1973, placed a breakup value of some $550,000 on the Motherlode-Greyhound plant and equipment after dismantling charges and sales commissions.

GEOLOGY AND MINERALIZATION

The property is underlain chiefly by limestone, chert and quartzite that have been intruded by granitic rocks. Metamorphism accompanying the intrusions has altered the sediments to crystalline limestone, marble, skarn and garnetite. The granitic rocks are predominantly granodiorite and, although not in great evidence on the surface near the ore bodies, they are reportedly prominent at depth. Dykes of various ages cut the formation and are barren of mineralization. Most of the copper mineralization, which occurs as chalcopyrite, is in the skarn or skarney limestone. Gold occurs with the copper in the ratio of 0.05 ounces of gold to 1% copper.

In addition to the development of skarn, which contains both magnetite (iron) and chalcopyrite (copper) mineralization, there are three main sets of fractures and faults which are considered to have influenced the concentration of sulfide mineralization. A northerly to N 30° E striking fault system, which parallels the elongation of the Motherlode pit and dips easterly from 65° to 80°, is found prominently in both the Motherlode and Greyhound pits. This system has been intruded by later porphyry dykes. The other two fault systems are east-west striking, with one system dipping 30° to 40° south and the other 60° to 75° north. The latter system generally shows post-mineral and intrusive movement and also appears to have had a damming effect on the mineralizing solutions.

EXPLORATION POTENTIAL

On the basis of geological and geophysical information and evidence of conditions apparently favourable to the deposition of mineralization, there are three main areas which are considered to be of interest for exploration:

(a) Area east of the Motherlode Pit

Mineralization in old workings, diamond drill and percussion holes and geophysical responses indicate an area with exploration potential, some 1,600 feet east-west by 1,000 feet north-south, extending from the east side of the Motherlode pit over to and including the Crown Silver workings.

(b) Area between the Motherlode and Sunset Pits (including the Sulphide Zone)

Evidence from previous underground mining, surface and underground diamond drilling, geophysical surveys and mineralized outcrop indicate an east-west trending zone, which is considered favourable for mineralization, lying between the Motherlode and Sunset pits and extending southerly toward the plant.

(c) Area from the Greyhound Pit to the Marguerite Zone

A major, regional fault zone extending between the Greyhound Pit and the Marguerite zone, over which there are geophysical responses, constitutes a favourable exploration area, some 5,000 feet north-south by 2,000 feet east-west, particularly in view of the number of mineralized showings that are also evident.

There are also a number of interesting geological structures, mineralized showings and geophysical anomalies in other areas of the property and on adjoining properties held under option, all of which constitute promising exploration targets.

Finally, but not last in order of importance, there is the exploration potential of the Motherlode and Greyhound pits themselves, the previously developed copper-gold mineralization which was re-estimated by the Company at some 400,000 tons.

The Company's program to test these exploration targets, at a budgeted cost of some $250,000, was commenced last September. In the 1973 season diamond and percussion drilling was done in the Greyhound pit and the reserves in this area were revised at 200,000 tons of mineralization grading 0.6% copper. Encouraging intersections were also obtained in the Sunset and Sulfide areas where, as a result, some 200,000 tons of mineralization are presently inferred. Furthermore, percussion, rotary and diamond drilling in the Motherlode pit indicated substantial tonnages of mineralization that could possibly be economic if the grade and volume can be increased and the waste to ore ratio improved. Percussion and diamond drilling were also carried out on several of the other targets but no economic concentrations of mineralization were intersected. This exploration program will be resumed later this year and other outside properties in the general Greenwood area will be investigated with the objective of developing tonnages of mineralization which might be economically treated in the existing plant. Although there are estimated tonnages of mineralization grading in the order of plus 0.5% copper range, there is no commercial mineralization.

BIG MISSOURI OPTION

GIANT MASCOT MINES LIMITED

PROPERTY, DESCRIPTION AND LOCATION

The Company has recently optioned the Big Missouri property consisting of five non-contiguous mineral claims and leases, some twenty-one miles north of Stewart, B.C.

ACCESS, CLIMATE AND SERVICES

Access is by a sixteen mile gravel road from Stewart to the former Premier Mine and thence by five miles of four-wheel drive and cat road, or by a two mile "cat" road which branches off from the Granduc road some three miles beyond Premier. The greater portion of the sixteen mile road to Premier is through Alaska.

Stewart is on tide water at the head of the Portland Canal, some 200 miles north of Prince Rupert. It is serviced by road from Watson Lake, Yukon Territory, by weekly water born transportation from Vancouver and daily aircraft from Prince Rupert. The weather is comparable with that of Prince Rupert but the snowfall is much heavier and may exceed ninety feet.

HISTORY OF THE PROPERTY

Most of the ground covered by the claims under option was part of the original Big Missouri group located in the early 1900's. In 1927 the Buena Vista Mining Co. Ltd. assumed control of the group from Big Missouri Mining Co. Ltd., in which Standard Mining Corporation was a participant. Up to that time work on the property had consisted of exploration of the visible surface mineralization by open cuts, short adits, shallow shafts and diamond drilling. Shortly after the formation of Buena Vista, The Consolidated Mining and Smelting Company of Canada, Limited (Cominco) took control and early in 1938 brought the low grade gold ore bodies of the Province claim into production. A road was built from Premier to the portal on the Province, a camp and powerhouse were erected at Hog Lake, and a 750 ton underground concentrator was built and a hydro dam constructed at the west end of Long Lake. This power plant, which utilizes the Divide Lake-Long Lake storage basin, is owned by Cominco and could be rehabilitated. The original ore reserves reportedly were estimated at

some 1.8 million tons grading 0.12 ounces of gold. After producing 850,000 tons grading in the order of 0.07 ounces, the property was closed down and permanently abandoned in April, 1942.

The Big Missouri property, as it is presently constituted, was assembled by T.S. MacKay and Consolidated Silver Butte Mines Ltd. (N.P.L.) is now beneficially entitled to it.

Under the option, Giant Mascot can earn up to a 70% interest in the property by carrying out a phased exploration program and placing it in production. Giant Mascot has budgeted for an expenditure of up to $30,000 in respect of this option to August 31, 1974.

GEOLOGY AND MINERALIZATION

"The Big Missouri group is in the generally metamorphosed Hazelton assemblage. The mineralization lies adjacent to and between a prong of the Texas Creek granodiorite and a series of mylonites on the east which are overlain unconformably by deformed rocks of the Bowser assemblage. The country rocks in the mine area are cut by a great lamprophyre and hornblende granodiorite dykes, and the Portland Canal Dyke swarm passes just to the north."

"In more detail, the rocks in the mine area include various chlorite and sericite schists and semi-schists, lenticular remnants of cataclasites (kakirites) and mylonites as well as weakly deformed and altered country rocks. These latter are prominent on the west slope above the Granduc road where excellent exposures of medium to dark green, medium grained volcanic conglomerates are easily accessible. Below the road on the glacier side deformed Bowser siltstones are visible."

"Faults are significant along the Big Missouri Ridge. The most obvious fault zone which lies along Silver Creek appears to offset all four silicified zones. Other less significant faults crudely parallel the country rock layering, trending north-northwest, and appear to dip westerly. Fault ore control is difficult to assess, but indications are that

a fault mapped in the 2300 and 2860 levels forms the footwall of the ore zone and offsets oreshoots. The present hangingwall of the zone also appears to be a low-angle post-mineral fault against which mineralization terminates abruptly." (Excerpts from the Provincial Government Bulletin No. 58.)

A number of surface showings of lead, zinc and copper with precious metal values are scattered over a length and width of about 500 feet in the western section of the Province claim. The indications are that this is a flat dipping, shallow zone of mineralization although there is the possibility that it could be a vein type structure cut off by the main fault reported in the underground workings.

In 1927 Duncan MacVichieme reported that this zone of mineralization was approximately 800 feet by 1,500 feet and 25 feet thick. He also reported the following average sample values by various individuals:

	Oz. Gold	Oz. Silver	% Lead	% Copper	% Zinc
P.E. Peterson, (M.E.)	0.02	3.36	3.3	0.72	5.5
F.B. Hyder (Geologist)	0.03	3.2	3.36	0.29	5.4
R.C. Nowland (M.E.)	0.05	1.0	1.15	0.15	2.3

One open cut examined last fall by the writer was previously sampled by others who obtained the following results

Oz. Gold	Oz. Silver	% Lead	% Copper	% Zinc
0.02	4.56	4.4	0.8	6.0

Reportedly the majority of the gold production from the Province came from the "A" silicified zone. This zone, in which the ore shoots are localized over a 200 foot width trending north-northwest, is reported to consist of fractured country rock laced with unevenly spaced quartz-calcite veinlets and stringers, both with and without sulphides present. The gold was reportedly associated with the area of most intense veining and silicification which in turn was best developed in areas where abundant kakirite lenses occurred within schists.

EXPLORATION POTENTIAL

If the mineralization on the Province is representative of a flat-lying zone as extensive as indicated in the old reports and by surface exposures, then it would be reasonable to postulate that a substantial tonnage could be developed for possible open pit mining, which might be supplemented by any reserves of gold mineralization that may remain underground from the previous operation.

The first phase of the planned exploration program is to sample the surface outcrops on the Province with short diamond drill holes and to carry out a limited geological survey of the property as a whole. The Company's future plans with respect to the option will depend on the results of this work.

Should an economic deposit be delineated and placed in production, the inclement weather and extreme snowfall would not permit year-round open pit mining operations, but it is possible that mining could be carried out in the summer months and the ore stockpiled in the former producing stopes from which it could be drawn to feed the concentrator during the winter months, thus maintaining a year-round operation. There presently are no known ore reserves on the property.

GIANT COPPER PROPERTY

GIANT MASCOT MINES LIMITED

PROPERTY, DESCRIPTION AND LOCATION

The Giant Copper property lies between elevations 4,300 and 6,500 feet above sea level and is located in southwestern British Columbia, approximately 23 miles southeast of the town of Hope. It adjoins the southwestern boundary of Manning Park. The property, situate in the New Westminster Mining Division and the Kamloops Land District, is comprised of 191 surveyed and unsurveyed mineral claims, of which eight are Crown-granted and 183 are held by location.

ACCESS, CLIMATE AND SERVICES

Access to the property is by blacktop road to Mile 26 on the Hope-Princeton Highway (Southern Trans-Provincial Highway), thence three miles to the south by secondary road. The property is some 127 miles by road from Vancouver and 40 miles from the Giant Nickel Mine.

The climate generally is considerably drier than on the western slopes of the Coast Range, although snow pack in excess of twenty feet is not uncommon at the higher elevations. Sheltered areas at elevations above 6,000 feet may not be free of snow until mid-July and first snowfalls commonly occur in early October, and in the result, the season for surface exploration is relatively short.

HISTORY OF THE PROPERTY

The property consists of two historically separate but adjoining properties, the A.M. and Invermay.

The A.M. was located in 1930 and was optioned to The Consolidated Mining and Smelting Company of Canada Ltd. (Cominco) in the same year by G. Alleson of Hope. During the period from 1930 to 1938, Cominco collared six adit levels, No's 1, 2, 3, 4, 5 and 6, and completed 2,700 feet of horizontal workings.

The property was acquired from Cominco by J.W. Heffernan and Associates in the late 1940's. In 1947 two deep diamond drill holes were drilled from the surface aggregating 970 feet. Subsequently, Canam Mining Corporation Ltd. was formed. In 1949 work was resumed on No. 6 Level and a road was constructed from the Hope-Princeton Highway to these workings. Thereafter, Canam Copper Company Ltd. (Canam) was formed and, during the period 1951 to 1952, further diamond drilling and a minor amount of drifting and crosscutting was carried out on No. 6 Level. In 1953, No's 7 and 10 Levels were collared and No. 3 Level was extended a short distance.

In July 1954, The American Metal Company Ltd., New York, undertook to develop the property, but withdrew in November of the same year, after completing some 2,500 feet of diamond drilling and 120 feet of drifting on No. 10 Level.

In 1955, Mogul Mining Company assumed management of the property with the objective of bringing it into production. During the period 1955 to 1956, Mogul undertook exploratory diamond drilling on the surface and underground, collared No. 15 Level and extended it some 4,800 feet, cleared a proposed concentrator site and erected a 100 man cookhouse and bunkhouse complex and 60 man bunkhouse near the portal of No. 15 Level.

Plans to bring the property into production were discontinued in 1957 with the decline of copper prices. During the next two years Cominco undertook an extensive surface geological program to look for other comparable occurrences of copper mineralization on the property.

On Cominco's withdrawal, Canam, in 1961, completed the No. 15 Level drive into the A.M. breccia zone and collared a shaft raise that was extended 141 feet.

In 1963, Canam rehabilitated No. 15 Level and drilled an aggregate of 1,185 feet of holes from the surface in the area of No. 7 Level and underground below No. 15 Level.

Giant Mascot entered into an option agreement with Canam in 1964, to earn a majority interest in the property by making exploration expenditures of $250,000 on the A.M. breccia zone and electing to place the property in commercial production. By early 1965 the No. 10 and No. 15 Levels were rehabilitated, 555 feet of exploration raise were driven and 19,100 feet of underground diamond drilling were completed. In March 1966, Giant Mascot purchased all the assets of Canam, for 1,084,997 shares of Giant Mascot and the assumption of the liabilities of Canam.

The Invermay group was staked in 1933, and was acquired by Invermay Annex Mining Company Ltd. in 1934. During the period from 1933 to 1938, this property was developed by five adit levels from which some small shipments of lead and zinc with precious metals were made. For access purposes, a 2.5 mile aerial tramway (since abandoned) was erected to service the property from the Silver Daisy flats and later a four-wheel drive road was built from the A.M. property. In the 1940's the property apparently lapsed for taxes and was acquired in 1948 by Invermay Annex Skagit River Development Company Ltd., which carried out some diamond drilling. In 1956, after further drilling had been done, the property was acquired by Canam. Cominco carried out an extensive drill program in the area of the Invermay workings from 1957 to 1959 and in the fall of 1964 Giant Mascot rehabilitated certain of the workings and made a cursory examination of them.

GEOLOGY

1. Regional

The general area is underlain by two groups of sedimentary rocks of considerably different age, separated by the Hozameen Fault, which is part of the regional Fraser River Fault system. Both groups have been intruded by large stocks and bosses of diorite and quartz diorite of post Lower Cretaceous age, and a still younger series of gabbroic and hornblendic dykes and sills. A northwesterly trending fracture system, associated with mineralization at both the Giant Copper property and the Giant Nickel Mine, may have its surface expression along the Nicolum-Sumallo Creek Valleys to Hope, and thence through the Giant Nickel Mine to Harrison Lake at the mouth of Cogburn Creek.

The younger Dewdney Creek Group of sediments, which trends north-northwesterly and lies to the east of the Hozameen Fault, hosts the mineralized zones on the Giant Copper property. The considerably older Hozameen Group lies to the west of the Hozameen Fault and does not appear to contribute to the economic potential of the Giant Copper property.

2. Local

The property is underlain by sediments of the Dewdney Group which have been intruded by a large stock of diorite known as

the Invermay stock, measuring approximately two miles north-south by one mile east-west, with a 3,000 foot apophysis extending southerly from the southeast corner of the main mass. In close proximity and within the main A.M. breccia zone, there are numerous dykes and sills of gabbro or hornblendite which intrude along the predominant fractures.

The Dewdney sediments generally trend in a northwesterly direction and dip steeply east, but have been extensively disturbed in and around the diorite stock. Brecciation of these rocks shows a definite relationship to apophyses and irregularities in the diorite contact. The main A.M. breccia zone is located in a large embayment to the west of the 3,000 foot apophysis and to the south of the main diorite mass.

Two main rock types are a dark grey to black, fine-grained argillite and a lighter grey, but fine-grained, quartzite. Copper mineralization appears to show little preference for one more than the other, but a subdivision is useful for purposes of structural analysis.

The Invermay stock varies from a granodiorite through to a quartz diorite with porphyritic phases which are usually more mafic. A tourmaline quartz monzonite is evident around the margins of the stock and adjacent to the Invermay shear zone.

Mafic rocks have intruded mainly along strike faults and to a lesser extent along crosscutting faults in the sedimentary horizons. They vary in composition from gabbro through to quartz diorite and coarse-grained hornblendite, and variations may be noted within a single unit. These rocks are considered to be an earlier intrusion. Generally, sulphide mineralization is minor in mafics, but one underground diamond drill hole outside the main A.M. breccia zone intersected 96 feet of gabbro, which averaged 0.95% copper.

Faulting appears to play an important role in the localization and configuration of mineralized zones. As noted above, there is a relationship between the several breccia zones on the property and irregularities in the contact of the Invermay stock with the sediments. It is important to note that sulphide mineralization presently considered to be potentially economic appears to occur in breccia zones which have been further disturbed by intersecting sets of strong faults, such as the A.M. and Invermay.

There are two main fault directions which appear to have the greatest influence on sulphide mineralization and distribution of intrusive rocks. Although a northeasterly striking, steeply-dipping set of faults offsets, and in some cases terminates, not only the breccia zones of mineralization but also the rock formations, generally, in the Invermay these faults are directly associated with the silver-lead-zinc mineralization. These faults cut across the general trend of the country. The northwesterly trending faults are part of a regional strike fault system having variable steep to shallow dips easterly. These faults, which control many of the mafic intrusive dykes, do not interrupt or terminate mineralized zones. On the contrary, there is frequently an increase in sulphide content adjacent to such fault strands.

The breccia zones in the sedimentary rocks consist of, in order of abundance, fragments of sedimentary rocks, mafic intrusives and diorites or granodiorites. The matrix is composed of crushed material with calcite, chlorite, quartz, feldspar, tourmaline and kaolin. The fragments vary in size from inches to several feet. There is quite strong evidence that brecciation was due partly to the intrusive action of the Invermay stock, partly to vapour activity and partly to faulting.

Very little is known of the Invermay breccia in which the mineralized northeasterly striking shear zone occurs. The presence of tourmaline in both the shears and matrix of the Invermay breccia suggests a relationship with the main A.M. breccia zone, even though the Invermay breccia is entirely quartz diorite.

3. Mineralization and Mineralized Zones

The A.M. and Invermay mineralization has been the main exploration target to date. However, there are several other weakly mineralized breccia zones on which only limited surface exploration has been carried out.

The main A.M. breccia zone is a sedimentary breccia which has horizontal dimensions of 1,200 feet in a north-south direction by 600 to 800 feet in an east-west direction, and has been traced in the vertical plane for more than 1,500 feet.

Its outer margins are sharp and may be bounded by faults as is the case at the northern and southern extremities, where strong northeasterly trending faults terminate the zone. Sulphide mineralization, of which chalcopyrite is the predominant mineral, occurs almost exclusively in the matrix of the breccia, associated with pyrite, pyrrhotite and arsenopyrite and minor amounts of molybdenite, scheelite, galena, sphalerite and magnetite. Concentrations of these minerals have been developed at the northern and southern boundaries of the zone where most of the underground exploration work has been done. Although there is a gradual decrease in the sulphide content of the breccia away from the contact, the whole breccia is more or less mineralized, as shown by the lateral development on 10 Level which encountered at least three smaller concentrations of sulphides in the central section of the breccia. The mineralization generally carries some minor gold and silver values.

The Invermay mineralized shear zone is within the Invermay diorite stock about one mile north of the main A.M. breccia zone. Sulphide mineralization, including galena, sphalerite, jamesonite, pyrite, pyrrhotite and chalcopyrite, carrying in many instance high silver values, occurs primarily along the strong northeasterly striking shear zone. The diorite in which the shear zone occurs shows brecciation for a length of some 1,000 feet and a width of some 400 feet. Limited surface diamond drilling in this brecciated zone has indicated low-grade copper mineralization.

MINERAL RESERVES OF THE MAIN A.M. BRECCIA

As noted above, the strongest mineralization located to date is in the main A.M. breccia zone. The northern nose of the zone has received the most detailed exploration by way of drifting, raising and diamond drilling throughout a vertical extent of 1,500 feet. Therefore, it is possible to estimate the grade and tonnage of the copper-bearing material in this area with reasonable assurance.

The southern nose of the zone has been partially explored on 15, 10 and 7 Levels, of which the most detailed work has been done on 10 Level by drifting and diamond and percussion drilling.

The central section of the breccia zone has been explored by limited crosscutting and diamond drilling on No. 15 and No. 10 Levels.

1. Northern Nose Zone

In view of the gradational nature of the mineralization, various calculations of tonnage and grade may be made using a series of cut-off grades. Two estimates are presented by way of illustration. In Case I a 0.8% copper cut-off is used, which represents the higher grade of mineralization in the zone. Case II was calculated using a 0.4% copper cut-off grade. Nineteen horizons were selected for the purposes of these calculations and all inclined holes were interpolated to these horizons in order to contour the mineralized blocks. The assay results of the samples taken by the previous operators and recorded on their plans were used where sampling had not been carried out by Giant Mascot. Core assays, wherever available, were used, and in their absence, sludge assays. Where gold, silver and molybdenite assays were not available for a specific area, values from adjoining blocks were used. The block average was used for other unsampled sections of known mineralization.

The copper value attributed by Giant Mascot to a mineralized intersection is the weighted arithmetic average of the individual five foot core or sludge samples, as determined by electrolytic methods in the Company's laboratory. Assays for copper, gold, silver and molybdenite by Coast Eldridge are of weighted composite samples from the mineralized intersection.

In several instances, erratic copper highs in Giant Mascot samples were cut to the average value of the complete mineralized intersection for inclusion in the calculations.

The tonnage is calculated on an average specific gravity of 2.82, which is equivalent to 11.5 cubic feet per ton.

A dilution factor of 15% has been applied throughout. Half of this dilution has been considered as barren and the other half has been given a grade of 0.44% copper, which was derived by taking half the arithmetic average of the values in the potential zone of dilution on the footwall.

Case I

Two calculations were made: (a) by the Company, and (b) by independent consultants, and are summarized as follows:

Available Reserves

	Tons	% Cu	Gold oz/ton	Silver oz/ton	Molybdenite %
(a)	2,779,984	1.35	0.017	0.72	0.033
(b)	2,610,000	1.28	0.015	0.65	0.031

The following tables set out the Company's calculations for the 19 horizons (Case I(a)). No comparable table showing the calculations by the independent engineers is available (Case I(b)):

MINERAL INVENTORY

CASE I (a)

NORTHERN NOSE ZONE

LEVEL	ELEVATION From	ELEVATION To	VERTICAL INTERVAL In Ft.	HORIZ. AREA (Sq. Ft.)	PROVEN & PROBABLE TONNAGE (@ 11.5 cu.ft./ton)	% Cu	Oz/Ton Au	Oz/Ton Ag	% MoS_2	POSSIBLE OR GEOLOGICALLY INFERRED Area (Sq. Ft.)	Tons
5825	5807½	5865	57½	6056	30280	1.66	.015	Av.	Av.	10524	52620
5790	5740	5807½	67½	4998	29274	1.59	.015	Av.	Av.	13276	77924
5690	5590	5740	150	21244	277095	1.54	.024	.86	Av.	1880	24522
5490	5440	5590	150	13504	176139	1.29	.022	.73	.107	1992	25933
5390	5340	5440	100	7616	66226	1.49	.011	.73	Av.	10944	94295
5290	5252½	5340	87½	7716	58709	1.64	.015	.61	.110	19144	145661
5215	5177½	5252½	75	18912	123339	1.86	.018	.76	.037	4464	30417
5140	5102½	5177½	75	2088	136200	1.56	.017	.58	.018	7700	50917
5065	5015	5102½	87½	12012	91396	1.49	.022	.57	.017	4012	30526
4965	4927½	5015	87½	14624	111269	1.68	.028	.69	.023	5032	23070
4890	4840	4927½	87½	12124	92248	1.76	.011	.89	.012	440	3347
4790	4727½	4840	112½	11940	116804	1.71	.012	1.03	.022	2528	24729
4665	4640	4727½	87½	13328	101409	1.40	.014	1.16	.015	540	4170
4615	4590	4640	50	16804	73409	1.57	.015	1.07	.029	436	1895
4565	4527½	4590	62½	17216	93565	1.25	.011	.74	.020	580	3152
4490	4465	4527½	62½	16876	91737	1.39	.019	.83	.015	844	4587
4440	4390	4465	75	12840	83739	1.36	.017	.83	.056	556	3626
4340	4315	4390	75	6996	45626	1.12	.013	.88	.009	-	-
4290	4265	4315	50	3784	16452	1.09	Av.	Av.	Av.	-	-
SUB TOTAL			1,600		1,814,896	1.52	.018	.81	.037		600,743
Add 15% Dilution					272,234	0.22	.003	.12	.006		90,111
TOTAL RESERVE					2,087,130	1.35	.017	.72	.035		690,854

MINERAL INVENTORY

NORTHERN NOSE ZONE

CASE II

PROVEN CATEGORY

Elevation	Tons/Vert. Ft.	Av. Grade %Cu	Block Tonnage	Vertical Interval
5825	4505	0.86	191.460	(42.5)
5790	1633	1.11	110,230	(67.5)
5690	9950	0.55	1,492,500	(150.0)
5490	7725	0.49	1,158,750	(150.0)
5390	2500	0.87	468,750	(187.5)
5290	1480	1.45	277,500	
5215	4055	0.80	304,125	(75.0)
5140	3450	1.055	258,750	(75.0)
5065	4140	0.59	362,250	(87.5)
4965	3940	0.47	344,750	(87.5)
4890	8000	0.53	700,000	(87.5)
4790	5260	0.42	591,750	(112.5)
4665	6415	0.49	561,310	(87.5)
4615	5170	0.64	258,500	(50.0)
4565	7540	0.51	471,250	(62.5)
4490	3595	0.56	224,690	(62.5)
4440	3785	0.48	283,870	(75.0)
4340	3640	0.47	273,000	(75.0)
	1250	0.35	125,000	(100.0)
4290	1895	0.42	142,130	(75.0)
TOTAL	5419 (average)	0.60	8,600,565	(1587.0)

PROBABLE CATEGORY

5875 (1)	4505	0.86	76,580	(65.0)
5737 (2)	1782	0.65	115,700	(65.0)
5737 (3)	3400	0.44	104,000	(80.0)
5250 (4)	770	1.08	144,375	(187.5)
TOTAL		0.78	440,655	

GRAND TOTAL - PROVEN 5697 - PROBABLE 0.61 — 9,041,220 — (1587.0)

Case II

The table on page 41 contains the tonnages and grades for each of the horizons using a 0.4% copper cut-off, giving a total of 9,041,220 tons grading 0.61% copper.

2. Southern Nose Zone

Development work has been carried out on the No. 15, 10 and 7 Levels. The No. 15 Level only partially developed the zone and assays on that Level were generally low. The No. 7 Level explored this zone along a length of 160 feet. An average grade of 0.60% copper for 1,620 tons per vertical foot was obtained.

The most detailed information has resulted from the work carried out on No. 10 Level, which amounted to 1,060 feet of drifting and crosscutting and 2,600 feet of percussion test-holing of the walls. The best mineralized sector in the zone, found on No. 10 Level, is 400 feet long and averages 0.85% copper for 1,500 tons per vertical foot. Adjoining it is another sector calculated to contain 1,700 tons per vertical foot, averaging 0.41% copper.

3. Central Zone

Grade information for this zone is only available from 1,400 feet of crosscutting, 1,500 feet of diamond drilling and 300 feet of percussion test-holing, all on No. 10 Level. In view of the extensive area involved, this work can only give an indication of the tenor of the mineralization. The average grade for this zone is in the order of 0.2% copper.

The following table, which is a compilation of the results obtained from sampling of the northern and southern nose zones and the central zone on No. 10 Level, gives an indication of the possible grade of mineralization at that horizon throughout the entire main A.M. breccia zone.

Zone	Tons/Vertical Foot	% Copper
Northern Nose	8,000	0.53
Southern Nose	7,800	0.47
Central	29,700	0.22
	45,500	0.32

In addition, 0.33 ounces per ton of silver and 0.08% zinc are indicated.

MINE WORKINGS

Prior to Giant Mascot first entering into an agreement with respect to the property, extensive underground work had been carried out.

The upper section of the main A.M. breccia zone had been explored by four adit levels, all crosscuts, namely, No's 1, 4, 5 and 6, at elevations 5844, 5783, 5694 and 5470 respectively, driven westerly in the same vertical plane for distances of 100, 200, 400 and 830 feet, respectively, to explore the northern nose of the zone. No lateral development work has been done from the No's 1, 4 and 5 Levels which exposed mineralization over widths from 65 to 80 feet.

The No. 6 adit was driven for 730 feet as a crosscut to the east contact of the breccia zone and continued for 100 feet through it to the west contact. The east contact was drifted on for 45 feet northwesterly, and then westerly for 40 feet to the face. This work was entirely in breccia. From the main crosscut a drift was driven along the eastern contact for 415 feet to the southeast. Two crosscuts were driven from this drift into the breccia zone, one at 200 feet from the main crosscut and the other at 410 feet. These crosscuts, which are 130 and 80 feet long, respectively, are both in breccia.

The No. 2 adit (5722 Level), situate 400 feet south of No. 4 adit, was driven 250 feet. The first 125 feet and the last 50 feet of this crosscut were in breccia. Only minor mineralization was noted.

The No. 3 adit (5435 Level), situate 600 feet south of No. 6 adit, was driven 230 feet in crushed breccia.

The No. 7 adit (5456 Level), situate 800 feet south of No. 6 adit, was driven 230 feet along the south contact of the breccia zone and shows very interesting copper mineralization. Surface diamond drilling by Cominco in this area in later years did not duplicate the results obtained from the tunnel, but the core recovery was poor.

The No. 10 adit (4890 Level) was driven 2,400 feet southwesterly through quartz-diorite to the eastern contact of the breccia, and then a further 600 feet into it. At 2,650 feet from the portal on the No. 10 Level, a northwesterly crosscut was driven 650 feet through the eastern and western limbs of the mineralized nose zone. At 180 feet from the intersection of the main tunnel and the northwest crosscut from it, a 30 foot crosscut was driven from the northwest

crosscut through the west limb. At 2,500 feet from the portal on the No. 10 Level a 200 foot drift was driven to the south, and a 100 foot drift to the west. The south drift showed interesting values over 25 feet.

The No. 15 Level (4340 Level) was driven 5,700 feet through quartz-diorite to the breccia. Eleven hundred feet of drifting and crosscutting and a 141 foot shaft raise was driven within the breccia. The east limb of the mineralized northern nose zone was thoroughly exposed by this work, but its west limb was not intersected.

The 10 and 15 Levels are close timbered throughout most of the quartz-diorite outside the breccia, as are the south nose zone workings within the breccia.

The Invermay mineralized shear zone has been explored over a length of approximately 1,000 feet by five adits at elevations 5055, 5235, 5392, 5833 and 5940, aggregating some 2,400 feet of workings.

Since Giant Mascot undertook exploration and development of the property in 1964, the No. 10 and No. 15 Levels in the main A.M. breccia zone have been extended to further explore the nature and extent of the mineralization of the north and south nose zones. Raises were also driven between the No's 15, 10 and 6 Levels in the northern nose zone from which diamond drilling was carried out. The southern nose zone was explored on the No. 15 and No. 10 Levels by drifting and crosscutting.

The underground exploration carried out by Giant Mascot in the main A.M. breccia zone is summarized below:

Level	Work Performed	Footage
No. 15	Drifting and crosscutting	1,100
No. 10	Drifting and crosscutting	1,885
No's 15 to 10	Raising	755
No's 10 to 6	Raising	1,260
No's 15 to 6.	Diamond drilling	25,847

Detailed surface geological mapping has been conducted over the main A.M. breccia zone north to the Invermay workings and reconnaissance geological and geochemical surveys have been carried out over most of the property. This work, in addition to providing additional information on the other breccia zones, disclosed two broad geochemically anomalous zones, known as the 10 Level and 26 Mile grids.

The 5392, 5833 and 5940 Levels of the Invermay were rehabilitated and check sampling was carried out which confirmed the presence of high grade silver mineralization in narrow, uneconomic widths. An electromagnetic survey of a selected area of the Invermay disclosed a fairly strong electromagnetic conductor.

There has been no material production from the Giant Copper property and there is no known concentration of commercial mineralization on it.

PLANT AND SURFACE ESTABLISHMENT

The bunkhouse and cookhouse-bunkhouse complex, built by former operators near the No. 15 Level portal, is now used for the storage of diamond drill core. Other buildings erected by them near that portal collapsed under snow load.

The portable diesel-electric and compressed air units are stored at the Company's warehouse yard near Hope.

The topography at the No. 15 Level portal is not suitable for the construction of plant facilities. Reconnaissance has indicated an excellent plant site, with an adequate water supply and tailings disposal area, approximately three miles west of the main A.M. breccia zone at the confluence of 26 Mile Creek and the Skagit River. The use of that site, however, would necessitate the driving of a low level tunnel for a distance of one to two miles, and the potential site lies within an area which has recently been designated as a Recreational Area by the Provincial Government.

EXPLORATION POTENTIAL

The main exploration targets at the Giant Copper property are as follows:

1. In the main A.M. breccia zone:

   (a) to test for extensions of the northern and southern nost zones laterally and at depth, with the objective of expanding the drill-indicated reserves which in the northern nose zone are indicated at some 2.8 million tons grading 1.35% copper with minor precious metals;

(b) to assess the potential of the entire northern and southern nose zones, where some 10 to 20 million tons of copper mineralization grading in the order of 0.6% copper are geologically inferred over a vertical range of 2,000 feet;

(c) to assess the potential of the entire breccia zone in which up to some 90 million tons of copper mineralization grading in the order of 0.3% copper have been postulated.

2. In the Invermay breccia zone: to test for the possible presence of a low grade porphyry copper deposit.

In addition, there are a number of other breccia zones, as well as the 10 Level and 26 Mile Grid anomalies, which are promising exploration targets.

NICKEL PLATE PROPERTY

MASCOT NICKEL PLATE MINES LIMITED

(owned by Giant Mascot Mines Limited as to 75%)

PROPERTY, DESCRIPTION AND LOCATION

Giant Mascot has a 75% interest in Mascot Nickel Plate Mines Limited which owns the Nickel Plate property, consisting of 83 Crown-granted claims and six mineral leases and the surface rights on 14 Crown-granted claims and one land lot.

This property is situate between elevations 3,000 and 6,100 feet on southern and western slopes of Nickel Plate Mountain, two miles northeast of Hedley, in the Similkameen Mining Division, Yale Land District, about 200 miles east of Vancouver.

ACCESS, CLIMATE AND SERVICES

The Southern Trans-Provincial Highway connects Hedley with Princeton and Vancouver to the west, and with Keremeos, Penticton and other British Columbia Interior towns to the east. Bus and trucking companies operate on this highway, and provide adequate service to the area. A good eleven mile gravel road, which is part of the Hedley-Nickel Plate-Lake Penticton secondary road, provides access to the former Nickel Plate camp from the highway one mile south of Hedley, and traverses the southern and eastern slopes of Nickel Plate Mountain.

The climate is essentially dry, characteristic of the southern interior of British Columbia, with hot summers and moderately cold winters. Hydroelectric power is available from British Columbia Hydro and Power Authority at Hedley.

HISTORY OF THE PROPERTY

The first claims on Nickel Plate Mountain were recorded in 1894, but it was not until 1898 that the presence of mineralization of commercial grade was established. In 1904 Yale Mining Co., which was controlled by the Marcus Daly interests of Butte, commenced production from what is now generally referred to as the Nickel Plate Mine. By 1909,

167,000 tons averaging 0.696 ounces of gold per ton were milled. The property was then taken over by Hedley Gold Mining Company which operated it until 1931 when the then known ore reserves were exhausted. Production figures for this period are incomplete, but from 1909 to 1922, 700,000 tons averaging 0.55 ounces of gold per ton were milled. In 1927, the production rate was increased to 200 tons per day of an average grade of 0.31 ounces of gold.

The property was later acquired by Kelowna Exploration Company and, in 1934, after an intensive geologic study of the property and extensive exploration work, it was reopened. Thereafter, the mine was in continuous production until August, 1955, when it was again shut down. The property was subsequently acquired by Kelowna's parent, Burden Investors Services Inc. (Burden) which in 1964 optioned it to Dundee Mines Ltd. which carried on exploration for some two years before abandoning the option.

In 1967 Giant Mascot, through its wholly-owned subsidiary, G.M. Explorations Limited (N.P.L.), obtained an option on the property and carried out exploration on it from that date to 1971. In 1971 a new private company, Mascot Nickel Plate Mines Limited, was formed to acquire the property. This new company, when formed, was owned by Giant Mascot as to 75% and by Burden as to 25%. Burden is also entitled to receive up to $250,000 by way of a production royalty.

The reserves remaining in 1955 were estimated at 67,118 tons averaging 0.245 ounces of gold per ton.

Total production from the property, exclusive of the period from 1923 to 1930, amounted to 2,860,790 tons averaging 0.45 ounces of gold per ton. It is reported that total net production from all operations on Nickel Plate Mountain was 3,800,000 tons, valued at some $48,000,000.

GEOLOGY

The early Mesozoic sedimentary rocks immediately north of the town of Hedley occupy an asymetrical anticline several miles wide. The axis strikes N 15° E with the east limb being vertical or overturned and the west limb dipping 12° to 40° to the west. The west limb is cut longitudinally by the deep gorge of 20 Mile Creek, which separates Nickel Plate

and Stemwinder Mountains. A quartz diorite, the Toronto stock, has intruded the sediments, and porphyritic apophyses from this body have penetrated the surrounding sediments in the form of sills and dykes and make up a large percentage of the stratigraphic column on Nickel Plate Mountain. The Okanagan granite and granodiorite mass, which dips gently to the west, underlies the sediments and truncates the anticlinical structure at the base of the mountain. A wide granodiorite dyke, an offshoot of the basement intrusive, traverses the western slope of the mountain, cutting both sediments and diorite porphyry sills and dykes.

The sedimentary formations, which are Triassic in age, consist of interbedded quartzites, argillites, limestones and volcanic material from 7,000 to 10,000 feet thick. It is in the altered limestone and quartzite horizons of the Nickel Plate formation that the ore bodies were found and these horizons are subdivided into:

Kingston - mainly coarse crystalline limestone	300 feet
Middle Member - interbedded limestone and quartzite, highly metamorphosed	500 feet
Sunnyside - mainly coarse crystalline limestone, with interbedded quartzites in upper sections	300 feet
Total thickness	1,100 feet

It has been found that gold deposition has been concentrated in the upper horizons of the Middle Member which hosted the main Nickel Plate ore system, and horizons immediately above and below the contact between the Sunnyside limestone and the Middle Member which hosted the Sunnysides, Bulldog and Warhorse ore shoots some 300 to 500 feet stratigraphically lower. In most cases, ore shoots were found in areas of intense silicification and alteration of the sediments to skarn, with the characteristic development of garnet, pyroxene, epidote and scapolite. Alteration of quartzites produced chert horizons.

MINERALIZATION AND ORE CONTROLS

Sulphide mineralization associated with the areas of alteration is comprised of arsenopyrite, pyrrhotite, chalcopyrite and minor pyrite and sphalerite. Gold values are associated with some, but not all, arsenopyrite. In the South Rim Area, finely disseminated chalcopyrite and pyrrhotite have been observed in relatively unaltered limestone belonging to either the lower portion of the Middle Member or the Sunnyside limestone horizon and closely associated with other sulphides in areas of intense skarn alteration.

It is generally conceded that a majority of the following conditions have characterized the presence of ore shoots:

1. Strong skarn alteration mixed with calcite, close to the edge of the zone of alteration.

2. Strong structure:

   either (a) anticlinal or synclinal folds, preferably with one limb steeply dipping,

   or (b) strong shearing and faulting near fold axes or on north dipping limbs of transverse folds pitching N 20° - 30° W.

3. A high proportion of diorite porphyry sills and transverse, steeply dipping dykes.

4. Concentrations of arsenopyrite and scapolite, usually indicating higher gold values.

The paralleling of the edge of a zone of alteration with any of the structural controls or with diorite porphyry sills has been found favourable for the formation of larger ore shoots.

The limits of skarn alteration are irregular but generally such alteration forms a saucer-shaped area of varying thickness. The alteration may terminate abruptly along the dip or strike of individual beds, or may traverse several beds, forming deep "keels" of alteration usually closely associated with steeply dipping porphyry dykes.

The zones of alteration, which are considered to be the main guide to the location of orebodies, are primarily controlled and localized by early structural features such as folding, accompanied by shattering and faulting. Into these zones of weakness was intruded diorite porphyry, forming dykes and sills, followed by solutions creating widespread silicification and skarn alteration of limey horizons. In the final stages, sulphides and economic minerals were introduced.

With the exception of the main Nickel Plate ore shoots, very limited exploration has been carried out on the favourable ore-bearing structures at depth. The extent of mineralization and persistence of favourable structural features along the South Rim are largely obscured on surface by a succession of diorite porphyry sills which dip almost parallel to the westerly slope of Nickel Plate Mountain. Exploration oriented to test the potential of the extension of the structures and mineralized areas now in evidence present interesting possibilities for the location of additional gold-copper mineralized shoots.

DESCRIPTION OF MINERALIZED AREAS

The following is a summary of the information relating to the orebodies and mineralization on the Nickel Plate property resulting from the work carried out prior to 1967:

1. Nickel Plate

The Nickel Plate ore system was comprised of a series of tabular ore lenses striking N 70° W and raking from 30° through out most of the 3,000 foot length but steepening to 70° in the lower section. The individual ore lenses occupied portions of seven different altered skarnized limestone beds from ten feet to 100 feet thick, separated by sills of diorite porphyry. The lateral extent of the orebodies was very irregular, but may have been as great as 500 feet. The upper limit of the ore system was at an elevation of 5,900 feet and the lower at approximately 4,300 feet. All orebodies were near the top of the Middle Member of the Nickel Plate Formation, close to the northern periphery of the zone of alteration.

Ore controls involved all of the prerequisites previously noted, as well as the intersection of porphyry sills and crosscutting dykes. This ore system contributed about 85% of the tonnage mined, but the overall grade was considerably lower than that of the Sunnyside system.

2. Sunnyside

The five orebodies which comprised this system strike and dip approximately parallel to the Nickel Plate system and were located along a 2,000 foot length of the eastern edge of the zone of skarn altgration, with approximately 400 feet of non-productive ground between the individual shoots. These orebodies were relatively small but high grade, the largest being Sunnyside No. 2 which produced some 100,000 tons, grading 1 ounce of gold per ton. The productive horizons were approximately 500 feet stratigraphically below those of the Nickel Plate system and immediately above the upper contact of the Sunnyside Limestone, which is the lowest main member of the Nickel Plate Formation.

Each of the orebodies was closely related to northwesterly trending anticlines or synclines, with attendant faulting and shearing. A diorite porphyry sill, common to each, overlay the orebodies. The intersection of steeply dipping porphyry dykes with intermediate sills localized ore shoots in the Sunnyside No. 4½. The Sunnyside No's 2 and 3 orebodies were cut off by a steeply dipping northeast striking fault.

3. Bulldog

This area is about 400 feet south of the Sunnyside No. 1 and occurs in the same stratigraphic horizon and therefore may be classified as the southern limit of ore occurrences of the Sunnyside system. The Bulldog, however, also occupies the same updip extension of the horizons in which the copper and gold mineralized zones on the Warhorse and Kingston are located, and may, therefore, be considered as the eastern limit of the South Rim Area.

The ore controls are similar to those previously noted. The small ore zone is cut off by a steeply dipping east-west striking fault, similar to that which terminates the Sunnyside No's 2 and 3.

Of particular interest in the Bulldog is the presence of copper mineralization in the workings and the frequent references in diamond drill hole logs to copper mineralization in several separate horizons.

4. South Rim

The area between the Bulldog and Kingston showings is overlain by widespread diorite porphyry. Therefore, structural conditions and controls and the extent of mineralization can only be inferred from work done at intervals over a distance of approximately 4,000 feet. In general, it would appear that, in addition to gold values, there is more copper mineralization present in the South Rim than in the former productive areas of the Nickel Plate and Sunnyside.

The areas of work in the South Rim are as follows:

(a) Rollo

Surface work on scattered mineralized zones associated with a flat-lying thrust fault, and diamond drilling from surface gave inconclusive results. However, copper mineralization has been observed on surface and is noted in diamond drill logs to a depth of 400 feet.

(b) Warhorse

Early surface and shallow underground workings disclosed several zones of mineralized skarn, associated with shearing, folding and diorite porphyry dykes and sills. Chalcopyrite is associated with arsenopyrite and, in most instances, pyrrhotite. Dundee Mines Ltd. drilled eight surface holes in this area in 1964. Five of the holes were largely in diorite porphyry with narrow intersections of skarn. The other holes encountered thicker horizons of skarn and limestone along with diorite porphyry, which was mineralized in part with pyrrhotite, arsenopyrite and chalcopyrite. Gold values, ranging as high as 0.84 ounces of gold per ton over a ten foot core length, were encountered in porphyry, skarn and silicified limestone horizons to a depth of 300 feet. One of the important results of this drilling program was the discovery of a greater than anticipated depth of skarn alteration in the Warhorse area which increases its potential for ore deposition.

(c) Kingston

The mineralized skarn zones in this area were partially explored by six short adits and 15 surface diamond drill holes between elevations 3125 and 3400 feet. When this work was done only gold was considered of importance. However, in all of the drill hole logs, chalcopyrite was noted as accompanying the other usual sulphides, but no samples were assayed for copper. Gold values were generally low and erratic. The mineralized skarn horizon at the Kingston appears to be the same as that at the Warhouse. The intervening 800 feet of ground between them is totally unexplored.

5. Central Zone

Although the central portion of the widespread alteration zone on Nickel Plate Mountain has been unproductive to date, it has only been the subject of a minor proportion of the overall exploration and development. However, the downward and lateral extensions of the structures controlling the Sunnysides and South Rim mineralized zones should extend to this area.

EXPLORATION PROGRAMS UNDER THE DIRECTION OF GIANT MASCOT

1. South Rim

Work carried out since 1967 under the direction of Giant Mascot in the South Rim area has included geophysical studies and diamond drilling of a number of massive sulphide zones located some years previously which occur as windows in the widespread capping of diorite.

Sampling in one of the old adits on the Kingston returned assays for a 50 foot length and 32 foot width of 0.07 ounces gold per ton, 0.78 ounces silver per ton and 1.57% copper. Four diamond drill holes totalling 829 feet tested a zone of massive sulphides down the rake for 150 feet, but this zone appeared to be too small to warrant further work. The drilling in this zone averaged 0 05 ounces of gold per ton, 0.56 ounces of silver per ton and 1.02% copper over a width of nine feet.

The Tiger fracture zone, 1,200 feet by 300 to 600 feet, in which the Warhorse and the northwesterly Rollo surface exposures occur, returned average assays for surface samples in the range of 0.04 ounces of gold per ton, 0.75 ounces of silver per ton and 1.0% copper. Four diamond drill holes totalling 2,078 feet spaced along the strike length of the Tiger fracture zone intersected narrow mineralized skarn zones of similar metal content.

Fourteen underground diamond drill holes totalling 2,319 feet were drilled in the Bulldog zone. The average of all holes was 0.20 ounces of gold per ton, 0.54 ounces of silver per ton and 0.20% copper over a width of 14 feet.

The results of diamond drilling to date in the South Rim area indicate that there is a zone, varying in width from 100 feet to 250 feet on the Kingston, and from 500 feet to 700 feet wide on the Rollo-Warhorse, of altered sediments and diorite dykes and sills which are a potential environment for copper-gold deposition. This South Rim area is traversed by several east-northeast and northwest trending mineralized fracture zones, and, in the area of the Warhorse, folding of the sedimentary horizons is in evidence. All are favourable mineral deposition controls. Two short holes aggregating 503 feet were drilled by the Company in the South Rim area in 1973 to further test the intersections obtained by Dundee in 1964.

2. Nickel Plate

The area surrounding the former productive horizons of the Nickel Plate, both laterally to the north and down dip to the west, received considerable attention underground during the 1970 program. Diamond drill sampling on and below the 1500 Level and wall channel sampling of drifts and stopes on the 1500 Level and above indicated an average grade of 0.39% copper within several skarn horizons over a total tested thickness of approximately 200 feet and 300 feet of strike length. On the basis of limited information from old surface diamond drill holes, the 3750 Level and the Mascot 2700 raise, it may be postulated that the former productive horizons of the Nickel Plate extend down dip for an additional 2,700 feet and the total thickness of these horizons may be in the order of 500 to 600 feet.

Such a down dip extension below the 1500 Level would lie almost entirely in Windfall Canyon, which, although one of the topographically more rugged sections of the property, is believed to represent one of the most favourable exploration areas.

3. Sunnyside

A 1470 foot hole was drilled by the Company in the Sunnyside area in 1973 to gain further geologic information at depth.

4. Central Zone

In the Central Zone the area extending from the Bulldog northwesterly through the Mound, Climax and Copper Cleft claims, which, in part, are the easterly extension of the interesting Princeton area north of the Toronto stock, has been examined on the surface and, where possible, underground.

There is no known concentration of commercial mineralization on the Nickel Plate property.

EXPLORATION POTENTIAL

Major exploration targets at this property include:

(a) the skarn horizons in the South Rim area between the Bulldog and Kingston workings, with special emphasis on the gold-copper indications on the Warhorse claim;

(b) the projected Nickel Plate horizons at depths well below previous exploration in the Central Zone area; and

(c) the projected down dip extension of the main Nickel Plate horizon in the Windfall Canyon area.

NICKEL SYNDICATE

(GIANT EXPLORATIONS LIMITED (N.P.L.) - 50%,
MASCOT COPPER MINES LIMITED (N.P.L.) - 50%)

PROPERTY, DESCRIPTION AND LOCATION

The Nickel Syndicate property adjoins the Giant Nickel Mine on the east and extends to Harrison Lake, some ten miles further to the west. It consists of claims held by location between elevations 600 and 6,600 feet. The topography is rugged and is heavily forest covered at lower elevations. Harrison Hot Springs, which is on Harrison Lake, is ten miles to the south, and Hope is 15 miles to the southeast in a direct line.

ACCESS, CLIMATE AND SERVICES

The property is accessible by twenty miles of improved logging road along the eastern shore of Harrison Lake from Harrison Hot Springs, which is about eight miles by hard surfaced highway north from the Trans-Canada Highway.

Climatic conditions are the same as those at the Giant Nickel Mine.

HISTORY OF THE PROPERTY

The Nickel Syndicate, formed in 1969 by Giant Explorations Limited (N.P.L.), a public company in which Giant Mascot holds a 38% interest, is a joint venture operated by Giant Explorations and Mascot Copper Mines Limited (N.P.L.), a wholly-owned subsidiary of Giant Mascot. The objective of the venture was to conduct an exploration program over an area believed to be underlain by ultrabasic rocks which could host nickel-copper ore bodies. Exploration continued each summer from 1969 to 1972. During 1973 only assessment work was undertaken.

Before the Nickel Syndicate commenced its preliminary prospecting, two copper showings were known in the area, but neither appeared significant, nor in an environment considered to be a host for nickel-copper mineralization.

There has been no mineral production from any part of the Nickel Syndicate property and to date no economic deposits have been discovered.

GEOLOGY

1. Regional

The description of the regional geology has been covered in the Giant Nickel section of this report.

2. Local

The property is underlain by a complex assemblage of ultrabasic and feldspathic rocks, intrusive into the peripheral metamorphic rocks. Although the intrusives predominate over an area eight miles north-south by five miles east-west, remnants of the metamorphics are not uncommon in most areas. Prominent fault structures trending northerly, northwesterly and easterly traverse the area and appear to have some control over the distribution of sulphide mineralization.

Although exploration of the property as a whole is at a very preliminary stage, it is possible to generalize to some extent on geological mineralizing conditions. The northeasterly and central sections of the property, including Area No's 1, 3, 4 and 7, are underlain by rock types very similar to those encountered at the Giant Nickel Mine. In the northwest and southwest sectors, which include Area No's 2, 5 and 6 (formerly 2A), the predominant rock types are highly altered ultrabasics, both pyroxenite and peridotite, some of which are mineralized with fine grained disseminated sulphides in varying amounts.

The ultrabasic rocks exhibit a greater variation than those at the Giant Nickel Mine. There are the usual dark green, almost black, peridotites and pyroxenites found at the Giant Nickel Mine. These range from a bronzititic, brownish-green medium-grained rock through to a hornblendic greenish-black medium to coarse-grained rock, and are sometimes poikilitic. In addition, however, there are rock types peculiar to this property, consisting of highly altered pyroxenite and peridotite which are light greyish-green in colour and are essentially a felted mass of anthophyllite with minor olivine and enstatite.

Hornblendites are common to both the Giant Nickel Mine and the Nickel Syndicate property, but at the latter there is a greater distribution of an intermediate-type basic rock in the form of a fine-grained, grey-green gabbro, some of which shows a poorly developed schistose structure and the presence of hornblende, probably resulting from pressure and shearing.

The feldspathic and metamorphic rocks are almost identical to those described under Giant Nickel Geology.

3. Mineralization

Sulphide mineralization, as pyrrhotite, chalcopyrite, pentlandite and pyrite, has been found in most of the areas examined to date, but not in economic concentrations, and is usually related structurally with one or more of the main faults.

In Area No's 4 and 7, the sulphides occur as disseminated clusters, as lacey mosaics, or as massive mineralization concentrated along shears and fractures. The sulphide mineralization in the altered pyroxenite and peridotite of Area No's 2 and 6 is very different, being a fairly even dissemination over a wide area of generally fine-grained pyrrhotite and pentlandite with negligible chalcopyrite.

EXPLORATION PROGRAMS

A reconnaissance geological, geochemical and prospecting program was carried out in 1969 and the claims were staked on the basis of this work.

In 1970 an airborne magnetometer survey was completed over an 85 square mile area, which included the Syndicate area and, for purposes of comparison, the Giant Nickel Mine. This survey provided information for planning the subsequent programs and for the interpretation of geological formations and structural conditions.

Ground work in 1970, which covered a major portion of the property, consisted of geochemical soil sampling and, where possible, the collection of rock samples along contours at approximately 400 foot elevation differentials and at 200 foot sample intervals. Some 4,000 soil samples were tested for copper, nickel and lead, and 600 rock samples for nickel and copper.

On the basis of this information, additional claims were staked and preliminary geological-geochemical maps were prepared from which the most interesting areas, originally six in number, were selected for detailed examination.

In the 1971 field season the six areas were examined in detail and a seventh area, which was located late in the season, was explored in a preliminary fashion. In all, 102 line miles of surveyed grid were cut which provided control for subsequent geological mapping, geochemical and magnetometer surveying. More than 2,000 soil and 160 rock samples were collected and assayed for nickel and copper. Induced Polarization surveys were carried out over two selected areas for a total of 10.6 line miles. A total of 5,765 feet of surface diamond drilling was completed in four of the areas in low grade nickel and nickel-copper mineralization. In Area No. 6 a zone of mineralized altered pyroxenite was outlined over a horizontal area 2,500 feet by 2,500 feet and a vertical range of 1,600 feet by surface sampling and 2,159 feet of diamond drilling in ten widely spaced holes. Diamond drill core and surface samples taken within this zone yielded an average grade of 0.22% nickel. This mineralization was thought to have possible economic potential but on metallurgical testing by present conventional methods, nickel recoveries were disappointing.

The 1972 program was concentrated on Areas 4 and 7 which cover the major part of a 2,000 foot wide belt of mineralized ultrabasics and diorites extending for at least three miles along the Cogburn Creek Valley. A Turam electromagnetic survey covering a total of seven line miles was conducted over a major portion of Area 4 which had been surveyed by Induced Polarization methods during the 1971 season. Several targets were outlined and two were tested with 1,477 feet of diamond drilling. Although favourable rock types and scattered sulphides were intersected, no concentrations of economic mineralization were found. Other drill targets derived from correlating the results of the geophysical surveys with the information from detailed geological mapping remain to be diamond drilled. A 4.5 line mile surveyed grid established on the north side of Cogburn Creek in Area 4 provided control for geological mapping, geochemical and magnetometer surveys, which disclosed ultrabasic rocks mineralized with sulphides in several sectors that warrant more detailed exploration. In Area 7, a 4.5 line mile grid was established in the lower sector as a base for geological mapping, magnetometer and geochemical surveys and a three line mile Turam electromagnetic survey, all of which were then carried out.

The upper sector of Area 7 was mapped geologically and surveyed geochemically. Two ultrabasic bodies, each approximately 1,200 feet long and several hundred feet wide, showing disseminated sulphide mineralization, were located, as were two Turam anomalies which were subsequently tested by 294 feet of diamond drilling. No economic mineralization was encountered by this limited drilling, but there are other targets in the area that remain to be tested.

In 1973 only a limited program of work was carried out on the western flank of Old Settler Mountain, but no economic mineralization was found.

EXPLORATION POTENTIAL

Areas 4 and 7 are presently considered to be the main areas of interest as detailed grid line mapping has outlined ultramafics favourable to hosting sulphide mineralization.

In Area 4 an irregularly shaped pyroxenite body some 170 to 600 feet wide and more than 1,000 feet long has been outlined. Within this body chalcopyrite, pyrrhotite and pentlandite mineralization is evident and selected samples have assayed as high as 0.8% combined nickel and copper. Diamond drilling in 1971 did not fully test this zone as only one drill hole penetrated it. The last 65 feet of this hole contained over 60 feet of mineralized hornblendic pyroxenite and pyroxenite which assayed some 0.2% nickel and copper.

In Area 7 one ultramafic body of considerable size has been outlined containing widely scattered sulphide nickel and copper mineralization.

PARTICIPATION IN PANARCTIC OILS LTD.

(Giant Mascot Mines Limited holds a 4.484% participation and interest in Panarctic Oils Ltd.)

Giant Mascot is engaging in the search for oil and natural gas through its participation in Panarctic Oils Ltd.

Panarctic is a venture organized as a Canadian Federal Corporation in 1966 by private industry with the participation of the Canadian Federal Government to explore for hydrocarbons in the Canadian Arctic Islands. It is 45 percent owned by the Government, with 19 other shareholders, (mainly Canadian). Of the 19 shareholders from the private sector, the Company is one of four, each of whom holds a 4.484% interest. The only shareholders that have a larger interest are two, who each hold 9.68%.

Six significant gas fields have been discovered in the Arctic Islands since 1969. Of these, five, namely, Drake Point, King Christian, Kristoffer Bay, Hecla and Thor, were found on lands in which Panarctic holds an interest. The first discovery of live oil, made in February, 1974 at Bent Horn, was also made on lands held by Panarctic. The sixth gas field was discovered by Dome Petroleums Limited on lands held by it.

The initial gas discovery by Panarctic was made by the Drake Point L-67 hole on Melville Island in 1969. Two gas blowouts occurred which damaged the surface casing and prevented control of the well, so the K-67A hole was drilled 1,100 feet distant. This hole discovered two gas-bearing sections: 10 million cubic feet per day from a sand encountered at 3,700 feet and 13 million cubic feet per day from another at 4,600 feet. In addition, three other porous zones were intersected below the 9,800 foot level and were indicated to be hydrocarbon-bearing, but attempts to drillstem test them failed. This hole was plugged back at 1,700 feet where a directional hole to intersect the wild L-67 hole was collared. This hole was unsuccessful in contacting L-67 but did intersect the gas strata in the Drake Point sand and is now a capped gas well. Drake Point K-67, located 300 feet west of the L-67 well, was drilled to 3,198 feet, successfully intersecting the wild well which was killed. In 1972 this field was expanded by the discovery of gas in two extension wells, the F-16 well, some six miles southeasterly from the initial

discovery well, and the B-44 well a further six miles to the southeast. Well F-16 yielded an absolute open flow of 265 million cubic feet per day. The second area in which gas has been discovered is on the eastern side of King Christian Island where the D-18 discovery well, drilled in 1970, was abandoned after a blowout at a depth of 2,010 feet. In 1971 a relief well was drilled at the site and the D-18 well killed. This hole was then redirected and continued down to evaluate the gas zone which proved to be a sand reservoir nearly 500 feet thick, with pipeline quality gas containing 96 percent methane. Later in the year the N-06 stepout well, drilled about two miles southeast of the discovery hole, encountered gas in the same horizon. This stepout well is calculated to have an absolute open flow potential of 410 million cubic feet per day, and has actually flowed at sustained rates of up to 183 million cubic feet per day. The third area of gas discovery is at Kristoffer Bay, Ellef Ringnes Island, where the G-06 gas well was drilled in 1971. This well drillstem tested gas at 10 million cubic feet per day. The fourth area is on the Sabine Peninsula, Melville Island, where gas was encountered in the Hecla F-62 well in December 1972 at a depth of 3,160 feet. The absolute open flow potential of this well is 96 million cubic feet per day based on flow rates of up to 45 million cubic feet per day. The stepout I-69 well, was drilled three miles south of the F-62 discovery well and directed out under the ocean at 45 degrees to reach a vertical depth of 3,500 feet. This hole drillstem tested 7.4 million cubic feet per day. The fifth area is on Thor Island where an indication of hydrocarbons was first reported in the P-38 discovery well but the potential of gas was not apparent until the 55 degree H-28 directional hole was drilled some half-mile under the ocean. This well has a confirmed gas flow of 55 million cubic feet per day at a true vertical depth of 3,500 feet. All of these gas fields have been found in the Sverdrup Basin.

In addition, crude oil has been disclosed in drillstem tests at three Panarctic locations. The most recent of these was made early in February 1974 at Bent Horn on Cameron Island. Although on the basis of current information this last discovery does not appear to be commercial, Panarctic is continuing to drill the Bent Horn well to see if there are other oil-bearing strata at depth. In any event, this discovery is important as it is the first recovery of live crude oil from the older Paleozoic formations in the Canadian Arctic Islands. This oil interception, when considered in relation to known oil seeps, bitumen occurrences, and data from geochemical studies, offers real encouragement for the further exploration of the large Paleozoic Basin in the Arctic Islands. Crude oil had been previously disclosed in drillstem tests

by Panarctic in two strata of the Romulus C-42 well on Fosheim Peninsula, Ellesmere Island, which drillstem tested clean crude oil of 28.6 degree A.P.I. gravity and 0.07% sulphur, and in the Thor Island P-38 well near Ellef Ringnes Island. Neither of these discoveries is considered economic at present.

The Paleozoic Basin, in which the Bent Horn showing occurred, is considerably larger than the Sverdrup Basin and is the area which in the early stages of Panarctic exploration was considered to possess the prime exploration potential.

In addition to these oil and gas discoveries on Panarctic lands, Dome Petroleums Limited found gas in its Wallis well on King Christian Island.

The rate at which Panarctic has discovered hydrocarbons and the deliverability of the natural gas wells lend strength to the estimates by the Canadian Petroleum Association as to the potential of major quantities of gas and oil in the high Arctic, and underlines the importance of exploration activities in the area in terms of the present energy crisis. This Association estimated the potential reserves of the Arctic Islands and the Arctic Coastal Plain at 43.5 billion barrels of oil and 261 trillion cubic feet of gas.

Before the gas discovered to date by Panarctic could be regarded as economic, certain threshold reserves for the Canadian Arctic Islands as a whole would have to be discovered and technological problems solved to permit economic marketing by way of a pipeline from the Arctic to Eastern Canada, or such other method as might be feasible.

The amount of oil reserves required for economic marketing would depend on their location. For example, a smaller threshold oil reserve would be required on Ellesmere Island in the Eastern Arctic because that area is generally accessible most of the year by tanker along the west coast of Greenland, whereas, depending on the size of the discovery, a larger threshold would be required for oil discoveries developed on Melville or Bathurst Islands.

There are a number of technical difficulties involved in the exploration and development of oil and natural gas in the high Arctic Islands. However, many have already been overcome by Panarctic and by others working in other areas of the North, such as the North Slope of Alaska, notably Prudhoe Bay, and at Atkinson Point in the Beaufort Peninsula on the north coast of the Canadian Mainland. Oil discoveries at Prudhoe Bay, Atkinson, and Mackenzie Delta have given impetus to the evolution of techniques for the exploration of hydrocarbon reserves in those fields.

To assess the feasibility of facilities for marketing natural gas from the Arctic Islands, Panarctic is a partner with TransCanada Pipelines Limited, Canadian Pacific Investments Limited and Tenneco Oil and Minerals Ltd. in the research, investigation and planning for a natural gas pipeline from the Canadian Arctic Islands. The undertaking is called the Arctic Islands Gas Pipeline Project or simply the "Polar Gas Project". The four companies have experience in gas pipeline transmission, in transportation in general and in Arctic operations. The possibility of delivering Arctic Island gas to markets in Eastern Canada via a 48 inch diameter pipeline extending 3,200 miles from the Sverdrup Basin down the east or west side of Hudson Bay, capable of carrying up to 4.5 billion cubic feet of gas per day, is presently under study.

As of March 31, 1973 Panarctic had interests ranging from 16 to 100 percent in land holdings of approximately 78,400,000 permit acres in the high Arctic Islands on which it is carrying out its exploration programs. The oil and natural gas lands held by Panarctic, which are north of the 71st Parallel, constitute the largest holding in that region. These lands are either held directly by Panarctic under permit or lease, by "farm-in" agreements from other permit holders, or through the Elfex project. As at March 31, 1973 Panarctic held approximately 46,000,000 net permit acres including its own permit lands. Panarctic's holdings, however, were subject as of March 31, 1973 to the right of others to whom Panarctic in turn has granted "farm-outs" to earn up to some 3,800,000 net permit acres by drilling wells on Panarctic lands.

The Elfex project is a joint venture by Panarctic with Tenneco Oil and Minerals Ltd., Columbia Gas Development of Canada Ltd., Norlands Petroleums Limited and Texas Eastern Exploration of Canada Ltd. who, as a group, have formed a partnership with Elf Oil and Exploration and Production of Canada Ltd. known as Elfex & Co. Elf contributed some 11.8 million acres in the Western Arctic on Banks, Prince Patrick and Borden Islands and offshore from them. Commencing January 1, 1973, the Group agreed to contribute, for exploration of the Elfex and Co. partnership land and any other lands which may subsequently be acquired, up to 400 million dollars in a first period and three subsequent optional periods of approximately two years each, the last ending on December 31, 1979. For this contribution the Group would be entitled to receive up to a 32½ percent interest in the partnership, and the gas companies involved will have the priority to negotiate the purchase of any gas developed by the partnership. Under the terms of the partnership the Group, upon the request of Elf, will provide up to 20 million dollars for drilling delineation gas wells and up to 75 million dollars for drilling development gas wells.

The Panarctic lands are subject to certain net profits interests in the aggregate amount of 10 percent. These interests entitle the holders to participation, after the recoupment by Panarctic of all its exploration and development costs, in the proceeds of production on the basis of operating profit at the wellhead without deduction for costs, excluding capital costs, beyond that point.

Of the total exploration commitment to date by the government, participants and certain of the original "farmors" of some $126,000,000, approximately $85,000,000 was expended by February 28, 1974. In addition, substantial sums of money have been and will be expended on Panarctic lands by companies to whom Panarctic has granted "farm-outs". As an example, the budget for the Fourth Panarctic Expansion program, to which in 1972 the participants committed a sum of 25 million dollars, amounted to some 43 million dollars, the difference being put up by third parties.

In addition, Panarctic has an arrangement for substantial expenditures to be made on an expanded gas exploration program by a partnership of four gas transmission companies and Panarctic. In 1971, Panarctic entered into a gas development agreement with Tenneco Oil & Minerals Ltd., Columbia Gas Development of Canada Ltd., Texas Eastern Canada Ltd. and Northern Natural Gas Company. Under this partnership agreement the gas company partnership agreed to provide up to $75,000,000 for drilling operations on Panarctic

lands (which now includes the lands held by Elfex & Co.) during a five year period ending in 1976. Of these funds, $50,000,000 was to be used exclusively for exploratory drilling and up to $25,000,000 was to be furnished for delineation drilling if required to confirm the extent of gas reserves. After 1976 the agreement may be extended annually for up to a further five years upon the gas company partners committing to spend $10,000,000 in exploratory drilling and up to $5,000,000 on such delineation drilling for each year of extension. This agreement also contemplates that the gas company partners will undertake the drilling of development wells if a commercial quantity of gas is indicated and a market is assured. If and when commercial production commences, the gas company partners will be entitled to recover their investment, together with interest thereon at the maximum rate of 7% per annum on the unrecovered balance from time to time, out of 25% of the net revenue at the wellhead from the sale of gas to the gas company partners or, if gas is sold to others, out of 33 1/3% of the net gas revenues, the remainder of such revenues accruing solely to Panarctic. If a well drilled by the gas company partnership results in the discovery of an oil field, the gas company partners will be entitled to receive 10% of the net wellhead oil revenue from wells drilled by such partners until the gas company partners have recouped all their expenditures under the agreement. After the final repayment of their investment, the gas company partners will retain the equivalent of a total 1% working interest in oil reserves established by their drilling of gas reserves. By agreement the gas company partners will also have the right right to purchase, at a price or prices to be negotiated at that time, any gas developed under the agreement and approved for export from Canada as surplus to Canadian requirements. This right will subsist for a period of [illegible] years after the initial five year term of the agreement or any extension thereof. Interest on the expenditures by the gas company partners will cease to accrue after the expiration of the right to purchase if arrangements for the marketing of gas are not in progress during the term or any extension thereof.

Notwithstanding the substantial expenditures assumed by the companies to whom it has granted "farm-outs" and by the gas company partnership, Panarctic has indicated that it does not intend to reduce its own rate of expenditure, but, if anything, to accelerate it. One prime objective of such an accelerated program is to complete as far as possible an assessment of the potential of Panarctic's lands so that an intelligent selection of leases may be made from the permits now held before the cost of holding such lands becomes excessive. Approximately one-third of the

permits which Panarctic holds or in which it has an interest will expire in 1975. Leases of a portion of the lands must be selected before the expiration of the permits and will be subject to royalties to the Canadian Federal Government in varying amounts.

The funds contributed by the participants to Panarctic were raised by an initial subscription of 20 million dollars, followed by a series of Expansion Agreements. A Fifth Expansion Agreement to raise an amount of 25 million dollars by the issuance of common shares of Panarctic at the price of $12.50 per share is presently proposed.

Panarctic has a capitalization of 40 million shares and after the allotment of the shares under the Fifth Expansion Agreement, the issued capital will total 37,360,100 shares.

The manner in which Panarctic has been financed is such that most of the participants, who are mainly involved in the mineral and hydrocarbon industry, have been in a position to deduct from their income for Canadian Income Tax purposes their pro rata share of the exploration and drilling expenses incurred on Panarctic lands. Under the terms of the agreements between Panarctic, the participants and the Canadian Federal Government, and under the Income Tax Act of Canada, Panarctic will not be entitled to any deduction from its income for any amounts expended on its land by the participants and has agreed to waive a claim for deductions equivalent in value to amounts subscribed for shares by the Canadian Federal Government.

A nominee of Giant Mascot is one of 21 Directors of Panarctic.

No new shares of Panarctic may be issued without the prior approval of the holders of 60 percent of the shares then entitled to vote (including the shares held by the Canadian Federal Government so long as it has at least a 10% interest). No outstanding shares of Panarctic may be transferred without like approval, except in the case of transfers between affiliates and among certain designated groups of corporate shareholders of Panarctic.

Giant Mascot acquired its interest in Panarctic in 1970 by purchasing all the shares of Eagle Ridge Petroleum Ltd., an Alberta corporation, the principal asset of which was a 4.52% interest in Panarctic. The shares of Eagle Ridge were purchased from Cemp Investments Ltd. for $1,000,000 in cash and 3,000,000 shares of Giant Mascot. The shares of Panarctic held by Eagle Ridge at the time of its acquisition by Giant Mascot included shares with respect to which there remained an exploration commitment of some $906,000 by way of contributions not previously called for under the Second Expansion Agreement. This amount was subsequently contributed by Giant Mascot on behalf of Eagle Ridge. The Panarctic shares held by Eagle Ridge were transferred to Giant Mascot in 1971 and all subsequent expansion agreements with Panarctic were entered into directly by Giant Mascot.

In August 1973 the name of Eagle Ridge Petroleum Ltd. was changed to Mascot Mines & Petroleums Limited. This company, which has exploration and development write-offs of some 2.3 million dollars as a result of its participation in Panarctic, holds the Motherlode-Greyhound property, Greenwood, B.C., and a 1.999 percent interest in Alberta Crown Petroleum and Natural Gas Lease No. 103083 and 103084 covering lands included in the Pembina Cardium Unit No. 8. It derives some $1,250 per annum from that unit interest.


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This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.
ARCTIC OCEAN
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PRINCE PATRICK
M'CLURE STRAIT
VISCOUNT
SOUND
BARROW STRAIT
CANADIAN ARCTIC ISLANDS
PANARCTIC HOLDINGS
PANARCTIC
FARMED OUT
Location/Drilling
Oil Well
Gas Well
Abandoned
SEA LEVEL
200 METRES
500 METRES
SCALE IN MILES

GIANT EXPLORATIONS LIMITED (N.P.L.)

Giant Mascot has a 28% interest in Giant Explorations Limited (N.P.L.), a public British Columbia company, with an authorized capital of 5,000,000 shares of which 3,319,224 shares are issued. Giant Explorations was formed by the Company in 1965 with the intent that it would act as the Company's exploration affiliate and would concern itself with primary exploration projects. The Company manages Giant Explorations, which is listed on the Vancouver Stock Exchange, and effectively controls it.

In addition to its undivided 50% interest in the Nickel Syndicate property, Giant Explorations owns or holds under option the Nahwitti group of mineral claims situate near Port Hardy on northern Vancouver Island, B.C., which have a number of galena (lead) sphalerite (zinc) and magnetite (iron) -chalcopyrite (copper) showings. No commercial mineralization has been found on this property. In addition, Giant Explorations has recently acquired exploration rights in respect of four sections of land, comprising 64 claims in all, in the Carrot River area, some 110 miles east of Prince Albert. These claims lie in an area where anomalous readings of radioactivity were discovered in an airborne spectrometer survey carried out by the Geological Survey of Canada.

Giant Explorations is presently investigating various methods of financing to carry out exploration on its own holdings and its share of the Nickel Syndicate and to continue its policy of property investigations, examinations, and acquisitions in Canada and the United States.

L.P. Starck, P.Eng.
President and Managing Director
GIANT MASCOT MINES LIMITED