Box 4

Silbak Premier

Compendium of Reports

1981

SILBAK-PREMIER MINES LTD. BY: J. GAMMON
August 10, 1981

104-B-1
B.C.

6415 - 64th Street, Delta, B.C.

INTER-OFFICE MEMORANDUM

DATE: August 10, 1981

TO: C. M. H. Jennings

COPIES TO:

FROM: J. B. Gammon

SUBJECT: British Silbak Premier Mines Limited

INTRODUCTION

The opportunity exists for Falconbridge to acquire an interest in this gold-silver-base metals property, located on the Alaska border near Stewart, B. C. This interest could be directly in the property or on an equity basis through taking down shares of British Silbak.

This summary of the current situation is based on conversations held on 2/8 with Dr. R. H. Seraphim, consulting geologist with prior experience on the property, on 5/8 with Dr. A. P. Fawley, consulting geologist and Director of British Silbak and on 6/8 with Mr. Bernard J. Ouellette, President and Chief Executive Officer of British Silbak.

Mr. Ouellette provided copies of the 1980 British Silbak Annual Report, Dr. Seraphim's report of March 8th 1979, Derry, Mitchener and Booth reports dated August 1st 1980, December 5th 1980 and May 26th 1981, Dianne and Ulrich Kretschmar's report of July 1981 and Schulz International's report of January 1981 all of which are appended to this memorandum.

SYNOPSIS OF THE PROPERTY

Mineralization was discovered in 1910 and the property has been in intermittant operation until 1968. The current property holding consists of a consolidation of 87 Crown Grants totalling 1202.70 hectares in area. Total production has been estimated at 4.7 million tons grading 0.384 oz/t Au, 8.03 oz/ton Ag, and better than 5.5% combined Pb and Zn.

Extensive underground development has taken place, there are approximately 46 miles of underground workings in 13 levels and sub-levels, 5 short internal shafts and several vertical ore passes extending over a horizontal distance of 9000 ft. and a vertical range of 1650 feet. There are 7 adits of which 4 were in recent use. The "Glory Hole" where the ore was stoped to the surface, is about 600 feet long by 200 feet wide. In excess of 400,000 feet of drilling has been conducted. Most of the records of this work are stored in Stewart.

DEVELOPMENTS ON THE PROPERTY 1953 - 1971

1953	Property closed due to low metal prices.
1956	Mine and Mill were rehabilitated but fire destroyed the mill after a few weeks of operation.
1959	Company records showed no ore reserve above the 2 level so the upper levels of the mine were thrown open to lease. One of the lessees discovered a lens in the south wall of the Glory Hole which totalled 2736 tons of 6.8 oz/t Au, 144 oz/ton Ag and 9.8% combined Pb-Zn. Subsequent study show that the 1 level geological plan shows two parallel ore zones running into a fault. On the other side of the fault only one ore zone was mined, the other, offset only 40 feet, became the

lesee's discovery. This emphasises the importance of studying the existing data thoroughly and paying close attention to structural controls.

1961 — The owners were able to have the upper level leases terminated and continued to ship high grade ore. Diamond drilling below 1 level showed the extension of high grade and justified sufficient feed for a 100 t.p.d. mill.

1964 - 68 — A second hand mill of approximately 100 t.p.d. capacity was installed and operated.

1971 — Granby carried out geophysics and drilled some mineralized targets in an area distant from the old mine workings.

EXPLORATION POTENTIAL OF THE PROPERTY

Present management have conducted a surface geological, geochemical and drilling programme supervised by the Kretschmars. They have also carried out an underground evaluation, rehabilitation and drilling programme organized by Derry, Mitchener and Booth. Tailings disposal questions have been considered by Schultz International Ltd. Details of these programmes are in the attached reports. The following possibilities are currently of interest.

A) New Hypothesis of Genesis

The deposit has classically been considered to be a shear zone controlled hyrothermal replacement deposit. Dr. Seraphim, who earlier subscribed to this view, has reevaluated the property from a volcanogenic point of view. The Kretschmars' also subscribe to the volcaniogenic hypothesis. A hanging wall purple tuff unit is completely unaltered or mineralized and would be considered as a post mineralization cap rock.

If this theory has any merit then it opens up possibilities for exploring for lateral sulphide and gold-silver accummulations peripheral to the main vent. Seraphim feels that his ideas in this respect have not been followed up and warrant some exploratory drilling for previously unsuspected major zones.

To throw light on this possibility would require a thorough job of three-dimensional mine geology re-evaluation in relation to topography to generate and define target areas.

B) Large Tonnage Potential

Various calculations have suggested the presence of 100 million to 240 million tons of ore grading on the order of 0.01 oz/ton Au and 0.5 ozs/ton Ag. Positive aspects of this potential are the most recent development drilling on 6 level by the previous operators. There flat holes, mostly over 1000 feet in length were assayed for silver only and encountered large, low grade intersections. Typical assays were 0.61 ozs Ag/1000 feet; 0.375 oz Ag/1000 feet and 0.43 ozs Ag/500 feet. The mineralized area would be 2400 feet X 800 feet with a back height of 1300 feet to surface. The presence of previously undetected high grade bonanza zones similar to the "lessees lens" on the old Glory Hole would make very nice "sweeteners" to such an operation.

The main drawbacks are dealing with the complexity of the old workings in developing a mining plan, metallurgical problems arising from old timber and other debris being incorporated in a bulk mining operation and tailings disposal. Some thought has been given to the latter problem in the Schultz report.

C) Underground Reserves and Targets

Seraphim has listed mineralized intercepts from previous underground drilling. Some of this mineralization may have been mined away by previous operators but stope outlines below 4 level ore can be compared to these intersections to see if they still represent worth-while targets.

Derry, Mitchener and Booth have supervised the rehabilitation of 6 Level and the initial drilling of some targets in the 602 winze area which were evidently in the process of being developed at the time the mine closed down due to the fire in the mill.

In the Northern Light mine shaft area two ore zones are outlined close to the shaft totallying 66,000 tons of 0.08 oz/ton Au, 2.01 oz/ton Ag, 4.2 % Pb and 6.1 % Zn. These are due to be drilled from underground in the immediate future when the rehabilitation of 6 Level reaches this area. In the meantime surface drilling of the Northern Light zone has commenced.

D) Ore Dumps

More than 50,000 tons of visibly mineralized material is present in ore dumps resulting from development muck at the portal of various adits. This should be evaulated as a source of mill feed.

E) Surface Targets

The Kretschmars' have carefully mapped the property and carried out a geochemical survey. This work has resulted in the discovery of several new targets which have only been partially drill tested. Ore grade intersections were obtained in the Picton, Cascade Falls and Buckham areas all of which deserve detailed follow up programmes.

The south and east side of the Glory Hole was mapped in detail (1" = 40') and tested by a fence of 7 drill holes. These show that the previous mine operators left 10 to 20 feet of mineralization on the stope footwalls which is mining grade at present metal prices. Material grading better than 0.04 oz Au/ton is estimated to form an easily accessible block of 300,000 tons on the south wall with possibilities for doubting this tonnage based on geochemical and drilling indications.

BACKGROUND ON CURRENT MANAGEMENT

Controlling interest in the property was held by Selukwe Mining Company of London, England as a result of acquisitions and Mergers in the 1930's. Stockbroker Arthur Bryant of London represented this group as s Director and Officer of British Silbak Premier Mines Ltd. since 1945.

A "roughneck" in Stewart by the name of Davis saw the potential in the property and brought in Ouellette to help raise the capital to acquire the property from the British owners. Ouellette has a varied history as a promoter of mining and oil ventures. Apparently Davis and Ouellette fell out and Ouelletter went to London alone in January 1978 to commence negotications with the British owners.

Selukwe Mining sold control to Mining Investment Corporation of London. Min corp apparently has a background of picking up coal properties in the UK and then selling them to the National Coal Board. By July 1979 Ouellette had concluded a deal with Mincorp on behalf of his investor group in Canada.

Al Fawley and Vic Bjorkman were put on the Board to represent mining expertise, Bryant was named Honorary Chairman. Henry Block (of Block Bros Real Estate) who headed the 14 man investor group, became Chairman, Ouellette was named President and CEO. The investor group are reputed to belong to a fundamentalist Christian organization and prayer meetings form an integral portion of corporate organization and decisions.

At the time of acquisition 562,000 shares were issued of an authorized capital of 5 million. The investor group took down 1,135,788 shares at $.60 each and an additional 300,000 shares at $2.50 each netting the treasury (after expenses) a total of $1,374,869. A voting trust has been established between the original 14 investors involving 1,190,435 shares leaving 807,353 free trading shares in the hands of 6,300 shareholders.

CURRENT FINANCIAL SITUATION

Some $3 million has been spent on the property to date, including approximately $1 million in equipment at cost. The company currently owes $1.4 million to banks and creditors.

When gold and silver ounces were riding high the stock reached a peak of $11,50/share. A firm underwriting was arranged with Canarim Investments for 1 million shares at $10/share. Delays in report preparation and compliance with VSE regulations saw the price of the stock steadily falling. The underwriting offer was withdrawn. The stock currently trades in the $2.80 - $3.00 range.

To cover the Companies' indetedness the "investor group" is procedding with a debenture issue, using the property as security, to raise $2.4 million to pay off the debts and provide $1 million in working capital. The debentures will be convertible to shares at $3.00 and will carry a warrant exercisable at $3.40. This would take another 1.2 million shares out of the treasury. This deal is scheduled to go through by September 20th and in the meanwhile Ouellette has initiated discussions with possible partners who would provide alternative financing possibilities.

He is known to have talked to Western Mines and Homestake in addition to Falconbridge.

POSSIBLE FNM PARTICIPATION

In preliminary discussions he was given the indication that Falconbridge would be unlikely to agree to any deal which:

(a) involved paying front-end money to get in on the project.
(b) involved payment of any debts incurred before FNM acquired an interest.
(c) implied any restrictions on FNM's sole right to administer and manage the technical aspects of the programme.

(d) involved committments to retain personnel not considered suitable by FNM for any reason.
(e) did not allow a sufficiently flexible time period for adequate study of the existing records prior to committment to any on-site programme.
(f) involved a restrictive time table on expenditure committments.

Apparently none of the above would cause problems. Ouellette briefly outlined two approaches be considered feasible.

(a) Acquisition by FNM of an Equity Interest in British Silbak Premier

Shares would be taken down in return for expenditures until a 50% interest has been earned. The "investor group" would then have the option of matching expenditures or being progressively watered down. Obvious points to be negotiated are the price at which shares would be taken down and the dilution process of the "investor group". Fawley indicated that negtiations with Western Mines have been based on an intial $2.5 million expenditure in return for treasury shares at $3.50/share. For illustrative purposes during my talk with Ouellette I mentioned $2.00/share without eliciting any comment. He mentioned that the investor group would probably strongly resist being diluted below 20% of the equity.

(b) Acquisition by FNM of a direct interest in all or part of the property on a joint venture basis with Silbak

Ouellette indicated that this would require "more ante" than the share acquisition approach.

CONCLUSIONS

Despite the long and productive history of the property exploration targets of merit still exist. If Seraphim is right concealed zones equivalent to previously discovered ore exist, and can be discovered, as a result of re-evaluation using the volcanogenic hypothesis. This would represent a most profitable situation but must be considered a long shot.

Evaluation of the bulk mining approach would require a detailed assessment by our Development Group to determine its feasibility.

It appears certain that small zones of ore can be developed both underground and at surface, this kind of target alone would probably not warrant our involvement.

J. B. Gammon

JBG:ik

British Silbak Premier Mines Ltd.

1980
ANNUAL REPORT

B R I T I S H S I L B A K P R E M I E R M I N E S L T D.

Listed Vancouver Curb Exchange

Symbol - B.S.K.

OFFICERS AND DIRECTORS

Henry John Block, Director and Chairman of the Board
Bernard J. Ouellette, Director and Chief Executive Officer
Marvin P. Kehler, Director and Secretary
Arthur E. Bryant, Director and Honorary Chairman
Allan P. Fawley, Ph.D., P.Eng. - Director
Victor B. Bjorkman, P. Eng. - Director
Edmund H. Talbot, P. Eng. - Director

CONSULTING ENGINEER

Roy W. Phendler, P. Eng.
7360 De Courcy Crescent,
Richmond, B.C. Canada

CONTRACTORS GEOLOGISTS

Dianne Kretschmar, Geologist
and Ulrich Kretschmar, Ph.D. Geologist
Seven Bridge, Ontario Canada

SOLICITORS, and REGISTERED OFFICE

Barbeau, McKercher, Collingwood & Hanna
24th Floor, Oceanic Plaza,
1066 West Hastings Street,
Vancouver, B.C. Canada

AUDITORS

Thorne Riddell & Co., Chartered Accountants
Board of Trade Building,
1177 West Hastings Street,
Vancouver, B.C. Canada

BANKER

Canadian Imperial Bank of Commerce,
1036 West Georgia Street,
Vancouver, B.C. Canada

REGISTRAR AND TRANSFER AGENT

Canada Permanent Trust Company,
Pacific Centre North,
701 West Georgia Street,
Vancouver, B.C. Canada

BUSINESS OFFICE

2470 Oceanic Plaza
1066 West Hastings Street,
Vancouver, B.C. Canada
Telephone: (604) 682-7679
Telex: 04-51298
Telecopier: 688-5338

MINE OFFICE

Box 100, Stewart, B.C.
Telephone: 636-2271

CHAIRMAN'S REPORT TO THE SHAREHOLDERS

Significant material changes have taken place since the last annual meeting of your company, British Silbak Premier Mines Ltd. As Chairman of the Board of Directors, I am pleased to report on these changes.

All the reorganization of British Silbak Premier and the listing of the company on the Vancouver Curb Exchange is now completed. Due to interest in our company from many parts in North America and abroad, other stock exchange services are being considered.

The interest in your company is due to the productive history which is public information available to all investors.

Some brief historical background....

IN 1979, A GROUP OF CANADIAN BUSINESS EXECUTIVES with various expertise joined together with Mr. Bernard Ouellette to acquire controlling interest in British Silbak Premier Mines Ltd. from Mining Investment Corporation of London, England. Funds were inserted to immediately place the company into a sound financial position and embark upon an exploration program. (See President's report).

1910 - 1916: Gold and Silver ore was discovered in 1910 in the area and some of the principal claims were staked. Cascade Falls Syndicate was formed and later reorganized as Salmon Bear River Company. Tunnel work was done on the No. 1 and No. 2 levels.

1916 - 1919: Pat Daly leased the property, shipped a few tons of high grade and after an inspection by R. K. Neill, the exploration group of Trites, Wood and Wilson bonded the property. Bonanza high grade was discovered and shipments made to Tacoma.

1919: In the fall of 1919, the American Smelting and Refining Co m pany acquired a 52% interest in the property, for $1,000,000 (One Million Dollars) cash from Trites, Wood and Wilson. During 1919 to 1920, shipments of 1,287 tons of crude ore were made from the Premier Mine, which averaged 4.24 oz. gold and 141 oz. silver per ton. Milling operations started in 1924.

1924: Shipment of ore from the B.C. Silver started, and up to 1927 totalled 1,103 tons averaging 1.92 oz. gold per ton and 76 oz. silver per ton.

1935: Silbak Premier Mines was formed to acquire the Premier Gold Mine, B.C. Silver, and Sebakwe Mines. Selukwe Mining Company of London, England, controlled the latter two properties and upon the merger, received a substantial interest in Silbak Premier Mines.

1953: Silbak Premier closed down due to low base metal prices.

1956: The Silbak Premier Mine and mill were rehabilitated, but fire destroyed the mill after only a few weeks of operation.

1958: The Premier Border Group of eleven Crown Granted mineral claims were purchased outright.

The upper levels of the mine were "thrown open" to lease, as the company records showed no reserves above 2 level. On September 23, 1959 a one year lease was granted on a part of the upper levels of the mine. The lessees shipped ore during the fall of 1959 and summer of 1960.

1961: Shipments of high grade were continued by the company upon the termination of the lease, and diamond drilling located the extension of high grade below 1 level and in addition indicated sufficient mill feed ore, which together with the older reserves in the mine, justified building a mill of about 100 tons per day capacity.

1964: A second-hand mill of approximately 100 tons capacity was installed on the property and operated until 1968.

1971: Geophysical exploration by Granby led to discovery of some mineralization that was not extended in the continued drilling. Most of the drilling was in an area distant from the old mine workings.

THE CHANGES IN MATERIAL FACTS

* Changes in the ownership of the controlling interest and management of your company.

* Changes in issued capital, * appointment of a chief executive officer, * incentive share option to directors, * changes in accounting method in keeping with the new direction of your company specifically in the area of redevelopment of the Stewart Properties, * and the substantial increase required in working capital. All changes have been submitted and reported in the statement of material facts to the Vancouver Curb Exchange on April 1, 1980 and also in the information circular accompanying the notice calling the 1980 annual meeting.

In 1979, the Company issued a total of 1,435,788 additional treasury shares to raise capital which was done through two separate issues. The total shares issued at the time of this report is 1,997,788 out of 5,000,000 share capital authorized. The first issue was made by way of offering to the shareholders in British Columbia (according to the British Columbia Securities Act) 1,135,788 shares netting the Treasury $681,483.00 and a second issued on the best effort basis was successfully made on April 1st and 300,000 shares netted the Treasury $693,396.50 for a total cash of $1,374,869.50.

A voting trust has been established between the original 14 investors and involving 1,190,435 shares leaving 807,353 free trading shares in the hands of approximately 6,300 shareholders.

Mr. Bernard Ouellette has also been asked to act as President and General Manager while the executives are searching for a person with the type of expertise that would enable him to assume the position of General Manager. The Board of Directors are very aware of the responsibilities involved in this position and will conscientiously strive to obtain the best talent available.

The long term planning for the Company's future is now being developed some of which is already in progress. The fluctuating metal prices make planning and taking specific action difficult. I am, however, pleased to report that a number of options are available and with the assistance of additional geological information now being gathered, steps of progress during 1980 will be made to place the property into production.

Financially, your company is sound and capable of undertaking an aggressive development program.

Respectfully submitted on behalf
of the Board of Directors

Henry J. Block
Chairman of the Board

Vancouver, B.C. April 21, 1980.

President's Report to the Shareholders

The first step in bringing the British Silbak Premier Mines' property into production was undertaken in 1979 and will be carried through the summer and winter of 1980. In addition to the known ore reserves, the 1979 program indicates that there is good potential south of the Glory Hole for the occurrence of more ore. Early production figures show that bonanza ore may grade 100 oz/t silver and 2.25 oz/t gold in small bodies of 10,000 to 20,000 tons (possible dimensions 90 feet x 90 feet, 12 to 18 feet wide) such a bonanza will be valued at some $12 million at $350.00 per oz for gold and $15.00 per oz for silver. A summary of physical work, summer and fall of 1979 is enclosed in the Appendix to this report.

In order to acquaint you with the British Silbak Premier's property and to help you to understand the meaning of our program, a series of maps, sketches, Past Production tables and Assay Results are appended hereto.

The Company objectives are well defined and consist of finding a large low-grade ore deposit from known and unknown minable ore. Also to find the shape, the size and the value of say 50 million tons of ore having a commercial value in which rich pockets or bonanza ore could be found and perhaps mined and shipped direct to smelter.

Steps are now being taken to get the present mill into operation for metallurgical testing and to operate until sufficient economical grade ore is developed to warrant the construction of a new mill with a potential and capacity to meet the requirements of the property.

A $750,000.00 program has been recommended and approved to carry out the preliminary work for the summer and fall of 1980. It consists of re-evaluation of data, rehabilitation of 6 level, 7000 feet of surface and underground diamond drilling, bulk sampling, metallurgical testing, mill and tailings disposal study, service road construction, investigating known ore mineralization, topographic maping, line cutting, geophysical, geological work and the purchasing of the necessary equipment and supplies to maintain an efficient operation.

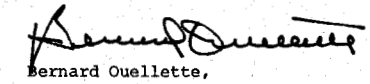
Most of the data, diamond drill logs for some 300,000 feet of drilling, assay plans and cross sections of the mines' workings are avilable and in good condition. The work in assembling the information on overlaid plastic maps, one showing the silver assays and the other showing gold assays, have been in progress since January and will be completed by May 31, 1980 - what was considered non economical at $35.00 oz for gold and $1.60 oz for silver under old time underground mining method, have become very attractive at the current price of metals under block caving methods or an open pit operation.

In May a crew will be hired to begin the rehabilitation of the #6 level so access may be gained to several sections of the mine and prepared for some underground diamond drilling to verify old drilling results and to explore for new ore if thought feasible. A minimum of 5000 feet using N.Q. wireline diamond drilling will be carried out and scheduled to start at the end of July, when the line cutting, some geological and geophysical work is completed.

At the time of writing this report a professional line cutting crew has been hired, the services of Dianne and Ulrich Kretschmar have been retained to map the geology and log drill core. A diamond drill has been purchased, a drilling head runner foreman hired and experienced project managers interviewed.

You may look forward to an excellent productive summer and positive results to be announced as they become available.

Respectfully yours,
on behalf of the Board of Directors



Bernard Ouellette,
President and Chief Executive Officer

Vancouver, B.C. April 21, 1980

BRITISH SILBAK PREMIER MINES LTD.

Appendix to Chairman

and

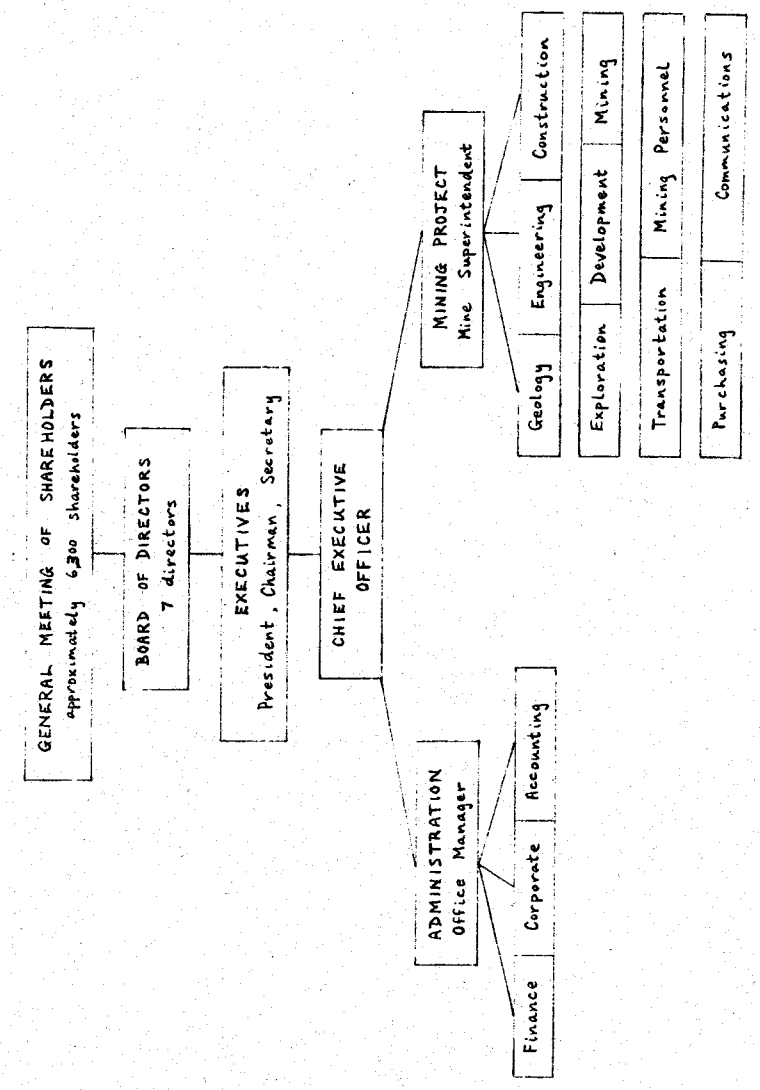
Presidents Reports

April 21, 1980

1. Organization Chart.
2. Directors Short Biographies.
3. Location Maps.
4. Claim Map.
5. Sketch of a vent in volcanogenic deposit.
6. Plan of mined section on south wall of Glory Hole with hypothetical U shape configuration.
7. Configuration of Premier ore bodies.
8. Plan of configured ore zone comparison volcanogenic deposits pit at Buttle Lake, British Columbia, Canada.
9. Sample location map, Pictou area.
10. Sample location map, Prospect Tunnel.
11. Summary physical work summer fall, 1979 and assay results.
12. Cost estimates 1980 program.
13. Production and dividends - 1918 - 1968.
14. Mineralization - Mineral reserves and possibilities.

BRITISH SILBAK PREMIER MINES LTD.

ORGANIZATION CHART



B R I T I S H S I L B A K P R E M I E R M I N E S L T D.

Director's Short Biographies

Henry J. Block
Chairman of the Board

Mr. Block is past President of Block Bros. Industries Ltd. and was the founder of this Corporation 25 years ago. The Company's assets grew to exceed $200 million and sales volume average over 100 million each month. He is also Director or President of numerous corporations including British Holdings Ltd. Born in Borden, Saskatchewan, Canada on May 28,1926, has been educated in British Columbia and holds a Real Estate Institute of British Columbia's designation. Mr. Block is widely known as a successful businessman, specializing in real estate investments, property management, land development and financing in Canada and abroad. He is an active business executive in community affairs in Canada and the United States.

Mr. Bernard J. Ouellette
President and Chief Executive Officer

Mr. Ouellette was born in Timmins, Ontario, Canada on May 31, 1927 - grew up in the Rouyn Noranda Quebec Mining District - Mr. Ouellette is licenced in Agricultural Science from Ville-Marie College. He specialized in cooperative farming, forestry and municipal accounting. In 1954 he established himself in Vancouver, British Columbia where he operated a successful mining oriented public accounting practice until 1968. Since then Mr. Ouellette has successfully managed several mining and exploration programs, including the management of the diamond drilling of the present Cypress Anvil Ore body in Faro, Yukon Territory. Mr. Ouellette has spend the last 12 years of his life in the financing and management of junior Oil and Gas; and mining companies in Saskatchewan, Alberta, British Columbia, the Yukon Territory and Mexico. Mr. Ouellette has been the originator and has been responsible for successfully repatriating the controlling interest in British Silbak from England to Canada.

Marvin P. Kehler
Secretary

Mr. Kehler was born in Altona, Manitoba, Canada March 16, 1938. He has resided in British Columbia since 1952. He is a Director of several corporations. He is actively involved in companies servicing the mining and resource industry. Mr. Kehler is, with his partners, a successful land developer; building housing and office complexes. He is a Director of Trinity Western College.

Allan P. Fawley, Ph.D., P. Eng.

Born in Winnipeg, Manitoba, 1912. He graduated from the University of British Columbia with a B.A. Sc. in Mining Engineering. He began his geological career with Geological Survey of Canada and was employed by International Nickel Co. prior to the war. He served in the Royal Canadian Air Force for five years in Europe and Africa. He obtained his M. Sc. in Geology from Queen's University, Kingston, Ontario in 1946. He was Teaching Assistant in Geology, University of California, Los Angeles for 2 years and received his Ph. D. in Geology there in 1948. He has been involved with various mining companies throughout Canada, South America and Africa, both as a geologist engineer and as a consultant.

Edmund H. Talbot, P. Eng.

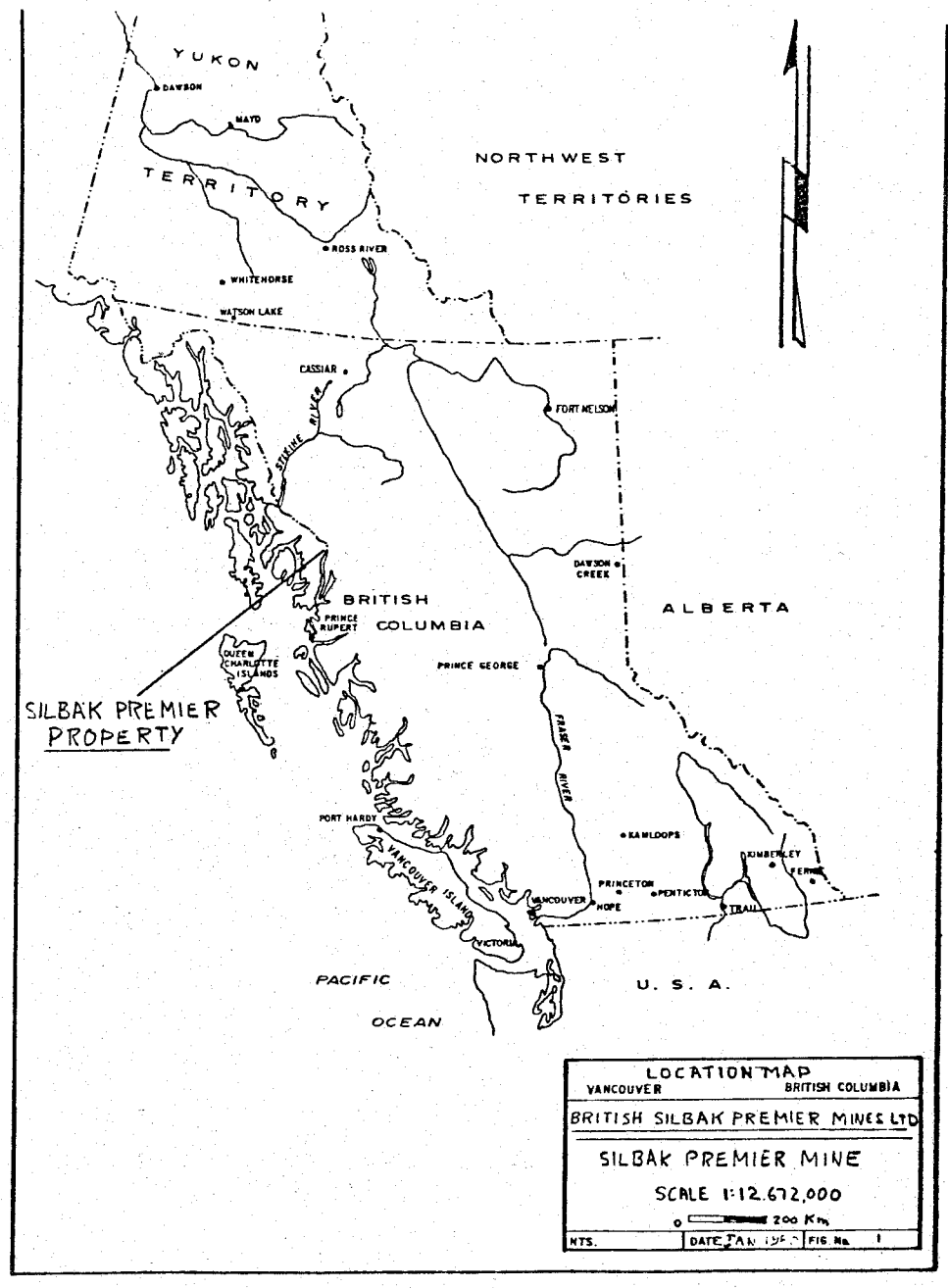
Born in Calgary, Alberta, Canada on September 3, 1927 - he graduated from the University of British Columbia in 1951. He is a Civil Engineer and has assumeed numerous responsibilities in designing and construction of roads, dams, bridges, pulp mills, wharves, industrial plants, commercial buildings and multiple housing. During the last ten years he has headed his own firm of consultants in engineering and architecture. Mr. Talbot is on the Board of Directors of several corporations.

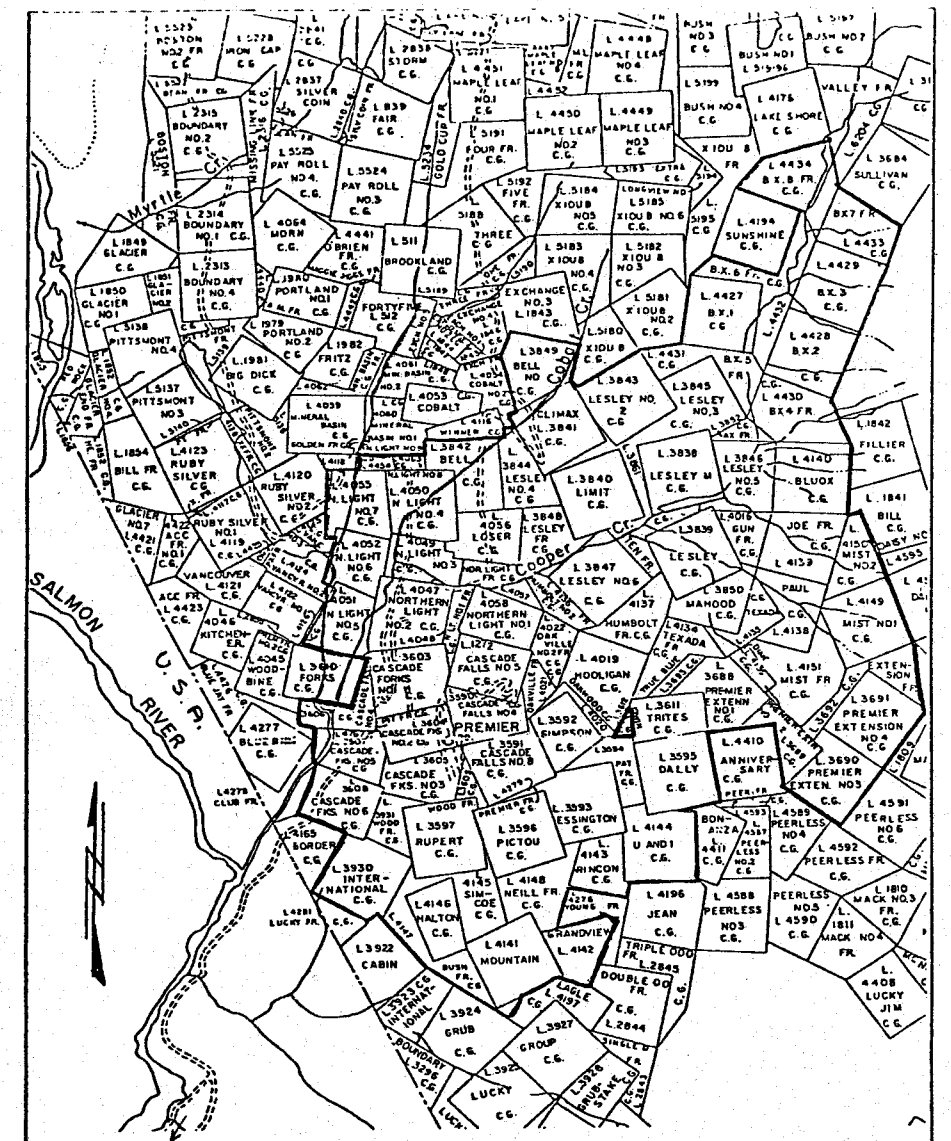
Victor B. Bjorkman, P. Eng.

Born in Viking, Alberta, Canada on May 27, 1916, holds a B.Sc. degree in Mineral Engineering and an M. Sc. degree in Civil Engineering (Environmental option) from the University of British Columbia. He is a Professional Engineer registered in both Ontario and B.C. He has more than 30 years of world-wide experience in the mineral industry exploration, development, operating and management.

Arthur Eric Bryant

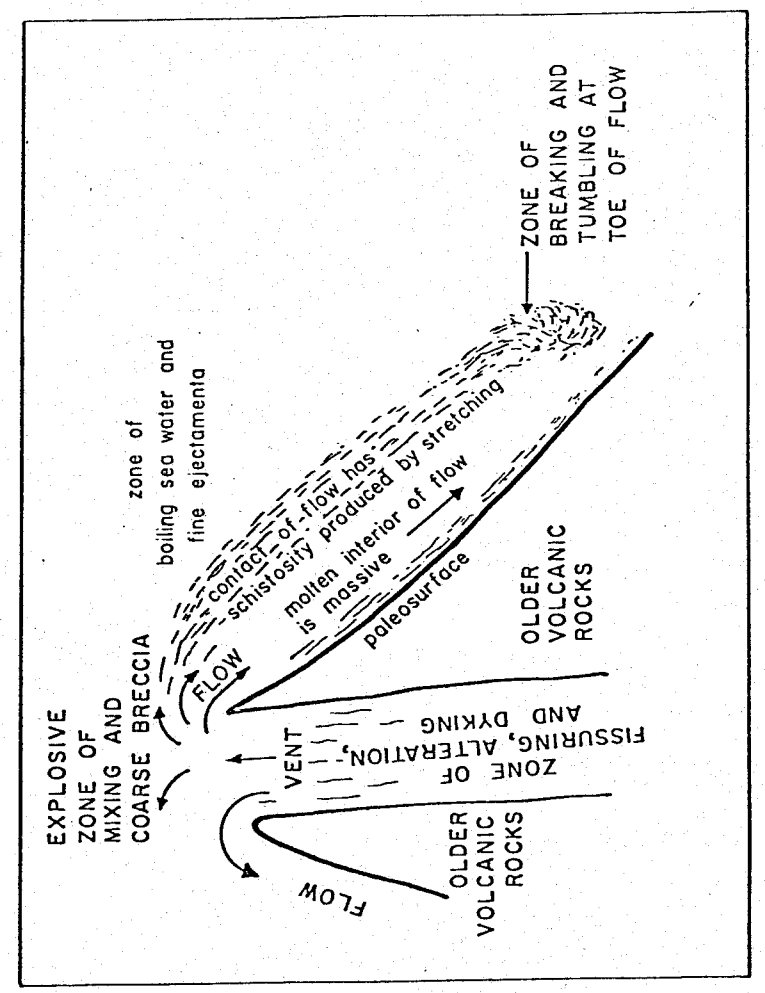
Mr. Bryant was born in London, England, August 24, 1908. He has a United Kingdon Secondary School education, leaving in 1924. He resides in London, England. He is a stock broker and has been a member of the London Exchange since 1947. He has been a Director and an Officer of British Silbak Premier Mines Ltd. since 1945. He has recently been appointed Honorary Chairman of the Board.





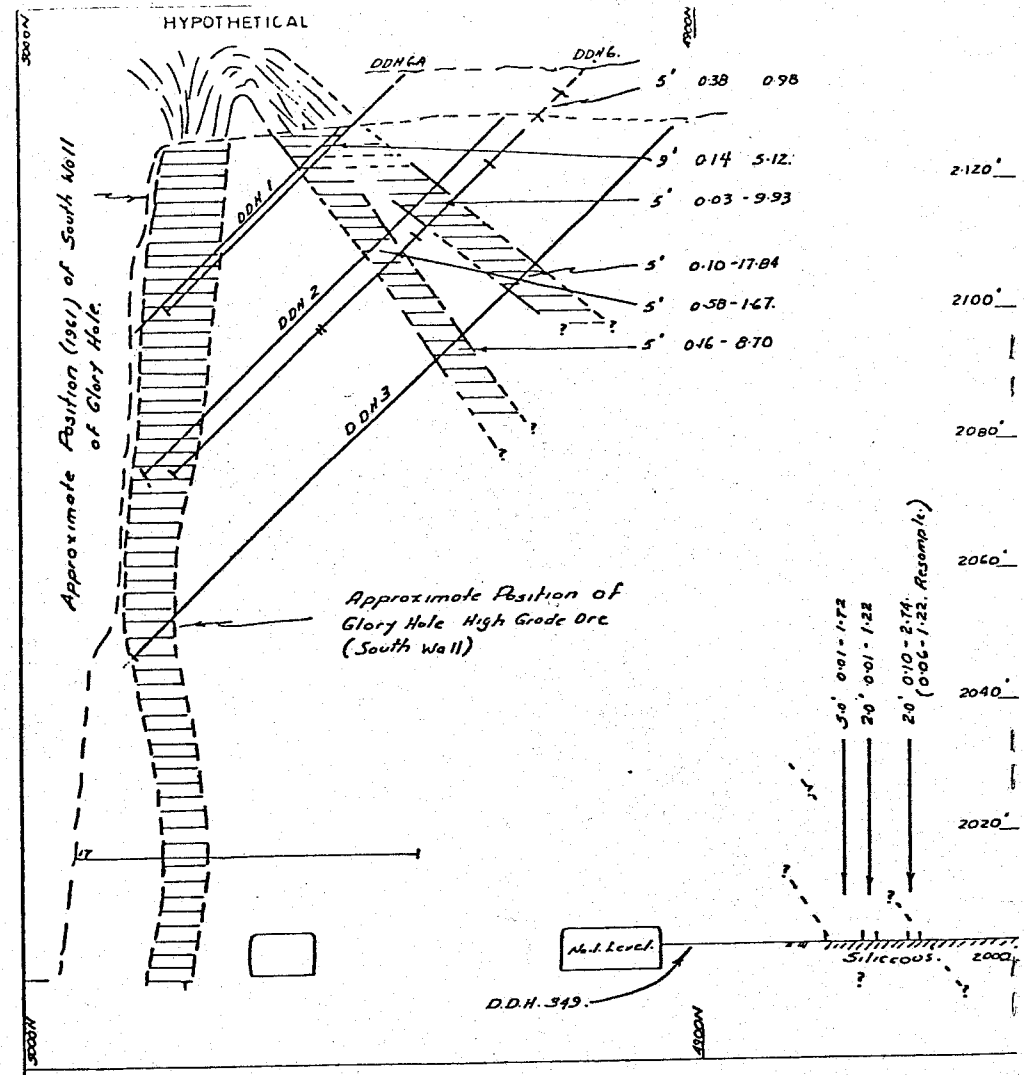
SILBAK PREMIER MINES LTD.
SKEENA MINING DIVISION, BRITISH COLUMBIA.
CLAIM MAP.
SCALE 1" = 2500'

Figure2



Diagramatic sketch of a vent in a Volcanogenic deposit.

Figure 3.



Section at 20 ft.=1inch on south wall of the Glory Hole showing inverted U or V shaped configuration, perhaps conforming to an area of volcanic venting rather than a northwest dipping fracture system.

Figure 4

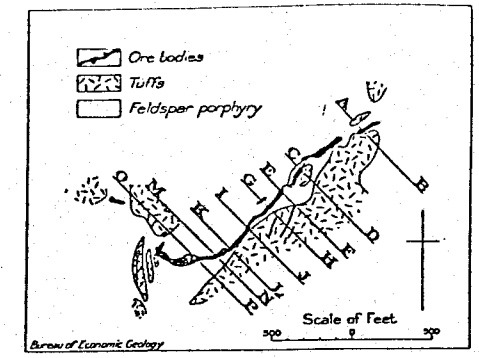


Figure 16. Plan of No. 3 level (elevation 1,550 feet), Premier mine (A-B, C-D, etc.: lines of section, *See* Figure 17).

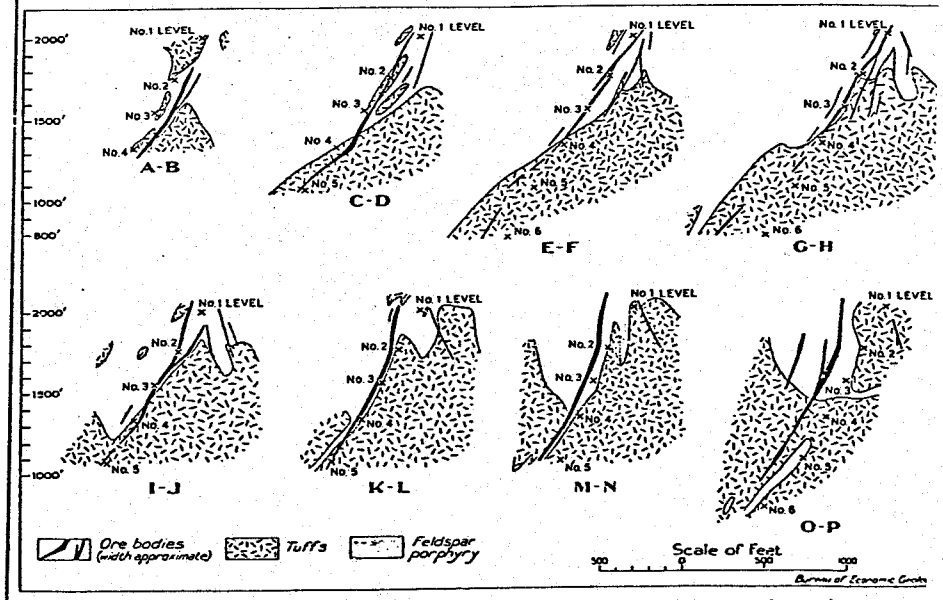
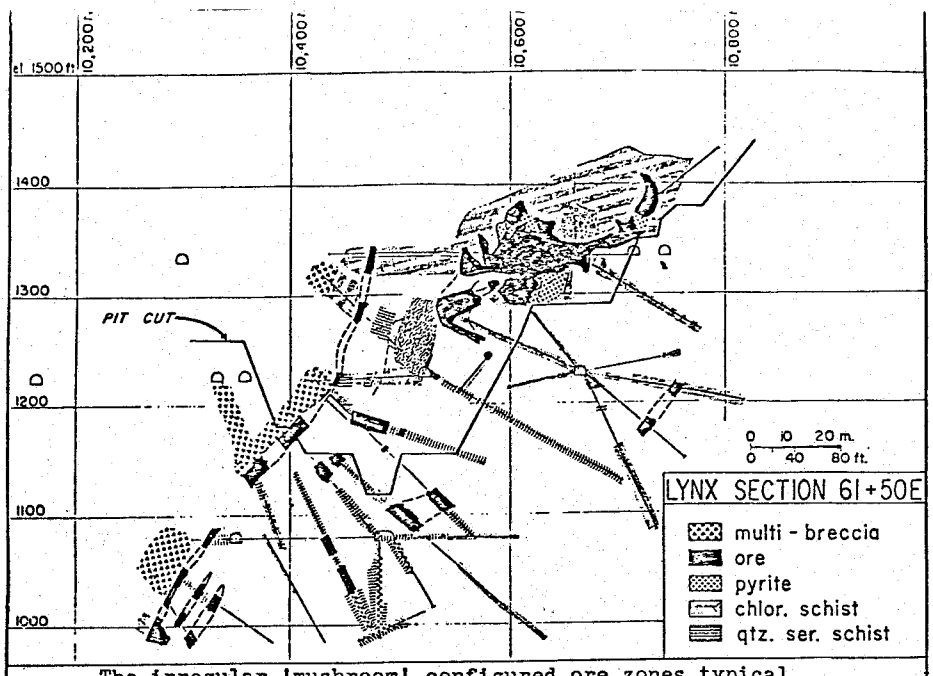


Figure 17. Vertical sections (*See* Figure 16), Premier mine; widths of ore-bodies approximate only.

Configuration of Premier ore-bodies showing relation of ore-bodies to feldspar porphyry and to tuffs (greenstone). Note the southeasterly dip of ore on sections G-H, I-J, K-L, M-N, and O-P. (From Geol. Survey of Canada, Mem.175)

(Hanson) Figure 2.



The irregular 'mushroom' configured ore zones typical of the uppermost part of many volcanogenic deposits is shown in Western Mines' pit at Buttle Lake. Note the north dipping 'G' Zone and south flank ore zones of the anteform structure shown below.

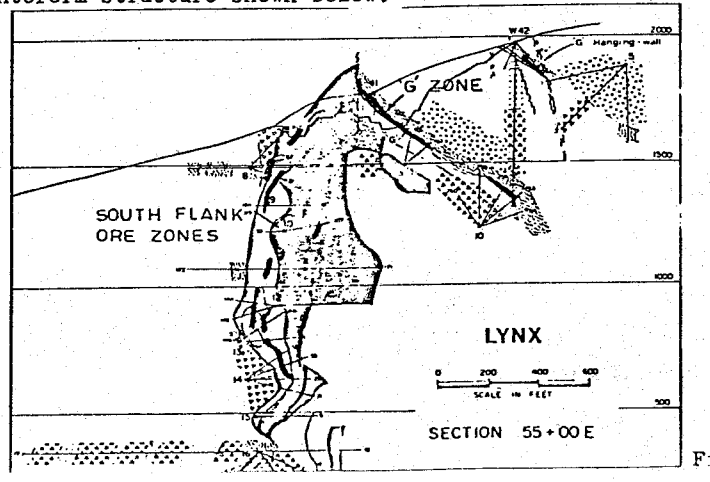
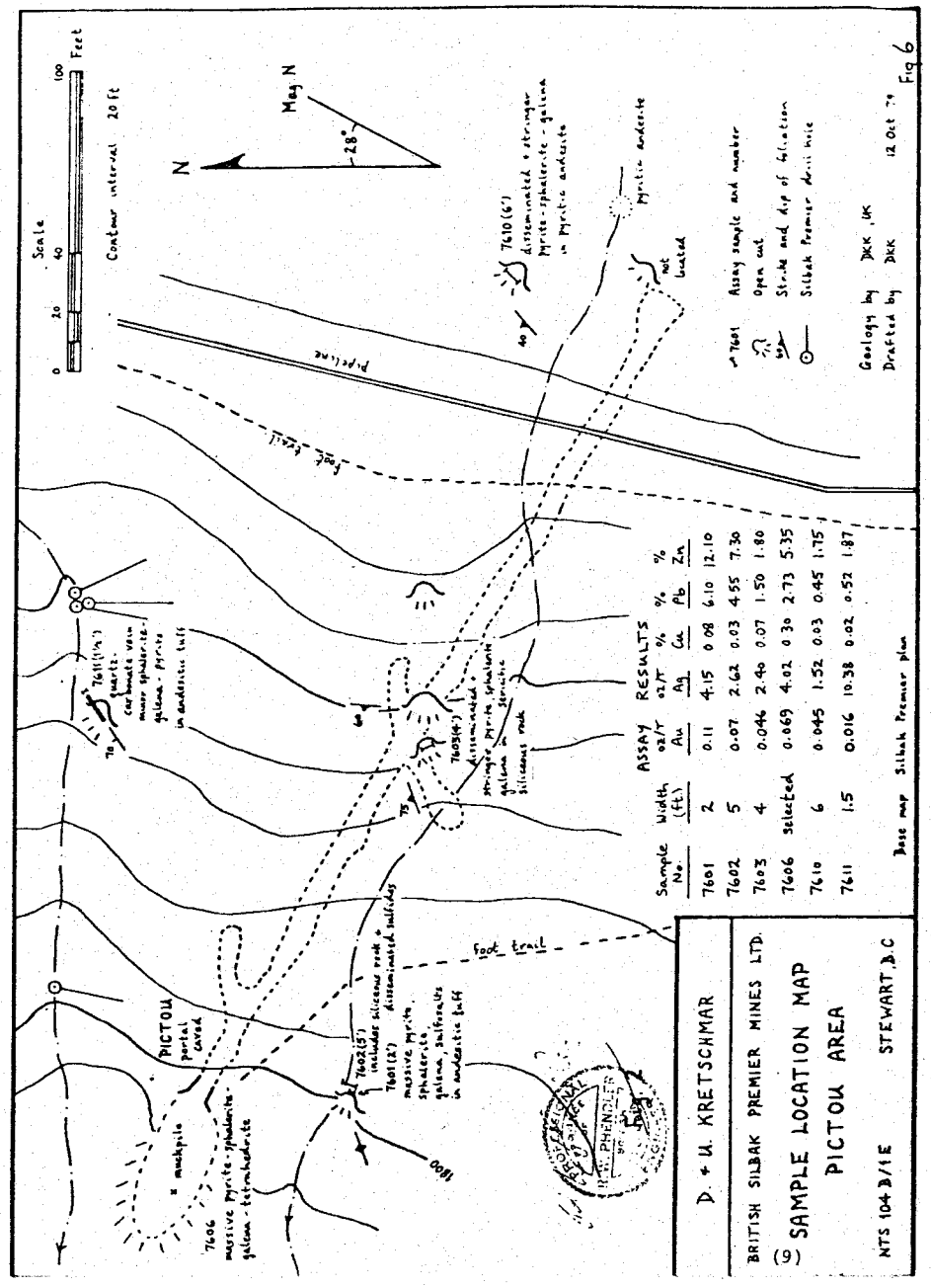
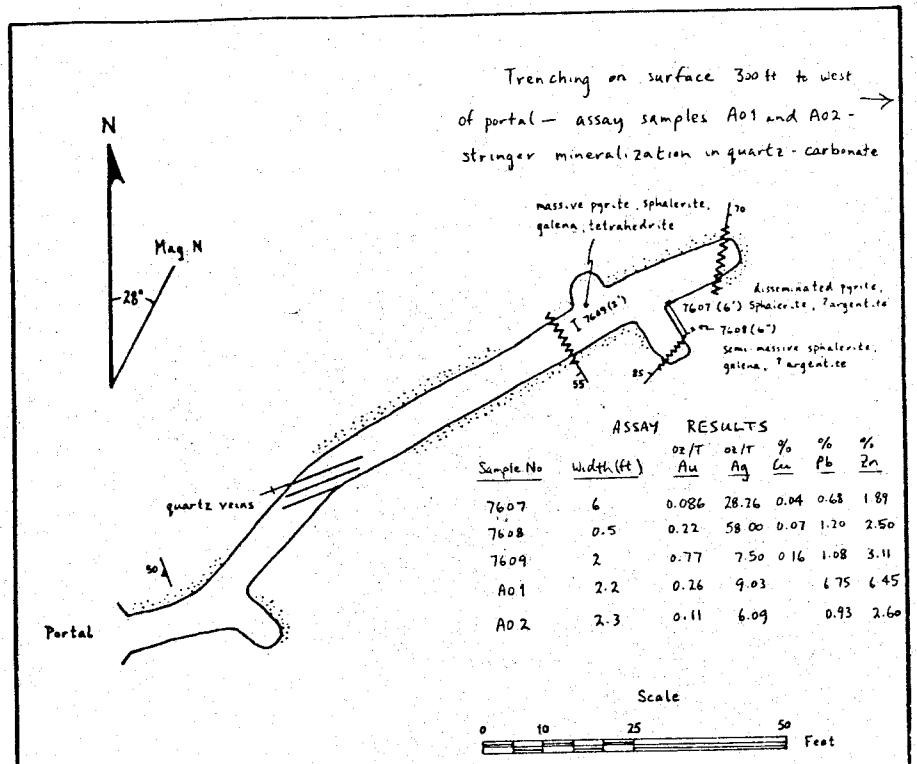


Figure 5.





ASSAY RESULTS

Sample No	Width (ft)	oz/T Au	oz/T Ag	% Cu	% Pb	% Zn
7607	6	0.086	28.76	0.04	0.68	1.89
7608	0.5	0.22	58.00	0.07	1.20	2.50
7609	2	0.77	7.50	0.16	1.08	3.11
A01	2.2	0.26	9.03		6.75	6.45
A02	2.3	0.11	6.09		0.93	2.60

EXPLANATION

- foliated andesitic tuff
- no pattern — quartz - carbonate breccia, disseminated to heavy sulfides
- Fault
- strike and dip of foliation
- assay sample width and number

R. W. PHEND

Geology by DKK, MK

Drafted by DKK 13 Oct 1979

D. & U. KRETSCHMAR

BRITISH SILBAK PREMIER MINES LTD.

SAMPLE LOCATION MAP
PROSPECT TUNNEL

NTS 104 B/1 E STEWART, B C

BRITISH SILBAK PREMIER MINES LTD.

PHYSICAL WORK SUMMER - FALL, 1979

1) New cat road (D-8) to provide drill access

Glory hole road to upper portal BCS	2900'	
Glory hole towards Pictou tunnel	900'	
Glory hole to Prospect tunnel	300'	
4 level to North Fork Fletcher Cr.	600'	
		4700'

2) Improvements and ditching on mine road to glory hole - D-8 cat — 1 mile

3) Access trails - scouted out cat roads and cut brush - relocated and brushed out old trails to surface showings which date back to 1920 - 1925

Glory hole road to No.2 portal	700'	
Glory hole to Pictou	2100'	
Glory hole to Prospect	1100'	
4 level to Logan Cr.	3500'	
Big Missouri junction to 6 level portal	500'	
4 level to Northern Light portal	2800'	
Bush trail	4000'	
Glory hole road to upper portal BCS and around Glory hole	4900'	
Branch trails to south of Glory hole	2000'	
Horse trail up to tree line	4000'	
4 level to bottom of mill tailings	1000'	
		26,600 ft. or 5 mi

150 man days at $8.75/hr. & full-time foreman

4) Rebox 4800' of Granby drill core at 6 level (boxes pushed over by loader operator removing snow)

30 man days at $8.75/hr.

5) 20' of trenching on Prospect vein, blasting and assay sampling.

Blasting and assay sampling of loose muck in Glory hole.

Assay results - A. Okrainec samples

		Width (ft.)	% pb	% Zn	% Cd	oz/T Au	oz/T Ag
A01	Trench on Prospect vein	2.2	6.75	6.45	0.07	0.26	9.03
A02	"	2.3	0.93	2.60	0.03	0.11	6.09
A03	S. side Glory hole - along S. wall	6.0	3.45	7.85	0.06	5.91	45.30
A04	" "	6.0	3.55	7.00	0.07	0.55	3.78
A05	S. side Glory hole - heavy pyrite in broken muck	grab	2.05	3.60	0.03	0.56	5.81

D. Kretschmar

Feb. 25/80

BRITISH SILBAK PREMIER MINES LTD.

1980 COST ESTIMATES

1.	Re-evaluation of data	$ 40,000.00
2.	Rehabilitation of 6 level and upper levels	60,000.00
3.	Underground diamond drilling 2000 x 20/ft.	40,000.00
4.	Bulk sample and metallurgical test	10,000.00
5.	Mill and tailings disposal study	15,000.00
6.	Road construction to Pictou area	25,000.00
7.	Road construction to Glory Hole	10,000.00
8.	Investigate Prospect Tunnel	25,000.00
9.	Investigate No. 6 portal area	25,000.00
10.	Topographic map	10,000.00
11.	Line cutting - 20 miles @ $300 per mile	6,000.00
12.	Geophysical work	12,000.00
13.	Geological staff	55,000.00
14.	Sample Glory Hole	10,000.00
15.	Surface diamond drilling 5000 x 20/ft.	100,000.00
16.	Compressor - (Lease purchase)	45,000.00
17.	Front end loader (Lease purchase)	100,000.00
18.	Haulage truck (Lease purchase)	50,000.00
19.	Engineering, geology and Supervision	30,000.00
20.	Travel and Accomodation	20,000.00
	TOTAL	$688,000.00
	Contingencies	63,800.00
	GRAND TOTAL:	$751,800.00

The sum of $750,000 has been provided to carry out the above program.

Production. (Premier and Silbak Premier)

		---------- Recovery per ton ----------						
Year	Tons	Au. Oz.	Ag. Oz.	Pb. %	Zn. %	Cu. %	Cd. %	Dividends
1918	26	7.0	88.0	-	-	-	-	-
19	488	6.6	221.0	-	-	-	-	-
20	799	2.86	97.0	-	-	-	-	-
21	18,750	1.88	60.5	-	-	-	-	400,000.
22	102,334	1.21	41.8	-	-	-	-	2,750,000.
23	145,665	0.80	18.9	2.1	-	-	-	1,738,000.
24	159,014	0.875	19.0	1.42	-	-	-	1,715,000.
25	168,557	0.70	14.4	2.34	-	-	-	1,600,375.
26	230,987	0.527	12.6	0.97	-	-	-	1,600,437.
27	244,172	0.48	12.8	4.70	-	2.57	-	1,601,250.
28	275,811	0.47	8.6	5.30	-	3.73	-	1,300,000.
29	266,972	0.364	8.7	3.94	-	2.43	-	1,208,250.
1930	256,836	0.338	9.9	2.40	-	0.98	-	1,203,281.
31	242,317	0.328	6.25	2.42	-	0.76	-	601,828.
32	221,718	0.343	7.03	2.45	-	0.78	-	691,535.
33	185,421	0.268	5.43	-	-	-	-	650,985.
34	153,950	0.17	4.30	(heads)	-	-	-	600,000.
35	149,672	-	-	-	-	-	-	650,000.
36	192,442	0.225	5.2	-	-	-	-	800,000.
37	201,206	0.237	4.54	-	-	-	-	Nil
38	184,606	-	-	-	-	-	-	200,000.
39	169,164	0.24	5.25	-	-	-	-	400,000
1940	171,504	0.216	3.58	-	-	-	-	400,000.
41	170,504	-	-	-	-	-	-	400,000.
42	140,567	0.259	-	-	-	-	-	400,000.
43	93,003	0.238	3.58	-	-	-	-	325,000.
44	68,496	-	-	-	-	-	-	125,000.
45	65,801	-	-	-	-	-	-	100,000.
46	34,804	0.234	1.10	1.68	-	-	-	25,000.
47	59,343	0.22	1.49	2.25	-	-	-	Nil
48	41,360	0.207	1.46	1.97	1.36	-	.014	Nil
49	10,348	-	-	-	-	-	-	Nil
1950	79,167	0.205	1.69	2.0	-	-	-	Nil
51	67,844	0.101	1.95	2.63	3.87	-	.027	Nil
52	90,762	0.098	1.73	2.23	3.37	-	.025	50,000.
53	40,322	0.123	1.94	2.70	3.48	-	.068	Nil
1954 to 1958 - closed down				DIVIDENDS		TOTAL		$21,535,941.
1959	1,282	5.89	158.7	6.41	7.85	0.64	-	-
60	62	10.48	271.4	5.15	8.64	-	-	-
61	831	7.78	135.8	3.36	3.48	-	-	-
62	465	7.0	112.4	3.15	4.6	-	-	-
63	96	6.6	98.0	3.12	4.6	-	-	-
64	2,712	0.71	14.4	-	-	-	-	-
65	2,336	0.28	6.4	0.15	0.28	-	-	-
66	14,189	0.57	11.6	0.30	0.42	-	-	-
67	6,694	0.54	12.4	0.35	0.46	-	-	-
68	4	12.75	182.0	1.28	2.15	-	-	-
Avge.	4,722,413	0.384	8.03	2.5	3.0	1.9		

Totals: 4,722,413 tons -- 1,814,723 oz. gold -- 37,963,245 oz. silver

MINERALIZATION

Two general types of mineralization are recognized, one in porphyry characterized by irregular stringers and bunches of sulphide, partially digested fragments of wallrock and by gradational walls; the second type, generally found in greenstone has abrupt walls and unaltered fragments of wall rock around which the sulphides are often banded. These mineral types have been recognized as vent type and stratiform type ores of volcanogenic origin.

Most of the ore at the property is of vent type and occurs in a broad belt of shearing with sericitic and siliceous alteration being associated with individual ore bodies.

Abundant evidence that the mineralization is emplaced by volcanogenic processes rather than shear zone replacement leads to the conclusion that the uppermost portion of the porphyry vent should be more fully explored for new mineral zones, as well as on both flanks.

Silbak Premier ore consists of about 20% base metal sulphides in a gangue of quartz and calcite. Present are pyrite, sphalerite, galena, chalcopyrite and pyrrhotite with smaller amounts of gold, electrum, argentite, pyrargyrite and native silver. Most metals were recovered with total production of the mine being 4,722,413 tons averaging 0.384 oz. Au, 8.03 of oz. Ag, 2.5% Pb, 3.0% Zn and 1.9% Cu.

Most of the mineral zones were from 5 to 10 feet in width but widths of up to 20 feet were not uncommon. The largest mineral zone measured up to 60 feet wide and 2000 feet long.

MINERAL RESERVES AND POSSIBILITIES

In 1963 reserves were reported by Hill Starck and Associates to be as follows:

Location	Tons	or	Au/Ton	oz. Ag/Ton	% Pb	%Zr
Glory Hole	22010		0.574	16.98	-	-
Below 3 level	82775		0.25	2.52	1.60	2.40
Premier Border	81561		0.06	1.78	3.83	5.72

The Glory Hole block was recovered by Bralorne Pioneer Mines Ltd. in 1965-1967. Blocks in the mine area probably exist in place but their status in relation to access drifts, shafts etc is not known.

BRITISH SILBAK PREMIER MINES LIMITED

FINANCIAL STATEMENTS

YEAR ENDED JANUARY 31, 1980

Thorne Riddell & Co.

CHARTERED ACCOUNTANTS

AUDITORS' REPORT

To the Shareholders of

British Silbak Premier Mines Limited

We have examined the balance sheet of British Silbak Premier Mines Limited as at January 31, 1980 and the statements of deferred exploration, development and other expenditures and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at January 31, 1980 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

In our report dated March 8, 1979 we expressed no opinion on the financial statements as a whole due to the fact that no provision for depreciation of plant and equipment had been made since 1967 however we did express our opinion that current assets, current liabilities and capital stock were presented fairly in accordance with generally accepted accounting principles as at January 31, 1979. As explained in note 1(a) and (c) the company can now be viewed as a non-producing mining company and it is no longer deemed necessary for depreciation to be recorded on the fixed assets.

Thorne Riddell & Co.

Vancouver, Canada
April 1, 1980

Chartered Accountants

Board of Trade Tower
1177 West Hastings Street
Vancouver, British Columbia V6E 2L9
Telephone (604) 685-3511

BRITISH SILBAK PREMIER MINES LIMITED
(Incorporated under the laws of the Province of British Columbia)

BALANCE SHEET AS AT JANUARY 31, 1980

ASSETS	1980	1979
CURRENT ASSETS		
Cash and term deposits	$ 475,695	$ 24,757
Accounts receivable	11,585	4,520
	487,280	29,277
FIXED ASSETS (note 2)	234,215	223,174
DEFERRED EXPLORATION, DEVELOPMENT AND OTHER EXPENDITURES (note 3)	157,621	1
	$ 879,116	$ 252,452
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	$ 9,324	$ 17,813
Payable to director	23,031	22,559
12% loan payable to Mining Investment Corporation	-	42,625
	32,355	82,997
DEFERRED REVENUE	-	4,167
SHAREHOLDERS' EQUITY		
CAPITAL STOCK (note 4)		
Authorized		
5,000,000 shares, without par value		
Issued		
1,697,788 shares	3,258,973	2,577,500
DEFICIT	2,412,212	2,412,212
	846,761	165,288
	$ 879,116	$ 252,452

Commitment (note 7)
Subsequent event (note 8)

Approved by the Board

Director

Director

BRITISH SILBAK PREMIER MINES LIMITED

STATEMENT OF DEFERRED EXPLORATION, DEVELOPMENT AND OTHER EXPENDITURES

YEAR ENDED JANUARY 31, 1980

Exploration and development		
Assays	$ 632	
Engineering and geology	29,267	
Freight	905	
Fuel	563	
Insurance	576	
Employees benefits	1,166	
Mining supplies	5,128	
Stripping	2,353	
Power tools rental	1,050	
Rent	2,310	
Travel	2,144	
Supervision salary	10,000	
Property and mineral taxes	4,176	
Wages	29,822	
Repairs to equipment	409	
Tailings acquisition	10,000	
		$100,501
Administration		
Audit and accounting	4,400	
Donations	300	
Interest on loans	10,057	
Legal	20,172	
Office	2,853	
Printing	2,970	
Salaries	12,000	
Stock exchange fee	470	
Transfer agent fees	15,568	
Travel	4,375	
Telephone	1,477	
		74,642
EXPENDITURES FOR THE YEAR		175,143
Rental and sundry revenue		17,523
NET EXPENDITURES, BEING THE BALANCE DEFERRED AT END OF YEAR		$157,620

BRITISH SILBAK PREMIER MINES LIMITED

STATEMENT OF CHANGES IN FINANCIAL POSITION

YEAR ENDED JANUARY 31, 1980

WORKING CAPITAL DERIVED FROM		
Issuance of capital stock		$681,473
WORKING CAPITAL APPLIED TO		
Deferred exploration, development and other expenditures	$157,620	
Add realization of deferred revenue which does not involve working capital	4,167	
	161,787	
Purchase of equipment	11,041	
		172,828
INCREASE IN WORKING CAPITAL POSITION		508,645
WORKING CAPITAL DEFICIENCY AT BEGINNING OF YEAR		53,720
WORKING CAPITAL AT END OF YEAR		$454,925

BRITISH SILBAK PREMIER MINES LIMITED

NOTES TO FINANCIAL STATEMENTS

YEAR ENDED JANUARY 31, 1980

1. ACCOUNTING POLICIES

(a) Basis of presentation

During the year the company commenced redevelopment of its Stewart property and has deferred all exploration, development and other expenditures. As a result it is no longer considered appropriate to prepare a statement of income and reflect the loss as a charge to deficit. Because of the change in the company's operations, comparative operating figures have not been presented as they would not be meaningful.

The company's ability to recover the cost of its fixed assets and deferred exploration, development and other expenditures is wholly dependent upon the development of a sufficient quantity of ore of an economic value in the Stewart area and the obtaining of adequate financing for such development.

(b) Mining property

The company is the registered owner of 87 crown granted mineral claims located in the Skeena Mining Division in B.C. all of which are in good standing.

(c) Fixed assets

Fixed assets are stated at cost. There has been no provision for depreciation since 1967, the date at which the company's mining and milling operations were suspended. It is management's opinion that the value of the fixed assets in connection with the redevelopment of the Stewart property approximates the net book value at 1967.

2. FIXED ASSETS

Net book value at 1967	$223,174
1979 additions	11,041
	$234,215

3. DEFERRED EXPLORATION, DEVELOPMENT AND OTHER EXPENDITURES

Previous expenditures on the original development of the mine, at cost less amounts written off	$ 1
Current period expenditures on the redevelopment of the property	157,620
	$157,621

4. CAPITAL STOCK

	Shares	Amount
Balance at beginning of year	562,000	$2,577,500
Issued during the year for cash	1,135,788	681,473
Balance at end of year	1,697,788	$3,258,973

The company has granted share purchase options to all of the directors entitling them to purchase a total of 84,000 shares over a period of five years commencing December 31, 1980, at a price to be approved by the Vancouver Stock Exchange. The share option agreement is subject to ratification by the shareholders of the company at the annual general meeting.

5. INCOME TAXES

The company has a loss carry-forward for income tax purposes of $22,187 which is available to reduce subsequent years' income. The potential benefits of the loss carry-forward have not been recognized in the accounts and expire as follows:

1981	$ 5,718
1982	13,182
1984	3,287

In addition, the capital cost available for income tax purposes exceeds the net book value of fixed assets by $158,880 and this potential benefit has also not been reflected in the accounts.

6. INFORMATION AS TO DIRECTORS AND OFFICERS

Number of directors	7
Aggregate remuneration as directors	Nil
Number of officers	3
Aggregate remuneration as officers	22,000
Number of officers who are directors	3

7. COMMITMENT

The company has entered into lease negotiations to rent warehouse facilities in Stewart, B.C. for a five year period commencing November 1, 1979, calling for aggregate rental payments of $44,000 over the five year period.

8. SUBSEQUENT EVENT

On April 1, 1980 the company successfully issued 300,000 treasury shares at $2.50 per share, realizing $693,750, net of commission of $56,250.

REPORT ON

SILBAK PREMIER PROPERTY

NEAR

STEWART, B. C.

SKEENA M.D.

by

R.H. Seraphim, Ph.D., P.Eng.

March 8, 1979

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

SUMMARY AND CONCLUSIONS

The reports and data from the Silbak Premier mine present abundant evidence that the mine should be re-evaluated in the search for known mineralization made economic by new metal prices, and for undiscovered mineralization because of new geological concepts.

Abundant evidence that the mineralization is emplaced by volcanogenic processes rather than shear-zone replacement leads to a strong recommendation to explore the uppermost portions of the porphyry, including its roof and both flanks, rather than to explore 'shear-zones' along their strike and dip.

The evidence includes:

1) The fact that the ore in general occurs in a broad belt of shearing, with 'quartz-sericite' and 'silicification' (rhyolite?) hosting individual ore bodies.

2) The presence of breccias, including clasts of porphyry, with ore in the matrix.

3) The presence of poly-sulphide ore with gold, silver, lead, zinc, and copper, arsenic, and antimony, with

the best grade of gold and silver accompanying 'black sulphides' in the upper parts of ore bodies.

4) The occurrence of two types of ore: one described as typical of the current classification of 'vent' ore and one typical of 'stratiform' ore.

5) A study of the structure of the porphyry hosting the ore, and the deduction that it occurred as "dykes or sheets feeding the .... northern zone which is probably flow or sill".

6) Sections showing that one or more ore bodies on the southwest flank of the porphyry dip southwest (i.e. not all the ore was in the two fracture sets as defined by the previous operating staff).

7) Capping by unconformable tuffaceous or sedimentary rocks (the purple tuffs) that contain jasper or hematite. These were locally removed by erosion to expose the mineralized outcrop leading to discovery. The volcanogenic deposits as a class contain evidence to show that the sulphide-bearing vent zones and the stratiform (ejected) ore formed in a shallow submarine environment.

Mineral reserves are reported in two categories: (1) 82,755 tons grading 0.25 ounces gold, 2.52 ounces silver, 1.6% lead and 2.4% zinc in a number of sills and pillars and (2) 81,561 tons grading 0.06 ounces gold, 1.78 ounces silver, 3.83% lead and 5.72% zinc in Premier Border lower levels. Part or all of category 1 might best be left in place for some time if necessary to maintain access. Part or all of category 2 will need re-evaluation in the likely event that additional mineral reserves are determined.

A low grade mineral reserve, probably mineable by open pitting, south and east of the larger Glory Hole undoubtedly exists. This reserve will require a detailed program of re-evaluation of old assay plans, check survey of old stope outlines, and locally at least, some diamond drilling prior to dependable estimation of tons and grade.

The old drill records show a number of mineralized intercepts considered worthy of further exploration. Our investigation was limited by time to the

data on the upper levels (4 level and above) and to the western workings (original Premier mine). This part of the mine contained most, but not all, of the highest grade gold-silver ore. Incidents like the 'Leasers Discovery' in 1959 are a strong indication that further high grade shoots probably exist to 'sweeten' possible open-pit ore. The detailed assay maps examined in Stewart show several stringers exposed in the upper levels that may not have been explored in detail above and below the level of exposure.

RECOMMENDATIONS

1) The mineralization near the crest and upper flanks of the 'Premier porphyry' in the vicinity of the mine merits detailed re-investigation. Each mineralized drill intercept and underground exposure in the crestal zone should be re-evaluated with reference to its structural position and geological nature (vent or stratiform), and should be tested for extensions.

2) The vicinity of the glory hole requires re-evaluation by compilation of a set of plans and sections assembling all available assay and geological data.

3) A number of 'outside' showings, such as the Northern Light, Pictou, 'Granduc Road near No. 6 portal' and Granby's geophysical discovery, need re-evaluation to determine whether or not they are volcanogenic in origin and, if so, whether or not further exploration is warranted.

COSTS

Stage	PIT PROJECT	
1)	Re-evaluation of Glory-hole area. Compilation of maps and sections from existing data and check surveys at site	$ 50,000
2)	Contingent drill program, say 5,000 feet at $30.00 per foot 'all in'. . .	$ 150,000

	UNDERGROUND EXPLORATION PROJECT	
1)	Re-evaluation of 3 and 4 level data to determine drill intercepts with merit for further exploration	$ 25,000
2)	Re-establishing entry to upper levels of mine where possible for drill sites .	$ 25,000
3)	Contingent drill program, say 5,000 feet at $30.00 per foot 'all in'	$ 150,000

	SURFACE EXPLORATION PROJECT	
1)	Re-appraisal of various 'outside' showings and re-mapping those considered to have potential.	$ 25,000
2)	Contingent drill program, say 2400 feet, at $30.00 per foot 'all in'.	$ 75,000

Total Stage 1	$ 100,000
2	400,000
GRAND TOTAL:	$ 500,000

INTRODUCTION

This report was commissioned by Mr. B. Ouellette of 410 Hadden Drive, West Vancouver, as spokesman for a group interested in acquiring control of the dormant Silbak Premier mine. The mine has not been revisited since the author prepared the report in 1955 that is shown in the list of reports and data appended to this section. An examination of the mine workings themselves is not believed to be practicable at present, not only because of the difficulty of access in winter, but also because of the large extent and questionable condition of the mine workings.

The data reviewed is listed in an appendix to this section. Assistance of T. Lisle, P.Eng., is acknowledged. Lisle also had previous experience at Silbak Premier through his work with H. Hill and Associates in 1961.

The study summarized herein is appropriate for two principal reasons. Firstly, Silbak Premier produced from the upper levels during its initial 15 years (1918 to 1932 inc.) 2.3 million tons of ore with an average grade of 0.536 ounces gold and 12.9 ounces of silver per

ton along with minor lead, zinc and copper (Hanson G. p. 162). This ore at Feb. 1979 has a value of over $250.00 per ton, and would provide an operating profit, prior to amortization and taxes, of approximately $200.00 per ton.

Secondly, our geological concepts concerning deposits in volcanic host rocks have, in the past several years, completely changed by work in Japan and in the Precambrian Shield. Abundant and compelling evidence, originating with Japanese geologists who had the advantage of working with a number of Kuroko deposits (free of metamorphism) indicates that many of these ore deposits are 'volcanogenic', i.e. emplaced contemporaneously with their host rocks, and are part of the same sequence in space and time. Consequently, they should be explored under the premise that they are either volcanic strata or volcanic vents.

Their shape, attitude, and location would depend in large part upon the topography that existed at the time of their formation rather than upon fracturing and replacement occurring in a much later and separate geological period. This revelation is important econom-

ically as it directs exploration into areas that merit a much more thorough test than formerly. The sections on 'Local Geology' and 'Summary and Conclusions' in this report present discussion regarding some of these areas that are attractive and we believe to exist near Silbak Premier mine workings.

PREMIER FILES FROM VANCOUVER

(1)	Incomplete Yearly Advances -- Maps, blueprints 1924, 1930, 1932, 1933, 1937, 1939, 1940, 1941, 1942, 1943, 1947, 1952, 1953	1 box
(2)	Assay Certificates -- mixed	1 box
(3)	Drill logs -- See Page 2	2 boxes
(4)	Claims -- Old record book, old survey maps, lists	1 folder
(5)	Ore Movement from stopes 1950-3 & costs	1 folder
(6)	Miscellaneous old geological reports	1 folder
(7)	Means report & map (1923)	1 folder
(8)	White, W.H. thesis (1939)	1 folder
(9)	Spellmeyer, Pentland (1951)	1 folder
(10)	D.F. Kidd & Seraphim 1953 (with plans & sections)	1 folder
(11)	Bell, Pearcey (1955)	1 folder
(12)	Pitt (1959)	1 folder
(13)	Hill-Plumb-Starck (1955) -- Reports Northern Light, Mist Anomaly, etc.	1 folder
(14)	Hill & Plumb 1955 - 20 scale maps Ore Reserves in 3 & 4 level sills, pillars, & 6 Level	1 folder
(15)	Hill & Plumb - 1956 - Data re new milling operation	1 folder
(16)	Hill, Plumb, Starck 1957 -- Data re resuming operation, geological study - Plumb's 200 scale plans & sections, 6 Level mapping on 20 scale	1 folder
(17)	Bermah Lease -- 1960 Glory Hole	1 folder
(18)	Hill-Starck - 1961 Glory Hole - plans & sections	1 folder
(19)	Hill-Starck - 1962 Glory Hole	1 folder
(20)	Hill-Starck-Stanley - 1963 Glory Hole Geology - Ore Reserves - Exploration	1 folder
(21)	Hill-Starck -- re new Mill 1964	1 folder
(22)	Bralorne-James-Weeks -- Ore reserves 1965 & chances	1 folder

PREMIER FILES FROM VANCOUVER - Page 2.

(23)	Bralorne-James-Weeks, Cons. shipped 1965-66	1 folder
(24)	Bralorne-James-Weeks, Cons. shipped 1966-69	1 folder
(25)	Granby -- Geophysics & Drilling - 1970-71	1 folder

DRILL LOGS

PREMIER	1 - 200 original
	1 - 200 typed
	201 - 400 typed
	401 - 600 typed
	601 - 743 typed
C.T.H.	801 - 1200 original
	1201 - 1590 original
PREMIER	1401 - 1690 typed
	1601 - 1800 typed - also original
	1801 - 1999 original
	1801 - 1870 typed
	2001 - 2106 original
NORTHERN LIGHT	201 - 400 original

SURFACE

P. Border - 1,2,3.
Premier - S1 - 14
Silbak - S101 - 125, 130 - 135

B.C. Silver - 0 - 200 typed
201 - 259 typed
0 - 259 original

PREMIER DATA IN STEWART

Assay Plans - 20 scale	Premier	several rolls	
	B.C. Silver	1 roll	
	Premier Border	1 roll	
	Vertical Projections	1 roll	
	Ore blocks (1940)	1 roll	
	1925 Blue Prints	1 roll	
	1013 - 1015 Ore body	1 roll	
	1940± stope maps	1 roll	
	1936± assay maps	1 roll	
	790 Level assay maps	1 roll	
	Misc. of Stope areas	1 roll	
	1923	1 roll	
	1944 & others - ore blocks	1 roll	
	Sebakwe - Bush	1 roll	
40 scale	Premier Border Tunnel	1 roll	
Geology & Survey	many maps with little lithology		
40 scale	Premier - various years & levels	1 roll	
	Linens - various years & levels	1 roll	
	B.C. Silver linens	1 roll	
	B.C. Silver vert. proj.	1 roll	
	Composite levels	1 roll	
	Development maps - 1925	1 roll	
	Development maps to 1952	1 roll	
	Pictou tunnel	1 roll	
20 scale	B.C. Silver & others	1 roll	
	Premier & others	1 roll	
	1 & 2 levels Premier	1 roll	
	3 levels Premier	1 roll	
Survey 'Hard Plans'			
100 scale	Composite		
40 scale	Composite		
20 scale	2E		
	2NE		
	3		
	4		
	4W		
	6		
	6W		
	7		
	8		

Level Plans		
100 scale	1953	1 roll
Vertical Projections		
20 scale	Assay	1 roll
Surface	1320 topo	
	500 topo	
	200 & other geol.	
200 scales	Hill-Starck Misc.	
	Premier Level Plans	
	Levels and DDH's	
	Composite Levels	
	Long projection & plans - 1948	
Miscellaneous Maps		
	Old ore block plans	
	Stopes 9C, 10F, 10E, 10J, 10K, 7B, 9	
	Old Level plans & vert. projections 1923-31	
	Tram-line topography	
	Old sepias in poor condition	
	Hills' miscellaneous glory-hole 1961	
	Bralorne sections - 1965	
	Showing on Granduc road	

FILES

Payroll data	2 cabinets
Claim & property	1 cabinet
Equipment	1 cabinet
Outside properties	5 cabinet
Annual meetings & head office	1 cabinet
Metallurgy & mill	1 cabinet
Roads, Trails, publicity etc.	1 cabinet
Taxes, invoices, etc.	1 cabinet

FURTHER REFERENCES

Hanson, G. 'Premier Gold Mining Co. Limited' in Geol. Surv. Can. Memoir 175, 1935

Burton, W.D. 'Ore Deposition at the Premier Mine' Ec. Geol. Vol. XXI, No. 6, p.578, 1926

Langille, E.G. 'Some Controls of Ore Deposits at the Premier Mine' Western Miner p.44, June 1945

Grove, E.W. 'Geology and Mineral Deposits of the Stewart Area' Bulletin 58, B.C. Dept. of Mines and Pet. Resources, 1970.

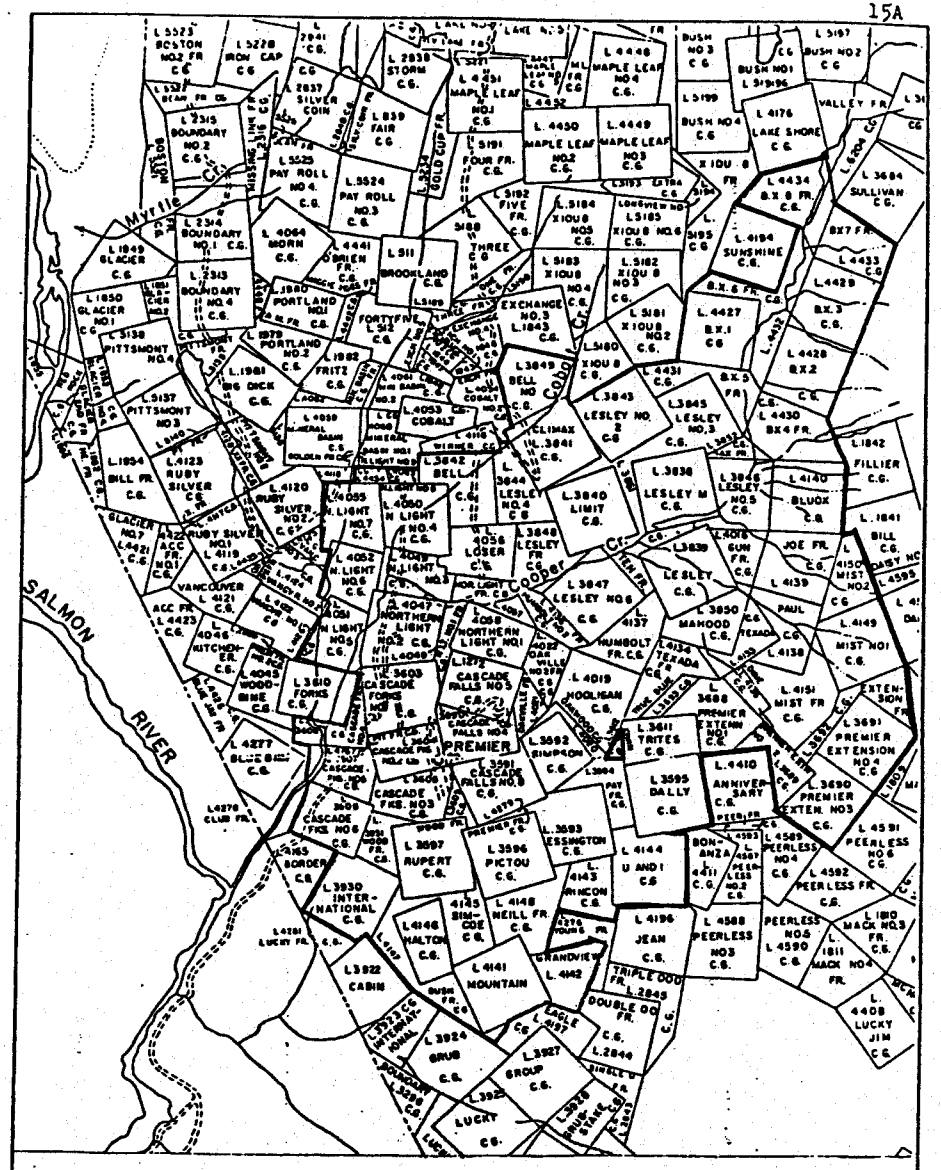
Hill, H.L. 'The Silbak Premier Mine' Western Miner, Sept. 1961.

CLAIMS

The 87 Crown-granted claims owned by British Silbak Premier Mines Ltd. are listed following this page and a map showing their location is also included. Their validity was checked at the Land Registry Office in Victoria.

The claims held total 1202.70 hectares (2971.94 acres).

One small fraction, named Irwin, precludes the claim block from being complete. The Irwin is recorded in the name of John Lunek of Box 428, Stewart, B.C.



SILBAK PREMIER MINES LTD.

CLAIM MAP.

Figure 1

SILBAK PREMIER MINES LTD. (N.P.L.)

CROWN GRANTED MINERAL CLAIMS

Lot No.	
272	Cascade Falls No. 5
3590	Cascade Falls No. 4
3591	Cascade Falls No. 8
3592	Simpson
3593	Essington
3594	Pat Fraction
3595	Dally
3596	Pictou
3597	Rupert
3603	Cascade Forks No. 1
3604	Cascade Forks No. 2
3605	Cascade Forks No. 3
3606	Cascade Forks No. 4
3607	Cascade Forks No. 5
3608	Cascade Forks No. 6
3609	Wood Fraction
3610	Forks
3611	Trites
3688	Premier Extension No. 1
3689	Premier Extension No. 2
3690	Premier Extension No. 3
3691	Premier Extension No. 4
3692	Extension Fraction
3693	True Blue
3838	Lesley N.
3839	Lesley
3840	Limit
3841	Climax
3842	Bell
3843	Lesley No. 2
3844	Lesley No. 4
3845	Lesley No. 3
3846	Lesley No. 5
3847	Lesley No. 6
3848	Lesley Fraction
3849	Bell No. 2
3850	Mahood
3851	Tex Fraction
3852	Ax Fraction
3930	International
3931	Wood Fraction
4016	Gun Fraction
4019	Hooligan
4020	Oakwood
4021	Oakville Fraction
4022	Oakville No. 2 Fraction
4056	Loser
4133	Texada
4134	Texada Fraction
4135	Dixie
4136	Humbolt No. 2 Fraction
4137	Humbolt Fraction
4138	Paul

Lot No.	
4139	Joe Fraction
4140	Bluox
4141	Mountain
4142	Grandview
4143	Rincon
4144	U & I
4145	Simcoe
4146	Halton
4147	Bush Fraction
4148	Neill Fraction
4149	Mist No. 1
4150	Mist No. 2
4151	Mist Fraction
4279	Premier Fraction
4427	B.X. No. 1
4428	B.X. No. 2
4429	B.X. No. 3
4430	B.X. No. 4 Fraction
4431	B.X. No. 5 Fraction
4432	B.X. No. 6 Fraction
4433	B.X. No. 7 Fraction
4434	B.X. No. 8 Fraction
4767	Pitt Fraction
4047	Northern Light No. 2
4048	Northern Light No. 1 Fraction
4049	Northern Light No. 3
4050	Northern Light No. 4
4051	Northern Light No. 5
4052	Northern Light No. 6
4055	Northern Light No. 7
4057	Northern Light Fraction
4058	Northern Light No. 1
4063	Northern Light No. 8
4454	Northern Light No. 9 Fraction

LOCATION, ACCESS, TOPOGRAPHY, CLIMATE

The old mine workings are 16 miles (26 km) from Stewart, B.C. and are easily accessible by road. The old camp, now completely derelict, is 1,346 feet (400 meters) above sea level on the lower western slope of Bear River Ridge. The lowest tunnel, No. 6, and the newer 100 ton mill are at 780 ft. (237 meters) elevation.

The local area is precipitous but covered with forest or dense slide alder except on local areas of cliff.

Snowfall in some years reaches 25 ft. (8 meters); snow-free season is from late May until late September. Hence surface exploration is limited to approximately a four-month season.

HISTORY

" The history .... of the Silbak Premier mine is summarized as follows:

1910-1916: Gold and Silver ore was discovered in 1910 in the area and some of the principal claims were staked. Cascade Falls syndicate was formed and later reorganized as Salmon River Mining Company. Tunnel work was done on the No. 1 and No. 2 levels.

1916-1919: Pat Daly leased the property, shipped a few tons of high grade and, after an inspection by R.K. Neill the exploration group of Trites, Wood and Wilson bonded the property. Bonanza high grade was discovered and shipments made to Tacoma.

1919: In the fall of 1919 the American Smelting and Refining Company acquired a 52% interest in the property, for $1,000,000 cash, from Trites, Wood, and Wilson. During 1919 and 1920, shipments of 1,287 tons of crude ore were made from the Premier mine, which averaged 4.24 oz. gold and 141 oz. silver per ton. Milling operations started during 1921.

1924: Shipment of ore from the B.C. Silver started, and up to 1927 totalled 1,103 tons averaging 1.92 oz. gold per ton and 76 oz. silver per ton.

1935: Silbak Premier Mines was formed to acquire the Premier Gold Mine, B.C. Silver, and Sebakwe Mines. Selukwe Mining Company of London, England, controlled the latter two properties and, upon the merger, received a substantial interest in Silbak Premier Mines.

1953: Silbak Premier closed down due to low base metal prices.

1956: The Silbak Premier mine and mill were rehabilitated, but fire destroyed the mill after only a few weeks operation.

1958: The Premier Border group of eleven Crown Granted mineral claims were purchased outright.

The upper levels of the mine were "thrown open" to lease, as the company records showed no reserves above 2 level. On September 23rd, 1959 a one year lease was granted on a part of the upper levels of the mine. The lessees shipped ore during the fall of 1959 and summer of 1960.

1961: Shipments of high grade were continued by the company upon the termination of the lease, and diamond drilling .... located the extension of high grade below 1 level and, in addition indicated sufficient mill feed ore which, together with the older reserves in the mine, (justified) building a mill of about 100 tons per day capacity."

(H.L. Hill 1961)

1964

A second-hand mill of approximately 100 tons capacity was installed on the property and operated until low metal prices coupled with low grade ore reserves contributed to closure in 1968.

1971

Geophysical exploration by Granby led to discovery of some mineralization that was not extended in the continued drilling. Most of the drilling was in an area distant from the old mine workings.

Productive. (Premier and Silbak Premier)

Year:	Tons:	Recovery per ton Au. Oz.	Ag. Oz.	Pb. %	Zn. %	Cu. %	Cd. %	Dividends
1918	26	7.0	88.0	-	-	-	-	-
19	488	6.6	221.0	-	-	-	-	-
20	799	2.86	97.0	-	-	-	-	-
21	18,750	1.88	60.5	-	-	-	-	$ 400,000.
22	102,334	1.21	41.8	-	-	-	-	2,750,000.
23	145,665	0.80	18.9	2.1	-	-	-	1,738,000.
24	159,014	0.875	19.0	1.42	-	-	-	1,715,000.
25	168,557	0.70	14.4	2.34	-	-	-	1,600,375.
26	230,987	0.527	12.6	0.97	-	-	-	1,600,437
27	244,172	0.48	12.8	4.70	-	2.57	-	1,601,250
28	275,811	0.47	8.6	5.30	-	3.73	-	1,300,000.
29	266,972	0.364	8.7	3.94	-	2.43	-	1,208,250.
1930	256,836	0.338	9.9	2.40	-	0.98	-	1,203,281.
31	242,317	0.328	6.25	2.42	-	0.76	-	601,828.
32	221,718	0.343	7.03	2.45	-	0.78	-	691,535.
33	185,421	0.268	5.43	-	-	-	-	650,985.
34	153,950	0.17	4.30	(heads)	-	-	-	600,000.
35	149,672	-	-	-	-	-	-	650,000.
36	192,442	0.225	5.2	-	-	-	-	800,000.
37	201,206	0.237	4.54	-	-	-	-	Nil
38	184,606	-	-	-	-	-	-	200,000.
39	169,164	0.24	5.25	-	-	-	-	400,000.
1940	171,504	0.216	3.58	-	-	-	-	400,000.
41	170,504	-	-	-	-	-	-	400,000.
42	140,567	0.259	-	-	-	-	-	400,000.
43	93,003	0.238	3.58	-	-	-	-	325,000.
44	68,496	-	-	-	-	-	-	125,000.
45	65,801	-	-	-	-	-	-	100,000.
46	34,804	0.234	1.10	1.68	-	-	-	25,000.
47	59,343	0.22	1.49	2.25	-	-	-	Nil
48	41,360	0.207	1.46	1.97	1.36	-	.014	Nil
49	10,348	-	-	-	-	-	-	Nil
1950	79,167	0.205	1.69	2.0	-	-	-	Nil
51	67,844	0.101	1.95	2.63	3.87	-	.027	Nil
52	90,762	0.098	1.73	2.23	3.37	-	.025	50,000.
53	40,322	0.123	1.94	2.70	3.48	-	.068	Nil
1954 to 1958 - closed down				DIVIDENDS		TOTAL		$21,535,941.
1959	1,282	5.89	158.7	6.41	7.85	0.64	-	-
60	62	10.48	271.4	5.15	8.64	-	-	-
61	831	7.78	135.8	3.36	3.48	-	-	-
62	465	7.0	112.4	3.15	4.6	-	-	-
63	96	6.6	98.0	3.12	4.6	-	-	-
64	2,712	0.71	14.4	-	-	-	-	-
65	2,336	0.28	6.4	0.15	0.28	-	-	-
66	14,189	0.57	11.6	0.30	0.42	-	-	-
67	6,694	0.54	12.4	0.35	0.46	-	-	-
68	4	12.75	182.0	1.28	2.15	-	-	-
Avge.	4,722,413	0.384	8.03	2.5	3.0	1.9		

This history leads to the important conclusion that by far the best grade ore was produced in the earliest years of operation, except for the new 'glory-hole' discovery in 1959. The high grade was all from the upper levels of the mine.

E.W. Grove (1971) provides a summary of production as follows. Note that he shows a higher grade of silver than that in the above calculations.

RECORDED PRODUCTION OF THE PREMIER VEIN SYSTEM

ne Section r -	Year	Ore Shipped or Treated	Gold	Silver	Copper	Lead	Cadmium	Zinc
			Oz.	Oz.	Lb.	Lb.	Lb.	Lb.
C. Silver	1924-27	1,103	2,218	88,058	290	10,787	(?)	(?)
emier	1918-37	2,817,327	1,380,906	33,652,118	2,329,630	22,673,075	(?)	3,194,284
lbak Premier	1936-68	1,852,845	436,038	7,292,860	1,967,247+	36,236,085	177,784	13,050,522
emier Border	1950-53	42,995	3,104	86,695	(?)	3,586,976	19,098	4,344,069
Totals:	1918-68	4,714,270	1,822,266	41,119,731	4,297,167+	62,506,923	196,882+	20,588,875+

" Ore reserve estimates have not been published by the company since 1961 when the available ore was estimated at about 170,000 tons, including broken ore, measured ore, and indicated ore found below 6 level by diamond drilling (Minister of Mines, B.C., Ann. Rept., 1964, p.22). Grades are difficult to estimate for the old working places as company records of copper, lead, and zinc values are generally incomplete. Of the 400,000 or more feet of diamond-drill core obtained by the company, virtually none has survived the climate and the old drill logs are of rather limited use. The potential of the property lies in a complete geological reappraisal and a new look at the ore-shoots and their apparent controls." (Grove EW 1971.)

MINE WORKINGS

Plans of all of the mine workings and several sets of sections have been studied.

" There are approximately 46 miles of underground workings, consisting of 13 levels and sub-levels, 5 short internal shafts and several vertical ore-passes, extending over a horizontal distance of 9000 feet and a vertical range of 1650 feet. There are 7 adits, only 4 of which were in recent use. The "Glory Hole", where the ore was stoped to the surface, is about 600 feet long by 200 feet wide. The major ore-shoots extend northeasterly at irregular intervals from the Glory Hole and do not again reach the surface. They have been largely stoped and are generally inaccessible above the main haulage level. Northwesterly from the "Glory Hole", a smaller "string" of ore-shoots have been stoped to the erosion surface. This "open-V" pattern is related to rock structure and is repeated on a smaller scale in the "West Ore Zone" (Premier Border) 600 feet west of the Main Zone. Whereas the ore shoots in the Main Zone bottom a short distance below the main haulage (#4) level, the ore in the West Zone extends 750 feet below this elevation."

(W.N. Plumb 1955)

E.W. Grove (1971) provides a number of very useful maps showing the mine workings.

REGIONAL GEOLOGY

E.W. Grove (1971) and G. Hanson (1935) have mapped the district, Grove in more detail than Hanson. Grove reports both in his text and in personal conversation that a 'belt of shearing' hosts most of the ore bodies in the district, including Premier. The shear zone is in andesitic rocks, is locally silicified, and is capped by later sedimentary rocks.

The writer notes that this environment typifies mines such as Western at Buttle Lake, Twin J. at Duncan, and Homestake near Kamloops, all of which contain a combination of gold, silver and of copper, lead and zinc sulphides and all of which are believed to be volcanogenic.

LOCAL GEOLOGY

ALTERNATIVE CONCEPTS

Premier was explored, mined, and closed down under the premise originally advanced in 1923 (A.H. Means) that the ore was deposited by 'replacement' in and near two intersections of two sets of mineralized 'shear zones'. One intersection was believed to produce the main series of stopes, and the other produced the Premier Border series.

However, several geologists and engineers, including the writer, were aware some years ago that the geology was not well understood. Even W.H. Means recognized in 1923 that the hypothesis of 'replacement' had its problems.

> "The silicification which is intimately associated with the ore penetrates the wall rock and gradually fades out as the distance from an ore body increases. The examination of thin sections indicates this silicification to be later than calcite-sericite wall rock alteration. There is no indication whatever that there has been any preference whatever for a particular type of wall rock, i.e. tuff or porphyry."

Hanson (1935) includes a plan and set of sections that show the spatial relation of the mineralized shear zones to the porphyry and greenstone. These sections show mineralized shear zones dipping south-easterly as well as northwesterly, and thus present the earliest reported evidence that mineralization could have vented onto a then-

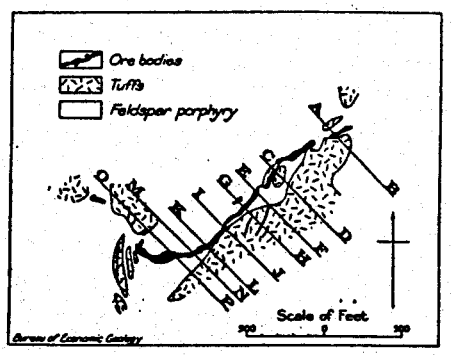


Figure 16. Plan of No. 3 level (elevation 1,350 feet), Premier mine (A-B, C-D, etc.: lines of section, *See* Figure 17).

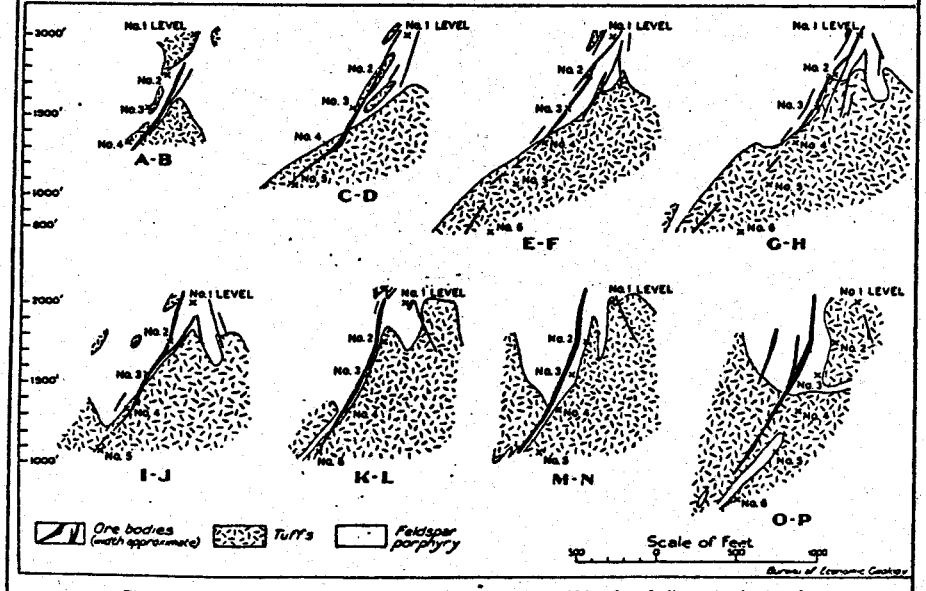


Figure 17. Vertical sections (*See* Figure 16), Premier mine; widths of ore-bodies approximate only.

Configuration of Premier ore-bodies showing relation of ore-bodies to feldspar porphyry and to tuffs (greenstone). Note the southeasterly dip of ore on sections G-H, I-J, K-L, M-N, and O-P. (From Geol. Survey of Canada, Mem.175)

existing surface, and, upon ejection, could have been deposited on both flanks of the surface of the volcanic pile. (See sketches on preceding page)

The 'shear zones' were recognized to be capped. Means states:

> "In general the values carried by outcrop material are low, very low in comparison with the ore which in some cases underlies them."

E.G. Langille, mine geologist during the latter years of full production, had the advantage of access to almost all of the mine workings for many years. He followed Means' hypothesis concerning shearing.

> "It became apparent at an early stage in the development of the Premier Mine, that ore zones were controlled by northeast and northwest fracture systems. (1) The larger stopes were located in that section, where an exceptionally strong northwest shear zone, swinging in a wide arc to partly merge with a major northeast shear zone, fractured the porphyry host rock over a wide area.
>
> While the more productive area at the junction of the two fracture systems was energetically developed during the preliminary stages of the mine development, the individual fracture systems leading from this area were not neglected. The earlier workings of the mine gradually assumed a crescent-shaped pattern, as narrower stopes were brought into production along the two fracture systems. The wide stopes, together with narrower ones in branching veins at the junction of the two shear systems, formed the body of the crescent-shaped mine workings.

"Subsequent Mine Development

Testing for depth conditions by diamond drilling and driving the lowest adit, known as number 6 level, showed that most of the ore shoots bottomed above number 5 level; and that only the roots of some persisted down to the lowest level. Furthermore, at that time, the northwest shear had been sufficiently developed to make it quite apparent that the potentially productive horizon of this structure would outcrop on the mountain side, not far from its junction with the northeast zone. Although rapid vertical zoning bottomed the ore shoots at comparatively shallow depths, and topographical relief abruptly terminated the upper favorable horizons of the northwest shear zone, there were apparently no physical limitations to the northeast zone. Consequently, major developments were eventually directed almost entirely in that direction, or in the hanging wall of that zone.

The initial development work along the northeast zone disclosed scattered ore shoots along the strike of the zone, while later efforts discovered various sized ore shoots arranged en echelon. Some of the ore shoots were less than 100 feet in length, so that in drilling for paralleling or en echelon arranged ore shoots, it became necessary to space the holes close enough to pick up any of these short ore bodies.

Some important ore deposits out in the hanging wall of the northeast zone were discovered by the diamond drilling program. This proved to be a somewhat smaller replica of the crescent-shaped fractured area, which had been so productive in the initial mining operations. Here again, northeast and northwest shearing paralleling that in the original part of the mine, merged to form a major ore body."

(Langille - 1945)

(This major ore body is known as the 'Premier Border')

ROCK TYPES

Purple Tuffs

"The 'purple tuff' should be named more accurately 'purple breccia'. The fragments range in diameter from a few tenths of an inch to greater than one foot. They are composed of mauve, purple, and purplish-orange fragments (many of them purple porphyry) in a matrix of purple tuff, greenish tuff, and purple porphyry. The bulk of the rock is closely packed ovoid fragments. In a few places however aphanitic purple rock shows no fragments. The borders of the purple tuff lenses, where observed, grade into greenstone; the purplish rock grades into patchy purple and green, and thence to green."

(Seraphim 1955)

Langille described the nature of the 'purple tuff' capping in detail and recognized that it was unconformable to the porphyry and greenstone that host the ore bodies.

"The purple tuff represents what might be considered an extreme degree of non-competence. In no case has it been found to bear even the disseminated pyrite, with which most of the other formations are impregnated. It is distinctly clastic in appearance, consisting of broken crystals and rock fragments in a fine grained rock mass. The lack of major fracturing is more than compensated for by the numerous incipient shears, which are usually slickensided and present in sufficient numbers to render the formation weak and somewhat fragmental...."

(Langille op cit)

Porphyry

" The large outcrop of the Premier porphyry formation, part of which is found on the westerly side of the Premier Mine property, is probably that of a stock. Its surface outline has never been completely mapped, partly due to the heavy overburden and partly to the fact, that, outside of the Premier property, no detailed geology has been done.

The stock appears to be at least 3000 feet in width occupying a position on the western side and roughly paralleling the mine property. There are several roof pendants of the intruded Bear River formation within the stock boundaries, and, conversely, the stock has many outliers in the form of dyke-like bodies intruding the Bear River formation. Most of the Premier ore bodies are associated with these outliers. Their structure, and the relationship of the ore bodies to them, are therefore important considerations when endeavouring to predict the recurrence of Premier ore bodies.

The Premier porphyry outliers are roughly tabular in shape. Schofield and Hanson considered them to be sills (3) and they have generally been so termed. White (5) called them irregular sill-like bodies. Burton (6) termed them an irregular stock work, while Hanson (2) simply referred to them as sill-like tongues.

The accompanying drawings and cross-sections clearly demonstrate their dyke-like structure. Furthermore, it appears quite evident from these that the porphyry outliers are definitely not sill formations. In the first place, the strikes of the tabular porphyry bodies seldom approach within 20° of the N.17° E. strike of the purple tuff. It has been pointed out that the purple tuffs serve as pilot strata defining the dip and strike of the other water-lain tuffs in the Bear River formation, within which the Premier porphyry is intruded. If the porphyry tabular bodies are sill structures, then their strikes and dips would conform with those of the purple tuff.

The strikes of the porphyry bodies may be readily seen from a plan of the mine workings. Most of the drifts along the northeast zone follow or parallel the porphyry-greenstone contacts. The directions of the drifts are for the most part somewhat more easterly than the N.17°E. strike of the intruded tuff.

The various cross-sections disclose a marked dissimilarity between the dip of the pilot strata of the Bear River formation and that of the tabular porphyry structures. Sections all show a noticeable consistency in the dip of both the porphyry intrusives and the purple tuff marker strata for the Bear River volcanics. An average dip of approximately 65° northwest for the former and 17° in the same direction for the latter, clearly demonstrated that these are not conformable formations, and therefore the porphyry tabular bodies are not sills."

(Langille,op.cit.)

R.H. Seraphim spent several months in 1955 mapping a key area of surface and relogging about 500 drill holes, the purpose being to determine the structure of the porphyry that hosts or is proximate to the bulk of the high grade ore.

" The surface mapping shows two zones of porphyry. The northern zone appears conformable to lenticular bodies of 'purple tuff', which are used as horizon markers. The southern porphyry zone is composed of a number of bodies similar in strike but dipping more steeply west than the 'purple tuffs'.

The southern bodies may be dikes or sheets feeding the northern zone which is proably a flow or sill. The junction of the northern and southern zones forms a bulge of porphyry. It is in this porphyry bulge that most of the bonanza type Premier ore occurred. The ore became marginal where the mineralized zone passed into greenstone at depth below the porphyry bulge."

(Seraphim 1955)

Seraphim recognized two types of porphyry.

" The Premier porphyry is composed essentially of orthoclase phenocrysts in an aphanitic or fine-grained andesitic matrix. The rock is generally green with greyish alteration. Its fracture is more blocky than that of the greenstone. Two ranges in size of phenocrysts are apparent. One lies between the approximate limites of 1/32" to 1/8" , and the other between limits of 1/4" to greater than 1", that is, very few phenocrysts, if any, are between 1/8" and 1/4" in diameter. Rock containing only the smaller phenocrysts is called 'single stage porphyry' - rock containing both the larger and smaller phenocrysts is called 'two stage porphyry'. Rock containing only the larger phenocrysts has been observed, but has a cloudy matrix in which the outlines of the smaller phenocrysts may be obscured.

The two-stage porphyry contains on the average only one or two large phenocrysts in two or three square feet of exposed surface. Thus, the odds are that only one large phenocryst would be observed in 10 or 15 feet of core. Thus where the core is dirty and/or contains quartz stringers, two-stage porphyry may be incorrectly recorded as single-stage porphyry.

Much of the porphyry (perhaps 50%), including both stages, is cloudy - the phenocrysts merge into the matrix with megascopically gradational boundaries. This 'cloudy' porphyry grades into greenstone, that is, the phenocrysts become increasingly cloudy until none can be distinguished from the matrix, and the rock is consequently recorded as greenstone.

The single-stage porphyry is in places brecciated and in one locality a fragment of porphyry was found, apparently isolated in greenstone breccia a few inches from the contact of solid porphyry. A zone of highly brecciated single-stage porphyry was observed on surface near co-ordinates 7000N-4500E. A similar zone occurs in D.D.H. -B.C.S. "D" in the same area. Another zone of this type was observed one or two miles north of the map area. <u>These zones suggest that at least the single-stage porphyry, if not also the two-stage porphyry, is in places flow rock.</u>"

Geologists have long recognized that a single flow, sill, or dyke, may contain rock of several types, because

of more rapid cooling of its contacts with respect to its interior portions.

This investigation thus provided results that were too far 'ahead of their time', in that the porphyry was deduced to be formed in part as "dykes or sheets feeding the northern zone which is probably a flow or sill". That is, part of the porphyry was suspected to be rock filling a fissure, from which a flow (or sill) of the same rock was ejected. Seraphim was not aware at the time, in fact it would have been heretic to suggest, that the accompanying ore zones were formed in the same fashion, that is partly within submarine vents and partly as sulphides ejected from the vents onto the volcanic rocks on the ocean floor in accordance with today's concepts.

Rhyolite?

W.H. Means (op.cit. p.10) reported

"The silicification which is intimately associated with the ore penetrates the wall rock and gradually fades out as distance from an ore body increases."

W.H. White (1939 p.13)

"Silbak Premier ore consists of about 20% base metal sulphides in a gangue of quartz and calcite."

Means (op.cit.) also reports that

"Wall rock alteration consists of calcite and sericite."

The writer suggests that some of these geologists today, including himself, might upon re-examination call the host rock rhyolite.

These descriptions all affirm that the rocks at Premier are typical, particularly with the presence of purple tuff and breccia 'cap-rocks' and the evidence of vent-flow relations, in both lithology and structure of those hosting volcanogenic deposits.

MINERALIZATION

The nature and distribution of ore was indicated in a general way in the statistics of production and dividend payments listed in section titled "HISTORY". Both A.H. Means and W.H. White conducted detailed laboratory investigations which showed that, in the main Premier orebodies, silver and gold were in greatest concentrations in the stopes at the upper levels. White (op.cit. p.13) reports

" Silbak Premier ore consists of about 20% base metal sulphides in a gangue of quartz and calcite. The minerals in order of abundance are: pyrite, sphalerite, galena, chalcopyrite and pyrrhotite, with small and varying amounts of gold, electrum, argentite, pyrargyrite, polybasite, and locally native silver."

White (op,cit. p.13) recognized the two types of ore which characterize volcanogenic deposits

" Two general types are recognized, one in porphyry characterized by irregular stringers and bunches of sulphides, partially digested fragments of wall rock, and by gradational walls; (vent or 'oko' ore in today's classification) while the other in greenstone, has abrupt walls and unaltered fragments of wall-rock around which the sulphides are often banded." (stratiform or 'kuroko' ore in today's classification)

The writer adds that volcanogenic ore bodies do, in many localities, contain high grade gold and silver mineralization in the last sequence, and thus at the top

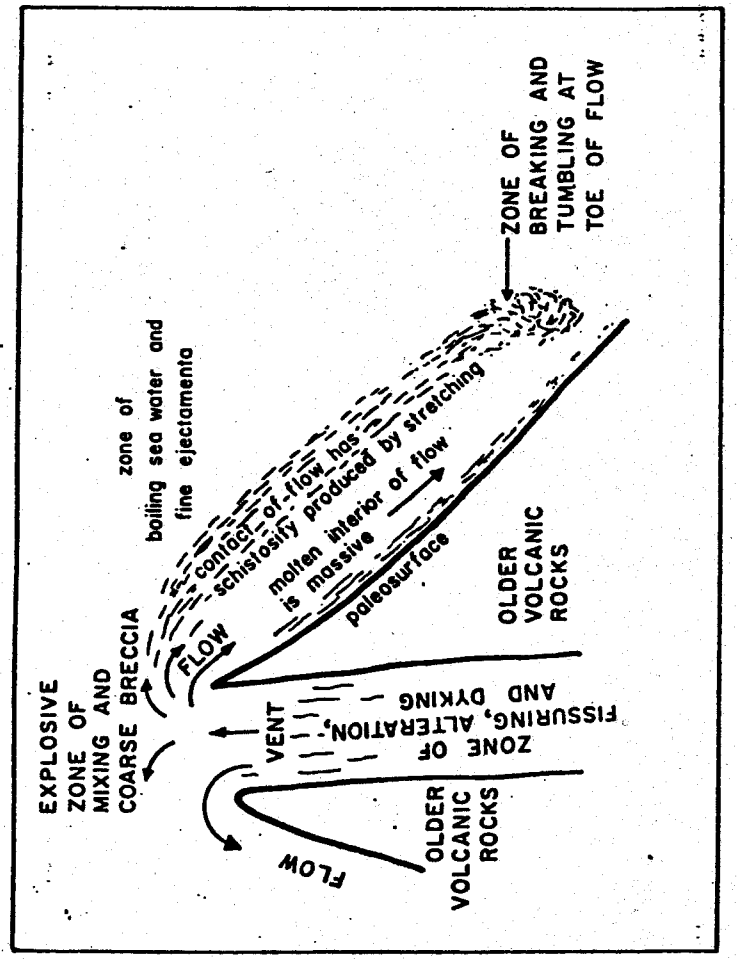
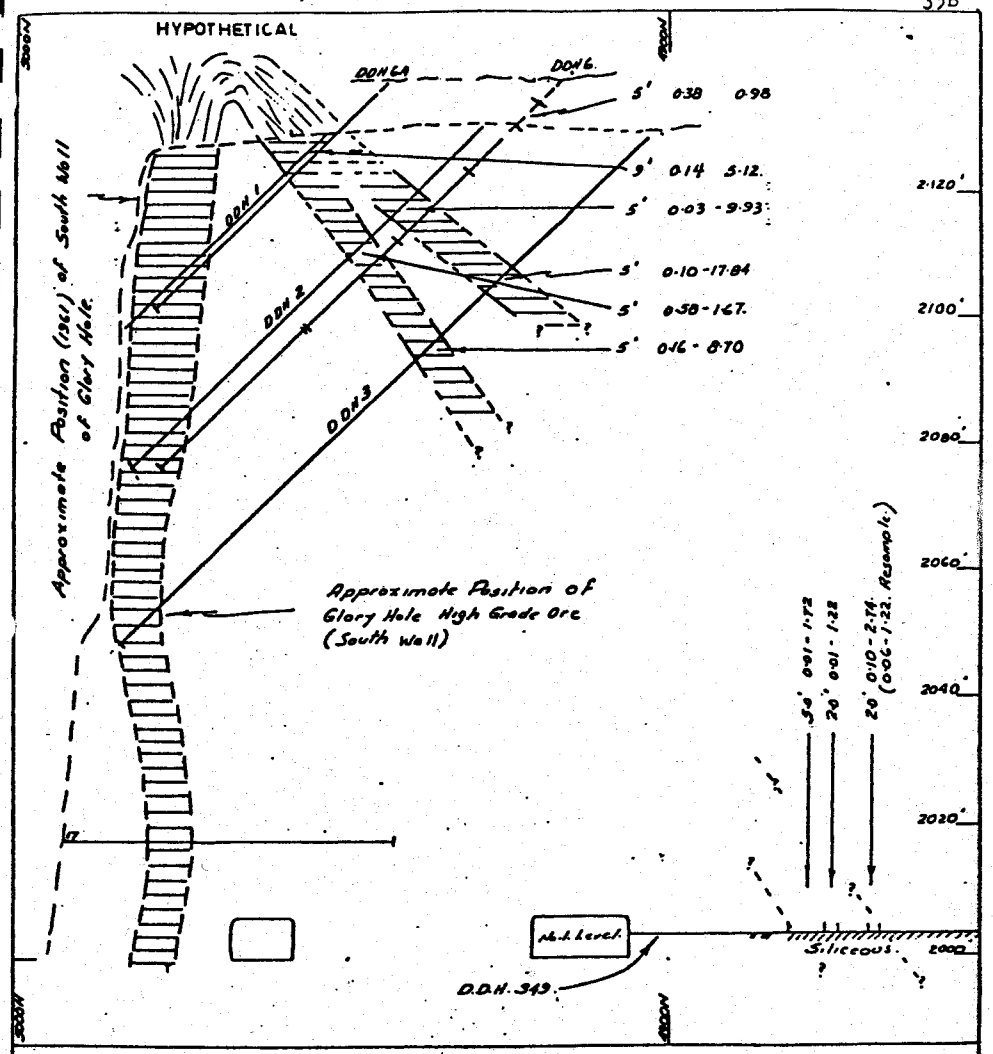


Figure 3.

Diagramatic sketch of a vent in a Volcanogenic deposit.



Section at 20 ft.=1inch on south wall of the Glory Hole showing inverted U or V shaped configuration, perhaps conforming to an area of volcanic venting rather than a northwest dipping fracture system.

Figure 4

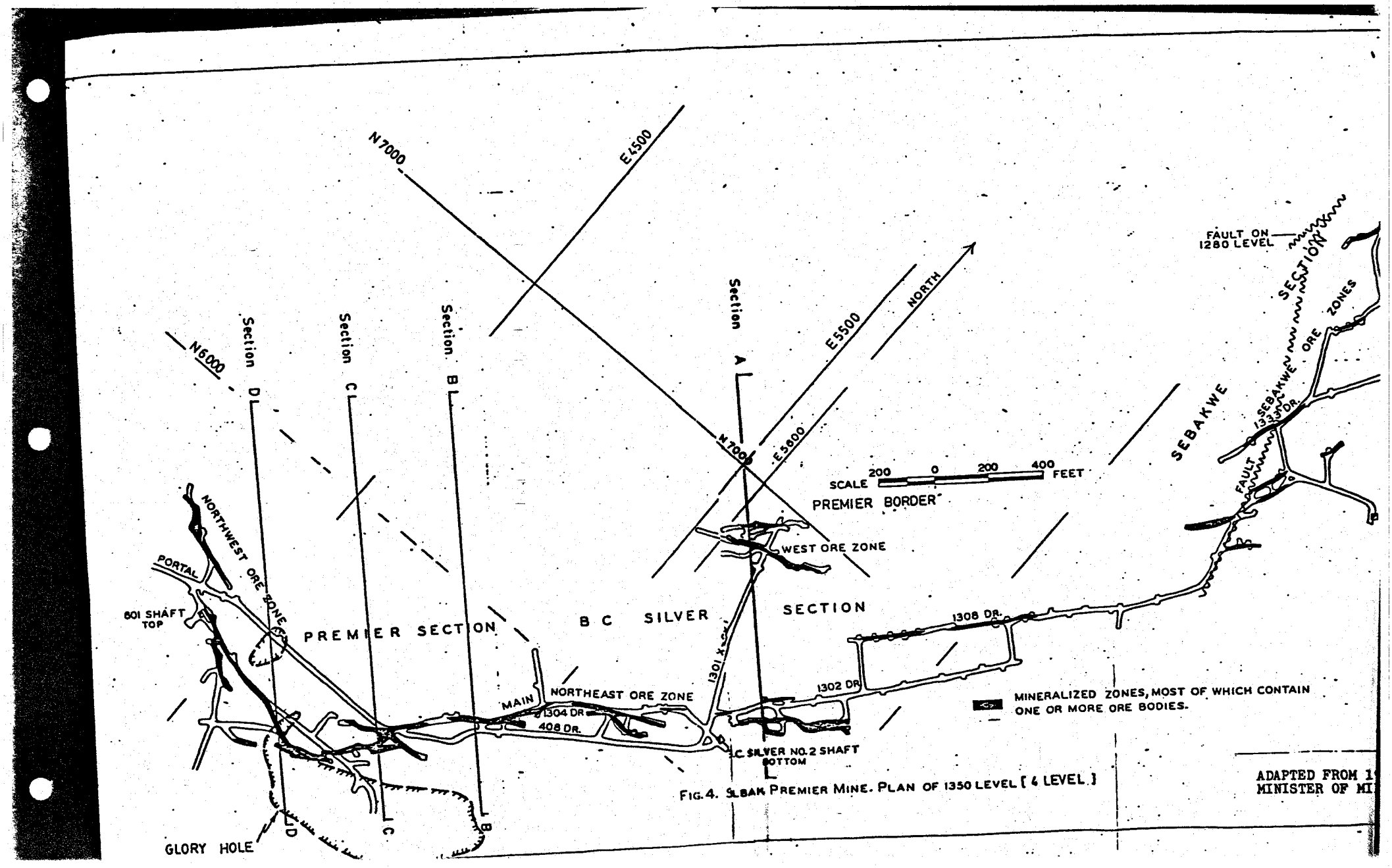


FIG. 4. SLOAN PREMIER MINE. PLAN OF 1350 LEVEL [4 LEVEL]

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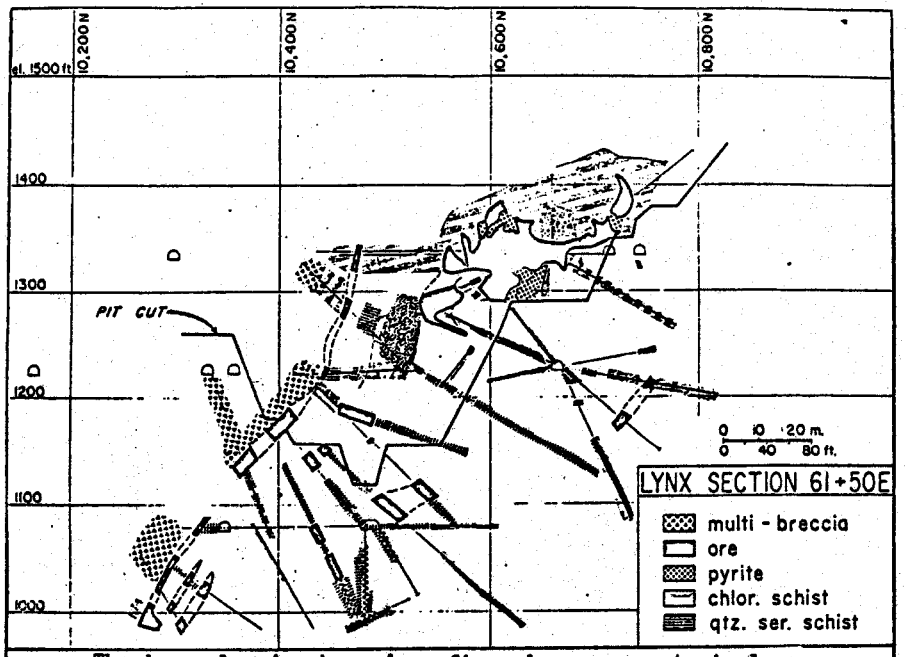

The irregular 'mushroom' configured ore zones typical of the uppermost part of many volcanogenic deposits is shown in Western Mines' pit at Buttle Lake. Note the north dipping 'G' Zone and south flank ore zones of the anteform structure shown below.

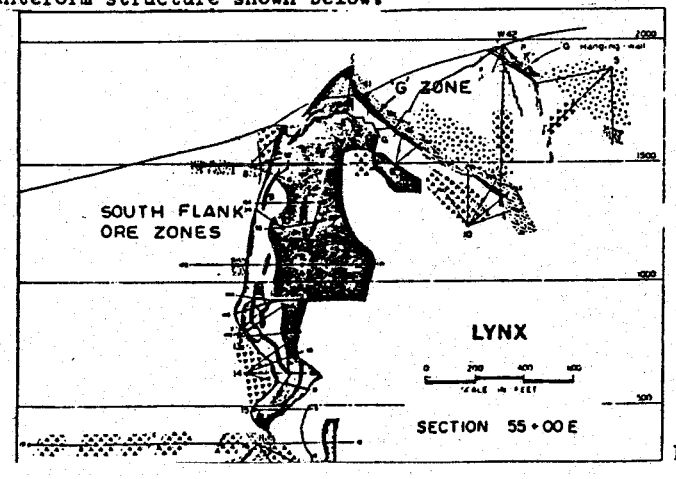

Figure 5.

The importance of the classification comes in the zones selected for intensive exploration. If we accept that the mineralization is volcanogenic, and is genetically related to the porphyry, then exploration of all of the uppermost portions of the porphyry, including roof and flanks, where it contacts the greenstone, should be given highest priority. Further, the search should be conducted under the premise that the two types of ore, described above by White, should occur in structures with cross sections which are either 'mushroom' shaped as in fig. 5 below or, if an ore vent ejected stratiform ore onto a surface that was sloping at the time, then an inverted U or V shaped structure as shown in fig. 4 below. Perhaps inverted U or V shapes were the basis for Langille's statement regarding stopes in tandem -

> "Developments to the eastward from the earlier stopes which are located in the southwestern part of the mine, followed along two successive patterns. In the first case the stopes occurred in tandem along a northwest direction." (Longille op.cit. p.50).

> "The reported attitude of the northwesterly trending zone is questionable. It appears to be formed by a number of smaller zones of different attitudes, perhaps related to small shear zones and/or greenstone-porphyry contacts. However, the stope maps do indicate that this northwest-trending zone does, in general, dip vertically. It does not seem to have the strength of the north-east trending zone. Both zones appear to decrease in strength with depth, the obvious reason being a change in host rock type from the porphyry to greenstone."
> (Seraphim Op.cit)

MINERAL RESERVES

'Ore' Reserves were reported in 1963 by Hill-Starck as follows:

Block No.	Location	Tons	Gold oz/T	Silver oz/T	% Pb.	% Zn.
1.	Glory Hole	22,010	0.574	16.98	-	-
2.	Below 3 Level	82,775	0.25	2.52	1.60	2.40
3.	Premier Border	81,561	0.06	1.78	3.83	5.72

The 'Glory Hole' block was mined subsequently by Bralorne Pioneer. Blocks 2 and 3 are believed to remain in place, and can be re-evaluated eventually.

Mineral reserves in the vicinity of the glory holes can be calculated eventually if some additional up-to-date assay plans are located, or alternatively, after a drilling program in the vicinity of the glory holes is completed. The assay plans examined in storage at Stewart do not include plans of the southwest parts of either 1 level or 110 sublevel. These areas were mined from 1959 to 1968 by leasees, by Hill, Starck and Associates for Silbak Premier,and by Bralorne Pioneer. Bralorne-Pioneer's data has not been obtained.

The writer's opinion, based on one day's study of assay plans covering 1 and 110 sublevels, is that the

1974 estimate of open pit reserves by a major mining company (name withheld) does not allow for open-pitting with selection. The company reported a grade of 0.03 oz. gold and 0.75 oz. silver for 7,000,000 tons, minus that mined by former operators. (The 1974 plans and sections are not available to the writer at present.) The ore configuration presumably included a block without selective sorting. The writer observed that the assay plans that are available do show discreet zones locally up to fifty feet or more wide with abrupt cut-offs, and, judging from a quick review without calculations, grading higher than the 1974 reported grade of 0.03 oz. gold and 0.75 oz. silver. Therefore a detailed program involving study of the available assay plans, together with fill in and check drilling, and an underground investigation if possible to determine what has been stoped, certainly is warranted. This program should result in determination of a 'mineral reserve' with several grade shcedules, the highest having a grade several times that of the 1974 estimate. Tonnage would be proportionately lower than that calculated in 1974. If the crest of the deposit has a 'mushroom' configuration typical of volcanogenic deposits, then the results might

be as successful as the pit operation which brought Western Mines to its maturity by recouping its pre-production and mill installation (capital) costs.

EXPLORATION AREAS

The geological study, accompanied and followed by a review of the available drill hole logs and assay plans, led to the conclusion that a number of intercepts approaching ore in grade-widths in the original Premier Mine attract further exploration. The previous operators explored the north and northwest flanks of the arcuate zone of vents in detail. Topography led to access from the north and west. Hence, the south and southeast flanks are not explored in sufficient detail for two reasons: lack of suitable underground drilling sites and the geological theory prevailing during the mine's productive lifetime. Some, but by no means all, of the intercepts deemed to be worthy of more extensive drilling programs are shown on the accompanying four cross-sections (pocket).

Numerous surface showings are reported and documented on the claim block. All of these require re-assessment which should be completed in the summer season.

R.H. Seraphim, Ph.D., P.Eng.

Telephone: Office 685-2914
Res. 224-7309

R. H. SERAPHIM ENGINEERING LIMITED
GEOLOGICAL ENGINEERING

316 - 470 GRANVILLE STREET
VANCOUVER, B.C. V6C 1V5

CERTIFICATION

I, Dr. R.H. Seraphim, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a Geological Engineer residing at 4636 West 3rd Avenue, Vancouver, B.C., and with office at #316, 470 Granville Street, Vancouver, B.C.
2. I am a registered Professional Engineer of British Columbia. I graduated with a Master of Applied Science from the University of British Columbia in 1948, and with a Doctor of Philosophy in geology from the Massachusetts Institute of Technology in 1951.
3. I have practiced my profession continually since graduation.
4. The attached report is based on a review of the data of Silbak Premier Mines Ltd. in the company records in reports of the Minister of Mines, and in technical journals. I did not re-examine the mine itself.
5. I consent to the use of this report in the raising of funds for this project.

DATED at Vancouver, British Columbia, this 8th day of March, 1979.

R.H. SERAPHIM, Ph.D., P.Eng.

APPENDIX 1

MINERALIZED INTERCEPTS IN SOME DRILL HOLES

SHOWN ON SECTIONS A TO D

(Some of the intercepts, particularly those indicated by an asterisk, may have been mined by previous operators. Many of the intercepts do not appear in the data examined to have been stoped and should be checked by underground examination to determine if they remain 'in place'. See individual drill hole plots.)

SECTION B

Drill Hole		Footage (Feet) From	To	Intercept (Feet)	Au. (oz.)	Resample	Ag. (oz.)	Resample
#261		30.0	40.0	10.0	0.02		2.18	
		40.0	50.0	10.0	0.01		2.16	
		60.0	70.0	10.0	0.02		1.82	
		70.0	80.0	10.0	0.02		1.66	
		220.0	230.0	10.0	0.01		1.28	
SECTION C								
#238	*	150.0	155.0	5.0	0.18	(0.24)	27.34	(22.33)
		155.0	160.0	5.0	0.03		2.94	
		160.0	170.0	10.0	0.02		1.22	
		401.0	406.0	5.0	0.01		2.68	
		406.0	413.0	7.0	0.02		3.90	
#245	*	0.0	6.0	6.0	0.06		11.18	
	*	11.0	20.0	9.0	0.03		1.70	
	*	20.0	21.0	1.0	0.40		28.08	
		40.0	50.0	10.0	0.01		2.32	
		50.0	60.0	10.0	0.01		1.24	
		70.0	80.0	10.0	0.08		6.12	
	R.S.*	70.5	72.0	1.5	0.46		44.34	
		150.0	160.0	10.0	0.01		1.68	
		390.0	400.0	10.0	0.02		2.50	
#272		60.0	70.0	10.0	0.01		1.96	
		90.0	97.5	7.5	0.02		1.74	
		97.5	100.0	2.5	0.08		1.20	
		100.0	110.0	10.0	0.02		1.38	
		130.0	140.0	10.0	0.04		1.58	
		140.0	150.0	10.0	0.04		0.36	
		160.0	170.0	10.0	0.02		1.86	
		440.0	450.0	10.0	0.01		1.64	
		590.0	601.0	11.0	Tr.		1.40	
#472		44.0	46.6	2.6	0.01		0.32	
	*	46.6	47.6	1.0	0.46		39.62	

* Stoped ?

SECTION C (Continued)

Drill Hole		Footage (Feet) From		To	Intercept (Feet)	Au. (oz.)	Resample	Ag. (oz.)	Resampl
#477		60.4	-	60.6	0.2	0.22		313.18	
		110.0	-	116.5	6.5	0.01		3.04	
	*	116.5	-	120.0	3.5	0.04	(0.04)	13.84	(11.00)
		120.0	-	130.0	10.0	0.02		2.30	
	*	173.0	-	173.7	0.7	0.16	(0.12)	19.28	(18.04)
	*	173.7	-	176.0	2.3	0.08	(0.06)	25.20	(12.30)
		455.0	-	460.0	5.0	0.04		3.32	
		460.0	-	467.0	7.0	0.02		8.22	
		756.5	-	757.0	0.5	0.10		1.90	
		764.5	-	765.0	0.5	0.08		8.40	
#404		20.0	-	30.0	10.0	0.04		1.72	
	*	30.0	-	40.0	10.0	0.66		0.38	
		146.0	-	146.7	0.7	0.16		2.36	
		156.0	-	159.0	3.0	0.02		1.54	
	*	159.0	-	161.5	2.5	0.06	(0.08)	8.70	(10.08)
		161.5	-	163.0	1.5	0.01		0.28	
		163.0	-	164.0	1.0	0.40	(0.68)	6.88	(6.52)
		241.5	-	242.5	1.0	0.14		14.10	
#394	*	60.0	-	61.0	1.0	1.84	(1.68)	138.64	(181.20)
	*	61.0	-	64.5	3.5	0.08	(0.08)	2.68	(3.84)
	*	64.5	-	66.0	1.5	0.14	(0.16)	13.14	(9.92)
	*	127.0	-	129.5	2.5	0.10		2.74	
	*	129.5	-	135.5	6.0	0.08		2.00	
	*	135.5	-	135.7	0.20	0.20		11.96	
	*	168.5	-	173.0	4.5	0.20		2.34	
	*	270.0	-	273.0	3.0	0.06		9.22	
#693	*	28.5	-	31.0	2.5	0.06		1.90	
	*	121.0	-	127.0	6.0	0.04	(0.02)	5.48	(5.10)

SECTION D

#328		51.0	-	56.0	5.0	0.04		0.96	
R.S*		55.5	-	56.0	0.5	0.28		6.44	
	*	66.0	-	71.0	5.0	0.12		0.76	
R.S*		67.0	-	67.5	0.5	0.68		5.56	
		134.0	-	138.0	4.0	0.16		4.96	
R.S*		134.0	-	136.5	2.5	0.18		3.14	
R.S.		136.5	-	137.4	0.9	0.06		2.18	
		258.0	-	268.0	10.0	0.03		2.38	
		278.0	-	283.0	5.0	0.02		2.14	

SECTION D (Continued)

Drill Hole		Footage (Feet) From		To	Intercept (Feet)	Au. (oz.)	Resample	Ag. (oz.)	Resam
#380	*	0.0	-	5.0	5.0	0.28	(0.16)	13.56	(6.
	*	5.0	-	9.0	4.0	0.42	(0.38)	15.22	(15.
	*	9.0	-	14.0	5.0	0.14	(0.16)	2.58	(3.
	*	14.0	-	19.0	5.0	0.16	(0.18)	2.12	(1.
	*	19.0	-	23.0	4.0	0.14	(0.14)	0.82	(0.
	*	23.0	-	29.0	6.0	0.04		0.40	
	*	29.0	-	29.5	0.5	0.16	(0.12)	1.68	(0.9
	*	29.5	-	32.0	2.5	0.02		0.50	
	*	32.0	-	36.0	4.0	0.44	(0.36)	0.92	(0.7
	*	36.0	-	41.0	5.0	0.08		0.24	
	*	41.0	-	41.5	0.5	0.28	(0.04)	2.20	(3.2
		54.0	-	58.5	4.5	0.04		0.64	
		58.5	-	60.0	1.5	0.06		2.62	
		176.0	-	177.9	1.9	0.20	(0.16)	2.20	(1.1
		330.0	-	340.0	10.0	0.02		1.86	
		340.0	-	350.0	10.0	0.02		1.22	
R.S.		330.0	-	339.0	9.0	0.02		1.10	
R.S.	*	339.0	-	341.0	2.0	0.10		3.58	
R.S.		341.0	-	350.0	9.0	0.02		1.06	
R.S.		479.3	-	480.0	0.7	0.08		50.44	
#298		162.5	-	163.0	0.5	0.24		2.52	
		169.5	-	170.0	0.5	0.14		7.86	
	*	178.4	-	183.0	4.6	0.04		2.08	
	*	183.0	-	184.75	1.75	0.02	(0.02)	8.78	(8.58
	*	184.75	-	191.40	6.65	0.02		3.58	
R.S.		184.75	-	188.0	3.25	0.02		4.78	
#295		8.50	-	10.50	2.0	0.08		4.88	
		140.0	-	150.0	10.0	0.02		4.98	
		150.0	-	151.0	1.0	0.30		1.34	
		180.8	-	182.3	1.5	0.04		4.16	
	*	182.3	-	186.0	3.7	0.46		15.58	
	*	186.0	-	189.0	3.0	0.06		11.30	
		189.0	-	192.0	3.0	0.02		0.26	
	*	192.0	-	195.5	3.5	0.56		9.52	
#722		210.0	-	216.0	6.0	0.01		1.28	

REPORT ON

BRITISH SILBAK PREMIER MINES LTD.

STEWART, B.C.

C. E. Michener, Ph.D., P.Eng.

J. O. C. Kerr, P.Eng.

Toronto, Ontario
December 5, 1980

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APPENDICES

LIST OF MAPS

SUMMARY

(1) The British Silbak Mine staff has outlined underground exploration targets at the Northern Light and related mineralized zones. We believe that exploration of these areas provides the best possibility of increasing the tonnage of the British Silbak Premier Mine at the present time and during the winter period. Developing a large, low-grade tonnage of ore on the sixth level also presents possibilities. The whole programme, although it contains risk elements, should be completed with the budget provided.

(2) An important exploration effort on surface should be the development drilling of ore-grade material found this past season. The potential for large, low-grade tonnage on surface was not shown to exist.

(3) Ore remaining in underground pillars and remnants adjacent to old stopes could not, in all probability, be economically mined and removed.

(4) A competent mine geologist is essential to the success of the underground programme.

C. E. Michener, Ph.D., P.Eng.

J. O. C. Kerr, P.Eng.

Toronto, Ontario
December 5, 1980

INTRODUCTION

A preliminary report with recommendations was prepared for British Silbak Premier Mines Ltd. on August 1st, 1980. For reference purposes, a copy of that report is attached as Appendix A. The progress made in the 1980 field season will be reviewed first followed by an assessment of the property and recommendations and conclusions summarized below.

EXPLORATION PROGRESS - SURFACE

A field camp consisting of tent frames and a cookery was erected at the property. This served as a base to repair the access roads which lead to the various portals which occur at different levels and also to the glory hole or open cut. Considerable clean-up work was required to gain access to the glory hole.

Two base lines were laid out on surface in a direction parallel to the strike of the ore zones and detailed geological mapping at a scale of 100 ft. to the inch was carried out over an area approximately 2,400 ft. by 4,800 ft. The glory hole served as a focal point for the mapping area. There are several prospect pits and adits in the mapped area. These were sampled where appropriate. The location of previous surface diamond drilling was plotted for correlation purposes.

A geochemical survey was carried out on the same grid pattern, sampling was done on lines 100 ft. apart and at 25 ft. intervals where possible. The results were contoured and used as a base for laying out the surface diamond drilling to be started later in the summer. A total of 23 bore holes was completed and these were grouped in four different areas controlled by the presence of geochemical anomalies. Map No. 1, at a scale of 100 ft. equals 1 inch, shows the results. The map shows geochemical results and the location of the bore holes drilled this season. A brief summary of the bore holes, which obtained interesting results, is shown below by area. Ore-grade material was found in bore hole numbers 80-1 and 80-5 at the east end of the glory hole. Ore-grade intersections were also obtained at the Pictou area, Cascade Falls area, and the Buckham area. Assays for some surface samples are also listed in the table.

TABLE 1

HIGHLIGHTS OF ASSAY RESULTS RECEIVED TO NOVEMBER 20, 1980

I - DIAMOND DRILL HOLES

DDH	FOOTAGE	WIDTH	% Pb	% Zn	OZ./T Au	OZ./T Ag
Glory Hole Area						
80-1	452-457	5'	0.01	0.03	0.026	5.47
	457-462	5'	0.08	0.27	0.162	7.16
(Av.	452-462)	10'			0.094	6.32
	465' hole broke into stope above 110 level.					
80-5	199-204	5'			0.042	5.38
	279-282	3'	0.06	0.01	0.054	6.44
	282-287	5'	0.08	0.08	0.040	8.34
(Av.	279-287)	8'			0.045	7.63
	353.5-358.5	5'			0.448	1.42
	358.5-363.5	5'			0.020	8.50
(Av.	353.5-363.5)	10'			0.234	4.96
	368.5' hole broke into glory hole.					
Pictou						
80-10	94.7- 95.7	1'			0.050	2.30
	166.7-168.1	1.4'			0.016	5.74
80-11	200.5-202.3	1.8'			0.154	0.27
Prospect						
80-12	319.2-320.2	1'	0.09	0.14	0.048	8.52
	320.2-323.2	3'	0.02	0.03	0.003	0.70
(Av.	319.2-323.2)	4'			0.014	2.66
	356.2-362.5	6.3'	0.30	0.92	0.040	3.26
80-13	223-226.5*	3.5'			0.036	4.04
Cascade Falls #8						
80-14	263.7-265.2*	1.5'			0.023	0.18
	265.2-267.7*	2.7'			0.028	12.91
(Av.	263.7-267.7)	4'			0.026	8.14

* - assays by Scotty Gold Lab, Stewart.

DDH	FOOTAGE	WIDTH	% Pb	% Zn	OZ./T Au	OZ./T Ag
Buckham Pictou						
80-16	317.1-323*	5.9'			0.014	6.54
	323-324*	1'			0.056	17.08
(Av.	317.1-324	6.9'			0.020	8.07
80-18	454.1-458.6*	4.5'			0.212	0.85
	458.6-460.4*	1.8'			0.006	0.27
(Av.	454.1-460.4)	6.3'			0.153	0.68
	466.7-468.6*	1.9'			0.008	3.77
	468.6-469.6*	1'			0.012	5.16
(Av.	466.7-469.6)	2.9'			0.009	4.25

II - TRENCHES & EXPLORATORY TUNNELS

SAMPLE NO.	WIDTH (FT.)	% Pb	% Zn	OZ./T Au	OZ./T Ag	OZ./T Au EQUIV.
Pictou Tunnel						
80-1085	6'	0.63	6.01	0.168	0.99	0.201
80-1082	6.5'	0.90	1.59	0.090	1.35	0.135
80-1081	6.5'	1.28	1.30	0.048	1.83	0.109
Pictou Trenches						
80-1092	6'	0.82	1.41	0.032	1.90	0.095
80-1112	1.5'	2.14	3.58	0.042	25.46	0.891
80-1113	5'	0.82	2.96	0.034	1.82	0.095
80-1115	4'	0.12	0.35	0.030	3.32	0.141
Prospect Tunnel						
80-1086	5'	2.03	1.18	0.110	1.85	0.172
80-1087	8'	0.34	1.06	0.092	2.23	0.166
80-1089	5'	0.27	0.44	0.020	9.12	0.324
80-1090	4.5'	0.31	0.42	0.014	10.80	0.374
Prospect Trench						
80-1007	3'	0.30	1.42	0.030	5.02	0.197

* - assays by Scotty Gold Lab, Stewart.

The drilling outlined above has pinpointed some targets, which will require delineation drilling next summer when access is possible. Assay results have not been received for the most recent bore holes, 23 in total.

UNDERGROUND WORK

The sixth level portal was retimbered and the rehabilitation of the sixth level started. This involved scaling, relaying the track, air line installation, and retimbering where necessary. Generally, this level is in good condition, except for the timber.

A programme of replotting the assay results from the old mine workings was started during the summer, but had to be stopped for lack of personnel. However, enough replotting of drift samples, diamond drill samples and percussion drilling samples was accomplished by Mr. Bjorkman, especially on the sixth level, to assess the ore potential below the sixth level. As a result of this work, proposals for exploration of this particular area have been prepared. In going through the records, it was found that, although they are fairly complete, a systematic filing system is badly needed for these records, along with the experience and ability to interpret these underground geological records, and their significance.

A full-time mine geologist is required to do this type of work. This would take possibly three months.

An assessment of the ore potential left in pillars in the old mine workings and the broken ore still remaining in the ore passes or stopes was also undertaken by Mr. Bjorkman. The conclusion was tentatively reached that the cost of mining a large number of isolated pillars where the timber has deteriorated is very expensive and probably would not be an economic undertaking. Some broken ore could be pulled in the general salvage operations of the mine, but this tonnage would not be great.

The replotting of values and colour coding the location of the values focus attention on the sixth level where ore potential exists at the 602 winze area and at the Northern Light mine shaft (NL) on the 787 cross-cut. Both of these areas have proven ore below the sixth level and were in the process of development when the mine closed down. The workings of both locations are flooded up to the sixth level track elevation and would require dewatering before underground exploration, together with the diamond drilling, could be carried out from the workings below the sixth level. However, the down-dip extension of these ore zones could be explored from both the surface and underground below the sixth level. The position of these targets is shown on the sixth level map no. 2 and in more detail on map nos. 3 and 4.

LARGE, LOW-GRADE ZONE ON SIXTH LEVEL

The former operators drilled a series of flat diamond drill holes at 90° to the sixth level tunnel over a length of 3,000 ft. along the adit. These holes, mostly over 1,000 ft. in length, were assayed for silver only and encountered large, low-grade intersections. Typical assays were 0.61 oz./ton over approximately 1,000 ft., 0.375 oz./ton over a similar distance, and 0.43 oz./ton over about 500 ft. The mineralized area on both sides of the adit would be approximately 2,400 ft. long by 800 ft. wide, with a back height of 1,300 ft. to surface. It is intended to chip sample the adit to confirm these values. The possibility exists here for a very large tonnage of low-grade ore which could be mined very cheaply.

The volcanic rock is mineralized with fine pyrite throughout and presumably there is also minor lead, zinc and gold present. The programme of check sampling of this adit has not been started but will be included in the proposed exploration programme for this winter.

GENERAL GEOLOGICAL ASSESSMENT, 1980

Previous reports on the property had suggested the possibility of a large, very low-grade open pit area to the east and surrounding the glory hole area. However, the drilling carried out this summer demonstrates there is present in this area a number of ore grade zones which may be developed as small open pits or a small underground operation and does not indicate consistent low-grade values over a large area. The most encouraging of these are the Buckham, the Cascade, the Pictou and the East Glory Hole areas shown on the surface map. Systematic diamond drilling of the better-grade ore intersections could be done next summer and is not included in the current budget.

The ore still remaining in the pillars has been calculated by previous mine staff and the present staff. It would represent about 31,000 tons grading 0.35 oz. Au/ton and 0.346 oz. Ag/ton. After investigating the situation underground it is our opinion that the cost of trying to recover this small amount of tonnage would be more than the value received, and therefore would not be economic. The broken ore remaining in the old stopes and ore passes is estimated to be about 6,000 tons. Some of this could be recovered on the sixth level. The grade is estimated to be similar to the pillars.

The main effort, the development of new ore, should therefore be directed to the higher-grade zones located on surface and to known ore, and ore extensions, on and below the sixth level. The latter could be converted for good access without too much cost and the exploration could be carried out on this level during the winter months.

ORE RESERVES

On surface there are four zones which have returned ore-grade intersections from recent diamond drilling. Before these can be classified as proven, a large amount of development drilling will be required. At the present time, these can only be classified as potential orebodies.

On the sixth level there are substantial drill intersections at the 602 winze area, which indicate the presence of an ore zone. Sufficient drilling has not been completed to warrant calling this drill-indicated or proven. This area was evidently in the process of being developed at the time the mine closed down due to the fire in the mill. The winze and some other workings below the sixth level are already completed, but would require dewatering (see Map 2).

In the Northern Light mine shaft area, two ore zones are outlined close to the Northern Light mine shaft. These zones run from the sixth level downward, and are shown on Map No. 3 and 4 . The total tonnage indicated by previous drilling would be about 66,000 tons grading 0.08 oz. Au/ton, 2.01 oz. Ag/ton, 4.2% Pb and 6.1% Zn. These are called the Northern Light Shaft Zone and the Northern Light East Zone, both of which are open and which could possibly develop additional tonnage with additional exploration.

To the east of the Northern Light ore zones there is, in the drift, a good deal of mineralization indicated in the back, and in some instances stoping has been carried out on or above the sixth level. These areas are shaded on Map No. 5 and exploration of these mineralized areas could be carried out by diamond drilling in conjunction with the drilling of the Northern Light Shaft Zone and Northern Light East Zone. We believe that exploration of these areas provides the best possibility of increasing the tonnage of the British Silbak Premier Mine at the present time and during the winter period.

EXPLORATION PROGRAMME

Map No. 5 shows a proposed diamond drill programme designed to utilize two short drifts to be driven for diamond drill stations. Drilling will be carried out from the hanging wall side of the Northern Light ore zones and associated zones which lie north and east of the Northern Light. In addition to this, the same zone could be drilled from the surface to penetrate the area below the Northern Light zone at a deeper level than can be reached from underground. This is indicated on Map No. 6 in plan. Two diamond drills could be used continuously throughout the winter months exploring this potential underground in addition to one diamond drill working from surface.

BUDGET

The following budget has been compiled from data researched by Mr. Vic Bjorkman of British Silbak Premier Mines Limited and Mr. J.O.C. Kerr and Dr. C. E. Michener of Derry, Michener & Booth, and applies only to the winter programme to March 31st, 1981:-

U.G. Rehabilitation - 6th level	$ 36,100
602 winze - 6th level	24,200
620 winze to end Northern Lights	49,400
N.E. of Northern Lights	17,600
X-Cuts for drill set-up	50,000
SUB-TOTAL	$ 177,300
Salaries	370,000
Administration	15,000
SUB-TOTAL	$ 385,000
Equipment SUB-TOTAL	$ 572,400
4 bore holes from surface (see Map No. 6) (Northern Light area) - 3,600 ft. @ $20	$ 72,000
602 winze area - 6 b.h. @ 250'	30,000
Northern Light area - 20 b.h. @ 500'	200,000
Check low-grade silver values on adit walls, 6th level	8,000
SUB-TOTAL	$ 1,444,700
Contingency @ 5%	75,000
GRAND TOTAL	$ 1,519,700
Say,	$ 1,520,000

CERTIFICATE OF QUALIFICATION

I, Charles E. Michener, of Suite 2302 - 401 Bay St., Toronto, Ontario, a Consulting Geologist and a Partner of the firm of Derry, Michener & Booth, certify that:-

(1) I am a professional geologist and a practising Professional Engineer in the Province of Ontario.

(2) The report contained herein is based upon my visits to the property on July 10th-11th and October 13th-15th, 1980.

(3) I have no interest, directly or indirectly, nor do I expect to receive any such interest, directly or indirectly, in the property of the company or any affiliate; nor do I beneficially own, directly or indirectly, any securities of the company or any affiliates of said company.

C. E. Michener, B.A., M.S., Ph.D., P.Eng.

Toronto, Ontario
December 5, 1980

CERTIFICATE OF QUALIFICATION

I, James O.C. Kerr, of 21 Munro Blvd., Willowdale, Ontario, a Consulting Mining Engineer and an Associate of the firm of Derry, Michener & Booth, certify that:-

(1) I am a professional mining engineer and a practising Professional Engineer in the Province of Ontario.

(2) The report contained herein is based upon my visits to the property on July 18-20 and on November 11-13, 1980.

(3) I have no interest, directly or indirectly, nor do I expect to receive any such interest, directly or indirectly, in the property of the company or any affiliate; nor do I beneficially own, directly or indirectly, any securities of the company or any affiliates of said company.

J.O.C. Kerr, B.A.Sc., P.Eng.

Toronto, Ontario
December 5, 1980

APPENDIX A

APPENDIX A

PRELIMINARY REPORT

BRITISH SILBAK PREMIER MINES LIMITED

C. E. Michener, B.A.,M.S.,Ph.D.,P.Eng.

J. O. C. Kerr, P.Eng.

Toronto, Ontario
August 1, 1980

TABLE OF CONTENTS

INTRODUCTION

At the request of British Silbak Premier Mines Limited I visited the Company's offices and properties on July 10th, 11th, and 12th, 1980 for the purpose of writing a fairly comprehensive evaluation report. It soom became apparent that the work completed so far this year on the property was of a general and geological nature and there was little new hard factual information which would contribute to the report. It was therefore decided to recommend to the British Silbak management that a preliminary report be issued at the present time which would summarize the present status of the mining properties and suggest further approaches for future work. This report is largely a summation of the work of others shown in Appendix A attached to this report.

A week after my visit, mining engineer, James O.C. Kerr of Derry, Michener & Booth, Toronto, and Mr. Irwin S. Parrish, geologist in charge of Derry, Michener & Booth's Denver office, visited the property and were able to enter the underground workings with Mr. Victor Bjorkman on two levels. They found the condition of the adits in reasonably good condition and the same applied to underground workings as far as they were able to go. An assessment of the rehabilitation cost involved to put the mine back in production will be required as soon as possible.

GEOLOGICAL SUMMARY

The most comprehensive geological study of the Stewart area was published in 1971 by the British Columbia Department of Mines and Petroleum Resources under the authorship of Edward W. Grove. His geological concept follows conventional thinking and ascribes the ore deposits to mineralization connected with the extensive Texas Creek granodiorite which is intrusive into a series of cataclastics of volcanic origin and equivalent to the Hazelton Series of rocks consisting of green clastics, black, purple, and green mylonites, and various coloured schists. Farther removed from the intrusive rocks to the northeast is the Hazelton Assemblage and the Bowser Assemblage of Jurassic age consisting mainly of sediments and volcanics. The Texas Creek intrusive has been variously altered at its contact with the volcanics to a pseudo-porphyry with large porphyroblasts. This particular phase of the intrusive was intruded by a swarm of later dykes and there is in the vicinity of these rocks the development of much quartz and carbonate together with value metals following vein-like structures. Later workers have suggested that Premier deposits are of volcanogenic origin and were directly emplaced by volcanic action. If this is correct the approach to ore finding in the district would be altered in some

degree but as a practical matter the geometry of the known deposits is the governing factor upon which these deposits will be most likely found. To quote from Edward W. Grove: "A number of the old mines including the Silbak Premier, Indian, Prosperity and Porter Idaho, to name a few, have not yet been subjected to an intensive exploration and valuable high-grade gold deposits are still to be found such as the Bonanza find at the Premier glory hole in 1959 clearly states."

KNOWN DEPOSITS

Surface

The glory hole, which provided much of the high-grade ore at the Premier Mine, presents possibilities for development of new pit ore through a system of grid pattern drilling from surface. It will be necessary to drill these holes because the surface is covered with overburden in the vicinity of the glory hole and to the east of it. Any geochemical samples taken in this area will be contaminated by previous mining activity. It is therefore felt that a series of short holes drilled towards the glory hole from the north and south side on 200' spacings could be started at once and this drilling should be continued to the east and should follow any indications arising from results obtained.

A light surface drill could be carried by helicopter. The helicopter pads could be prepared ahead of time, and the moves made without cutting roads through the bush. This drilling should be done in conjunction with a detailed study of the old assay plans and stoped out levels in the vicinity of the glory hole. There are persistent comments in the older reports concerning values to the east and the south of the glory hole which have never been drilled.

Underground Reserves

The Premier vein system has produced, according to reports of the B.C. Minister of Mines, 4,714,000 tons of ore containing 1,822,000 oz. of gold and 41,019,000 oz. of silver. There was also contained in this ore 0.91 lbs. of copper, 13.25 lbs. of lead and 4.36 lbs. of zinc per ton of ore shipped. In mining this ore there were certain pillars left underground which according to the same authorities and from several private sources contain about 85,000 tons of recoverable ore grading 0.25 oz. of gold, 2.52 oz. of silver, 1.6% of lead and 2.4% of zinc. The ore reserve estimates given by the Company, itself, in 1961 consisted of 170,000 tons including broken ore, measured ore and indicated ore below the 6th level found by diamond drilling. This would imply that there is some 90,000 tons of broken ore and ore in place in the workings and below the 6th level in addition to the pillars.

Ore Dumps and Tailings

There are a number of ore dumps resulting from development muck at the portal of various adits. It appears that the waste rock and ore-bearing material were dumped in separate piles so that development ore could be moved separately from these dumps and put through a mill. For example, the B.C. silver dump contains visible mineralization and no doubt the same is true of other dumps. No attempt was made to estimate the tonnage that might be available here but it would certainly not be less than 50,000 tons. The same might be said for tailings but it is probable that these were dispersed and carried down to the Salmon River in the spring run-off each year; however, this might be worth investigating.

In attempting to summarize the known ore possibilities an additional source of information was made available to the author, a report by W. N. Plumb, P.Eng., dated March 1957. Mr. Plumb states that the following estimates are based upon an intensive preliminary study by the writer assisted by the mine superintendent and the mine engineer of the Silbak Premier and Premier border workings, maps and available assay records, between January 21st and March 20th, 1957.

"'Proven and Indicated' reserves, including broken ore, are estimated as follows:-

	Tons	oz. Au	oz. Ag	% Pb	% Zn
Silbak Premier	75,250	0.28	2.80	1.8	2.7
Premier Border	74,146	0.07	1.98	4.25	6.36
TOTAL	149,396	0.18	2.39	3.0	4.5

In addition to the above, a study of the diamond drill records and recent working areas suggests that the following "Possible" reserves might be developed by an underground drilling programme:

Silbak Premier	90,000 tons
Premier Border	13,000 "
TOTAL	103,000 " "

It appears likely that Mr. Plumb used a lower cut-off grade than was used in the earlier work as he shows a grade for the proven ore of 150,000 tons grading 0.18 oz. Au/ton and 2.39 oz. Ag/ton as against a figure of 0.25 oz. Au/ton and 2.52 oz. Ag/ton for the pillars. Taking Plumb's figures and combining them with other estimates, it appears possible that the recovery of 200,000 tons grading about 0.2 oz. Au/ton and about 2 oz. Ag/ton might be recovered in a salvage operation in the lower levels and pillars of the Premier properties. This would be in addition to the ore dumps and the possible addition of surface ore in the vicinity of the glory hole. The old mine records indicate that a great deal of underground diamond drilling was carried on in the course of the development work. These are in the course of replotting and colour coding so that the ore trends may be followed up. It is to be expected, but not altogether certain, that additional extensions of ore will be found under this programme.

EXPLORATION PROGRAMME

In proposing a programme for exploration and development of the property, it must be remembered that this is a preliminary report subject to change as the programme develops. It is quite apparent that a full-time manager who is in charge of all personnel is needed to operate more efficiently at the property and keep a much tighter control with the personnel than under the present arrangement.

Although the current surface mapping programme will be of value it is essential to have a good mining geologist on the job familiar with underground mine workings and mine development who could correlate the geology and the ore values and develop an exploration programme underground as quickly as possible. This, of course, would be correlated with the surface work. The current programme of geochemistry and I.P. surveys is of future value but should be looked at as a long-range programme, and of no immediate concern. In addition it is expected that the surface surrounding the Premier Mine and vicinity is contaminated and that geochemical results will not likely be very meaningful. It is therefore suggested that the following sequence in a general way be adhered to:-

1. Continue the detailed surface mapping in the immediate vicinity of the glory hole to assist in the layout of the diamond drill programme.

2. Start the diamond drill surface programme as quickly as possible on both sides of the glory hole and on the eastern extension of it.

3. It is essential to obtain an experienced mine geologist to start the underground mapping and correlation of geological information so that a comprehensive exploration programme for the underground could be started.

4. Prepare an estimate of reserves under the direction of the mine geologist, from a mineability standpoint. This would apply mainly to the pillars and the broken ore, the ore immediately below the 6th level. The rehabilitation of the underground workings will have to be assessed possibly by a contractor with the help of the mine geologist.

5. Colour code all assay plans for the following suggested categories:

High Grade (+$250/ton), Ore ($75-$250/ton), Waste (-$75/ton).

6. Set up new plans preferably at 20, 50 and 100 scale and a set of sections at 50 and 100 scale. This would be in conjunction with the colour coding mentioned above. It would be essentially used for exploration under the current programme and could later be used for development work.

7. Institute a statistical study looking at the possibility of developing a large low-grade deposit in the vicinity of the glory hole. The possibility would unfold as the close-spaced drilling around the glory hole advanced and might result in the development of a large tonnage of ore which would be too low grade to mine as an underground project.

8. Formulate plans for the treatment of the ore on a scale of 200 to 300 tons per day keeping in mind environmental problems imposed by the proximity of the American border and the Salmon River.

C. E. Michener, B.A., M.S., Ph.D., P.Eng.

Toronto, Ontario
August 1, 1980

J. O. C. Kerr, P.Eng.

CERTIFICATE OF QUALIFICATION

I, Charles E. Michener, of Suite 2302 - 401 Bay St., Toronto, Ontario, a Consulting Geologist and a Partner of the firm of Derry, Michener & Booth, certify that:-

(1) I am a professional geologist and a practising Professional Engineer in the Province of Ontario.

(2) The report contained herein is based upon my visit to the property on July 10th and 11th, 1980.

(3) I have no interest, directly or indirectly, nor do I expect to receive any such interest, directly or indirectly, in the property of the company or any affiliate; nor do I beneficially own, directly or indirectly, any securities of the company or any affiliates of said company.

C. E. Michener, B.A.,M.S.,Ph.D.,P.Eng.

Toronto, Ontario
August 1, 1980

APPENDIX A

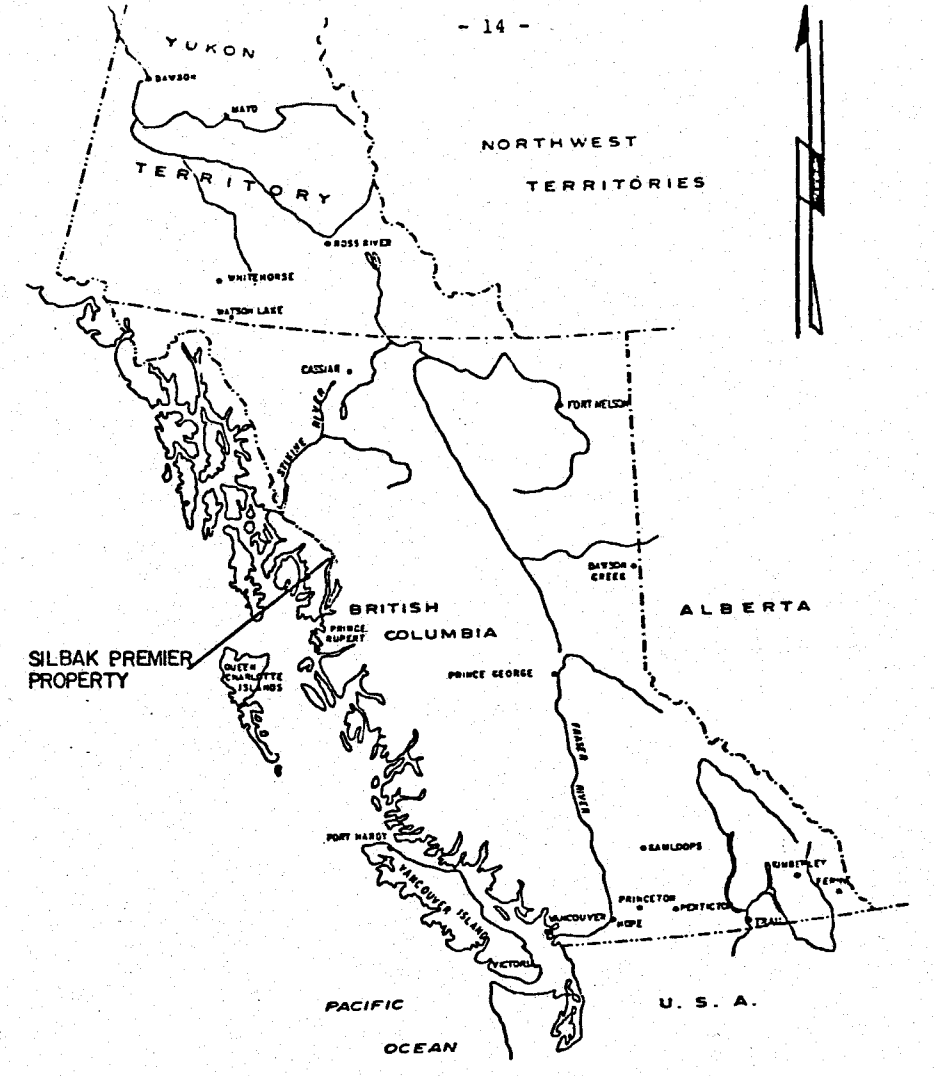
1. "Geology and Mineral Deposits of the Stewart Area, British Columbia", by Edward W. Grove; British Columbia Department of Mines and Petroleum Resources, Bulletin No. 58, 1971.

2. "Ore Potential - Silbak Premier and Premier Border Mines", by W. N. Plumb, March 25, 1957.

3. "Report on Silbak Premier Property Near Stewart, B.C., Skeena M.D.", by R. H. Seraphim, March 8, 1979.

4. Personal Communication at the property with Dianne Kretschmar.

5. Personal Communciation with J.O.C. Kerr and I. S. Parrish of Derry, Michener & Booth.



DERRY MICHENER & BOOTH
BRITISH SILBAK PREMIER MINES LTD
LOCATION MAP
SCALE 1"=12,672,000 FIG NO 1

DERRY MICHENER & BOOTH
BRITISH SILBAK PREMIER MINES LTD
CLAIM MAP
SCALE 1" = 2,500'   FIG NO. 2

X-RAY ASSAY LABORATORIES 25-JUL-80 REPORT 7765 REF. FILE 4066-C2 PAGE 1

SAMPLE	AU OZ/TON	CU %	ZN %	AG OZ/TON	PB %
278 Tails	TRACE	--	--	1.34	--
279 "	TRACE	--	--	1.52	--

Samples provided by Ann Bjorkman

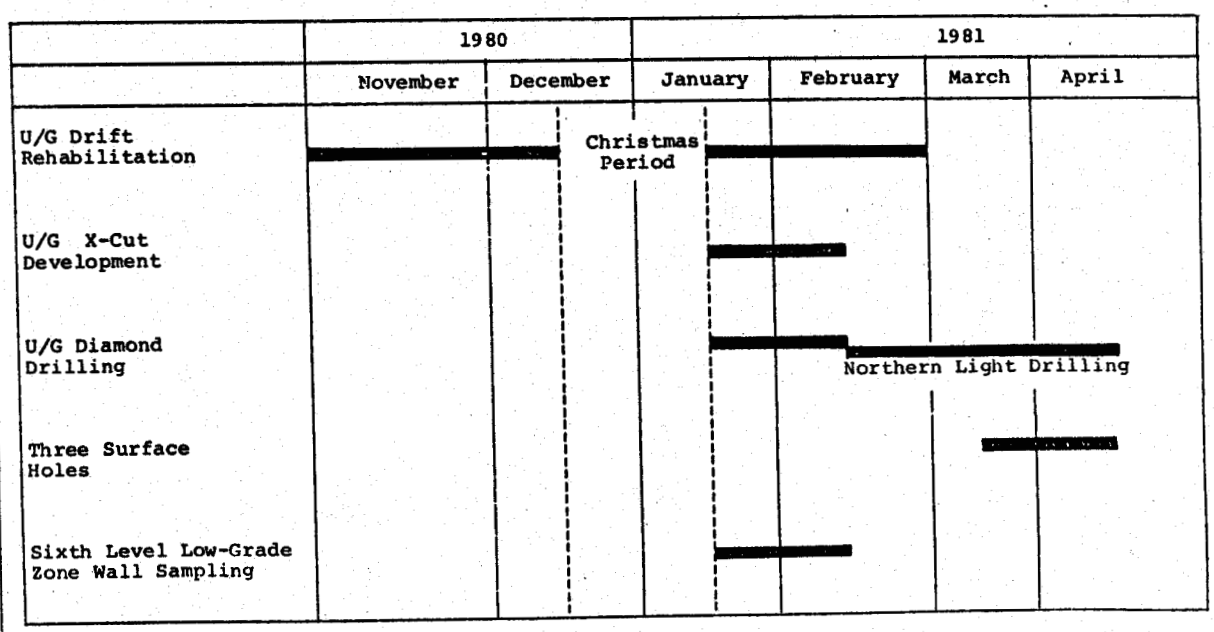
[illegible signature]

APPENDIX B

B. & C. LTD.

Appendix B

SCHEDULE



APPENDIX C

Appendix C

DETAIL OF BUDGET FOR WINTER PROGRAMME

Underground Rehabilitation for the Sixth Level, by Contractor

Portal to 602 Winze X-Cut (2,500 ft.)

Scaling, ditch and track	$ 32,000	
Timbering - 3 sets	1,000	
Cleanup - 601 shaft	1,500	
Air line installation	1,600	
Sub-Total		$ 36,100

602 Winze X-Cut, include Winze (1,000 ft.)

Scaling, ditch and track	11,000	
Hoistroom, station cleanup	5,000	
Air line installation	1,000	
Dewater shaft	7,200	
Sub-Total		$ 24,200

602 Winze X-Cut to end Northern Lights (2,300 ft.)

Scaling, ditch (reroute water) and occasional track work	$ 18,400	
Air line installation	1,600	
6A stoping area - 16 sets	5,000	
702A-7A stoping area cleanup	3,000	
Cleanup hoist room (timber, skips)	15,000	
Northern Light, East Block to end, past winze, scaling, track, etc. (800 ft.)	6,400	
Sub-Total		$ 49,400

Northeasterly of Northern Light to end of zone drift (1,600 ft.)

Scaling, ditch and track	$ 16,000	
Air line installation	1,600	
Sub-Total		$ 17,600

Underground Rockwork

To drive about 300 ft. of X-Cut for drill bases	$ 45,000	
Allowance, explosives, etc.	5,000	
Sub-Total		$ 50,000
TOTAL		$177,300

Manpower Requirements for the 4-Month Programme[1]

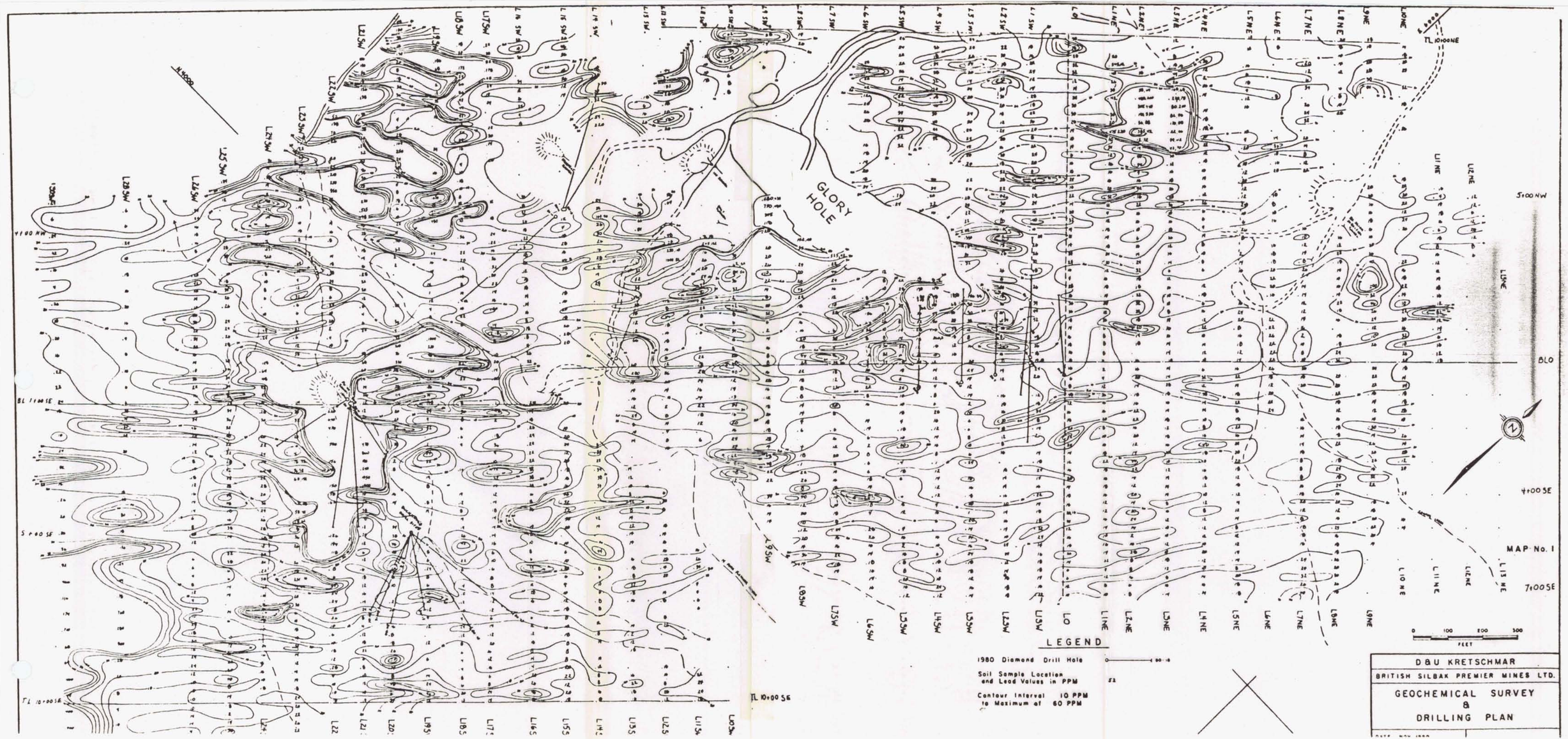
		Man-Months
Labour		
1 Mechanic	- 4 months	4
1 Loader Operator (snow removal)	- 4 months	4
1 Electrician	- 1 month	1
1 U/G Diamond Driller	- 3 months	3
1 Cook	- 4 months	4
1 Helper	- 4 months	4
2 First-Aid (incl. time keeper)	- 4 months	8
6 Labourers	- 4 months	24
		52
Staff		
1 Manager	x 4 months	4
1 Shift Boss	x 4 months	4
1 Geologist (U/G)	x 4 months	4
1 Sampler/Surveyor	x 4 months	4
1 Geologist (surface)	x 2 months	2
1 Assayer	x 4 months	4
		22
Salaries, wages[2] - 74 man-months @ $5,000		$ 370,000
Contingency, Admin. Costs		15,000
		$ 385,000

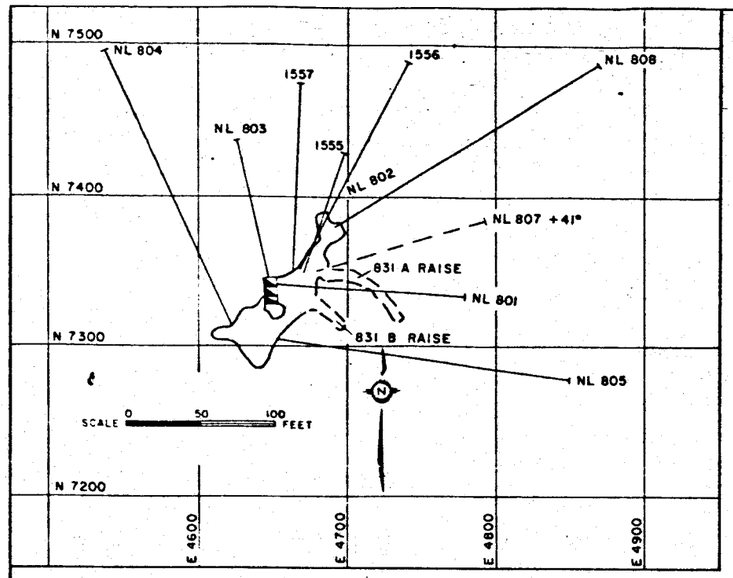
Notes:
(1) - Miners, timbermen and general mine labour included with U/G contractor.
(2) - Camp running expenses at the sixth level portal are included with each monthly allowance at about $20/man-day. Fringe benefits paid by the Company are also included here.

Equipment

30-man trailer/dining/rec. facility	$ 220,000
Dining/camp supplies (bedding, dishes)	15,000
Generating plant, near mine portal	15,000
Storage/shop building, near mine portal (reinforced for snow loads)	70,000
Explosives magazine	10,000
Pumps and accessories	22,000
Vehicle, standby-lease	7,200
Vehicle overhaul-foreman	1,200
Locomotive for underground, batteries & charger	9,000
Drills - three jacklegs including accessories - steel, hoses	12,000
Ventilation fans and tubing	8,000
Core racks	2,000
Timber for underground	12,000
Small tools, bits, general	35,000
Diamond drill-underground, repair and overhaul	7,000
Diamond drill-underground, new	27,000
Diamond drill supplies and accessories	22,000
Underground mine cars-repair materials	5,000
Air line-underground	22,500
Rail and accessories-underground	7,500
Ladders, staging-dewatering 602 winze	3,000
Assaying facilities	40,000
TOTAL	$ 572,400

ACCOMPANYING MAPS

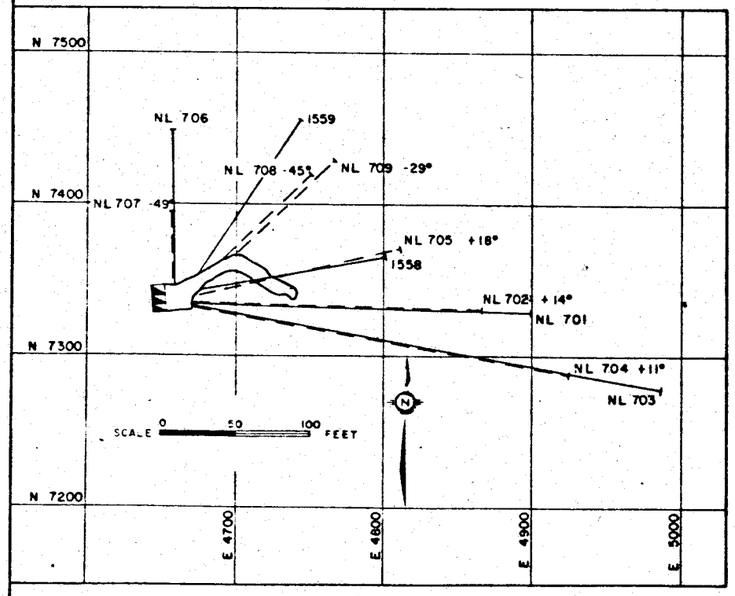

GLORY HOLE
TL 10+00NE
5+00NW
BL 0
4+00SE
7+00SE
TL 10+00SE
MAP No. 1
LEGEND
1980 Diamond Drill Hole
Soil Sample Location and Lead Values in PPM
Contour Interval 10 PPM to Maximum of 60 PPM
0 100 200 300
FEET
D&U KRETSCHMAR
BRITISH SILBAK PREMIER MINES LTD.
GEOCHEMICAL SURVEY & DRILLING PLAN



NORTHERN LIGHT

No. 8 LEVEL

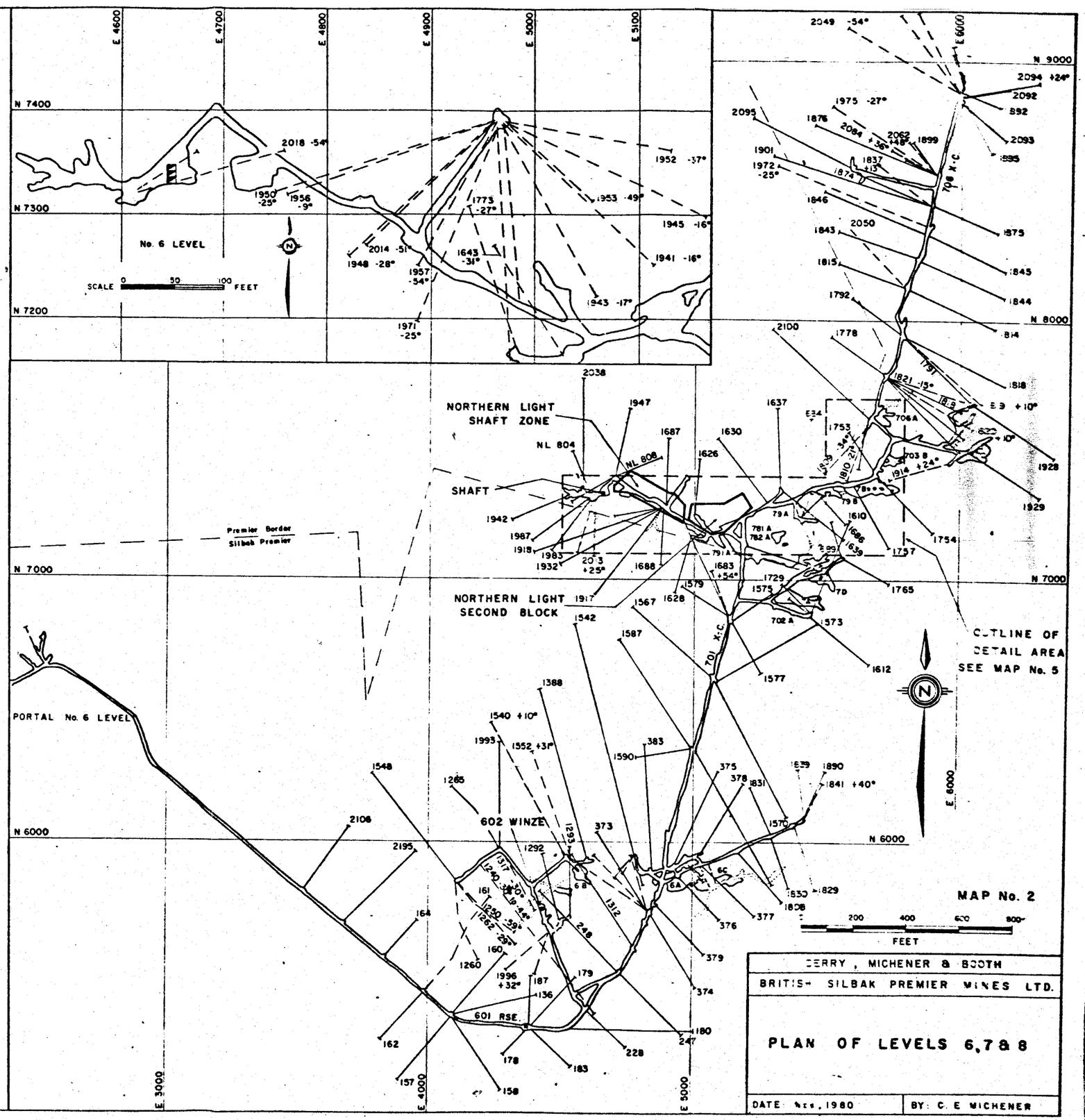
SILBAK PREMIER MINES LTD.



NORTHERN LIGHT

No. 7 LEVEL

SILBAK PREMIER MINES LTD.



DERRY, MICHENER & BOOTH

BRITISH SILBAK PREMIER MINES LTD.

PLAN OF LEVELS 6, 7 & 8

DATE: Dec., 1980

BY: C. E. MICHENER

800

700

600

6 LEVEL

1941
1945
1943
1944
1955
1952
1953

PROJECTION PERPENDICULAR TO STRIKE

782 W. DR 0·09, 1·90, 2·20, 5·30 / 20·0°

NE 1

NE 5

1943 0·02, 0·73, 0·6, 3·7 / 5·5°

1941 0·14, 3·08, 8·8, 12, 37 / 8·5°

1945

0·09, 2·03, 5·2, 6·2 / 9·0°

1944 0·03, 1·72, 1·60, 9·70 / 18·0°

NE 4

NE 3

NE 2

NE 6

1955

0·04, 4·96, 1·10, 7·1 / 4·0°

1953

1952

PROJECTION PARALLEL TO STRIKE N 62° 30' E

800

700

600

1955

1953

1952

782 N. DR.

1944

1943

1941

1945

791 DR.

N 7300

NORTHERN LIGHT No. 1
CASCADE FALLS No. 5

782 W. DR.

782 E. DR.

N 74° 37' W.

790 DR.

E 4900

E 5000

E 5100

E 5200

N 7100

N 7200

MAP No. 3

0 20 40 60 80
FEET

JERRY, MICHENER & BOOTH

BRITISH SILBAK PREMIER MINES LTD.

NORTHEAST ORE BLOCK BELOW LEVEL NO. 6 NORTHERN LIGHT AREA

DATE: Nov., 1980

BY: C. E MICHENER

800

700

600

6 LEVEL

782 N. DRIFT 0·08, 2·53, 3·36, 7·80 / 7·8'

NW 1

NW 2

NW 3

NW 4

NW 5

NW 6

NW 7

NW 8

NW 9

NW 10

NW 11

NW 12

1950 0·04, 2·29, 5·5, 5·7 / 17·0'

1948 0·03, 0·73, 0·8, 3·6 / 52·0'

1971 0·12, 2·11, 3·3, 5·3 / 24·0'

1973 0·17, 4·58, 13·3, 5·4 / 16·5'

NL 704 0·07, 1·08, 1·64, 8·48 / 74·0'

NL 702 0·03, 2·72, 7·18, 4·83 / 54·0'

NL 901 0·04, 2·42, 4·1, 2·2 / 9·0'

0·01, 4·08, 11·14, 1·85 / 14·0'

NL 700

732 DR

7 LEVEL

NL 701

NL 703

0·02, 2·22, 4·39, 9·04 / 6·6'

NL 709 0·01, 0·41, 0·11, 1·48, 1·06 / 9·0'

0·03, 1·78, 4·2, 10·6 / 31·0'

2018

NL 807

1956 0·04, 2·93, 6·36, 9·15 / 27·0'

MARGINAL

MARGINAL

2014

1957

NL 707

NL 708

0·02, 0·66, 0·90, 2·7 / 12·0'

831 A RAISE

831 B RAISE

NL 803

NL 802

NL 801

8 LEVEL

2018

807

708

PROJECTION PARALLEL TO STRIKE N62° 30' W

PROJECTION PERPENDICULAR TO STRIKE

NL 708

NL 807

1950

786 X-C.

1973

1971

1948

1956

NL 702

1018

NL 709

782 DR

NL 705

NL 703

NL 904

732 DR.

782 N. DR.

787 X-C.

831 X-C.

N 46

N 62

N 59

N 57

831 A RAISE

831 B RAISE

E 4700 N 7300

E 4800

E 4900 N 7200

MAP No. 4

0 20 40 60 80

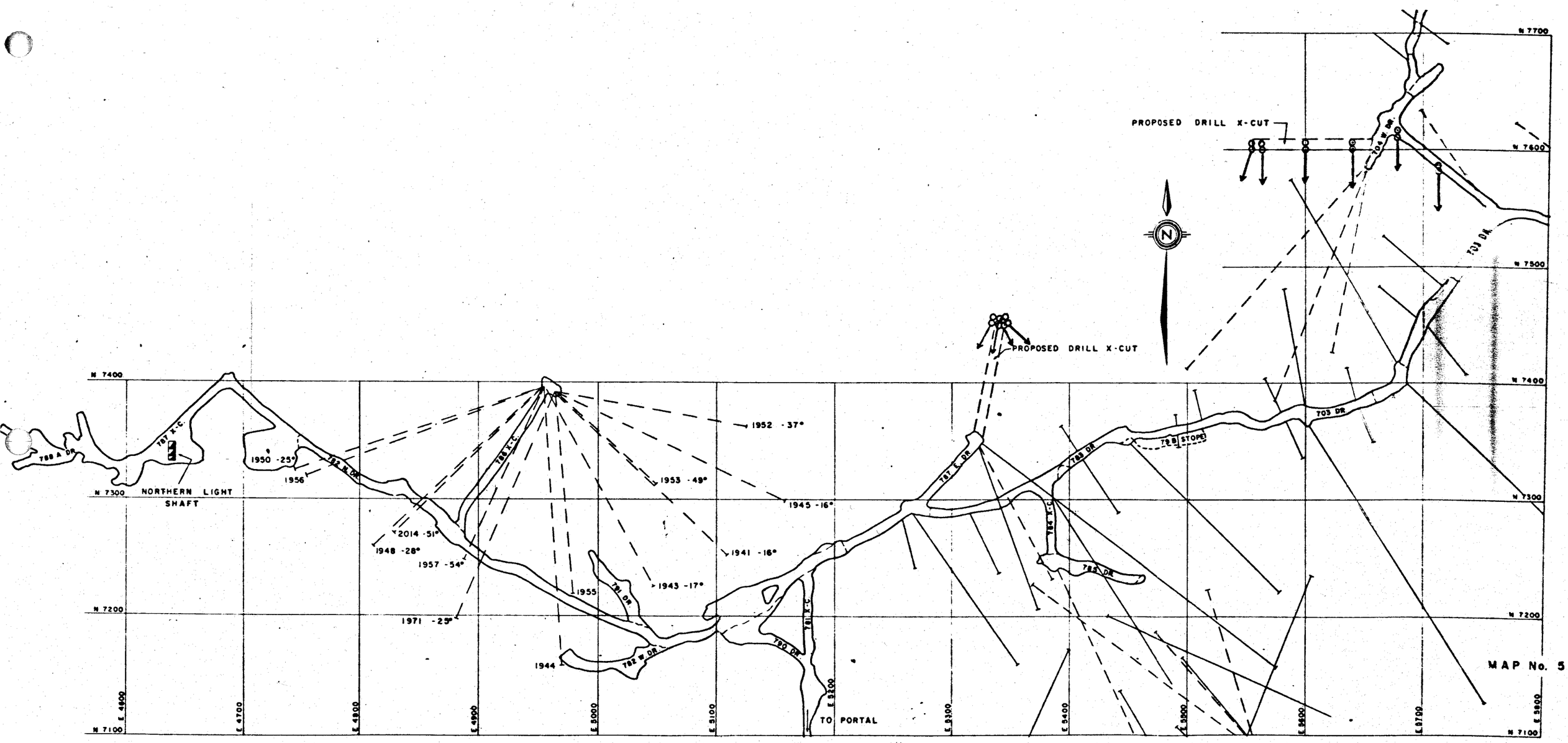
FEET

PERRY, MICHENER & BOOTH

BRITIS- SILBAK PREMIER MINES LTD.

NORTHWEST ORE BLOCK BELOW LEVEL NO. 6 NORTHERN LIGHT AREA

DATE: Nov. 1980 | BY: C. E MICHENER



MAP No. 5

Mineralization

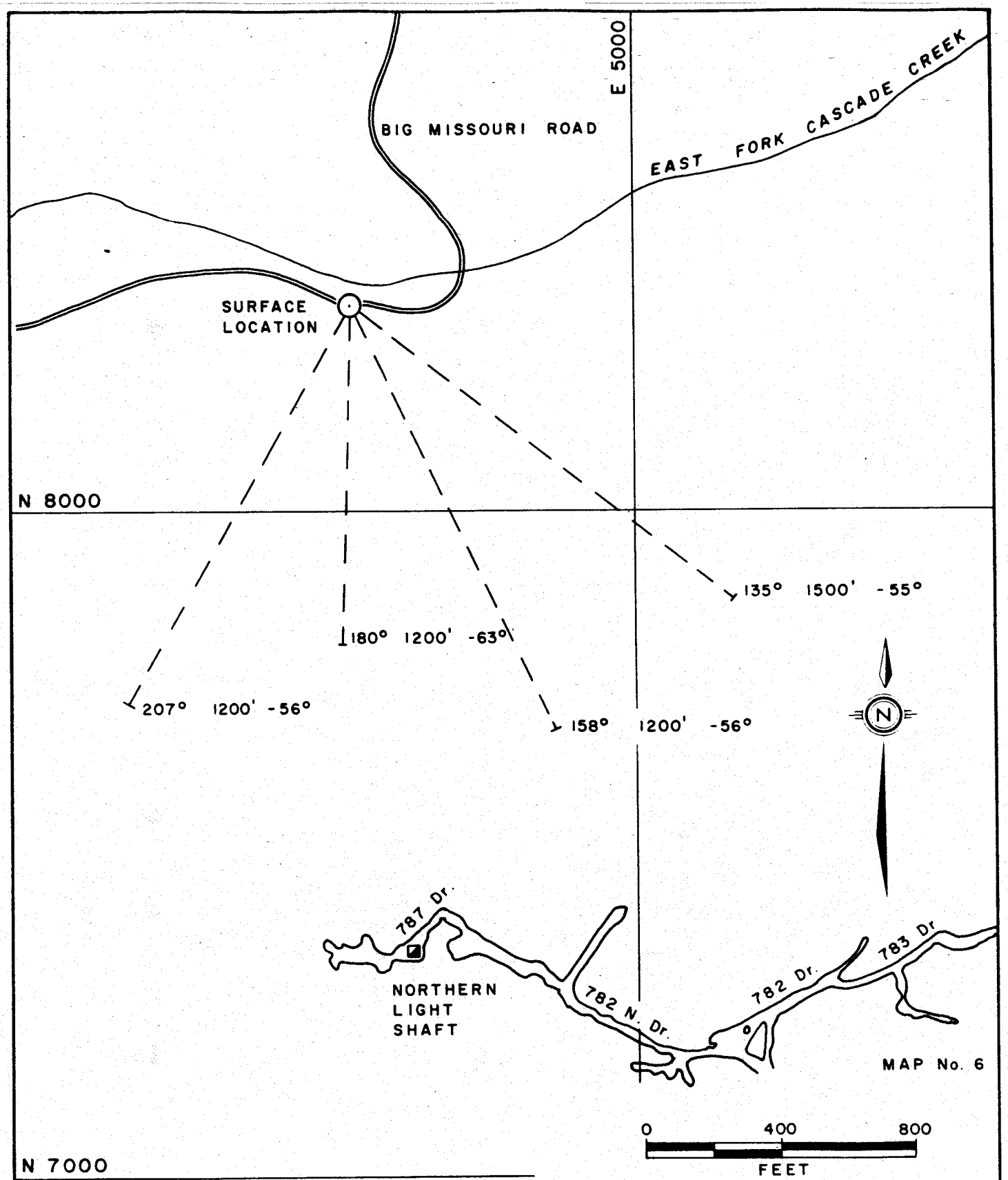
Proposed Bore Holes

JERRY, MICHENER & BOOTH

BRITIS- SILBAK PREMIER MINES LTD.

SIXTH LEVEL EXPLORATION
NORTHERN LIGHT SHAFT AREA

DATE Nov., 1980 | BY: C E MICHENER



DERRY, MICHENER & BOOTH
BRITISH SILBAK PREMIER MINES LTD.
DIAMOND DRILLING OF NORTHERN LIGHT AREA FROM SURFACE
DATE: NOV. 1980 | BY: C. MICHENER

PROGRESS REPORT ON

BRITISH SILBAK PREMIER MINES LTD.

STEWART, B.C.

C. E. Michener, Ph.D., P.Eng.

Toronto, Ontario
May 26, 1981

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LIST OF MAPS

SUMMARY

Rehabilitation of the surface and 6th level workings over the past year was designed to provide facilities for surface exploration of the property and underground drillings of certain known ore zones. The surface work has turned up several promising areas which will be drilled off this summer. The underground rehabilitation - the 6th level - has only just reached the Northern Light area which was the original objective. This involved cleaning up more than 5,000' of drift. Extensive drilling is planned for the Northern Light ore zone.

The budget has been revised in order to provide sufficient funds to complete the programme outlined in the December 5th report.

Capital equipment purchased by the company which was unrelated to the recommended programme has not been included in the budget account.

INTRODUCTION

This is a progress report, following a recent visit to the property, designed to update a previous report of December 5, 1980. In the latter, a comprehensive exploration programme for the underground exploration of the British Silbak Premier Mines was presented, together with a budget. When the December 5th budget was presented, rehabilitation of the mine had been in progress for several months, consisting chiefly of surface work and repair of roads. This work was carried out, based on a report and budget of Phendler, February 1980.

SURFACE DRILLING

Five diamond drill holes with a total of 6,322' were drilled from surface to check for the depth extension of the Northern Light ore zone. These holes indicated that the structure flattens with depth. All five drill holes cut the mineralized silicified breccia zone at an elevation of about 480'.

Assays have not been received for most of the surface drilling. However, in bore hole 81-22, there was reported 0.011 oz. of gold and 0.045 oz. of silver, 0.5% lead and .20% zinc over 11.8'; and bore hole 80-24 showed traces of gold and traces of silver over 44'. In an upper zone, diamond drill 81-22 obtained an intersection averaging 11.56 oz. of silver over 23.6' of core length. Please refer to plan of surface drilling.

REHABILITATION AND UNDERGROUND DRILLING

The rehabilitation of the 6th level was started in the fall as part of the winter programme. The work was contracted out to a group of local miners who started at the 6th level portal and advanced to the 602 Winze area and, at the time of writing this report, had reached the Northern Lights area. Over 5,000' of scaling, timbering, ditching and track repair was completed, and the rotten timber and scrap were removed from the workings. A 3" air line was laid and two air receivers were installed. A small battery locomotive was used in conjunction with the mucking machine and two one-ton cars for removal of muck and old timber. This work also involved relaying the track and placing new ties under the track. It was found that the original track in the first part of the adit was only 17 pound rail and badly rusted. This will probably have to be replaced. Because of the long haulage distance, another battery locomotive is required.

In March, work began on the 602 Winze area to cut diamond drill stations. Drilling is currently proceeding here as follows:

Recently completed diamond drill hole 81-27 U intersected a silicified breccia zone with pyrite mineralization over a distance of 26.5'; and drill hole 81-28, a flatter hole on the same section, intersected the same pyrite silicified zone 36.5' in width. The best section in these two holes ran 0.21 oz. of gold and a trace of silver over 5.0' with an additional 27.5' running .10 oz. of gold in the same hole. It is planned to use the underground drill in this location to explore the 602 area while waiting for access to the Northern Lights area.

ANALYSIS OF EXPENDITURE

Referring to the DMB budget, page 12 of the December 5th report, there was an allocation of $177,300 which, added to the salaries, came to a sub-total of $385,000. There was also a large item for equipment with a total of $572,400. There was an allotment of $310,000 for underground diamond drilling and sampling of the No. 6 adit walls, making a sub-total, without contingencies, of $1,444,700. A 5% contingency brings the total to $1,520,000.

According to a list provided by British Silbak Premier Mines at March 31, 1981, copy of which is attached, a total expenditure of $994,939 had been made on equipment.

BRITISH SILBAK PREMIER MINES LTD.

EQUIPMENT - ACTUAL EXPENDITURES
March 31, 1981

	Actual Expenditure
Trailer	$ 234,026
Trailer supplies	11,693
Generating plant	11,042
Shop building	110,901
Explosives magazine	-
Pumps and accessories	-
Vehicle, stand-by lease	7,200
Vehicle overhaul	1,200
Locomotives and batteries	3,912
Three jackleg drills	16,389
Ventilation fan and tubing	2,172
Core racks	1,490
Timber	4,288
Tools and bits	25,509
Underground diamond drill, new	-
Underground diamond drill, supplies	50,997
Underground mine cars	-
Air line	26,942
Rail	6,755
Ladders	-
Assaying facilities	3,294
Freight	20,602
Insurance	9,645
Repair	17,437
Sub-total:	$ 565,494
Compressor, lease purchase	45,000
Front end loader, lease purchase	98,498
Haulage truck, lease purchase	39,345
TOTAL:	$ 748,337
Contingencies:	
Air trac drill	51,337
Surface diamond drill & accessories	99,324
Tent camps & accessories	10,923
Electrical equipment	22,667
Mucking machine	13,000
Communication equipment	6,411
Compressor	42,940
Total contingent equipment:	$ 246,602
TOTAL EXPENDITURE ON EQUIPMENT:	$ 994,939

This compares with a budget estimate of $572,400, an overrun of $422,539. Many of the items in this list of equipment are major capital items, which should be capitalized in the company accounts, such as trailer camp, generating plant, shop buildings, surface drills, compressor. If these items were capitalized, the expenditure on equipment would fall well within the original budget of $572,400.

It was found that the underground rehabilitation of the 6th level was much more difficult than had been anticipated. Practically all the old timber had to be removed and the ties replaced under the track. The drainage ditches had to be completely dug out and this involved a much more time-consuming job than anticipated. At the present time, the rehabilitation work has reached the northern lights area but no drilling has been done there as yet.

There are certain additional items which will be required to carry out an efficient exploration operation. For example, it is very difficult to get assays done in Vancouver or any other Canadian Centre at the present time, and it was therefore decided to build an assay laboratory at the property. Radio communication is almost an essential part of the operation, a new locomotive is required for underground haulage and some additional mine cars; and it has finally been determined that the very light 17 pound rail in the original part of the No. 6 adit had deteriorated so badly that it would not stand up and it must be replaced. This item alone will be at a cost of about $40,000 and will take considerable time.

It was therefore felt that the budget should be reworked, major capital items should be capitalized, and a new working budget proposed which would provide for the completion of the rehabilitation of No. 6 level and the diamond drilling of the Northern Lights area, which was the objective in the beginning. In addition, there was some additional underground drilling proposed at the 602 and 601 locations and there had been two additional surface holes completed. These items should be added to the budget as well.

PROPOSED BUDGET REVISION

It is now proposed to present a new budget for the continuation of work at the British Silbak Premier Mines, in particular to reach the objective of the Northern Lights area where the major drilling programme was originally outlined.

BUDGET

Underground rehabilitation - 6th level	$ 15,000
602 Winze - 6th level	24,000
620 Winze - to the end of Northern Lights	49,400
N.E. of Northern Lights area	17,600
Cross-cuts for drill set up on the Northern Lights area	50,000
Sub-total	$ 156,000
Salaries	300,000
Administration	15,000
	$ 315,000
Equipment Total	$ 400,000
Sub-total:	$ 871,000
4 bore holes from surface (see map 3600' already completed	$
602 Winze area - 6 bore holes at 250' (add 4 bore holes)	40,000
Northern Lights area - 20 bore holes at 500'	200,000
Check the low grade silver values on the added wall - 6th level	10,000
Total:	$1,121,000
Contingency:	79,000
GRAND TOTAL:	$1,200,000

CERTIFICATE OF QUALIFICATION

I, Charles E. Michener, of Suite 2302 - 401 Bay St., Toronto, Ontario, a Consulting Geologist and a Partner of the firm of Derry, Michener & Booth, certify that:-

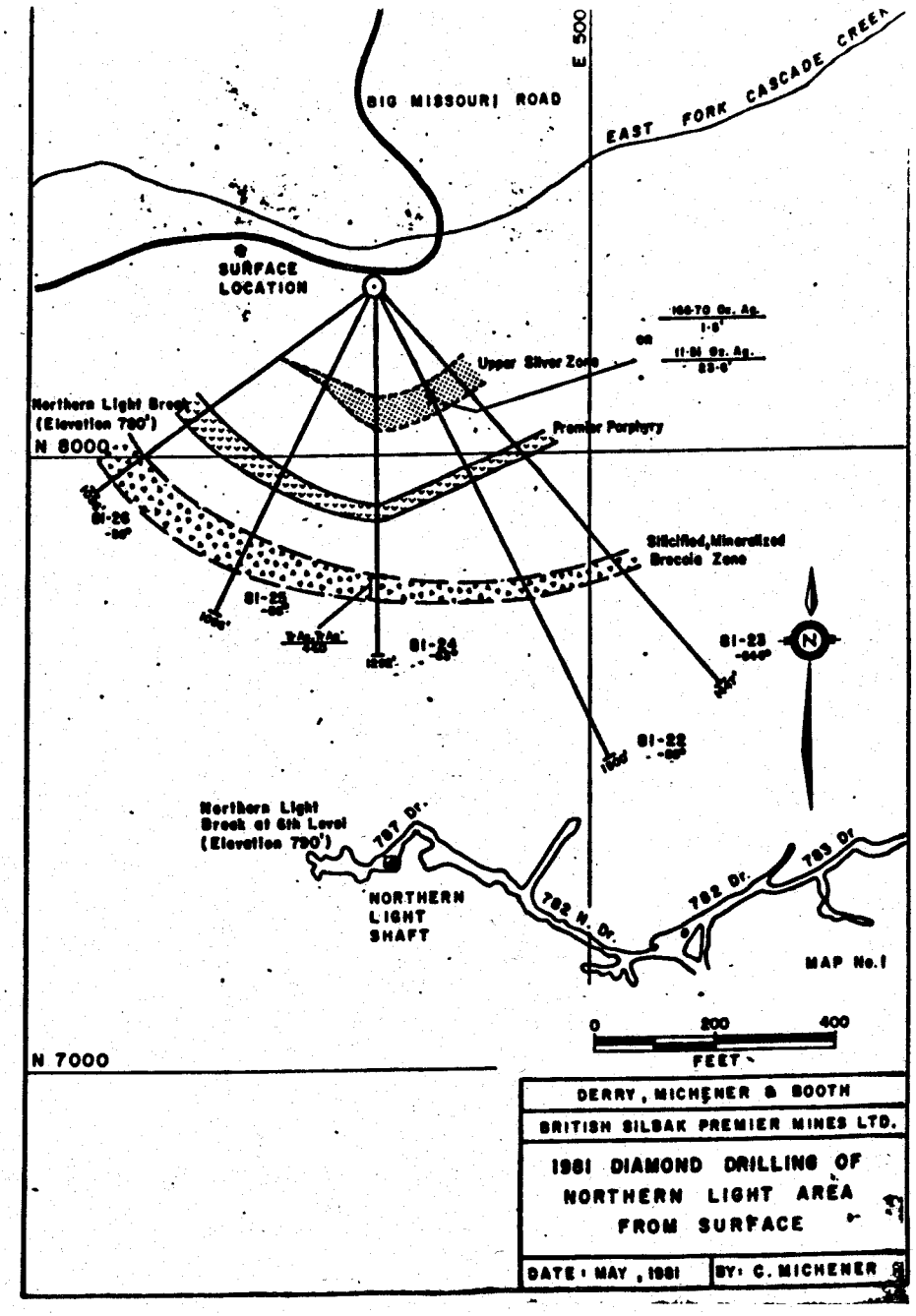
(1) I am a professional geologist and a practising Professional Engineer in the Province of Ontario.

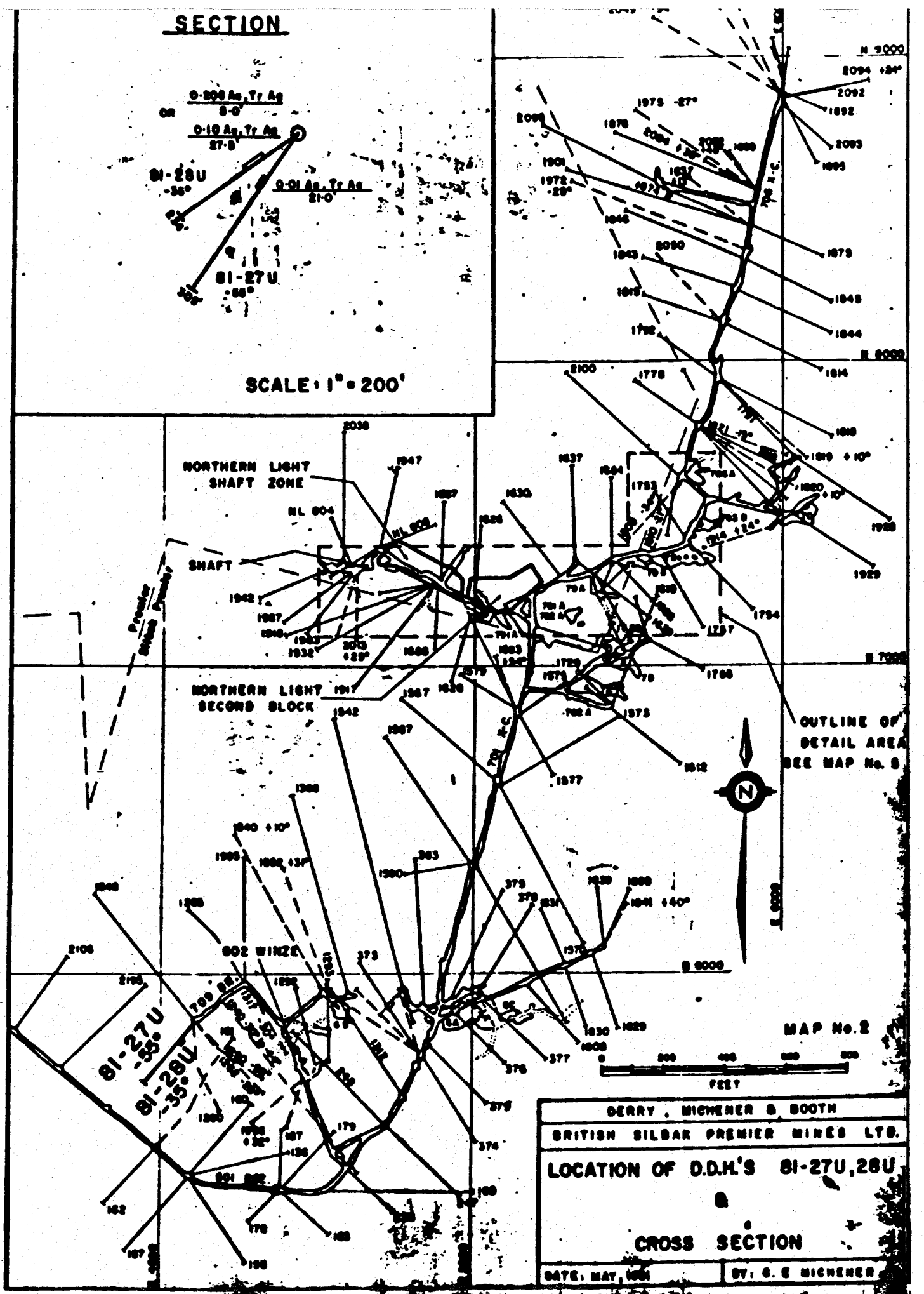
(2) The report contained herein is based upon my visit to the property and discussions with management, May 13 and 14, 1981.

(3) I have no interest, directly or indirectly, nor do I expect to receive any such interest, directly or indirectly, in the property of the company or any affiliate; nor do I beneficially own, directly or indirectly, any securities of the company or any affiliates of said company.

C. E. Michener, B.A., M.S., Ph.D., P.Eng.

Toronto, Ontario
May 26, 1981




SECTION
0·206 Oz. Tr Ag
8·0
OR
0·10 Oz. Tr Ag
27·8
81-28U
-35°
0·01 Oz. Tr Ag
21·0
81-27U
-55°
SCALE: 1" = 200'
NORTHERN LIGHT
SHAFT ZONE
NL 804
SHAFT
Powder Blast Tunnel
NORTHERN LIGHT
SECOND BLOCK
802 WINZE
81-27U
-55°
81-28U
-35°
OUTLINE OF
DETAIL AREA
SEE MAP No. 8
N
MAP No. 2
FEET
DERRY, MICHENER & BOOTH
BRITISH BILBAR PREMIER MINES LTD.
LOCATION OF D.D.H.'S 81-27U, 28U
&
CROSS SECTION
DATE: MAY, 1951
BY: G. E. MICHENER

BRITISH SILBAK PREMIER MINES LTD

Stewart, B.C.

SUMMARY REPORT

1980 SURFACE EXPLORATION PROGRAM

by

Dianne and Ulrich Kretschmar

March 27, 1981

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APPENDICES

Appendix I GEOLOGICAL MAPS

- Fig. 4 : Preliminary Geological Map of Mine Area (1"=200')
- Fig. 5 : Geological Map of Glory Hole-Pictou Grid (1"=100')
- Fig. 5a : Geochemical Overlay of Glory Hole-Pictou Grid (1"=100')
- Fig. 6 : Glory Hole Target Area - Geology and Drill Results (1"=40')
- Fig. 7 : Prospect Target Area - Geology and Drill Results (1"=40')
- Fig. 8 : Pictou Target Area - Geology and Drill Results (1"=40')

Appendix II SOIL GEOCHEMICAL MAPS (1"=100')

- Fig. 9a : Soil Geochemical Map - Copper - Glory Hole-Pictou Grid
- Fig. 9b : " " " - Lead - " " " "
- Fig. 9c : " " " - Zinc - " " " "
- Fig. 9d : " " " - Silver - " " " "
- Fig. 9e : " " " - Gold - " " " "
- Fig. 9f : Soil Sample Location Map - " " " "
- Fig. 10a : Soil Geochemical Map - Copper - Woodbine Grid
- Fig. 10b : " " " - Lead - " "
- Fig. 10c : " " " - Zinc - " "
- Fig. 10d : " " " - Silver - " "
- Fig. 10e : " " " - Gold - " "

Appendix III DIAMOND DRILL LOGS (bound separately)

Appendix IV 1 LEVEL ASSAY PLANS

- Fig. 11a : Plan of No. 1 Level Assays - Gold, Silver (1"=40')
- Fig. 11b : " " " " " - Gold equivalent "

DIANNE & JURGEN KRETSCHMAR

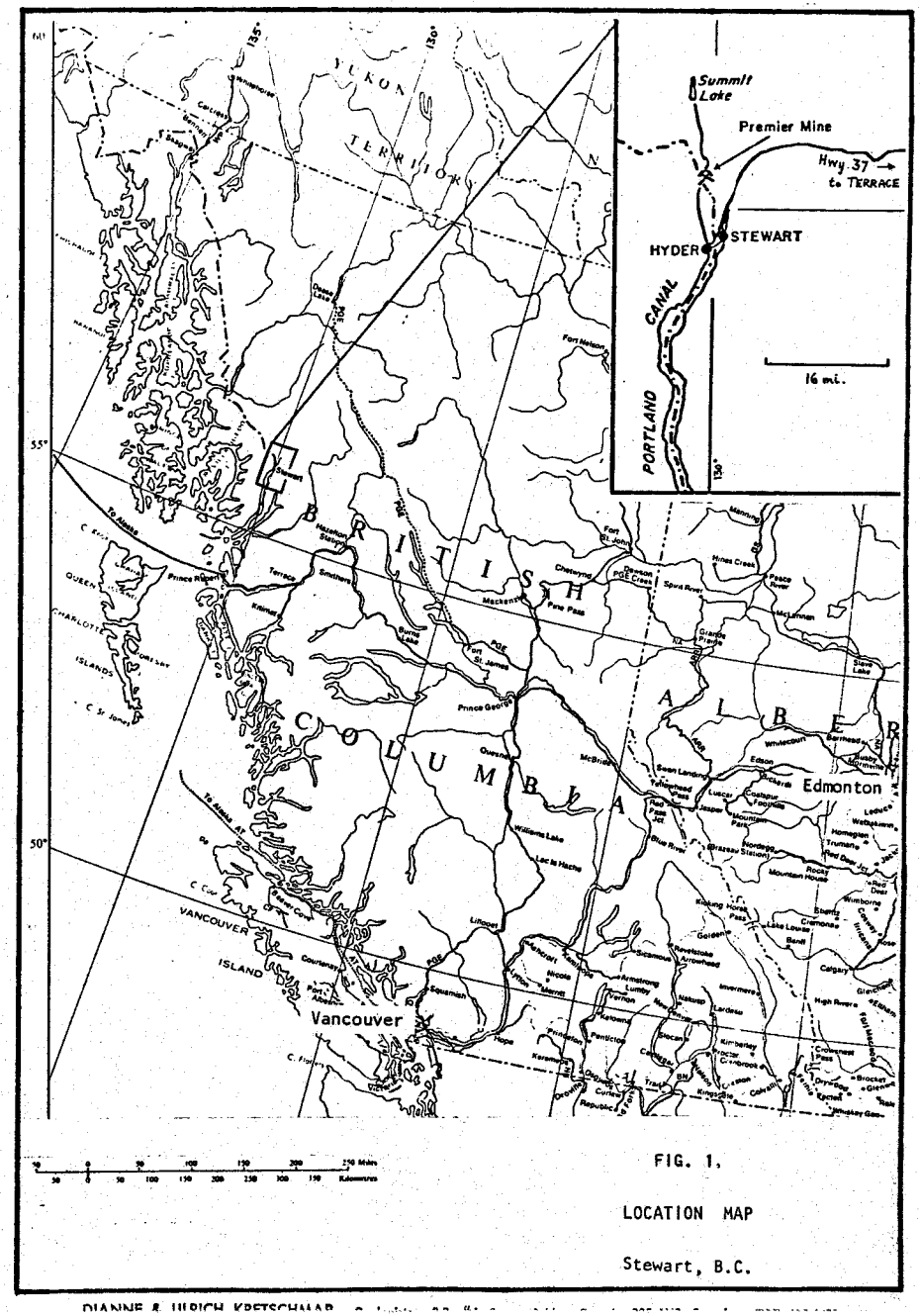


FIG. 1.

LOCATION MAP

Stewart, B.C.

DIANNE & JURGEN KRETSCHMAR

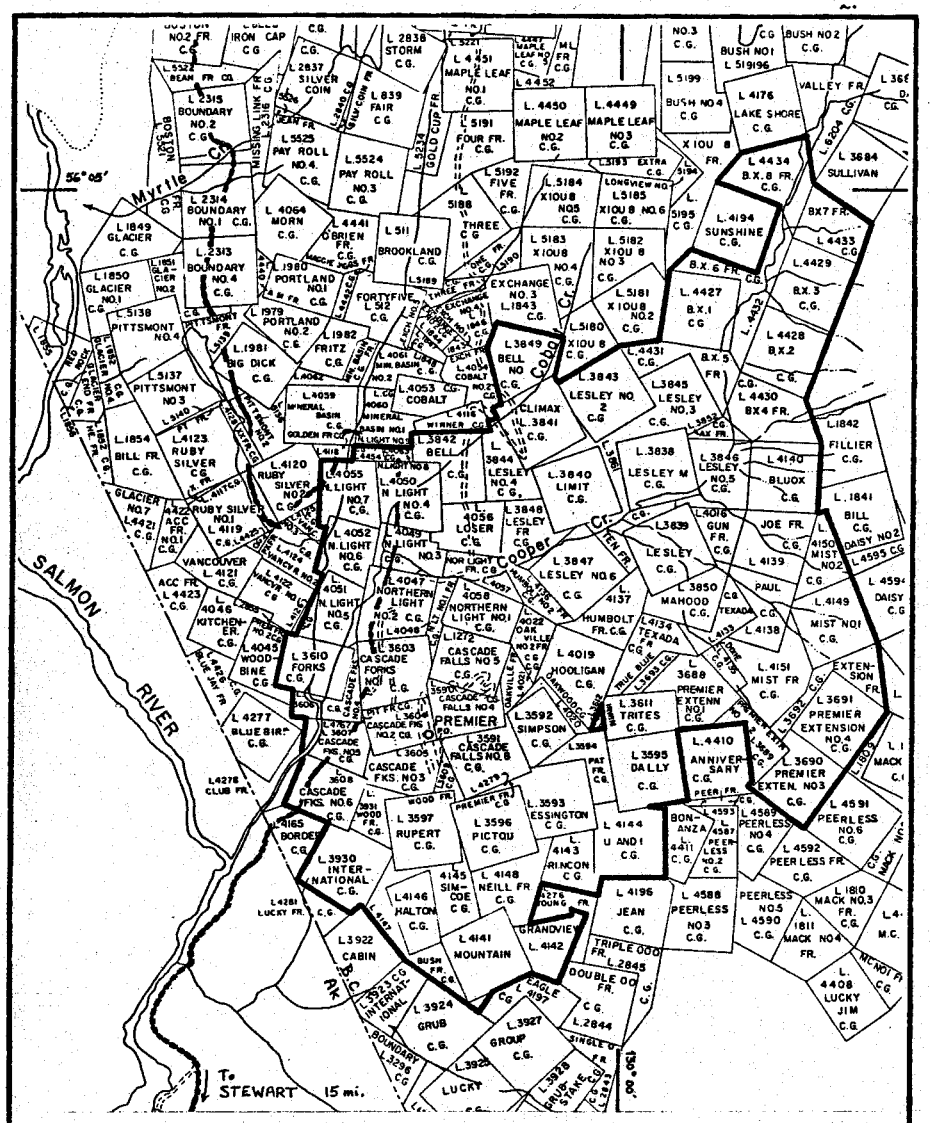


FIG. 2.
British Silbak Premier Mines Ltd
CLAIM MAP
NTS 104 A/4W, 104 B/1E
Stewart, B.C.

After Grove (1971) Fig.15B

INTRODUCTION

British Silbak Premier Mines Ltd contracted the authors to carry out an exploration program on their newly acquired property, 16 road miles northwest of Stewart, B.C. (Fig.1). The claim group consists of 87 crown granted mineral claims totalling 2971.94 acres or 1202.70 hectares (Fig.2). The property produced 4.7 million tons of ore grading 0.384 oz/t Au, 8.03 oz/t Ag and more than 5.5% combined Pb + Zn between 1918 and 1968.

The program had two main objectives:

1. to examine the potential for a large tonnage mineral reserve amenable to open pit mining in the Glory Hole area;
2. to prospect for high grade gold-silver zones which had either been missed or inadequately tested by the previous mine operators.

WORK ACCOMPLISHED

The geological crew was on the property from June 8 until December 3. The time devoted to field work breaks down as follows:

Project geologist: Dianne or Ulrich Kretschmar	153.5 days
Senior geologist	4.4 months
Assistants	11.75 months

A grid of lines totalling 15.5 line miles was cut by contractors in the Glory Hole-Pictou area and 0.5 line miles were added onto the HIMCO grid in the Woodbine area. A total of 2346 soil samples were collected and analyzed for Cu-Pb-Zn-Ag. 1030 samples from anomalous areas were also analyzed for Au. A geological map at a scale of 1" = 100' was completed on the grid.

Geological mapping on a reconnaisance scale (1" = 800') was completed on the south half of the property, south of the East Fork of Cascade Creek, with most detail in the mine area. The Pictou and Prospect tunnels were mapped in detail (1" = 20') and assay sampled, as were the Glory Hole, Pictou and Prospect target areas.

The drilling program may be summarized as follows:

Target Area	Holes	No. of Holes	Footage
Glory Hole	80-1 to 7	7	2416
Pictou	80-8 to 11	4	1387
Prospect	80-12 & 13	2	751
Cascade Falls #8	80-14 & 15	2	691
Buckham Pictou	80-16 to 21	6	2738
Total		21	7983

Rock and drill core samples were assayed for Cu, Pb, Zn, Ag, and Au as follows:

Sample Type	Location	No. of Samples
Assay	Prospect and Pictou tunnel	11
	Surface trenches	55
	Drill Core	166
Rock geochem.	Surface showings	46
	Drill Core	290

GEOLOGY AND MINERALIZATION

Both Premier porphyry and greenstone are host rocks for mineralization on the property.

Premier porphyry is a massive green, medium grained feldspar - hornblend-potassium feldspar-quartz porphyritic rock of andesitic composition. Quartz and potassium feldspar phenocrysts vary in size and abundance. This variation may have an exploration significance, with chances of finding mineralization proportional to the size and abundance of the phenocrysts. The intensity and zoning of alteration within the Premier porphyry is another ore finding index. In the proximity of ore zones, there is an increase in carbonate, pyrite and sericite alteration, culminating in a quartz flooded, pyritic completely altered and bleached porphyry which hosts the ore. The core of the alteration zone may be represented by massive dark green chlorite containing stringers of pyrite and calcite.

There are two types of mineralization in porphyry as observed in the Glory Hole, Cascade Falls #8 and B.C. Silver Camp areas: (1) stringer and disseminated black sulfides, mostly silver sulfosalts, and (2) pods

or lenses of massive pyrite-sphalerite-galena-tetrahedrite or sulfide matrix breccia with high gold and silver contents. The lenses are grossly conformable with the contact between porphyry and green tuff.

Geological mapping and drilling in the Glory Hole area indicate a large area of pyrite-sericite-carbonate-silica altered Premier porphyry characterized by brecciation, faults, discontinuous stringer sulfide zones, pods of high grade massive sulfides and sericitic rock containing low grade gold and silver values. The observed alteration and discontinuous mineralization is to be expected in a vent facies or hydrothermal conduit environment. New concepts of ore genesis dictate exploration for altered porphyry rather than shear zones at Premier.

The greenstone is predominantly fine grained, foliated, rather featureless andesitic tuff. Two main types of mineralization were noted:

1. quatz-carbonate breccia zones containing fragments of bleached sericite and pyrite altered rock. Sulfides occur in stringers or rarely as massive pyrite-sphalerite-galena-tetrahedrite. These quartz-carbonate breccia zones may be veins (e.g. Prospect), or possibly flow top or intertuff units (e.g. Pictou, Buckham 4 level zone, 13 Mile Dam, Granduc Road).
2. pyritic, sericitic felsic tuff units (e.g. Mac's Zone, upper Pictou trenches).

Four sets of faults were noted during mapping: 010-025°/60° W; 160-170°/E or W dip, resulting in wedge shaped fault blocks; 045°/ NW and 125-130°/ SW. The importance of determining the amount of offset on these faults is clearly illustrated by the discovery of the lessee's lens (2736 T of ore grading 6.8 oz/T Au, 144 oz/T Ag, and 9.8% combined Pb + Zn) in the south wall of the Glory Hole after the mine ceased operation. No. 1 level geological plan shows two parallel ore zones running into a fault. On the other side of the fault, only one ore zone was mined, the other, offset only 40 feet, became the lessee's discovery.

Another structural element pertinent to exploration is the plunge of ore shoots. Mapping did not delineate any fold structures, but a consistent deformational lineation 240 to 260° plunging 25 to 45° was observed throughout the grid area.

SOIL GEOCHEMISTRY

The B horizon soil survey on the Glory Hole-Pictou grid was very successful, outlining 7 areas of multi-element anomalies. Anomalous soils commonly contain coincident high concentrations of Pb (≥45 ppm), Zn (≥90 ppm), Ag (≥3.0 ppm) and Au (≥50 ppb). A large number of samples contain low concentrations of base and precious metals, even down-slope from the Glory Hole, indicating that contamination is not prevalant.

Detailed followup of an Ag-Au soil anomaly along the Cascade Falls #8 porphyry resulted in discovery of new mineralization which was overlooked during routine grid mapping. It is expected that continued follow-up in the coming season will uncover more new mineralized occurrences.

TARGET AREAS

Highlights of the 1980 assay results are listed in the accompanying table and target areas are shown on Fig. 3. To facilitate comparison of the results, a factor "gold equivalent" is used which is calculated as the gold content plus 1/30 of the silver content. The factor 1/30 is based on the historic relative dollar value of gold and silver and does not take into account mill recovery rates. Using a dollar value of $500 for gold, 0.15 oz/T Au equivalent is considered to be minimum mining grade. The minimum mining width is taken to be 5 feet. Assay results listed in the table are selected on the basis of these minimums, except in cases where a single isolated sample indicates potential in a new area. In this table, no consideration is given to the greater widths and lower grades acceptable for an open pit situation.

Glory Hole:

The target on the south and east side of the Glory Hole is a bulk tonnage mineral reserve amenable to open pit mining. The area was mapped in detail (1" = 40') and tested by a fence of 7 drill holes (80- 1 to 7).

Drill holes 80-1, 3, 4 and 5 show that the previous mine operators left 10 to 20 feet of mineralization on the stope footwalls which is mining grade at present metal prices. In addition, these drill holes

intercepted sizeable blocks of altered rock grading $20/T in gold and silver adjacent to the zones of mining grade, as well as stringers and pods of high grade ore.

In the southeast corner of the Glory Hole, silicified and pyritized Premier porphyry was mapped along a strike length of 400 feet. Grade is represented by samples 80-6011: 12 foot true width assaying 0.292 oz/T Au and 7.95 oz/T ag, 80-6012 and DDH 80-5 (see table). From drill results (not in the table) it is estimated that a zone 50 to 75 feet thick grades $20/T or better. Assuming an elevation difference of 150 feet between the floor and rim of the Glory Hole, there is an easily accessible reserve of 300,000 T on the south wall. Intercepts in DDH 80-3 and 80-4 and an area of anomalous Au-Ag-Pb in soils indicates that this zone extends along strike to the northeast for another 400 feet. If grades in the zone are continuous this represents a possible additional 300,000 T of low grade reserve.

In the southwest corner of the Glory Hole a similar silicified and pyritized zone was mapped along the wall for a strike length of 600 feet. High grade stringers and lenses are visible in the wall (80-6008 : 6 foot true width assaying 0.210 oz/T Au, 2.13 oz/T Ag, 8.0% combined Pb and Zn; 80-6009, see table).

In summary, the south side of the Glory Hole is an obvious target for easily accessible and profitable mill feed. A concerted sampling effort is warranted to determine the size and grade of bulk tonnage reserves which could be mined by cutting back the south wall of the Glory Hole.

Pictou:

Mineralization in quartz-carbonate breccia zones and in pyritic, sericitic felsic units in andesitic tuff is exposed in surface trenches and an exploratory tunnel at Pictou. Known mineralization is reflected by soils anomalous in Pb-Zn-Ag-Au, with considerable downslope spreading of the anomaly. A fan of 4 diamond drill holes was designed to test the down dip projection of known mineralization.

The results of assay sampling show that the mineralized occurrences at Pictou look very promising on the surface, that the grades are

less spectacular in the tunnel and that the drill intercepts are on the whole sub-ore grade. For example, the mineralized zone exposed in trench 80-1111 (0.042 oz/T Au, 19.76 oz/T Ag over 5 feet) is sub-economic in DDH 80-10.

However, many of the better showings are cut off at depth by faults. Mineralization in the trench which produced the best assay sample of the season (80-1116 : 4 feet grading 0.528 oz/T Au, 23.17 oz/T Ag) is cut off by faulting and does not project downwards into the tunnel. A strong massive pyrite-sphalerite-galena-tetrahedrite zone in the tunnel (80-1081, 1082) probably correlates with a surface showing (80-1114, see table), but is cut off by a fault zone and was not intercepted by DDH 80-8 and 9.

In summary, numerous faults disrupt the down dip projections of showings on surface and in the tunnel. More detailed surface mapping and drilling is required to find extensions.

Buckham Pictou:

A fan of four drill holes from one setup was laid out by T.R. Buckham to test the up dip projection of a northeast trending sub-economic zone exposed by drifting on 1350 (4) level. The upward projection of this zone had not been tested by previous operators. Surface mapping indicates several zones of sericitic and pyritic felsic tuff in the target area. Isolated soil samples contain anomalous concentrations of Pb, Au and Ag.

The target mineralization was intersected in the first hole DDH 80-16: 315-324 feet : 0.065 oz/T Au and 9.98 oz/T Ag, but the zone was cut off by a fault and did not show in the next 3 holes. Two additional holes, 80-20 and 80-21 were drilled on either side of 80-16. The lithologic section and mineralized intercepts in 80-21 correlate well with DDH 80-16 but the mineralization was sub-economic. DDH 80-20 hit the fault zone before reaching the projected mineralization. The 4 level zone had been intersected at a lower elevation earlier in the season by DDH 80-9 (0.116 oz/T Au, 1.34 oz/T Ag over 5 foot core length).

In summary, DDH 80-9, 16 and 21 intersected the target zone, with 80-9 and 16 showing mining grades with good gold contents and widths. Continued drill testing of this zone is recommended.

DDH 80-18 was drilled beyond Buckham's proposed footage (375') in order to test the down dip projection of massive pyrite mineralization found by Mac Okazaki during surface mapping. In this hole a 15.5 foot core length of pyritic, sericitic tuff grades 0.056 oz/T Au and 2.57 oz/T Ag. A 4.5 foot length at the beginning of the section contained 0.156 oz/T Au. DDH 80-19 established the strike continuity of this zone, as it was intersected from 488 to 512.8 feet (see table). "Mac's Zone" is considered to have excellent potential for strike continuity and therefore tonnage since it is a distinct lithological unit. The difference in elevation between the drill intercepts and the surface showing is 400 to 500 feet. This is a new showing in previously untested terrain and should be pursued by further drilling.

Prospect:

Two holes, 80-12 and 13, were drilled to test the down dip extension of the Prospect vein, which is exposed in the Prospect tunnel and in trenches above the tunnel. In the tunnel, good grade mineralization occurs in a multiple quartz-carbonate breccia vein containing pods of massive sulfides in greenstone; e.g. 80-1086 : 5 feet grading 0.110 oz/T Au, 1.85 oz/T Ag and 80-1087 : 8 feet grading 0.092 oz/T Au, 2.23 oz/T Ag. These results corroborate assays shown on old mine plans which date back to the early 1930's. It was felt that the potential of this area had not been adequately tested by previous drilling. The Prospect vein structure was intersected by both drill holes but grades are marginal (see table).

DDH 80-12 was drilled to 463 feet in an effort to reproduce intersections recorded in early exploratory holes drilled from 2 level. Numerous quartz-carbonate breccia zones containing stringers of pyrite-sphalerite-galena show only marginal grades; e.g. 356.2-362.5 feet : 0.040 oz/T Au, 3.26 oz/T Ag.

While the drilling established continuity of the Prospect vein structure, it is evident that the occurence of mining grades is spotty. Further drilling is not warranted unless a better understanding of the plunge of ore shoots within mineralized zones indicates more specific targets in untested ground.

Cascade Falls #8:

An altered Premier porphyry body hosting numerous mineral occurences outcrops as a prominent knoll on the Cascade Falls #8 claim, just south of the Glory Hole. Considerable exploration effort was focussed on this porphyry body because assay results from trenching in the 1930's are encouraging. There is no record of underground or drill testing of the porphyry in the upper levels except for a flat drill hole from 2000 (1) level which intersected 0.16 oz/T Au and 2.12 oz/T Ag over 8 feet.

Resampling of the original open cuts resulted in two significant assays over zones of quartz veining and stringer black sulfides in porphyry (80-1103 : see table. and 80-1104 : 12 feet grading 0.013 oz/T Au and 5.00 oz/T Ag). A reconnaissance IP traverse southwest of the open cuts detected an anomaly coincident with the contact between porphyry and greenstone. The intercept in DDH 80-15 from 217.9 to 219.9 feet (0.034 oz/T Au and 2.54 oz/T Ag) is roughly coincident with the IP anomaly. The drill hole was stopped short of target and is to be completed in 1981.

Follow-up of a silver-gold soil anomaly coincident with the porphyry along strike to the southwest resulted in the discovery of significant mineralization in two new locations. High grade in talus (samples 80-1078 and 80-1079; 0.046 oz/T Au, 17.91 oz/T Ag and 0.096 oz/T Au, 55.12 oz/T Ag respectively) was subsequently located in place by trenching (80-1109: 0.014 oz/T Au and 2.98 oz/T Ag). DDH 80-14 intersected the zone at depth (265.2-270.2 feet : 5 feet assaying 0.026 oz/T Au, 5.65 oz/T Ag). Along strike, trenching exposed high grade gold and silver over a narrow width (samples 80-1098 : 2 feet of 0.144 oz/T Au, 1.06 oz/T Ag and 80-1107 : 2 feet of 0.005 oz/T Au, 11.36 oz/T Ag).

The Cascade Falls #8 porphyry warrants a concerted exploration effort in the coming season.

UNDEVELOPED TARGET AREAS

1. 13 Mile Dam

Between Cascade Falls #8 and Pictou, on the North Fork of Fletcher Creek, there is an area of mineral occurrences referred to on old mine maps as 13 Mile Dam. Surface showings were tested by a number of short drill holes in the 1930's.

The area of known mineralization was enlarged this past season when two showings approximately 100 feet apart were exposed during blasting for roadbuilding. One exposure (80-1096) grades 0.072 oz/T Au and 13.82 oz/T Ag across a true width of 6 feet. Along strike to the southwest, an area of soils anomalous in Pb, Zn and Au (up to 0.188 oz/T) indicates the potential for a sizeable zone.

2. B.C. Silver Camp

Uphill from the old B.C. Silver Camp silicified and pyritized Premier porphyry is well exposed in several old open cuts. The area of interest is delineated by an Ag-Pb-Au soil anomaly. The best assay sample is 80-1048 : 5 feet grading 0.026 oz/T Au and 6.87 oz/T Ag. However, the B.C. Silver 1820 level workings pass under this area and no further work is recommended at this time.

3. Granduc Road - 6 Level Portal

When the road to the Granduc Mine was built in the early 1960's, massive pyrite-sphalerite-galena-tetrahedrite mineralization was exposed in a road cut just above the 6 level portal (samples 80-1135 to 1137 : averaging 0.158 oz/T Au, 3.24 oz/T Ag, 6.6% combined Pb and Zn across 18 feet). This mineralization probably correlates with an occurrence exposed by early prospectors in a short exploratory adit driven into the cliff above the road cut (samples 80-1133 and 1134, see table).

The previous mine operators explored unsuccessfully for down dip extensions of the mineralization to 6 level. However, the showing continues to be intriguing because of the high grade and the similarity to mineralization on HIMCO's Woodbine property to the west. Detailed mapping in the vicinity of the showing and westwards to the Woodbine property boundary is recommended.

4. Bush

Little more was accomplished at the Bush workings than locating the exploratory tunnels and open cuts. Old mine plans show significant assay results, especially for silver, which are substantiated in a very preliminary way by an unbiased grab sample chipped from the wall of No. 4 tunnel (sample 7676 : 0.078 oz/T Au, 44.24 oz/T Ag).

5. Simcoe

Showings on the Simcoe and Neill Fr. M.C. are near the southern boundary of the property and just off the south end of the grid of lines. A large area of soils anomalous in Pb-Zn-Ag-Au-Cu was outlined on the southern most lines of the grid, and the anomaly is open towards the known showings.

Mineralization in old open cuts and adits consists of quartz-carbonate-galena veins in greenstone near a contact with Premier porphyry. The assay results show sub-ore grade. The most spectacular showing recorded on the old mine plans, 0.5 oz/T Au and 11.68 oz/T Ag could not be located.

A major fault zone, now occupied by a Tertiary dike swarm, was mapped in the South Fork of Fletcher Creek between Simcoe and the Pictou area to the north. Depending on displacement along the fault, the Simcoe Premier porphyry body may correlate with either the Cascade Falls #8 or the Glory Hole porphyry to the north.

6. Hospital

A large area of soils containing anomalous concentrations of Pb and Zn, as well as smaller areas with high Ag and Au (up to 5000 + ppb) contents extends upslope from the road to the old hospital at 4 level town site. Some outcrops of silicified and pyritic Premier porphyry were mapped on the grid within the anomalous area.

7. Woodbine

The Woodbine claims of HIMCO are due west of the 6 level portal, across Cascade Creek. The silicified and pyritized Premier porphyry body which hosts mineralization on the Woodbine claims strikes northeast and projects into the Premier property.

COMPILATION

Reinterpretation of the existing mine geological plans and drill logs has proven very difficult. The geological observations are sketchy and it is clear that the mine was run as an engineering operation following shear zones and ore shoots with little or no geological control.

While faults and fractures are recorded in great detail on the underground plans, there is no indication of the magnitude of structures and little evidence that lithological correlations were used to define offsets along the faults. Lack of continuity in many ore shoots could be the result of faulting. It is probable that an effort to interpret the role of faulting in displacing ore zones would locate more ore (e.g. lessee's lens).

An assay plan of 1 level was reconstructed using drill log data. Assessment of this assay plan together with the data from DDH 80-1 to 7 leads to the conclusion that there is probably not a large enough tonnage of bulk mining grade gold and silver reserve ($20/T or 0.04 oz/T Au equivalent) in the area south and east of the Glory Hole to support a high capacity milling operation. The 1 level assay plan shows abrupt cut-offs in grade adjacent to the mining grade intercepts, while the 1980 drill results indicate broader zones of low grade material, perhaps as a result of more sensitive analytical techniques and larger assay samples. However, there is certainly a substantial tonnage of profitable mill feed for an existing mill both in the stope walls and on the south wall of the Glory Hole. Particularly in the upper levels, where mining was carried out in the 1920's, rock left in the walls of bonanza stopes is mining grade at today's metal prices.

CONCLUSIONS

The 1980 exploration program leads to the following general conclusions:

1. At present metal prices, there is mining grade in the stope footwalls as indicated by DDH 80-1, 3, 4 and 5. Sericitized, pyritic Premier porphyry adjacent to the ore grade silicified zones represents a lower grade mineral reserve.
2. New mineralized zones can be found even in the near vicinity of old workings by detailed work consisting of soil geochemistry, geological mapping and prospecting (e.g. Cascade Falls #8).

3. Delineation of fault systems on the property is essential to the interpretation of drill results, both past and present, and to the prediction of offsets on ore shoots.

4. Ore grade mineralization is not difficult to find but establishing continuity and therefore tonnage is less straightforward because of the numerous faults and erratic distribution of values within the mineralized zones.

RECOMMENDATIONS FOR 1981

There are many targets both within the Glory Hole-Pictou grid area and elsewhere on the property which warrant detailed exploration. However, it is recommended that the 1981 field season be used to upgrade known mineralized zones which would be easily accessible for mining from present workings and to consolidate the effort being made on the lower levels to put the property into production.

1. Bulk mineral reserve in Glory Hole area:
   (a) Assay more core samples from DDH 80-1, 3, 4 and 5, to better define the extent of lower grade reserve.
   (b) Do the physical work necessary to make safe the south wall of the Glory Hole for sampling and drill testing. Strip overburden and blast off overhangs.
   (c) Cut timber on the south side of Glory Hole (contract out to logger who would also build roads). Excavate a series of continuous trenches at 100 foot intervals from the Glory Hole rim into footwall.
   (d) Drill horizontal and up holes from 110 level tunnel to assay test the westernmost section of the Glory Hole wall (12 holes totalling 2000 feet).
   (e) If sufficient encouragement is forthcoming from the above work, drill short horizontal test holes into the south wall on a grid pattern for assay purposes using a jumbo drill or underground drill mounted on a lift (possibly percussion). Continue drilling south and east of Glory Hole on a grid pattern.

2. Of the mining grade zones indicated by 1980 drilling and surface sampling, it is recommended that further work be concentrated on those which would be accessible for mining from existing workings, i.e. from the 4 level cross cut (407 Dr) heading south to Pictou. These include:
   (a) Cascade Falls #8 Porphyry
      -deepen DDH 80-15 to 450 feet and drill a fan of holes from the same setup (4 holes totalling 1700 feet)
      -drill a fan of holes in vicinity of DDH 80-14 to test for extensions of intercept 265.2 to 270.2 feet. (3 holes totalling 1500 feet)
      -drill test down dip projections of mineralization in surface trenches (4 setups, 12 holes, total 1800 feet)
      -compile 4 level data in area of down dip projection of this zone. Possibly drill test from 4 level.
   (b) Pictou
      -drill test showings in surface trenches which do not project downwards into tunnel (6 holes, total 1000 feet).
      -map the area of the upper showings in detail with a view to finding extensions and delineating faults.
   (c) Buckham Pictou
      -continue drill testing from underground in Pictou tunnel. Initial indications are that continuity of grade is poor and drilling must be on a close-spaced (not more than 50 foot) pattern (1500 feet of drilling)
   (d) 13 Mile Dam zone
      -follow up known mineralization and soil anomalies by detailed geological mapping and prospecting
      -develop drill targets (accessible from Pictou road, contingent 2000 feet)

Many of the 1980 drill holes, especially those at Pictou, reached the projected target too far below the known mineralization because of steep terrain and difficult access. To drill test the surface showings

and soil anomalies, a small machine capable of mobility in rough terrain and of drilling short, flat holes is needed. Information on width, grade, attitude and continuity of the mineralized zones from holes right under the showings is essential before going to the expense of setting up the Longyear 38 drill. A BBS-1 or an underground drill mounted on skids with a winch to move around should work in most instances, with an air line to a compressor parked on existing roads. Core size should be NQ or at least BQ.

3. Surface mapping and prospecting on a scale 1" = 100' should be carried out on a grid of lines in the area above development work on 6 level and in the area between the Granduc Road showing and HIMCO's Woodbine property. This geological information is needed for exploration on 6 level and below. Contingent drill testing of Granduc Road showing (3 holes totalling 600 feet).

4. A continued effort is required to delineate fault attitudes and offsets and to define structures which would indicate the plunge of ore shoots. Underground mapping should be carried out on 110 level, 4 level and 6 level. As well as accumulating structural information, this mapping should concentrate on developing a three dimensional picture of the distribution and nature of the Premier porphyry.

5. Contract an IP survey on the Glory Hole-Pictou grid of lines to detect massive sulfide pods and pyritic alteration zones.

6. Co-ordinate with HIMCO line cutting on the Woodbine grid. Extend the present grid east to Cascade Creek and to the south. Do a soil geochemical survey on the grid extension.

7. Both blasting and mucking out are required to expose mineralization in old open cuts.

8. Construct a three-dimensional model of the mine workings.

ESTIMATED COSTS

GLORY HOLE "PIT" EVALUATION

1)	Physical work, trenching and assay sampling on south rim	$25,000.
2)	Drill and assay sampling program from 110 level. 2000 feet at $25.00 per foot "all in".	$50,000.

SURFACE TARGET AREAS

1)	Drill program from Pictou tunnel. 1500 feet at $25.00 per foot "all in".	$37,500.
2)	Drill program of short test holes under showings 2800 feet at $35 per foot "all in"	$98,000.
	(contingent drilling - 600 feet	$21,000.)
3)	Drill program with Longyear 38. 3200 feet at $50.00 per foot "all in"	$160,000.
	(contingent drilling - 2000 feet	$100,000.)
4)	Geological mapping program. Follow up known mineralization and soil anomalies. Develop drill targets. Delineate fault systems.	$50,000.
5)	Contract linecutting-10 line miles at $1000 per mile	$10,000.
6)	Contract IP survey	$20,000.
7)	Trenching and sampling	$5,000.

UNDERGROUND GEOLOGY

1)	Geological mapping and compilation on 110, 4 and 6 levels	$50,000.
	TOTAL	$505,000.
	(contingent drilling)	$120,000.)

RECOMMENDATIONS FOR FUTURE WORK

1) Extend present Glory Hole-Pictou grid to close off soil anomalies at the edges of the grid. Map and soil sample the grid extensions. Follow up soil anomalies by detailed geological mapping and prospecting.
   (a) Hospital Pb-Zn soil anomaly and area to south of No. 2 portal and Ladder tunnel.
   (b) Simcoe-Neill Fr. Pb-Zn-Ag-Au soil anomaly and known showings.

2) Reappraisal of outside showings and remapping of those with potential.
   (a) Bush workings.
   (b) Northern Lights - Hovland Creek - Granby IP anomaly and drill intercepts.
   (c) Logan Creek at Cascade Creek area.

3) Follow-up mineralized intercepts from previous underground drilling as listed by Seraphim (1979). Some of this mineralization may have been mined by previous operators and should be either drilled "on speculation" or the stope outlines should be checked underground (possible only on 4 level and below).

Respectfully submitted

March 27, 1981
Severn Bridge, Ontario

Dianne Kretschmar
Dianne Kretschmar

STATEMENT OF EXPENDITURES - British Silbak Premier Mines Ltd.
1980 Field Program

	Field Work to 31 Dec/80	Compilation to 31 Dec/80	Report Preparation	TOTAL
Salaries and fees	52,943	8,693	10,102	71,738
Travel	6,654	3,454	-	10,108
Transport and Fuel	7,245	-	-	7,245
Supplies and Maps	2,033	509	368	2,910
Communication & Report Reproduction	602	226	900	1,728
Freight	425	43	206	674
Commissary	961	-	-	961
Outside Contracts	495	-	-	495
Analyses	389	-	41	430
TOTAL	71,747	12,925	11,617	96,289
10% Overhead	6,991	-	1,162	8,153
GRAND TOTAL	78,738	12,925	12,779	$104,442

Dianne Kretschmar
Dianne Kretschmar

DIANNE & ULRICH KRETSCHMAR Geologists R.R. #1, Severn Bridge, Ontario, P0E 1N0, Canada (705) 689-6431

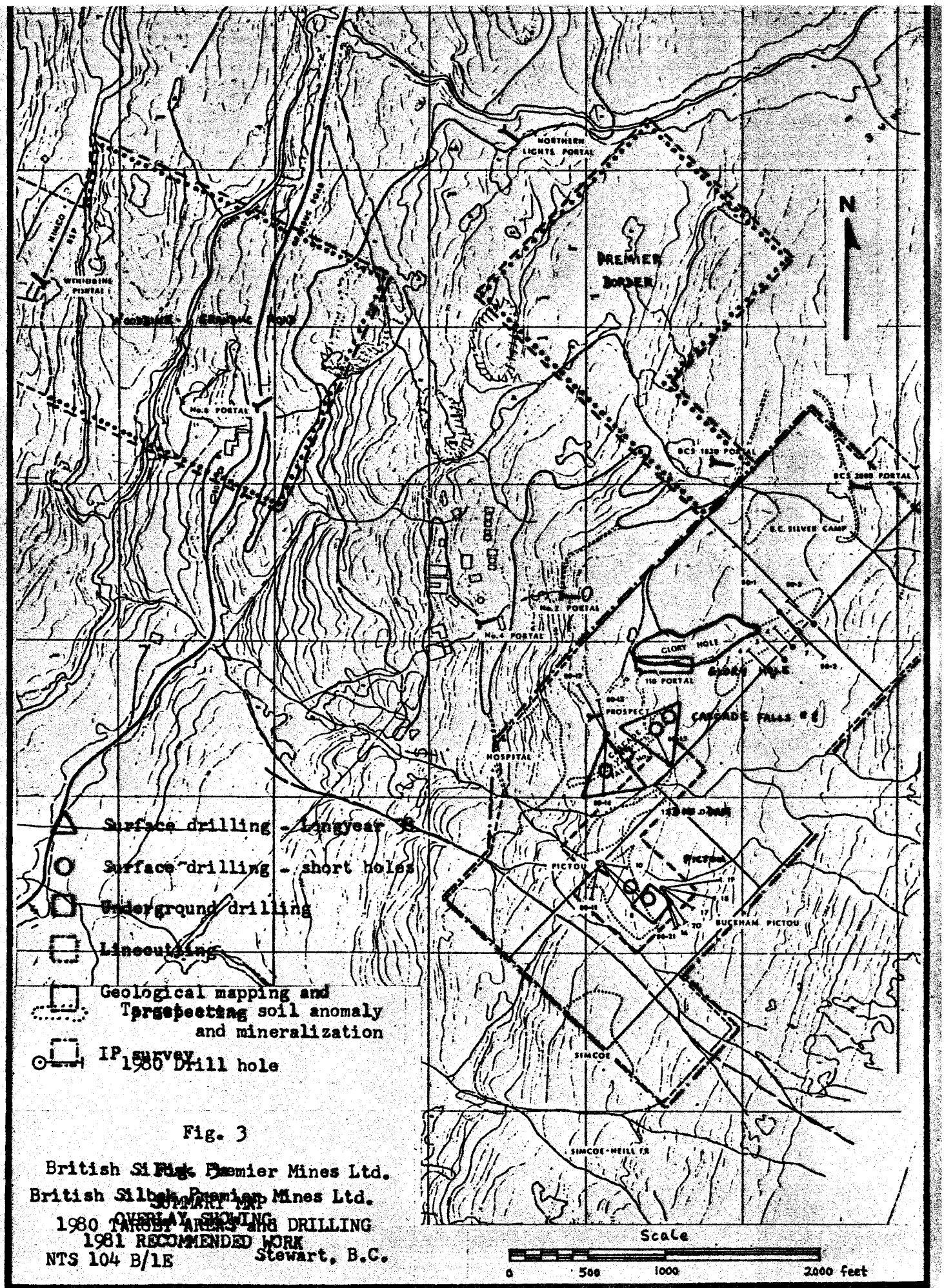


Fig. 3

British Silbak Premier Mines Ltd.

British Silbak Premier Mines Ltd.

SUMMARY MAP

OVERLAY SHOWING

1980 TARGET AREAS and DRILLING

1981 RECOMMENDED WORK

NTS 104 B/1E Stewart, B.C.

DIANNE & ULRICH KRETSCHMAR Geologists R.R. #1, Severn Bridge, Ontario, P0E 1N0, Canada (705) 689-6431

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.		width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
1.GLORY HOLE							
Diamond Drill Holes							
80-1	447-452	5	0.01	0.02	0.030	0.82	0.057
	452-457	5	0.01	0.03	0.026	5.47	0.208
	457-462	5	0.08	0.27	0.162	7.16	0.401
(av.	447-462	15	0.03	0.11	0.073	4.48	0.222)
	465	hole broke into 110 level stope					
80-3	281.5-283	1.5	0.06	0.21	0.054	13.18	0.493
	283 -285	2	<0.01	<0.01	0.002	0.35	0.013
(av.	281.5-285	3.5	0.03	0.09	0.024	5.85	0.219)
	288.4-291.9	3.5	<0.01	<0.01	0.003	1.32	0.047
	291.9-293.4	1.5	0.08	0.25	0.454	116.45	4.34
	293.4-297.8	4.4	<0.01	0.01	0.009	2.00	0.076
	297.8-302.8	5	0.01	0.02	0.030	2.26	0.105
	302.8-308.8	6	0.02	0.04	0.003	1.98	0.069
(av.	288.4-308.8	20.4	<0.01	0.04	0.044	10.36	0.389)
	308.8	hole broke into 1 level stope					
80-4	160-165	5	0.01	0.02	0.059	3.67	0.181
	205.6-210.9	5.3	0.06	0.04	0.180	22.04	0.915
	210.9-213.6	2.7	0.03	0.05	0.052	3.14	0.157
	213.6-218.6	5	<0.01	0.03	0.006	1.26	0.048
(av.	205.6-218.6	13	0.03	0.04	0.086	10.12	0.423)
	227-233	6	0.01	0.05	0.063	4.26	0.205
	240-245	5	<0.01	0.02	0.056	5.02	0.223
	252.5-254	1.5	0.05	0.25	0.076	5.84	0.271
	254-256.1	2.1	<0.01	0.03	0.010	1.76	0.069
	256.1-259.9	3.8	<0.01	0.02	0.076	4.12	0.213
	259.9-263.8	3.9	<0.01	0.01	0.006	1.13	0.043
	263.8-269	5.2	<0.01	0.03	0.023	2.04	0.091
	269-273	4	<0.01	0.04	0.108	5.40	0.288
(av.	252.5-273	20.5	0.01	0.04	0.049	3.16	0.154)
	277	hole broke into 1 level stope					

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.		width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
1.GLORY HOLE (continued)							
Diamond Drill Holes							
80-5	199-204	5	0.06	0.04	0.042	5.38	0.221
	279-282	3	0.06	0.01	0.054	6.44	0.269
	282-287	5	0.08	0.08	0.040	8.34	0.318
(av.	279-287	8	0.07	0.05	0.045	7.63	0.299)
	353.5-358.5	5	0.02	0.02	0.448	1.42	0.495
	358.5-363.5	5	<0.01	0.01	0.020	8.50	0.303
(av.	353.5-363.5	10	0.01	0.02	0.234	4.96	0.399)
	368.5	hole broke into Glory Hole					
80-6	133.8-139.3	5.5	0.09	0.21	0.011	8.04	0.279
80-7	218.9-219.7	0.8	0.16	0.49	0.012	11.54	0.397
Samples from South Wall and Rim of Glory Hole							
	80-1053	4.5	0.02	0.10	0.096	12.70	0.519
	80-6008	6	3.70	4.26	0.210	2.13	0.281
	80-6009	8	2.36	2.53	0.148	4.55	0.300
	80-6011	12	0.23	0.31	0.292	7.95	0.557
	80-6012	7.5	0.05	0.06	0.034	5.28	0.210
2.PICTOU							
Diamond Drill Holes							
80-8	80.8-84.3	2.5	<0.01	0.04	0.003	0.27	0.012
	84.3-86	2.7	0.53	0.52	0.038	8.52	0.322
(av.	80.8-86	5.2	0.28	0.29	0.021	4.55	0.173)
	101.8-102.8	1	0.17	0.55	0.020	5.46	0.202
	269.6-273.1	3.5	0.03	0.04	0.052	3.38	0.165
	286.3-287.3	1	0.22	0.36	0.034	4.12	0.171
	287.3-287.8	0.5	6.46	8.37	0.092	8.24	0.367
	287.8-289.3	1.5	0.27	0.96	0.042	1.49	0.092
(av.	286.3-289.3	3	1.29	2.00	0.048	3.49	0.164)
80-9	283-286.5	3.5	0.31	0.63	0.046	1.72	0.103
80-10	166.7-168.1	1.4	0.01	0.01	0.016	5.74	0.207
80-11	200.5-202.3	1.8	0.10	0.48	0.154	0.27	0.163

DIANNE & ULRICH KRETSCHMAR Geologists R.R. #1, Severn Bridge, Ontario, P0E 1N0, Canada (705) 689-6431

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.	width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
2. PICTOU (continued)						
Pictou Exploratory Tunnel						
80-1081	6.5	1.28	1.30	0.048	1.83	0.109
80-1082	6.5	0.90	1.59	0.090	1.35	0.135
80-1085	6	0.63	6.01	0.168	0.99	0.201
Pictou Trenches						
80-1111	5	0.62	0.91	0.042	19.76	0.701
80-1114	7	0.15	0.98	0.142	0.56	0.161
80-1115	4	0.12	0.35	0.030	3.32	0.141
80-1116	4	0.93	1.22	0.528	23.17	1.30
3. BUCKHAM PICTOU DIAMOND DRILL HOLES						
4 Level Zone Projected up Dip						
80-9 395.9-397.9	2	<0.01	<0.01	0.006	0.09	0.009
397.9-400.9	3	0.04	0.06	0.190	2.17	0.262
(av. 395.9-400.9	5	0.02	0.04	0.116	1.34	0.161)
80-16 315-317.1	2.1	0.05	0.15	0.003	4.66	0.158
317.1-323	5.9	0.10	0.15	0.062	11.12	0.433
323-324	1	0.25	0.15	0.214	14.45	0.696
(av. 315-324	9	0.11	0.15	0.065	9.98	0.398)
347.1-348.1	1	0.01	0.03	0.106	1.02	0.140
80-17 158.5-159.5	1	0.23	0.43	0.020	32.52	1.104
159.5-162.5	3	0.01	0.17	0.002	2.70	0.092
(av. 158.5-162.5	4	0.07	0.24	0.007	10.16	0.346)
80-21 140-141.5	1.5	0.03	0.03	0.011	4.24	0.152
Mac's Zone						
80-18 454.1-458.6	4.5	0.03	0.07	0.156	1.07	0.192
458.6-460.4	1.8	<0.01	0.01	0.026	0.66	0.048
460.4-461.9	1.5	<0.01	<0.01	0.002	0.16	0.008
461.9-464.1	2.2	0.05	0.08	0.012	5.16	0.184
464.1-466.7	2.6	<0.01	0.04	0.005	3.36	0.117
466.7-468.9	1.9	0.06	0.04	0.028	4.56	0.180
468.9-469.6	1	0.08	0.16	0.018	4.82	0.179
(av. 461.9-469.6	7.7	0.04	0.07	0.014	4.36	0.159)
(av. 454.1-469.6	15.5	0.03	0.05	0.056	2.57	0.142)

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.	width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
3. BUCKHAM PICTOU DIAMOND DRILL HOLES (continued)						
Mac's Zone (continued)						
80-19 257.2-258.2	1	0.14	0.30	0.003	7.08	0.239
466.4-471.4	5	0.07	0.16	0.010	5.26	0.185
488-489.5	1.5	0.10	0.21	0.005	3.10	0.108
489.5-494	4.5	<0.01	0.02	0.003	0.57	0.022
494-495.5	1.5	0.16	0.31	0.026	18.90	0.656
(av. 488-495.5	7.5	0.05	0.11	0.008	4.74	0.166)
502.7-505.2	2.5	0.02	0.03	0.003	1.52	0.054
505.2-510.8	5.6	<0.01	0.02	0.003	0.63	0.024
510.8-512.8	2	0.33	0.65	0.042	27.86	0.971
(av. 502.7-512.8	10.1	0.07	0.13	0.011	6.24	0.219)
4. PROSPECT						
Diamond Drill Holes						
80-12 319.2-320.2	1	0.09	0.14	0.048	8.52	0.332
320.2-323.2	3	0.02	0.03	0.003	0.70	0.026
(av. 319.2-323.2	4	0.04	0.06	0.014	2.66	0.103)
356.2-362.5	6.3	0.30	0.92	0.040	3.26	0.149
80-13 223-226.5	3.5	0.18	0.76	0.038	3.54	0.156
226.5-228.5	2	<0.01	<0.01	<0.001	0.05	0.002
(av. 223-228.5	5.5	0.12	0.49	0.025	2.27	0.101
288 hole abandoned in heavy fault zone						
Prospect Exploratory Tunnel						
80-1086	5	2.03	1.18	0.110	1.85	0.172
80-1087	8	0.34	1.06	0.092	2.23	0.166
80-1089	5	0.27	0.44	0.020	9.12	0.324
80-1090	4.5	0.31	0.42	0.014	10.80	0.374
Prospect Bulldozer Trench						
80-1007	3	0.30	1.42	0.030	5.02	0.197

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.	width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
5. CASCADE FALLS #8 PORPHYRY						
Diamond Drill Holes						
80-14 265.2-267.7	2.5	0.37	0.71	0.028	10.08	0.364
267.7-270.2	2.5	0.20	0.08	0.024	1.22	0.065
(av. 265.2-270.2	5	0.29	0.40	0.026	5.65	0.214)
282.2-286.9	4.7	0.06	0.16	0.038	2.22	0.112
328.5-333.5	5	0.07	0.08	0.014	4.70	0.171
80-15 33.6- 38.6	5	0.09	0.29	0.131	0.53	0.149
217.9-219.9	2	0.57	0.77	0.034	2.54	0.119
248 - Pulled off hole short of target to move to Buckham Pictou site. Hole to be completed in 1981.						
Surface Trenches						
80-1078	grab	0.27	0.49	0.046	17.91	
80-1079	grab	0.43	1.34	0.096	55.12	
80-1098	2	0.37	0.69	0.144	1.06	0.179
80-1103	2	0.18	0.46	0.005	3.92	0.136
80-1104	12	0.13	0.24	0.013	5.00	0.179
80-1107	2	0.89	2.02	0.005	11.36	0.384
80-1109	5	0.10	0.29	0.014	2.98	0.113
6. 13 MILE DAM (North Fork Fletcher Creek)						
80-1096	6	0.23	0.71	0.072	13.82	0.533
7. B.C. SILVER CAMP						
80-1048	5	0.06	0.21	0.026	6.87	0.255
8. GRANDUC ROAD ABOVE 6 LEVEL PORTAL						
80-1133	3	2.68	4.85	0.094	4.08	0.230
80-1134	4	0.44	2.74	0.686	3.78	0.812
80-1135	6	0.33	1.63	0.162	1.38	0.208
80-1136	6	1.53	10.90	0.248	6.85	0.476
80-1137	6	0.41	4.85	0.064	1.50	0.114
(av.	18	0.76	5.79	0.158	3.24	0.266)

BRITISH SILBAK PREMIER MINES LTD

HIGHLIGHTS OF 1980 ASSAY RESULTS

DDH and Footage or Sample No.	width (ft.)	% Pb	% Zn	oz/t Au	oz/t Ag	oz/t Au equiv.
9. BUSH #4 TUNNEL						
7676	grab	1.60	1.71	0.078	44.24	

All assays by Chemex Labs Ltd, North Vancouver, B.C.

Au equivalent = oz/t Au + 1/30 oz/t Ag

POTENTIAL TAILINGS SITE AT PREMIER MINE

For

British Silbak Premier Mines Ltd.
Vancouver, B.C.

By

SCHULTZ INTERNATIONAL LIMITED
Vancouver, B.C.
Project No. B153.3.2

January, 1981

SCHULTZ INTERNATIONAL LIMITED
ENVIRONMENTAL AND RESOURCE MANAGEMENT CONSULTANTS
1155 WEST GEORGIA STREET, VANCOUVER, B.C., CANADA V6E 3H4

SCHULTZ
SINCE 1944

January 27, 1981 B153.3.2

PRIVATE & CONFIDENTIAL

Mr. B. J. Ouellette
President
British Silbak Premier Mines Ltd.
24th Floor
1066 West Hastings Street
Vancouver, B.C.
V6E 3X1

Tailings Disposal Options

Dear Mr. Ouellette:

On October 31, 1980, C. O. Brawner & Allister Brown conducted a reconnaissance of the mine leases and surrounding areas, in order to identify the tailings disposal options available to British Silbak Premier Mines Ltd. We are pleased to submit a report of our findings on this reconnaissance.

I have chosen to present the report as a summary of the findings and opinions of both Mr. Brawner and Dr. Brown. Mr. Brawner's report to our Company is provided in Appendix I. For convenience, the figure numbers in the body of the report and in Appendix I are in direct correspondence.

I trust that this report will be useful for future planning with regard to tailings disposal. Should you have any questions, I would be happy to answer them.

Sincerely,

SCHULTZ INTERNATIONAL LIMITED

Allister Brown, Ph.D.
Vice-President
AB/blj
c.c. Mr. Victor B. Bjorkman

POTENTIAL TAILINGS SITES AT PREMIER MINE

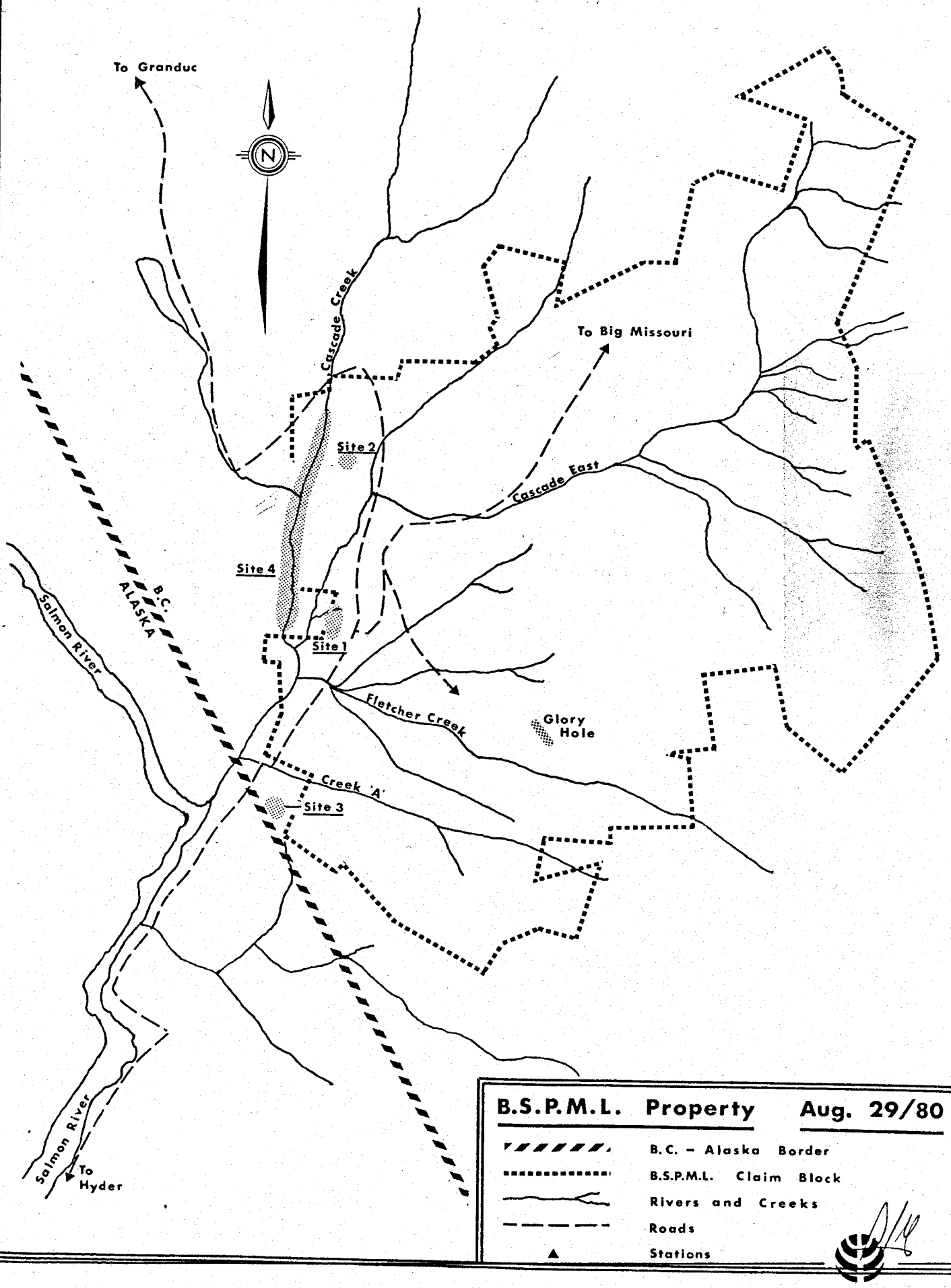
TABLE OF CONTENTS

1.0 INTRODUCTION

The Premier Mine is located in the Cascade Creek, Cascade Creek East valleys on the Salmon River drainage. On the east, the Valley rises steeply and is drained by a number of creeks including Cascade Creek East, Fletcher Creek and a small stream identified as Creek A, Figure 1. On the west, the Valley walls are also very steep, but the maximum elevation is substantially lower than on the east slopes. Cascade Creek drains the area to the north and has a very steep channel until it reaches the confluence with the Salmon River. The topography of the claim site is not conducive to siting of large tailings disposal areas.

It is particularly important that tailings disposal options be identified and evaluated early in the planning stages, so that subsequent planning will reflect the constraints of environmental conditions. In this regard, a number of sites were identified from the available orthophotos. These sites were further evaluated during a site reconnaissance on October 31, 1980, conducted by C.O. Brawner and Allister Brown. Our observations, preliminary conclusions and recommendations constitute this report.

FIGURE 1


To Granduc
N
Cascade Creek
To Big Missouri
Site 2
Cascade East
Site 4
B.C.
ALASKA
Salmon River
Site 1
Fletcher Creek
Glory Hole
Creek 'A'
Site 3
Salmon River
To Hyder
B.S.P.M.L. Property
Aug. 29/80
B.C. – Alaska Border
B.S.P.M.L. Claim Block
Rivers and Creeks
Roads
Stations

2.0 RESULTS

We have been advised by Mr. V. Bjorkman that initial production will be at a low level as summarized below.

1. Initial production will be 100 to 200 tons per day.

2. The main ore production will be removed through the Level 6 drift.

3. Ore will be concentrated at the location of the present concentrator. This concentrator will be repaired and upgraded as necessary.

4. The concentrator process is undetermined as yet. The options include: a flotation process to produce a zinc concentrate and a lead concentrate; or, alternatively, a flotation process combined with cyanide treatment to produce a zinc concentrate, a lead concentrate and a silver/gold concentrate.

5. The volume of water makeup required for the concentrator is unknown at this time.

During a helicopter reconnaissance, four sites suitable for tailings disposal were identified and inspected. These were: the tailings disposal site located just west of Level 6, Site 1; two sites between Cascade Creek and Cascade Creek East, Site 2 and Site 4; and an area adjacent to the Alaska border and outside the present claim holdings, Site 3. These sites are discussed below in order of suitability and preference for operation at 200 tons per day. (Site 4 is suitable for operation at 5,000 tons per day if production is scaled to this level.) These sites are outlined in Figure 2.

BRITISH SILBAK MINE

Waste Disposal Sites

Scale 1" ℄ 400'

Low Volume Sites:
Site 1
Site 2
Site 3

High Volume Site
Site 4

FIGURE 2.

Site 1 - Level 6

A small site, used for tailings disposal at sometime in the past, is located just below the Level 6 drift (see Photos 1 and 2 and Figure 3). The site has approximately 1.7 hectares (4.25 acres of available space with a small dam, approximately 3.7 m (12 ft. high)), built from the coarse refuse from the Level 6 workings. The dam has been breached at sometime in the past by a small stream composed of the mine water and a small surface stream, Photo 3. This water has been diverted to the north and subsequently downslope into the upstream end of the abandoned tailings area. Except for this minor breach, the tailings appear to be well compacted, geotechnically stable and apparently chemically stable. (Soil samples taken from the tailings have retained an unusually high cyanide content.) The west side of the site, the downslope side, has a rock nose which forms a partial natural containment barrier along Cascade Creek East. The site is large enough to build two separate ponds, or one larger pond with a downstream overflow safety pond. Good material is available on site for construction of a dam (the course rock from Level 6). The final tailings dam should be sealed with either a plastic liner or the clay fraction of the tails which are already impounded.

Some additional work is required to completely evaluate this site. This work includes:

1. Monitoring the small stream discharge downstream of the eventual limits of the tailings pond. We have established a water quality station downstream of the tailings dam and quarterly samples will be taken to fulfill monitoring requirements.

2. Complete an analysis of the chemical constituents of the existing tails at various depths to determine chemical properties and water content. Soil samples from the toe of the existing tailings dam will be analyzed to detect any migration of the tailings.

3. A geotechnical analysis of soil stability along the centre line of the eventual tailing dam(s).

4. Complete a topographic survey of the potential dam site and storage area with two foot contours.

We find the following advantages to this site:

1. The site is an existing and established site.

2. The construction materials for the dam are at hand in the form of course rock from Level 6.

3. The site offers good protection of Cascade Creek East.

4. No pumping of the tailings will be required.

5. Constant surveillance of the tailings site will be possible, due to the location with respect to the concentrator.

6. The site provides storage for two years of tailings at 200 tons per day.

7. The preliminary costs to develop this site will be minimal, as will the construction costs and operational costs.

8. The site is ideally located for recycling of supernatant tailings water to the concentrator.

The following points detract from desirability of the site:

1. The site offers limited storage capacity.

2. It will be necessary to divert the mine water and the small creek which presently flow through the tailings pond. (This water should be evaluated as a source of water for the concentrator). Site 1 offers significantly more advantages than disadvantages. If this site is selected as the tailings disposal area for the initial production, relocation to another site either when production expands or when the tailings exceed the available storage is not precluded. Barring any, as yet, unidentified restricting conditions, this site is our first choice for tailings disposal.

Site 2 - Between Cascade Creek and Cascade Creek East

Site 2 is a small area located between Cascade Creek and Cascade Creek East, see Figure 2. It is located in a small depression and is approximately 6.0 hectares (14.9 acres). The site is approximately 1,000 meters (3,600 ft.) from the concentrator and would require pumping the tailings vertically to overcome the 100 meter (350 ft.) elevation difference. The availability of suitable materials to construct a dam is unknown. In order to more fully assess this site, the following additional items of work will be required.

1. Prepare an estimate of costs to pump the tailings from Level 6 to this disposal site.

2. Complete a geotechnical survey of the soils along the center line of the dam.

3. Locate a suitable source of coarse material for dam construction and prepare an estimate of the costs to transport to the dam site.

Site 2 has a number of advantages, including:

1. no significant surface drainage will directly affect the site;

2. the site has a larger area than Site 1;

3. construction materials may be immediately available;

4. the site is secure from any upslope soil instabilities or avalanches; and

5. the site has a reasonable capacity for tailings storage.

Site 2 has the following disadvantages:

1. All costs associated with site will be greater than those at Level 6.

2. If the concentrator is to be located at Level 6, it will be necessary to pump the tailings uphill from this location.

3. The operational and surveillance costs of the site will be moderate to high.

4. Recirculation of the decanted tailings water will be more difficult than for a site located at Level 6.

Site 3 - Between Creek A and the Alaska Border

Site 3 is located adjacent to the Alaska Border and is not within the present lease area held by British Silbak Premier Mines Ltd., see Figures 1 and 2. The site consists of approximately 7.7 hectares (19 acres) of level ground (Photos 4 and 5). Drainage is to the north into Creek A. The site is approximately 1,300 meters (4,200 ft.) from the concentrator and 75 meters (250 ft.) higher in elevation. If this site was to be used for tailings disposal, the tailings would have to be pumped uphill and over a considerable lateral distance. The occurrence of a large patch of willows, upslope of the site, may indicate the location of an avalanche in the past or poorly drained soils, which could be a source of istability in the future.

The following additional work would be required on this site.

1. The property must be purchased.

2. A geotechnical investigation of the area covered by willows to establish soil types, soil stability, stabilization to make tailings disposal safe, and the potential for avalanche or landslide.

3. A geotechnical investigation of the dam foundations (three sides).

4. A surface and groundwater drainage investigation to identify the source of water ponded on the site.

5. The location of suitable materials for dam construction must be established and costs for transportation to Site 3 estimated.

The following points favour this site:

1. The site is relatively level.

2. There is a natural downslope barrier on one side of the site.

3. There are no major surface drainage channels upslope of the site.

The following factors detract from the suitability of the site.

1. The site is at the toe of a possible avalanche/slide area.

2. It is located directly adjacent to the U.S. border.

3. The property must be purchased.

4. Tailings would have to be pumped for laterally 1,300 meters and 75 meters vertically.

5. The location is remote from the process area requiring additional surveillance.

6. The relative costs for the site would be significantly greater than Sites 1 and 2.

7. Recirculation of the tailings decant would require substantial engineering and maintenance.

8. The availability of materials for dam construction is unknown.

Site 4 - Cascade Creek Channel

A high volume tailings site within the existing channel of Cascade Creek can be quickly developed if sufficient reserves are proven to increase production levels substantially, see Figure 2. The development of this site will require diversion of Cascade Creek at approximately 325 m (1,050 ft.) elevation, just downstream of the Granduc Road. Site 4 comprises approximately 20.4 hectares (50.5 acres) located between 290 m and 325 m (950 to 1,050 ft.) elevation. Disposal of tailings from the present concentrator site would require pumping approximately 1,160 meters (3,800 ft.) horizontally and 100 meters (300 ft.) vertically. In addition, the tailings would have to be pumped across Cascade Creek East in an elevated pipeline. Should ore reserves be increased sufficiently to justify a significantly larger scale concentrator, the option of relocating the concentrator closer to Site 4 should be carefully evaluated.

The viability of Site 4 for tailings disposal has not been fully established. The following general work items must be completed to determine if detailed examination of this site would be warranted. This work should be delayed until reserves prove large enough to consider production at 1,000 tons per day or more.

1. Prepare an estimate of the costs to pump the tailings from Level 6 to Site 4.

2. Locate a suitable route to divert Cascade Creek to Cascade Creek East. This will require a thorough hydrological evaluation to determine the size of channel required to contain flood flows.

3. Prepare an estimate of the cost to divert Cascade Creek to Cascade Creek East at approximately 325 m elevation.

4. Locate suitable sources of construction materials for the diversion.

5. Prepare the conceptual plan and design for tailings disposal at Site 4.

6. Complete a geotechnical evaluation of the centre line(s) for potential tailings dam site(s).

7. Locate suitable sources of construction materials for dam construction and prepare a cost estimate to transport to dam sites.

8. Analyze the effect of diverting Cascade Creek to Cascade Creek East in terms of channel morphology and channel stability.

Site 4 offers a number of advantages as a high volume tailings disposal site. The major advantages are summarized below.

1. The site has a potential to accept a large volume of tailings.

2. The tailings will be contained in a steep walled gorge. The surface runoff in the gorge will be minimal once Cascade Creek is diverted.

3. The tailings dam will not be extensive, thus the cost will be comparatively lower than sites requiring extensive dams.

There are also a number of disadvantages to the site, including:

1. additional cost to pump the tailings from Level 6 to Site 4; and

2. the need to divert Cascade Creek increases the cost of Site 4 significantly and also creates a risk of washout of the tailings if the diversion fails at high flood.

3.0 CONCLUSIONS AND RECOMMENDATIONS

1. The tailings from the initial production at 100 to 200 tons per day can be accommodated by Site 1 at Level 6. This site is most desirable on the basis of location, cost, availability of construction materials, and environmental sensitivity. Should production be expanded in the near future or the capacity be exceeded, an alternate location can be selected.

2. The mine water and small surface stream which presently runs through the existing tailings pond should be diverted and used as makeup water for the concentrator. Any water in excess of makeup requirements should be diverted downstream of all tailings dams and the overflow point.

3. When and if production expands to 1,000 to 5,000 tons per day and a greater cash flow is available, the tailings could be disposed of in a high volume site located in the channel of Cascade Creek, Site 4. Consideration should also be given to relocating the concentrator to a location nearer to and above Site 4 for the expanded production.

4. If production is to continue at 100 to 200 tons per day after the capacity of Site 1 has been exceeded, disposal at Sites 2 and 3 should be evaluated more extensively.

PHOTO LEGENDS

PHOTO 1

British Silbak Premier Mines Camp, September, 1980. Note the coarse rock disposal and abandoned tailings dam in the left centre of the photo.

PHOTO 2

British Silbak Premier Mines Exploration Camp, September, 1980, showing the existing tailings dam and potential for Site 1 in the upper centre portion of the photo.

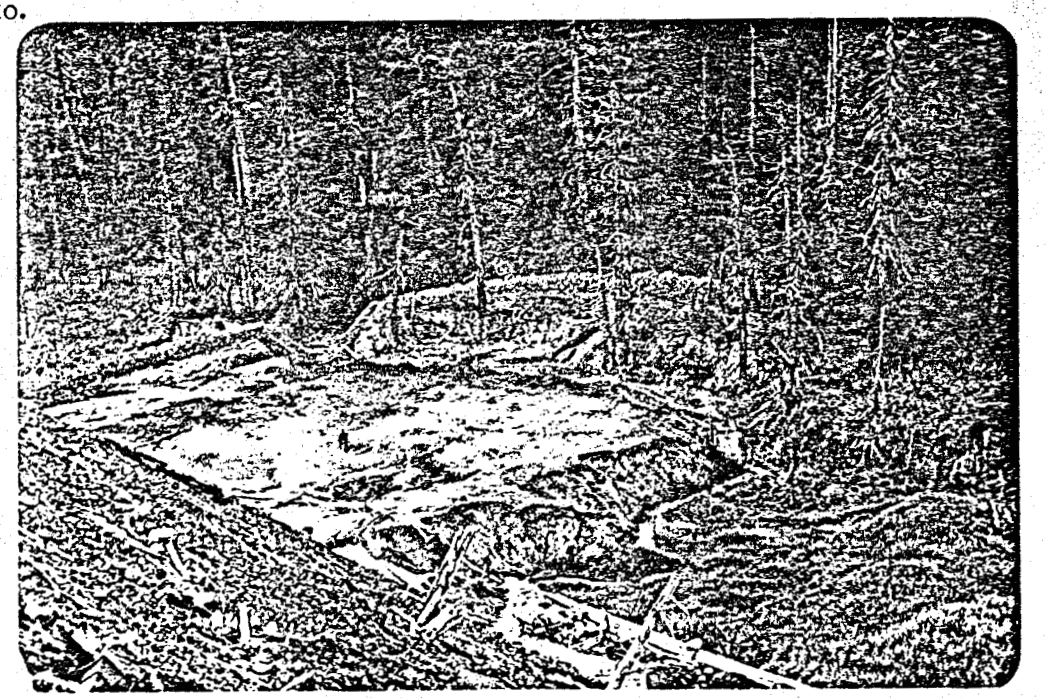


PHOTO 3

The existing tailings and damn at Level 6. Note the small stream passing through the tails and the breach and the dam itself.

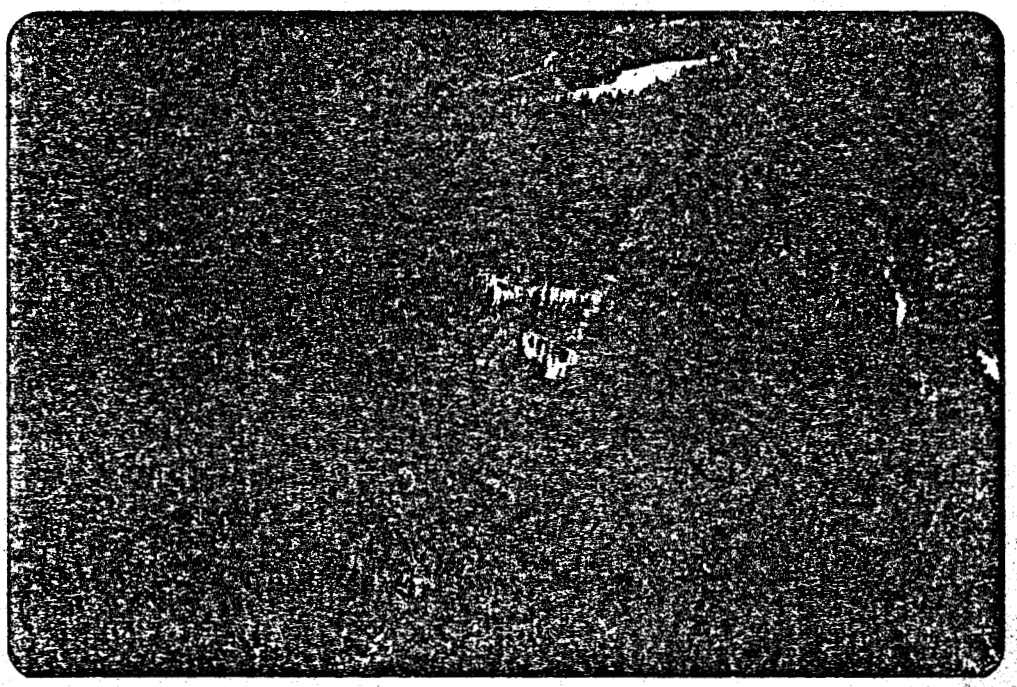


PHOTO 4

Site 3 is found in the swampy area located in the centre of the photo.

PHOTO 5

Site 3, showing the position of the Canada-U.S.A. border and the swampy area.

APPENDIX I

REPORT PREPARED BY C.O. BRAWNER ENGINEERING LTD.

C.O. BRAWNER ENGINEERING LTD.
Consulting Geotechnical Engineers

209B 1571 Bellevue Avenue,
WEST VANCOUVER, B.C., CANADA V7V 1A6

Telephone: (604) 922-3717
(604) 926-2747

Dr. A. Brown,
C.D. Schultz Limited
1155 West Georgia
Vancouver, B.C.

RE: British Silbak Tailings Disposal - Preliminary Assessment

Dear Dr. Brown,

Further to your request I inspected the British Silbak Mines property near Stewart B.C. (Figure 1) with you on October 31 to evaluate potential locations for tailings waste disposal.

We were advised by the project engineer, Vic Bjorkland, that production of about 200 tons per day from an underground operation is being considered at the present time based on the existing proven ore reserves. Further drilling is being carried out to determine whether a large volume open pit mine can be justified.

I have therefore assessed tailings storage potential from two volume stand points.

(a) A low volume operation (200 tons/day)

(b) A high volume operation (5,000 tons/day)

Based on a helicopter reconnaissance and assessment from air photographs there are in my opinion three potential alternative sites for a low volume operation that bear consideration. (See Figure 2.

Site 1

Redevelop the existing tailings storage near the old mill to store at least 2 years tailings. This site has many advantages.

(a) The tailings can be distributed by gravity at low cost

(b) The existing waste pile rock and original tailings can be used to construct the new storage dam.

(c) The natural ground is swampy with organic surface material. Recent studies in North America show that an organic layer has good filtration and absorption characteristics which reduces chemical and metal migration by groundwater.

Site 2

Tailings storage over about 3500 feet upstream from the existing mill in a depression between Cascade Creek and Cascade Creek East.

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The advantages of this site are;

(a) Reasonable volume capacity

(b) Isolation from existing drainage channels

Disadvantages include;

(a) Pumping of the tailings will be necessary. A topographic survey is required to determine the pumping head.

(b) There may be scarcity of construction materials at the dam site.

Site 3

A storage area in a level swampy area about 4500 feet downstream from the mill and above the road.

Advantages of this site are;

(a) Reasonable volume capacity (in excess of site 1)

(b) Isolation from existing drainage channels

Disadvantages include;

(a) Pumping of the tailings will be required.

(b) Potential scarcity of construction materials near the dams

(c) Proximity to the U.S. Border.

(d) The property will require purchase

It is my assessment that the best choice for a new tailings dam is at the existing site. It is recommended that studies be implemented for a site investigation from which to develop the design. The program I recommend is as follows:

1. Perform a site topographic survey of the potential storage dam site and storage area with 2 foot contours. Preliminary survey data is given in Figure 3.
2. Evaluate the soil and potential seepage conditions by excavating about 8 - 10 test pits with a backhoe or caterpillar tractor.
3. Determine and assess the soil, tailings and groundwater geochemistry to establish background conditions and assess environmental parameters and impact.
4. Based on 1, 2 and 3 develop a tailings dam design for first year volume storage which can be expanded for a second year storage. Determine the total potential storage capability.

Air photo topographic mapping of site 2 and site 3 is recommended so that potential storage volumes can be determined for these sites to allow assessment of longer term storage potential.

For the potential of large volume mining and large tailings volumes it is considered the best scheme is to divert Cascade Creek just below the road crossing of the

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creek into the Cascade Creek East.

One or more dams can be constructed across the abandoned West Channel valley over a length of about 5000 feet. Ultimate storage capacity of at least 10,000,000 cubic yards is available. See site 4-Figure 2).

Preliminary studies for this alternative are not recommended unless large scale mining operation appears to be viable.

If you have any questions at this time please call me.

Yours truly,

C.O. Brawner, P. Eng.

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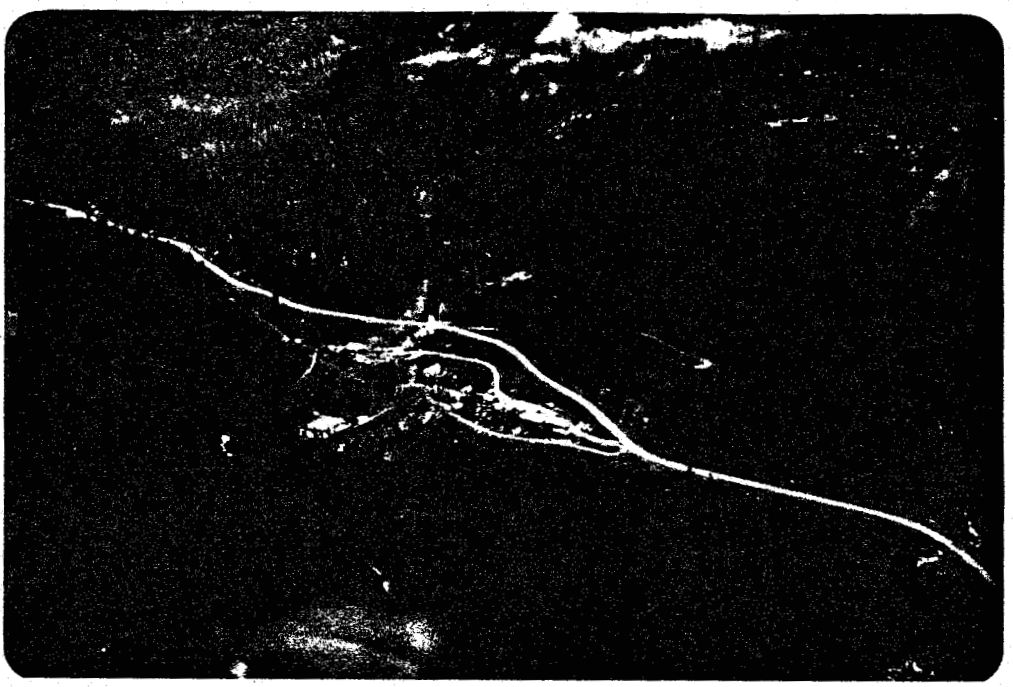

Photo 1 - Site 1 - Expand original tailings storage area at original location. The waste rock below the mill can be used as the freedraining main dam section with the old tailings used to construct an impervious upstream blanket. At least 2 years storage at 200 tons per day is available.

Photo 2 - Site 2 - Looking downstream at swamp area between two creek channels that can be developed for storage.

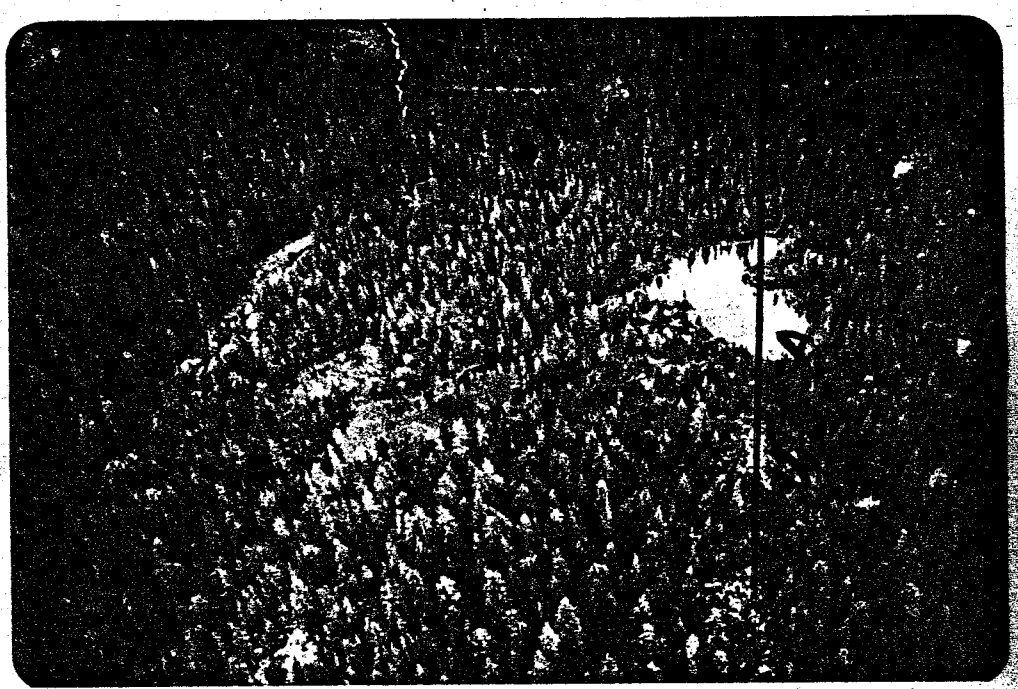

Photo 3 - Site 3 - Considerable tailings storage volume is available near the U.S. border. A tailings dam can be constructed parallel to the border to provide at least three years storage at 200 tons per day.

Photo 4(a) - Looking upstream

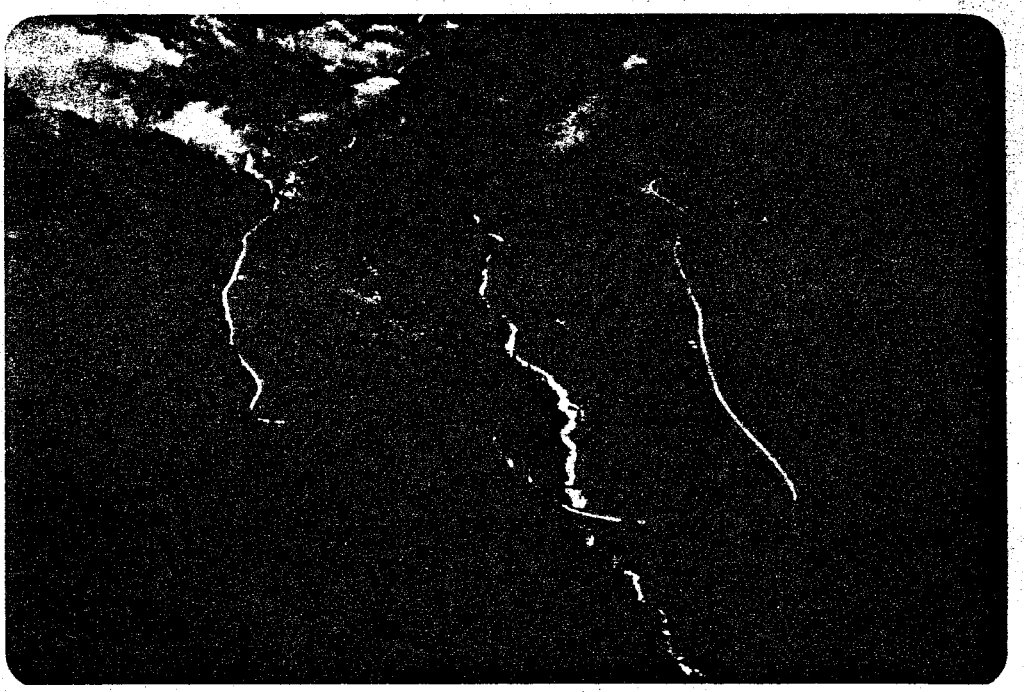

Photo 4(b) - Looking downstream. For large scale mining (5000 tons per day or more) Cascade Creek can be directed eastward into the adjacent creek channel and the existing Cascade Creek valley be developed for large scale storage. Estimated storage volume - 10,000,000 cu. yds. minimum.