Property Submission - Silbak Premier 104B/01

825752 JAN 10 1974

KERR ADDISON MINES LIMITED
SUITE 405 - 1112 WEST PENDER STREET
VANCOUVER 1, B.C.
PHONE 682-7401

103 P

W.J.
D.M.H.
G.M.H. ✓
M.D.R.
I.D.B.
R.D.S.
G.R.
T.W.B.
E.C.J.

January 7, 1974

attach to Previous

Mr. Arthur E. Bryant
Southard Gilbey, McNish & Co.
Leadenhall Buildings
1, Leadenhall Street
London, EC3V 1NH
ENGLAND

Dear Mr. Bryant:

Thank you very much for your letter of December 27. I think you did well to write anything in the face of the difficulties you appear to be encountering.

It was my hope that we could lay out an intelligent drilling program on the south perimeter of the "glory hole" but I had been labouring under the impression that there were some values between the ore shoots and this does not appear to be the case. This means that our efforts would be restricted to drilling the silver anomaly and I don't think that such a minimal effort would be in your best interests or ours. Despite the amount of time we devoted to checking other target areas on the claims we really have not been able to zero in on anything we would consider another suitable exploration area. It is always possible that this simply reflects our comparative ignorance of this property and in no way reflects on the potential that might be there. It was a genuine pleasure meeting you and we will be happy to return the reports to whatever office you might suggest.

Again we appreciate your cooperation in supplying the various reports and maps and we regret that we were not able to design any mutually acceptable program.

Yours sincerely,

W. M. Sirola

WMS/rb

cc: Mr. G. M. Hogg ✓

Re. Silbak Premier

103/P
(do not update).

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

DEC 11 1968

W.S.R.
K.C.G. ✓
J.H.S. —
E.F.
R.D.S.
B.C.B. ✓
P.M.K.
G.W.M.
R.O.M.
C.K.W.
J.B.S.
G.P.R.
K.F.L.
J.H.B.
E.C.J.

To P. M. Kavanagh *From* W. M. Sirola

Subject Silbak-Premier Mines Limited, Portland Canal Area, 103-P-13 *Date* December 9, 1968

Herewith a copy of Mr. Bryant's reply to my letter of November 20th.

Obviously Mr. Bryant wants to consider the Granduc proposal before providing us with the technical data but I would not rule out the possibility that he will consider a second proposal. Time will tell.

Bill

W. M. Sirola.

Nov 30/73.

Bill Sirola has been
chasing into the possibilities
of the Silbak property
and has come up with
obviously negative
conclusions.

This letter is a nice
way of telling Mr Bryant
-who has been most
co-operative - that we
think that 'slaving the
pit' is the only real
possibility.

GHA.

Mr W. M. Sirola,
Kerr Addison Mines Ltd.
Vancouver.

2nd Dec 1968.

RECEIVED

Dear Mr Sirola

Thank you for your letter of the 20th Nov, which I have delayed replying to as I have been daily expecting to hear from Vancouver that the current study of the Silbak Premier data has been completed. I am awaiting a reply to my letter of enquiry as to when I can expect a report.

I will keep your letter before me and write to you again as early as possible.

Thanking you for your interest + help

Yours sincerely

Arthur E Bryant

KERR ADDISON MINES LIMITED

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DEC 3 1973

103 P

To G. M. Hogg **From** W. M. Sirola

Subject SILBAK PREMIER MINES LIMITED
STEWART AREA, B. C. 103-P-13 **Date** November 29, 1973

attach to Preview Nov '73

INTRODUCTION

Earlier this year I received a telephone call from Arthur Bryant, President of Silbak Premier, saying that he was now prepared to make all of the technical data on this property available if we were still interested in reviewing this information. Accordingly he left certain maps and reports with us and we have now completed our review.

In 1968 when it appeared possible that a deal could be made on the property we contacted Mr. Bryant but he was in the throes of dealing with both Granduc Mines Limited and Granby Mines. Since we did not know that he would end up dealing with either of these companies we reviewed such information as we had and concluded that up to that point none of the present day techniques such as geochemistry and induced polarization had been used on the property. It seemed reasonable that something should be done since the property had been British Columbia's second largest producer of gold and silver with a production of 4,700,000 tons of gold-silver ore with gross earnings of 30 million dollars.

Granby Mines managed to come to terms with Mr. Bryant that same year and obtained a five year option by agreeing to a minimum outlay of $50,000 per year. Accordingly Granby undertook exploration on a 70 - 30% basis and covered the key claims with an I.P. survey. This survey detected one large anomaly in the northwest corner of the property and Granby drilled a total of sixteen holes before giving up the option this year. In 1964, 1965 and 1966 Ted Grove of the B. C. Department of Mines mapped the Stewart area and this included remapping of the Silbak Premier property. This work was published in 1971 as Bulletin No. 58 and is by far the most comprehensive work on the Stewart area.

PURPOSE AND SCOPE OF THIS REVIEW

The purpose of this report is to review the results of the recent Granby work, to comment on Ted Grove's observations and to add our own conclusions.

SUMMARY OF TED GROVE'S OBSERVATIONS

(1) The host rocks for the Premier ores (formerly called Premier porphyry) are actually metasomatized volcanic rocks called cataclasites by Grove.

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The metasomatism resulted from the intrusion of the Texas Creek granodiorite which intrudes the Hazelton volcanics to the northwest of the mine.

(2) The actual ore bearing structure is a silicified pyritized zone trending north-northeast with a length of 6000 feet and an average width of 1500 feet. Within that overall structure there are at least seventeen lenses of ore varying from 6 to 40 feet in width and having down-plunge dimensions varying from 200 to 800 feet.

(3) Contrary to former opinion, Grove found little or no secondary enrichment but the ores are zoned from top to bottom and from east to west. On the first level the bonanza ore had Ag:Au ratios of more than 100:1 but at the bottom of the mine and on the fringes this ratio changes to 6:1.

(4) The ore minerals are electrum, free gold, argentite, stephanite, native silver, tetrahedrite, polybasite, pyrargyrite, galena, sphalerite and rare mercury.

(5) The higher grade ore shoots are pipe-like lenses in which the pyrite content ranges from 20% in lower grade ore to 80% in high grade ore. The gangue minerals are quartz, barite and calcite. Elements within these structures that might be useful in ore search are barium and potassium.

(6) The controlling structure at the mine is not a syncline plunging gently northwest as was formerly believed but a fracture pattern formed by the intrusion of the Texas Creek pluton.

(7) Grove felt that the area south of the mine had not had adequate search and he recommended that any additional work on the property might best be carried out in that area.

SUMMARY AND CONCLUSIONS

(1) In analyzing the ore bearing fracture pattern we have concluded that the intrusion of the Texas Creek pluton west of the productive area on the property was such as to produce prominent northeast and southeast trending fault zones and a series of east-west oriented tension cracks due east of the "nose" of the pluton. These tension cracks have been subsequently mineralized to form mineable orebodies. They are in all probability confined to an area between two prominent fault zones and any search for additional ore beyond those limits is not likely to be productive.

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KERR ADDISON MINES LIMITED

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To G. M. Hogg **From** W. M. Sirola

Subject SILBAK PREMIER MINES LIMITED
STEWART AREA, B. C. 103-P-13 **Date** November 29, 1973

(2) Since underground mining is becoming more and more expensive we considered the concept of enlarging the area of the existing glory holes in an attempt to see if any tonnage could be developed which would be lower grade but which would be relatively cheap mining. This concept required that a stockwork of quartz veinlets would occur between some of the known ore shoots and that mineable grades would exist within zones where only bonanza type material had been removed in the past. We found however that there is no real stockwork of quartz veins and the wall rock between the ore shoots is unmineralized. We have therefore been forced to conclude that additional search around the peripheries of the old workings would yield only scattered occurrences of ore in confined ore shoots.

(3) A perusal of surface sampling of outcrop and of some geochem sampling done by Eric Ostensoe of Granduc Mines indicated one silver anomaly 1700 feet long and perhaps 30 feet wide. The center of this anomaly occurs about 2500 feet south-southwest of the main glory hole. By analyzing Ostensoe's samples for gold we found high values in two of the samples and this is, to some degree, a favourable sign. This anomaly would deserve exploration if work were undertaken on the perimeters of the glory hole but having just ruled out that approach, we would not option the property on the basis of the silver anomaly alone.

(4) Silbak publishes a reserve of 135,000 tons with 0.17 oz. Au, 2.39 oz. Ag, 3.05% Pb and 4.53% Zn and this would consist of broken ore in stopes and probably of ore left in sills and pillars.

(5) While exploration of the property may have been interesting and possibly even rewarding in 1968, we now feel that the potentially productive area has been well investigated by various companies and despite the current high prices of both gold and silver only small tonnages might be found by a concentrated exploration program.

We have just written to Mr. Bryant asking him what type of deal he had in mind for the property but are now prepared to advise him that we would not undertake exploration of the Silbak Premier property.

I agree fully with Bill Sirola's recommendation.
Mod. Dec 3/73

WMS/rb W. M. Sirola

....4

KERR ADDISON MINES LIMITED

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To G. M. Hogg *From* W. M. Sirola

Subject SILBAK PREMIER MINES LIMITED
STEWART AREA, B. C. 103-P-13 *Date* November 29, 1973

Enclosures:

(1) General Geology of the Silbak Premier Mine Area (Fig. 39, 1" = 200')

(2) Geology Cross Section AX, Silbak Premier Mine (Fig. 49, 1" = 200')

(3) Geology Cross Section BX, Silbak Premier Mine (Fig. 50, 1" = 200')

(4) Geology Cross Section CX, Silbak Premier Mine (Fig. 51, 1" = 200')

(5) Composite Plan and Section, Silbak Premier Mine (Fig. 41, 1" = 200')

(6) Report on Silbak Premier Mine by J. Lund, November 1973.

NOV 3 - 1973

KERR ADDISON MINES LIMITED
SUITE 405 - 1112 WEST PENDER STREET
VANCOUVER 1, B.C.
PHONE 682-7401

P.M.K.
G.M.H.
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I.D.B.
M.D.R.
J.H.F.
E.C.J.

November 28, 1973

Mr. Arthur E. Bryant
Messrs. S. Gilbey, McNish & Co.
2 Copthall Buildings
1, Leadenhall Street
London, EC3V 1NH
ENGLAND

Copthall Canal Area

Dear Mr. Bryant:

We managed finally to get some data from Eric Ostensoe of Granduc Mines Limited regarding the Silbak Premier property. The only target that came out of this was a silver geochemical anomaly located on the boundary of the Pictou 3596 and the Rupert 3597 M.C.'s. The anomaly is about 1700 feet long and extends southward into Simcoe 4145. Ostensoe ran three lines of soil samples across this area and in plotting his work we found that a 10PPM silver contour could be considered anomalous. The south half of this silver anomaly is overlapped on its west side by a 10 millisecond per volt I.P. anomaly and the I.P. anomaly coincides with pyritization as mapped by the Granby Mining Company. In an attempt to gain a little more knowledge about the gold possibilities in this silver anomaly we ran Ostensoe's samples for gold but only two of the samples were highly anomalous. The rest were ordinary. We treat these results with caution however, because not all of the ore shoots were high in gold at the surface. Apart then from this one zone anomalous in silver, and to some extent in gold, we did not find any other new targets.

The peripheries of the main glory hole still offer some possibilities for additional exploration and in our view this work would take priority over exploration of the silver anomaly. I would question that the glory hole perimeter would yield any really large tonnages but could of course locate more of the "bonanza" mineralization encountered in the past.

Perhaps, Mr. Bryant, you could give us some indication of whether or not you would be interested in dealing with us on the basis that we would explore the pit perimeter by diamond drilling and at the same time further investigate the silver anomaly. This is strictly an inquiry on our part but it would be helpful if we knew something of the terms which might be arranged for such an effort.

It was a pleasure meeting you and we very much appreciate your cooperation in making the technical information available.

Best regards.

Yours very truly,

W. M. Sirola

WMS/rb

cc: Mr. G. M. Hogg

NOV 27 1968

KERR ADDISON MINES LIMITED

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103 P

W.S.R. ✓
K.C.G. ✓
J.H.S. ✓
E.F. ✓
R.D.S. ✓
B.C.B.
P.M.K. ✓
W.M.
R.O.M.
C.K.W.
J.B.S.
G.P.R.
K.F.L.
H.L.B.
E.C.J. ✓

To P. M. Kavanagh *From* W. M. Sirola attach to previous ✓

Subject Silbak-Premier Mines Limited, Portland Canal Area, 103-P-13 *Date* November 26, 1968.

Mr. E. B. Papenfus of this city is a director of the Silbak-Premier Mines Limited and he told me some days ago that he thought that this property deserved a lot more work. He further advised that the Bethlehem Copper people had attempted to make a deal with Mr. A. E. Bryant, who is president of Silbak, but had failed to do so. Bethlehem had apparently been prepared to spend $750,000.00 over an unspecified period of time. Mr. Papenfus thought that the Granduc Company were currently reviewing the data but he felt that they must be dragging their feet because they received this data last July.

In view of the rather impressive past production (4,374,287 tons averaging 0.4 oz Au and 8.25 oz Ag), I felt that we should at least make contact with Mr. Bryant and make it clear to him that we would not drag our feet in arriving at a decision. My letter to Mr. Bryant was dated November 20th but there has been no answer as yet.

I asked Fred Chow to summarize all of the information which could be found in our records and his work is enclosed with this memorandum.

It is a fairly safe assumption that all of the higher grade ore has been mined but there may well be considerable tonnages of much lower grade material which is amenable to open pit mining.

In the 1960's, a 75 to 100 ton mill was operated intermittently. Some idea of the grade treated is obtained from 1966 production figures; that year the mill treated 10,419 tons with an average grade of .5 oz Au, and 10.5 oz Ag.

Should we obtain the blessing of Mr. Bryant, the past production figures justify a very thorough scrutiny of the technical data.

W. M. Sirola.

WMS/lk
Encl. Summary of Operating and Geological Data.

SILBAK - PREMIER MINES

Salmon River, Portland Canal Area,
Cassiar District, B.C.
103-P-13

Location:- 15 miles north of Stewart, B.C.

Property:- includes former Premier, B.C. Silver, and Sebakwe properties. Consolidated in 1935.

History:- First exploratory work in 1911 on Premier.
1935 - three properties consolidated.
1919 - 1935 - A.S. & R. operated Premier Gold Mining Co.

Mill

1921 -	Cyanide, tabling & flotation	100 Ton Mill in 1921
1926 -	" "	increasing to
1933 -	" (?)	500 Tons in 1931

Also mined & milled Premier Border Gold Mining - connected underground.

Premier Ore: Early shipments of high grade ore - several oz. of Au, in one year average 200 oz. Ag.

	Tons Ore ↓	Au oz. ↓	Ag. oz. ↓
1922	65,574	103,899	3,797,462
1925	112,853	92,924	1,978,690
up to 1935	2,823,089	1,402,187 (½ oz)	35,172,966 (12.4 oz)
1939	101,829	51,073	1,408,853
1947	59,343 tons		

0.22 oz Au, 1.49 oz Ag, 2.25% Pb, +Zn (BCMM 1947)

B.C. Silver Ore:

1924)	1,103	2,136	83,831 (BCMM 1947)
1926)			
1927)			
Total Production 1936 - 1944	1,391,492 tons	326,358 oz Au.	5,755,002 oz. Ag.
Total Production to 1947	4,374,287	1,736,248	36,703,762 (BCMM 1947)
Total Dividends to 1936	# 18,858,075		
Total Dividends 1937 - 1944	# 2,375,000		

REVIEW OF SILBAK - PREMIER MINES

Salmon River (56°130°SE) 103P/13
Portland Canal Area, Cassiar District, B.C.

Location:

The mine is about 15 miles north of Stewart, B.C., at the head of Portland Canal.

Property:

The Silbak - Premier property includes the former Premier, B.C. Silver, and Sebakwe properties which were consolidated in 1935.

History:

First exploratory work on the Premier was done in 1911. Not much work was done on the B.C. Silver and Sebakwe properties until after the consolidation.

From 1911 to 1935, American Smelting and Refining Company operated the property under the name of Premier Gold Mining Co.

A 100-ton mill was constructed in 1921, its tonnage was gradually increased to 550 tons in 1931. Early shipments of high-grade ore containing several ounces of Au and up to 200 ounces of Ag were shipped to the smelter. The early mill circuit comprised of cyanidation, tabling, and flotation. In 1926, the cyanidation circuit was taken out and from 1933 on only flotation was used in concentrating. A fire destroyed the mill in 1956. A 75-ton cyanidation plant was placed in operation in 1964. During the period between 1953 to 1966 the property was in operation intermittently. Exploration work carried out during the later years did not add much to the ore reserves.

General Layout:

A. Premier:

Development on 6 levels, in decreasing elevations are as follows:

2 internal shafts	2000 level	- #1	ADITS
	1760 "	- #2	
	1555 "	- #3	
	1345 "	- #4	Main Haulage (called 1350 L)
1 internal shaft	1070 "	- #5	
	790 "	- #6	

B. B.C. Silver: (Northeast of Premier - adjoining property)
Development on 5 levels between 2070 and 1350, plus 2 internal shafts with one extending down to 1350.

C. Sebakwe: (Northeast of B.C. Silver - adjoining)
Development on 3 levels between 1670 and 1350, plus one internal shaft extending down to 1350.

Geology:

Volcanic rocks of the Bear River Formation (tuff, breccia, lava and argillite - Hazelton Group) and bodies of quartz-sanidine porphyry, known as Premier porphyry, are the main rock types. These form the northeastern limit of a large open syncline, the axis of which trends northwesterly and plunges gently in that direction. The greenish-coloured, massive and tuffaceous rocks so commonly seen underground exhibit no obvious primary textures whereby the local structure might be determined. However, an overlying, presumably conformable group of somewhat coarser, reddish, and vari-coloured fragmental volcanics known as "the purple tuffs" provide a clue to the local structure in the Sebakwe section. The location of this contact in other parts of the mine is too imperfectly known. These rocks are of considerable importance, as they appear to constitute a horizon above which no ore-bodies of major importance extend. (J.M. Black & W.H. White, B.C.M.M., 1947)

The Premier porphyry occurs as rudely laticular and, in places, tabular bodies, most of which are elongated in a northerly or northeasterly direction. There is a general tendency for porphyry bodies to dip northwest, roughly parallel to the major structure. The porphyry is readily identified in hand specimens by its blocky fracture and by the presence of a few phenocrysts of feldspar which may be up to 1" in length. However, in parts of the B.C. Silver and Sebakwe sections the porphyry loses its identity and may merge in any direction into massive, non-porphyritic, dark green rock indistinguishable from massive phases of the greenstone.

The gnesis of these porphyry bodies is open to question.

The porphyry bodies are of prime importance in regard to the localization of ore in the Premier section and in many other parts of the mine. The mineralized shear zones, parts of which constitute ore-bodies, occur along or near porphyry-greenstone contact zones. One outstanding exception to this rule is the West ore zone, where neither tuffaceous rocks nor porphyry are found there. The main rocks are lavas, dark green to black in colour, and fine-grained to dense in texture.

Large dykes of medium to coarse-grained quartz diorite, striking northwest and dipping steeply to the southwest, occur on the property and elsewhere in the district, and some can be traced to the Coast Range Batholith. A variety of smaller dykes having the same general attitude as the quartz diorite dykes are also present in the workings. Some of these dykes appear dioritic, others resemble lamprophyre, while a few are very fine-grained and felsitic. These dykes cut the greenstone and porphyry, and usually the mineralized zones as well. On the whole the evidence suggest that these dykes even intruded during and probably near the end of the period of mineralization.

Mineralization:

The ore bodies of the main northeast ore-zone and of the Sebakwe ore-zone are replacements of massive fine-grained sulphides which grade laterally and toward their extremities into zones of silicified rock containing much pyrite. In the west ore-zone the ore-bodies are well defined lodes composed of sulphide-bearing quartz-calcite veins or stringers, of which the wall-rocks are not silicified and contain but little pyrite.

Stope-lengths range from less than 100' to more than 300', and stope-widths range from 6' to as much as 40'. Metallic minerals constitute about 12% of the mill feed.

The veins on the Premier ground were wider and higher grade in the brittle porphyries than in the easily sheared and relatively impermeable tuffs. The main system ran N50^{o}E, dipping 50 - 70^{o} NW, but at the southwest end, it swung to a north-west course. On the Sebakwe section the mineralized zones strike N15 - 50^{o}E and dip 45 - 75^{o}W, and rake from 45 - 70^{o} southward. The west ore-zone has a general northeast trend, and the dip averages approximately 65^{o} northwestward. Towards its southwest end the zone curves to e westerly and then to northwesterly direction and the dip steepens nearly to vertical. The ore bearing

section in each of the three properties is about 1600 feet long, trending northeast for 6000 feet along the main fracture system. In both the main and west ore-zone, the greatest mineralized widths are where the change of strike occurs. In general, the major lodes are controlled by a secondary set of fractures - termed the northwest fracture system.

The ore-bodies consist in general of pyrite, galena and sphalerite with minor amounts of chalcopyrite, native gold and electrum, accompanied in places by considerable silica. The ganque minerals are pyrrhotite, calcite, sericite, and rhodonite, all in minor amounts.

The ore appear to be formed to some extent by secondary enrichment of lower grade primary mineralization. From the surface to a depth of 600 feet much of the ore in the Premier mine contained more than 100 oz. Ag a ton in tetrahedrite, argenite, ruby silver, native silver, and other silver minerals, plus several ounces of gold a ton occuring mainly as electrum and native gold. Below this upper zone, the ore is a heavy granular pyrite, carrying small amounts of other minerals, particularly sphalerite.

Gold values were relatively high in the upper parts, but gradually decreased with depth. A gradual decrease in the ratio of Ag to Au also occurs with the depth of mineralization. The ratio ranges from a high of $2\frac{1}{2}$:1 to 15:1.

Ore Reserves:

Published ore reserves as of 1961 include: (BCMM, 1947)

20,000 T	broken ore in old glory hole left from earlier operations;
75,000 T	broken, measured, and indicated ore below #3 level; grade 0.28 oz. Au, 2.8 oz. Ag, 1.8% Pb, and 2.7% Zn;
74,146 T	estimated at and below #6 level, mainly Pb-Zn, grade 0.07 oz Au, 1.98 oz Ag, 4.25% Pb, and 6.36% Zn.
169,346 T	TOTAL

Ore Picture:

A. Premier:-

All the known large and rich orebodies have been mined to a short distance below 1350 level where they appear to "bottom" in low-grade or barren pyritic zones. A few small, low-grade bodies were found at greater depths.

B. B.C. Silver:-

Most of the northeast ore extending from Premier were mined above the 1070 and 1350 levels to the 1670 level.

C. Sebakwe: -

The west ore-zone was mined from the 750 to the 1350 level, including the portion of the orebody extending into Premier Border Mine ground.

From year 1956, underground work was concentrated on the 790, 940, and 1060 levels. Diamond drilling was the main exploratory tool used. Geophysical, and probably geochemical, work was conducted during the later years. No new finds were reported.

To assess the ore potential of the property would require a thorough study of the geology and exploration work done during the past ten years in finding new ore.

FC/lk

KERR ADDISON MINES LIMITED
405 - 1112 WEST PENDER STREET
VANCOUVER 1, B.C.

NOV 25 1968 103P

COPY

November 20, 1968.

W.S.R.
K.C.G. ✓
J.H.S. ✓
E.F.
R.D.S.
B.C.B.
P.M.K. ✓
G.W.M.
R.O.M.
C.K.W.
J.B.S.
G.P.R.
K.F.L.
J.L.B.
E.C.J.

Mr. A. E. Bryant,
2 Cupthall Buildings,
London E.C. 2, England.

Portland Canal Area
BC

Dear Mr. Bryant:

Approximately ten days ago I approached Mr. E. B. Papenfus regarding the possibility of examining the technical data on the Silbak - Premier property. The examination of this material was intended as a prelude to a possible option of this property by Kerr Addison Mines. Mr. Papenfus suggested that this information would have to be obtained from you.

Kerr Addison Mines operates one of Canada's largest gold mines at Larder Lake, Ontario and has recently acquired control of Quemont Mining Corporation and Normetal Mines, both of which are located in the province of Quebec. In addition, they are developing an impending uranium producer in the Blind River district of Ontario. At the present time, Kerr Addison maintains an exploration organization which is active across Canada and in the United States.

We would like very much to have an opportunity to review the technical data on the Silbak - Premier property and could assure you of a very prompt decision regarding the possibility of an option arrangement with you.

We have a well equipped exploration base in Vancouver and within one month's time, could come to a decision.

Yours sincerely,

W. M. Sirola

W. M. Sirola.

cc/ Mr. E. B. Papenfus
Dr. P. M. Kavanagh ✓

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To W. M. Sirola *From* J. C. Lund

Subject SILBAK PREMIER MINES *Date* November 19, 1973

I have reviewed the reports and maps submitted by Silbak Premier primarily to determine if there are any untested target areas outside or peripheral to the mine workings. Erik Ostensoe of Granduc Mines Ltd. made available results of their soil survey over the main part of the property and pinpointed the location of rock samples taken for assay. Without underground drill hole data and assays no meaningful evaluation of the low grade potential within the immediate mine area could be made. It is my understanding that ore boundaries were relatively sharp at the Silbak Premier mine thus diminishing the low grade probabilities.

OBSERVATIONS

1. Published reserves were listed in 1961 as 169,346 tons (proven, broken and indicated) with an estimated grade of 0.17 oz. Au; 2.39 oz. Ag; 3.05% Pb and 4.53% Zn.

2. Between 1961 and 1968, 26,492 tons of ore were extracted under a management agreement with Bralorne Pioneer Mines Ltd. Production was primarily from the main Glory Hole (23,219 tons). Reserves therefore as of 1968 would be about 135,000 tons.

3. Horizontal drilling has been completed in relatively closely spaced holes extending from 200 to 500 feet outward from each level. Any drill hole encountering sericite-pyrite alteration was apparently assayed. For an evaluation of the underground potential or low grade potential, results of the drilling would be required.

4. Some surface diamond drilling was done immediately to the southeast and southwest of the main Glory Hole. Results of the drilling were not available.

5. Ore shoots bottom out rapidly at about the 1300 level.

6. There is a suggestion that the best mineralization lies off a protruding nose of the Texas Creek granodiorite between two converging major faults. The resultant tensional fractures caused by a forceful intrusion of the granodiorite would provide a favourable environment for ore deposition. All ore shoots mined by Silbak Premier lie within this zone.

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7. The Grauduc Mines Ltd. soil survey has indicated two high silver anomalies. One can be discounted as probably caused by contamination - it is down slope from the mine waste dump and mill. The second anomaly lies about 3000 feet south of the small Glory Hole. It is 30' x 1700' in size, as defined by the 10 PPM Ag contour, and is in part coincident with a pyrite-silica zone. There is a relative low resistivity with an adjacent moderately high I. P. anomaly in part coincident with the geochem anomaly. Two lines of samples over this area (20 samples) are being tested for gold. If a reasonable gold response is obtained this could be a significant target with potential of up to 500,000 tons. Assay results are expected early next week.

8. There are three areas not well explored that have a potential for a small tonnage.

   (a) Northern Light area near contact with granodiorite and Premier porphyry. High surface assays in Au, Ag and Zn have been obtained from surface trenches. There is a low order I. P. anomaly coincident with trenches (600' x 300'). No drilling or underground work has been done here.

   (b) Southwest of No. 6 level adit near the granodiorite - Premier porphyry contact in an area of considerable pyrite. Rocks are Premier porphyry and greenstone that has been intruded by diorite dykes. Na drilling or underground exploration work has been done.

   (c) Geochem anomaly 3000 feet south of the small Glory Hole. Rocks include greenstone, Premier porphyry near a northwest trending diorite dyke.

CONCLUSIONS

1. No definite conclusions can be reached on the potential for low grade ore in old workings without examining old drill hole logs and assay data. In discussion with Erik Ostensoe of Granduc Mines Ltd. his impression was that there may be some $5.00 open pit material in the vicinity of the No. 4 level adit and Glory Holes. This impression is based on examination and not on systematic sampling and may be regarded as speculation.

....3

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To W. M. Sirola *From* J. C Lund

Subject SILBAK PREMIER MINES *Date* November 19, 1973

2. The best target area is south of the Glory Holes where the geochem anomaly occurs.

RECOMMENDATIONS

If Au in soils being tested by Chemex Labs is anomalous and coincident with the Ag anomaly we should consider drill testing the anomaly. The target is small but the grade could be high.

JCL/rb

J. C. Lund

Figure 39

GENERAL GEOLOGY OF THE SILBAK PREMIER MINES LTD. AREA

SHOWING ORE SHOOT PROJECTIONS

PREMIER DYKES

LAMPROPHYRE DYKES

ORE SHOOTS SHOWING PLUNGE

TEXAS CREEK GRANODIORITE (+equiv.)

H4, H2 — GREEN VOLCANIC BRECCIA, ETC. GREEN CONGLOMERATES, ETC.

M1, M2 — GREEN CATACLASITES, MYLONITES, SCHISTS, BLACK(bl), PURPLE(pu), GREEN(gn) MYLONITE

P – Pyritization
K – Feldspathization
S – Silicification
h – Metasomatic Hornblende Prominent

Mine waste dump
Building
Mine Glory Hole

Lineament (air photo)
Mining Property
Adit
Mineral Lineation (Inclined)
Schistosity (Inclined, Vertical)
Bedding (Vertical, Horizontal)

SCALE 0 1,000 2,000 FEET

To Accompany Bulletin 58. British Columbia Department of Mines and Petroleum Resources, 1970

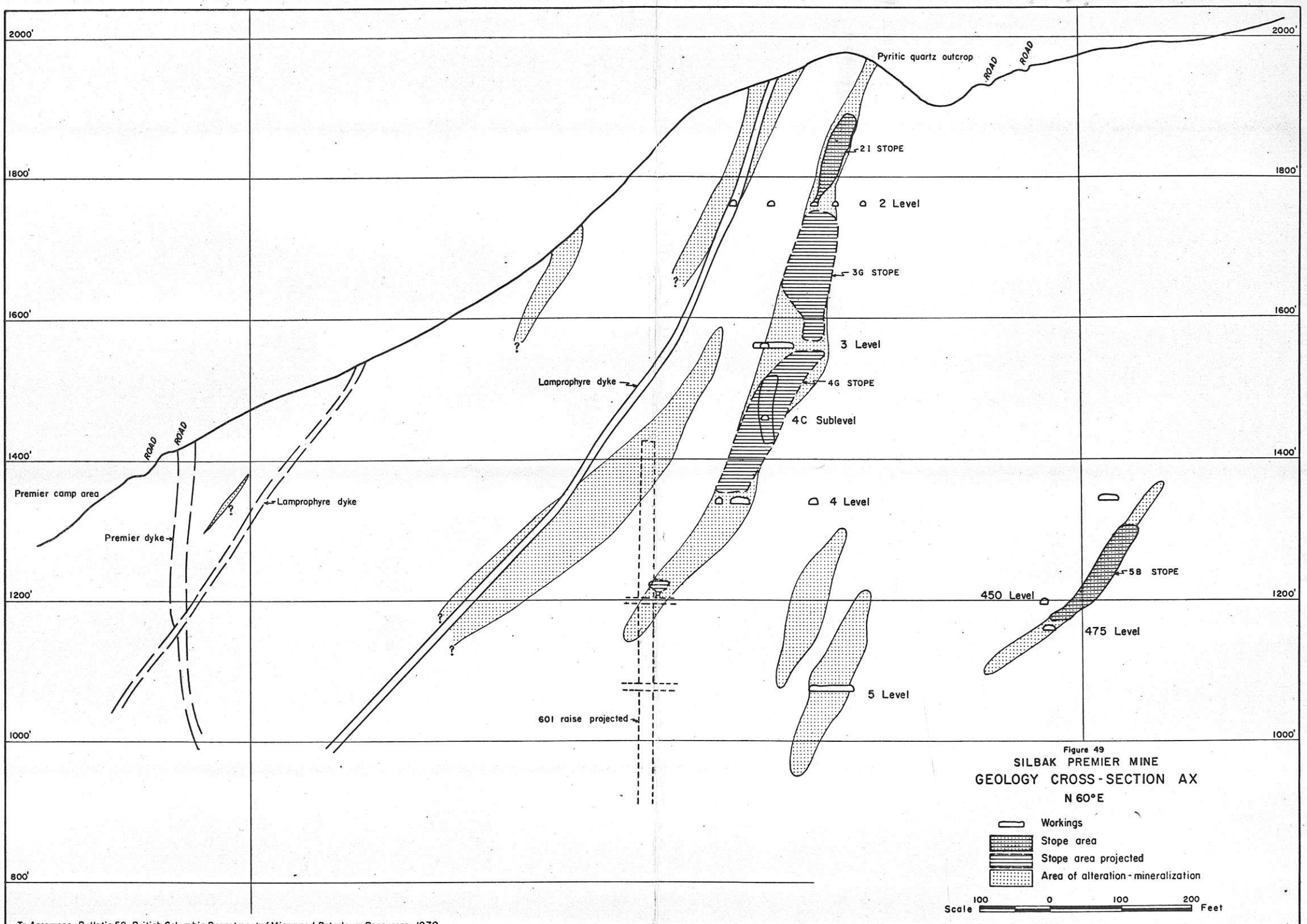

Figure 49

SILBAK PREMIER MINE

GEOLOGY CROSS-SECTION AX

N 60°E

To Accompany Bulletin 58. British Columbia Department of Mines and Petroleum Resources. 1970

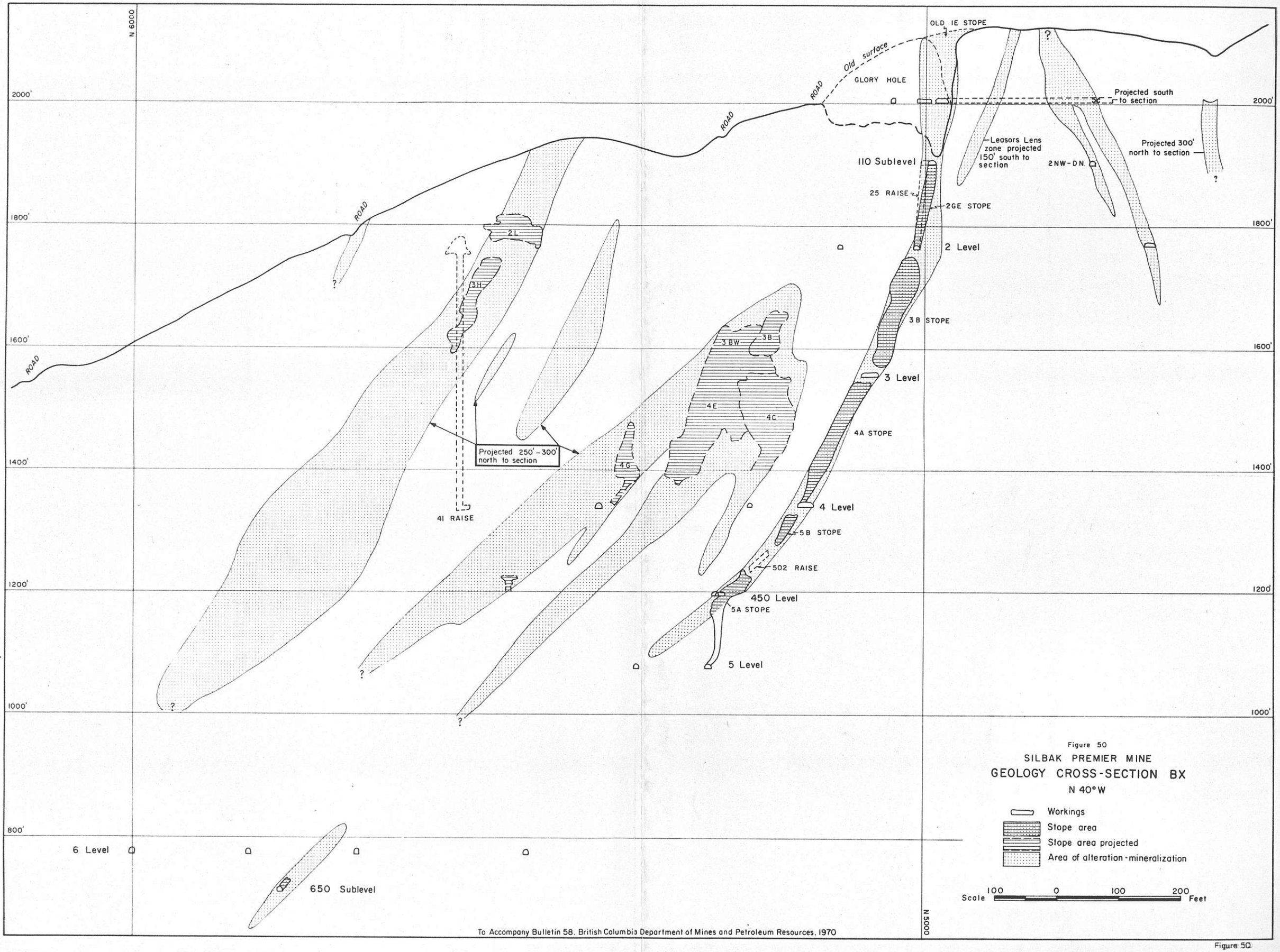

Figure 50

SILBAK PREMIER MINE

GEOLOGY CROSS-SECTION BX

N 40°W

Workings

Stope area

Stope area projected

Area of alteration-mineralization

Scale 100 0 100 200 Feet

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Figure 50

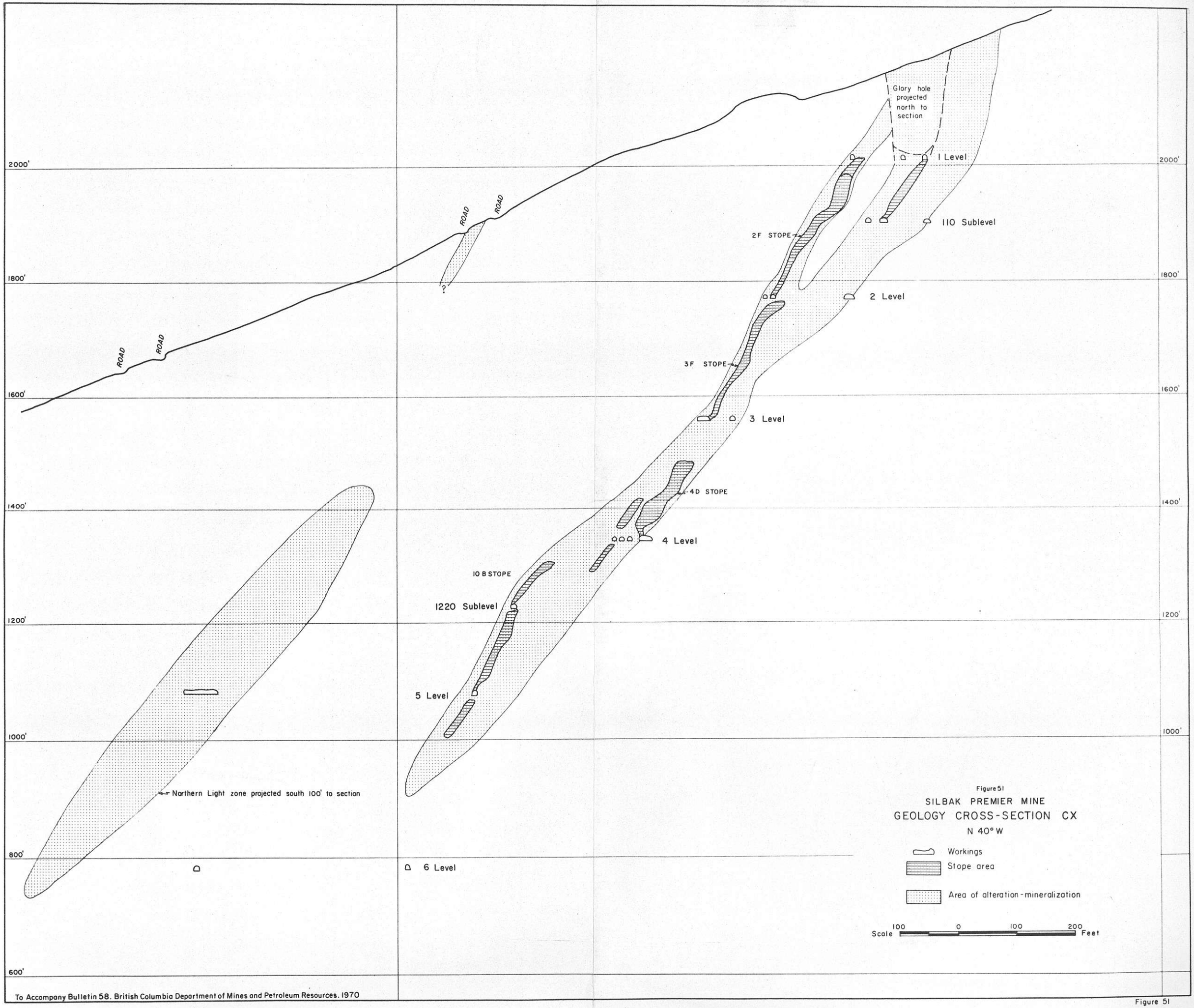

Figure 51

SILBAK PREMIER MINE

GEOLOGY CROSS-SECTION CX

N 40° W

Workings

Stope area

Area of alteration-mineralization

Scale 100 0 100 200 Feet

To Accompany Bulletin 58. British Columbia Department of Mines and Petroleum Resources. 1970

Figure 51