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REPORT

ON

HARRISON LAKE GOLD PROPERTY  
NEW WESTMINSTER MINING DIVISION  
HARRISON HOT SPRINGS  
BRITISH COLUMBIA

FOR

BEMA INTERNATIONAL RESOURCES INC.

April 1, 1987  
Vancouver, B.C.

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## TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY . . . . .	1
CONCLUSIONS . . . . .	2
RECOMMENDATIONS . . . . .	2
INTRODUCTION . . . . .	2
PROPERTY . . . . .	3
OWNERSHIP AND OPTION AGREEMENTS . . . . .	3
LOCATION AND ACCESS . . . . .	4
PHYSICAL FEATURES . . . . .	4
HISTORY . . . . .	4
REGIONAL GEOLOGY . . . . .	6
PROPERTY GEOLOGY . . . . .	7
GOLD MINERALIZATION . . . . .	8
OTHER PROSPECTS	
PORTAL STOCK . . . . .	10
MINOR PROSPECTS . . . . .	11
ECONOMIC POTENTIAL . . . . .	12
BUDGET OUTLINE . . . . .	15

### LIST OF FIGURES

<u>FIGURE NO.</u>	<u>TITLE</u>	<u>LOCATION</u>
FIGURE 1	PROJECT LOCATION MAP . . . . .	After Page 1
FIGURE 2	CLAIMS MAP . . . . .	After Page 3
FIGURE 3	REGIONAL GEOLOGY . . . . .	After Page 6
FIGURE 4	PROPERTY GEOLOGY . . . . .	After Page 7
FIGURE 5	GEOLOGY - JENNER ZONE . . . . .	After Page 8
FIGURE 6	CROSS SECTION 9485N SHOWING PROPOSED ADIT AND RAISE . . . . .	After Page 13

### LIST OF TABLES

<u>TABLE NO.</u>	<u>TITLE</u>	<u>PAGE</u>
TABLE I	CLAIM STATUS . . . . .	3
TABLE II	DRILL HOLE DATA . . . . .	6
TABLE III	GOLD INTERSECTIONS, JENNER STOCK . . . . .	9
TABLE IV	GOLD INTERSECTIONS, PORTAL STOCK . . . . .	10

### APPENDICES

<u>APPENDIX NO.</u>	<u>TITLE</u>
APPENDIX I	PETROGRAPHIC DESCRIPTIONS
APPENDIX II	EXPLORATORY METALLURGICAL TESTING (TWO REPORTS)
APPENDIX III	PROPOSED UNDERGROUND EXPLORATION WORK
APPENDIX IV	CERTIFICATE OF ANALYSIS

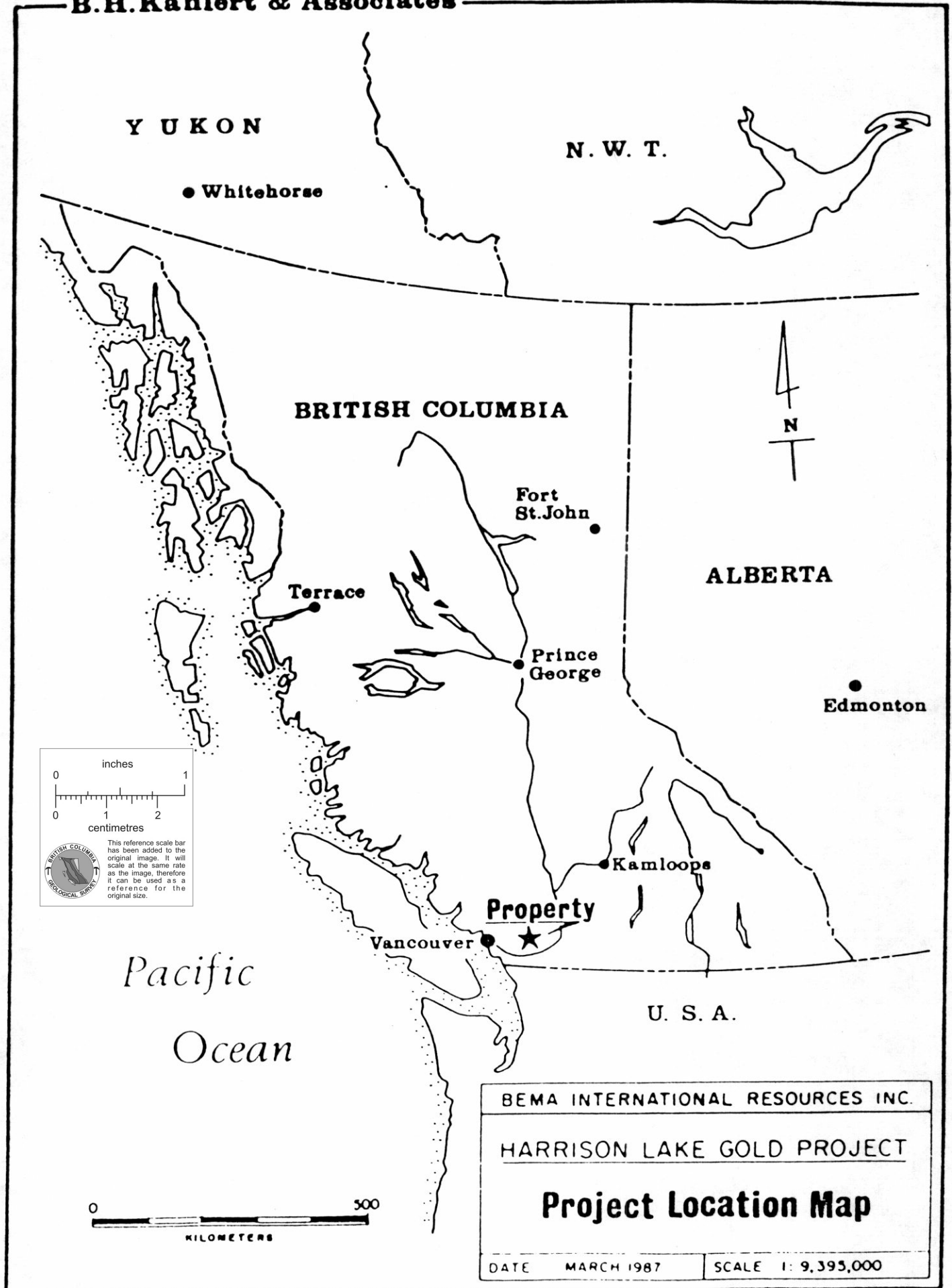
## SUMMARY

In February of 1987, Bema International Resources Inc. (BIRI) optioned the Harrison Lake Gold Property from Kerr Addison Mines Ltd. In 1985 and 1986, Kerr Addison completed surface exploration work as well as two very substantial diamond drilling programs totalling 3,377 metres in 37 holes. Twelve of these holes were in the Jenner Zone, where a substantial body of gold mineralization is now indicated. Kerr Addison incurred approximately \$525,000.00 in expenditures carrying out the exploration work.

By terms of the agreement, BIRI will fund an underground exploration program and associated work which will cost \$750,000. For this expenditure, BIRI will earn a thirty percent equity interest in the property or fifty percent of Kerr Addison's interest of sixty percent. BIRI can earn an additional five percent equity by spending the next \$250,000. Abo Oil Co., the original vendor, retains a forty percent equity, however, Abo will have to contribute pro rata once a total of \$1.75 million has been spent on the property.

The purpose of the \$750,000.00 underground exploration program as proposed in this report will be to establish the actual grade of the deposit, collect 900 tons ore to determine mill recoveries and allow preliminary mining engineering studies to determine an optimum mining method. This work is important to the exploration of the property as all gold occurs as free flakes, up to 2 millimetres diameter, which has resulted in erratic distribution of gold values. Milling of the bulk sample should determine the final grade as well as recoveries. Underground geological mapping should also result in an understanding of the controls of gold mineralization to allow for projection of ore blocks and plans for further drilling. Engineering studies of the rock fabric should also help determine optimum mining method.

Once all results of this proposed program are available, a scoping study should determine if a mineable deposit exists on the Harrison Lake Gold Property.



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Figure 1



## CONCLUSIONS

Work at the Harrison Lake Gold Property has indicated the presence of widespread gold mineralization associated with small quartz diorite stocks. In particular, drilling at the Jenner prospect has indicated the presence of a substantial body of gold mineralization which requires underground bulk sampling and engineering evaluation to determine if it is economically mineable. Diamond drilling at other prospects has indicated the presence of highly anomalous to ore grade gold mineralization in other quartz diorite stocks. This is associated with quartz vein stockworks and sulphides, similar to the gold mineralization at the Jenner Prospect. Geological mapping and geochemical sampling has indicated the presence of additional targets which hold further potential and require follow-up.

## RECOMMENDATIONS

A substantial underground bulk sampling and engineering program should be undertaken to determine the true grade of ore, its distribution, geological controls, rock competency and optimal mining method. An adit should be collared at the 9485N section at an elevation of 185M ASL.

Length of the adit should be about 200 metres, with drifts run north and south in the gold mineralization. Raises should then be extended along three existing drill holes to develop several hundred tonnes of well mineralized muck for milling to determine gold grade and mill recoveries.

Based on the above work, an engineering scoping study should be undertaken to examine the economics of developing a mining operation on the property.

It is recommended that, for the above program, a budget of \$750,000.00 be allocated as summarized in the Budget Outline section of this report.

If results of this phase of work are positive, a second work phase should be undertaken. Drilling at the Jenner prospect should be carried out from underground to search for additional reserves. On surface, geological and geochemical surveying should be completed on several prospective quartz diorite stocks of the property.

## INTRODUCTION

This report on the Harrison Lake Gold Project is written at the request of the directors of Bema International Resources Inc. It is based on a thorough review of all exploration results compiled to

date as well as observations and sampling on a visit to the property by the author on February 16, 1987.

The body of the report deals with the geological setting of the Harrison property and a description of the gold mineralization encountered in over 5,000 metres of diamond drilling on the property. Details of a proposed underground exploration and bulk sampling program are discussed and future exploration programs are proposed.

PROPERTY (see Figure 2, over)

The Harrison Lake Gold Property consists of 11 mineral claims totalling 123 units. These are the RN, MBI, FF and HOT 1-8 Claims; details are given in Table I below.

TABLE 1 - CLAIM STATUS

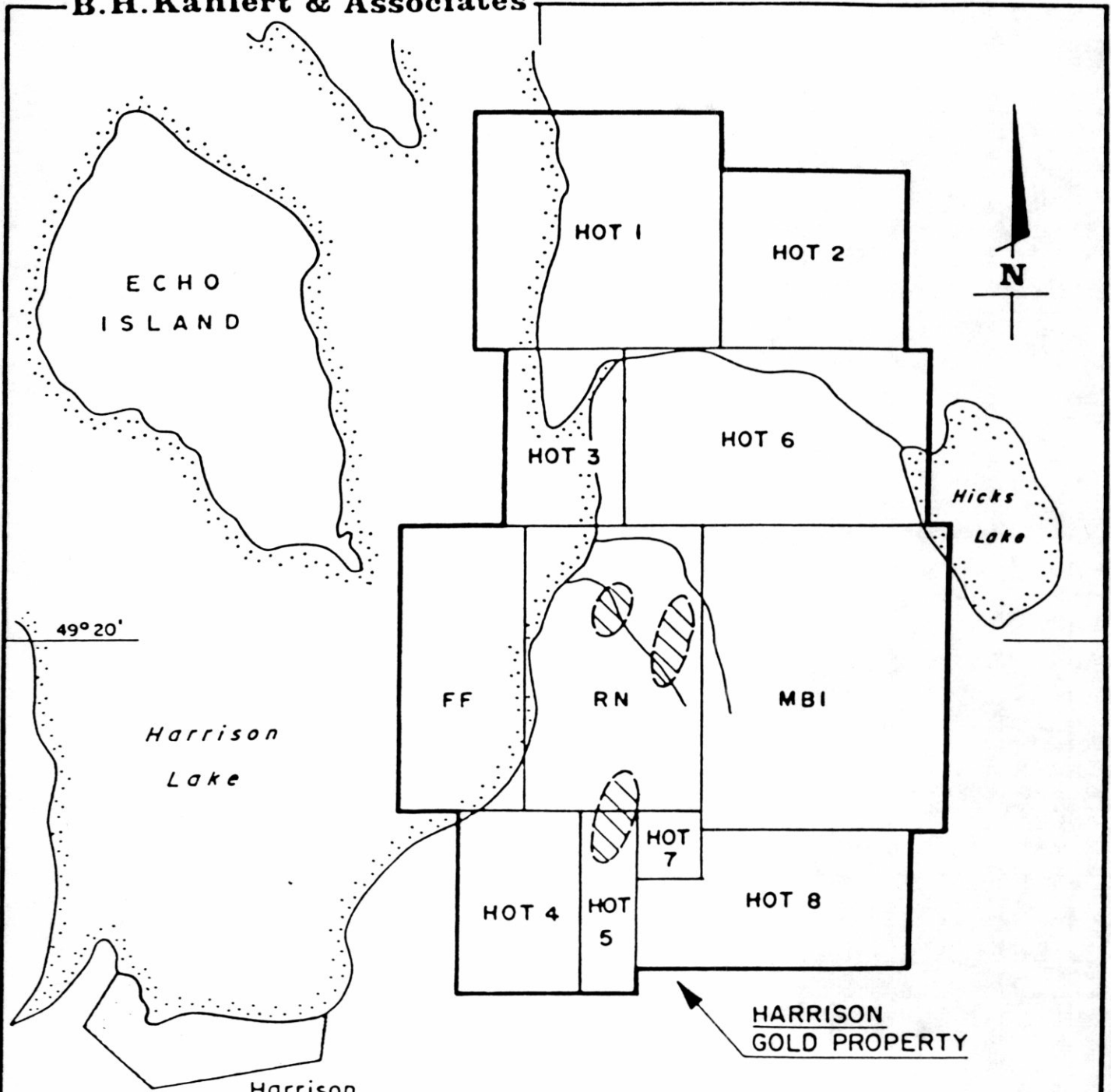
<u>Claim</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Recording Date</u>	<u>Expiry Date</u>
RN	46(8)	15	Aug. 26/75	Aug. 26/96
MBI	592(5)	20	Sept. 20/79	Sept. 20/96
FF	2051(9)	15	May 3/83	May 3/96
HOT 1	2579(12)	16	Dec. 17/84	Dec. 17/89
HOT 2	2580(12)	9	Dec. 17/84	Dec. 17/89
HOT 3	2581(12)	8	Dec. 17/84	Dec. 17/89
HOT 4	2582(12)	6	Dec. 17/84	Dec. 17/89
HOT 5	2583(12)	3	Dec. 17/84	Dec. 17/89
HOT 6	2584(12)	15	Dec. 17/84	Dec. 17/96
HOT 7	2585(12)	1	Dec. 17/84	Dec. 17/89
HOT 8	2587(1)	15	Jan. 10/85	Jan. 10/90

All claims are presently registered in the name of Kerr Addison Ltd., with Head Office in Toronto, Ontario. Expiry dates shown in Table I reflect assessment work recorded in December, 1987.

The Sasquatch Provincial Park cuts through the northern part of the property.

OWNERSHIP AND OPTION AGREEMENTS

The RN Claim was staked in 1975 and the MBI claim in 1979 by R.P. Rincombe and B.H. Williams who farmed the property out to Abo Oil Corp. in February 1983, who staked the FF claim in May, 1983. In

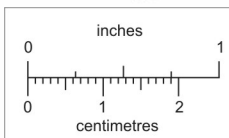


49° 20'

Harrison Lake

Hicks Lake

HARRISON GOLD PROPERTY




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Harrison Hot Springs



**Legend**  
 AREAS OF 1986 DIAMOND DRILLING

BEMA INTERNATIONAL RESOURCES INC.	
HARRISON LAKE GOLD PROJECT	
<b>Claims Map</b>	
DATE	MARCH 1987
SCALE	1 : 50000

121° 45'

Figure 2

November of 1984, Abo Oil Corp. entered into an agreement with Kerr Addison Mines Ltd. whereby Kerr could earn a 60% equity interest in the property. Ownership of all three claims was transferred to Kerr Addison, who later staked the HOT 1-8 claims around the original property. On February 10, 1987, Kerr Addison signed a letter of intent with Bema International Resources Inc. (BIRI) whereby BIRI can earn a 50 % interest in Kerr's 60% interest in the property for a net of 30% equity. To earn this interest, BIRI will be required to expend \$750,000 on exploration in 1987. BIRI can earn, at BIRI's option, an additional 5% equity interest by making further expenditures of \$250,000.

#### LOCATION AND ACCESS

The Harrison Lake Gold Property is located on the southeast edge of Harrison Lake, about 100 kilometres east of Vancouver (See Figure 1). The main Jenner Stock area of interest is situated about five kilometres northeast of the resort town of Harrison Hot Springs (See Figure 2). Elevation ranges from 100 to 250 metres above lake level.

B.C. Highway 9 leads north from the Trans Canada Highway at Agassiz to Harrison Hot Springs. From Harrison, a paved highway runs northeast along Harrison Lake to Sasquatch Provincial Park, passing by the Jenner gold prospect on the claims. Access to the Jenner Prospect is from the highway via a 4-wheel drive track. This is shown on Figure 5.

#### PHYSICAL FEATURES

The Harrison Lake Gold Prospect is located in the B.C. Coast Range Mountain physiographic region. Elevations range from a base of 30 metres at Harrison Lake to over 1,000 metres at Bear Mountain, the highest point on the property. Elsewhere in the region, elevations of mountain tops exceed 2,000 metres.

Slopes are steep, ranging from 10<sup>0</sup> to 40<sup>0</sup> with occasional short precipices. Most of the area has been previously logged, resulting in second growth evergreen and deciduous trees ranging up to 20 centimetres in diameter, with frequent, dense undergrowth, including devils club. Mean annual precipitation in the area ranges from 150 to 200 centimetres.

#### HISTORY

In the early 1970's, the Harrison Gold property was known as the GEO claim, it was re-staked as the RN claim in 1975. In 1979, the MBI claim was added to the east.

Between 1972 and 1982 this property was mined and produced 30.44 kg gold, 10.14 kg silver and 616 kg copper from 643 tonnes of ore. This was mined from the "Portal Stock" Adit (see Figures 4 and 5) which was 50 metres long and included 4 raises up to 15 metres long. The ore consisted of a quartz-pyrrhotite vein containing visible gold.

Abo Oil acquired the property in 1982 and, using A & M Exploration Services, explored the property in 1982 and 1983. Work consisted of geological mapping, soil sampling and EM surveying. This was followed by a drilling program of 27 diamond drill holes totalling 2,588 metres. In March of 1983, Abo 1-7 claims were staked then in May of 1983, the FF claim was staked.

In 1984, Sawyer Consultants of Vancouver, B.C. reviewed all data for Abo Oil Corp. and made recommendations for further work. Abo drilled a further seven diamond drill holes in 1984, totalling 754 metres, including the extension of two previously drilled holes.

Gold was intersected in three of these holes (DDH 84-28, 84-29 and 84-30). The best intersection was a 64 metre interval in DDH 84-28 which averaged 3.77 gm/T Au. This came from the newly indicated Jenner Stock Prospect, whereas original production and exploration work concentrated on the Portal Stock.

In late 1984, Kerr Addison Mines Ltd. entered into a joint venture with Abo Oil Corp. to continue exploration. The Abo 1-7 claims were restaked as the HOT 1-7 claims; the Hot 8 claim was added in January, 1985.

In 1985, Kerr Addison re-mapped the property and carried out substantial stream, soil and rock chip geochemical sampling. This was followed by a program of 834 metres of diamond drilling in four new holes as well as extensions of a previous Abo drill hole.

In 1986 Kerr Addison completed a major exploration program covering several prospects on the property. Geological mapping, based on gold geochemical anomalies, indicated the presence of a number of newly located quartz diorite stocks located to the south and east of the Jenner stock as well as a 1,000 metre long, 100 metre wide, north trending feldspar porphyry dyke.

Two large grids were established totalling 42.7 kilometres with lines cut at 50 metre line spacing. Soil samples were collected at 25 metre intervals on these grids; additional in-fill line cutting and soil sampling to 25 metres was completed over the north end of the Bluff stock. In addition to the soil geochemical sampling, heavy mineral stream sediment sampling was conducted on several creeks, including Jenner Creek, below the Jenner stock.

Based on previous drilling results, geological mapping and the geochemical surveys, extensive diamond drilling was completed in 1986. Total drilling is tabulated in Table II below.

TABLE II

<u>Prospect</u>	<u>No. of Drill Holes</u>	<u>Total Metres Drilled</u>
Jenner Stock	12	1499 M
Portal Stock	3	272
Bluff Stock	5	209
Lake Stock	2	107.8
Cliff Stock	1	29
Hill Stock	<u>1</u>	<u>35</u>
Total Drilled, 1986	24	2151.8 M

At all but the Jenner Prospect, drill holes were inclined at angles from  $-50^{\circ}$  to  $-65^{\circ}$ . At the Jenner Prospect numerous holes were drilled from one setup in a star pattern due to very difficult drill site setup. All holes were drilled due east on sites spaced 25 and 50 metres apart in north-south directions. Inclinations of holes ranged from vertical to up-holes of  $+12^{\circ}$ . The northern perimeter of the Jenner stock has not been tested due to lack of drill site access on steep, rocky slopes. The purpose of the detailed drilling at the Jenner Prospect was to test for grade of gold and possible ore reserve potential.

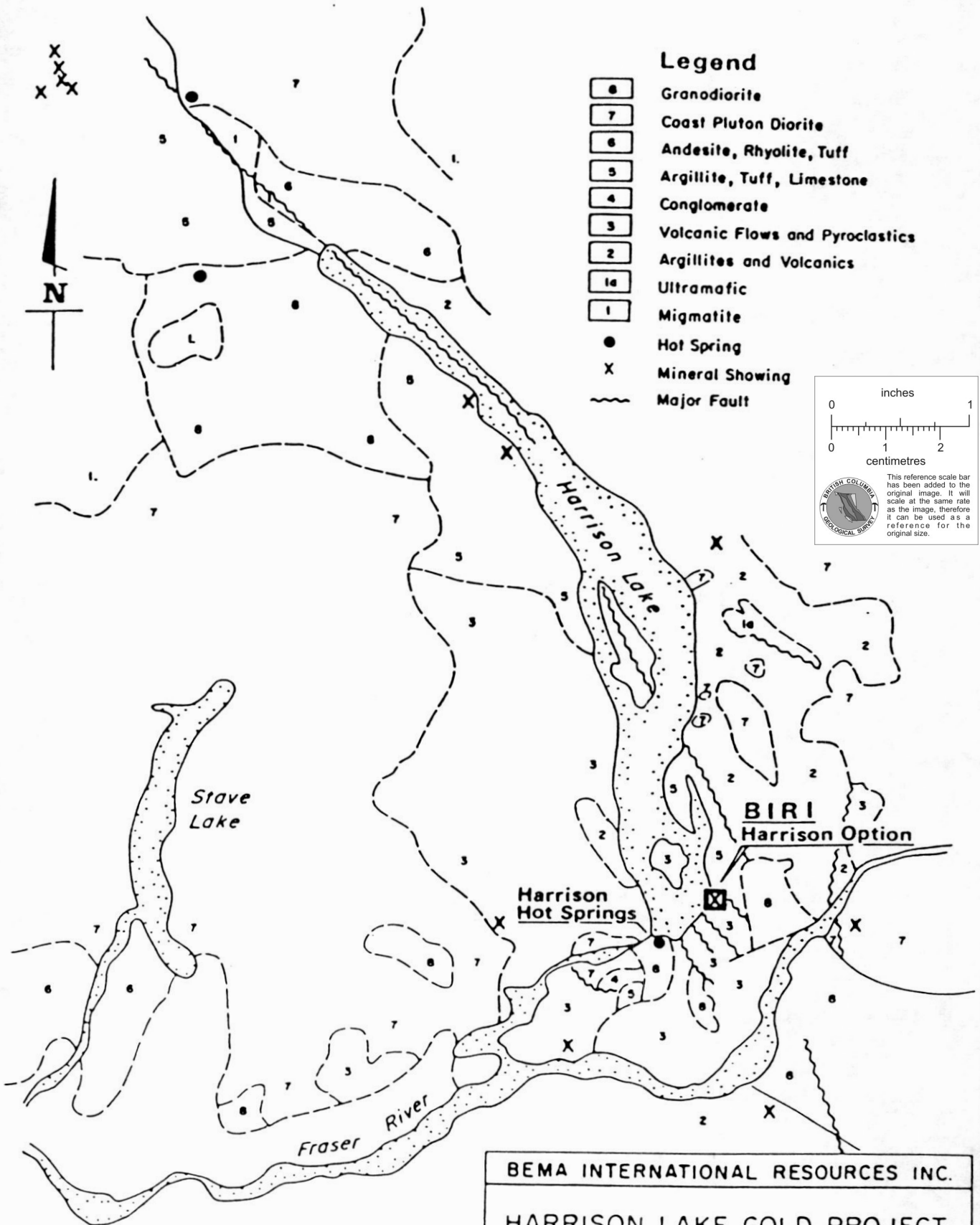
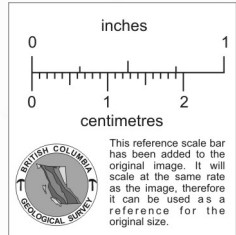
Due to the presence of coarse, visible gold in erratic distribution a unique method of assaying was developed. All core was crushed and pulverized, then sieved to segregate coarse gold. Each speck was counted and the larger ones were measured. The whole core was assayed by fire assay with AA finish.

REGIONAL GEOLOGY (See Figure 3, over)

The Harrison Lake Gold Property is situated within the Cascade Mountain geological terrane. This suite of rocks consists of a northwesterly trending axial core of gneiss and granitic rocks flanked on each side by folded and faulted sedimentary and volcanic sequences which show little evidence of metamorphism. The contact between the axial core and the western sequences is formed by the Harrison Fault which is a one to two kilometres wide fracture zone with well developed cleavage but no marked linear fabric. The Jenner Prospect lies just to the west of the Harrison Fault and is dissected by a substantial splay fault along which Jenner Creek flows.

Legend

- 8 Granodiorite
- 7 Coast Pluton Diorite
- 6 Andesite, Rhyolite, Tuff
- 5 Argillite, Tuff, Limestone
- 4 Conglomerate
- 3 Volcanic Flows and Pyroclastics
- 2 Argillites and Volcanics
- 1a Ultramafic
- 1 Migmatite
- Hot Spring
- X Mineral Showing
- ~ Major Fault



BEMA INTERNATIONAL RESOURCES INC.

HARRISON LAKE GOLD PROJECT

**Regional Geology**

DATE MARCH 1987

SCALE 1 : 250 000

Figure 3

The Harrison Fault extends for more than one hundred kilometres, north to south, from the Lillooet River well into Washington State. It has a dip of 65° to the east and is known to have numerous splay faults. Its age is placed at lower Cretaceous, about 110 ma.

The oldest rocks in the district are migmatites and ultramafics of unknown age which occur in the northwest and northeast corners of the map area and are unrelated to gold mineralization.

The oldest layered rocks are the Upper Paleozoic Chilliwack Fm volcanics and argillites which are overlain by Triassic Cultus Fm sediments. Later mid-Jurassic Harrison Lake Fm volcanic flows and pyroclastics are overlain by various conglomerate and sandstone units as well as the upper Jurassic Mysterious Creek Fm. argillite, which underlies most of the Harrison property. A final sequence of lower Cretaceous volcanics of intermediate to acid composition completes the layered succession of the area.

All the layered sequences have been cut by Cretaceous to Tertiary aged diorite and quartz diorite stocks and batholiths related to Coast Range intrusives. Locally, strong hydrothermal alteration is noted in the layered rocks of the western belt.

#### PROPERTY GEOLOGY (See Figure 4, over)

The greater part of the Harrison Lake Gold Property is underlain by argillites of the Mysterious Creek Formation. This sequence is in fault contact with the older Chilliwack Fm sediments to the northeast and southwest of the property.

The Mysterious Creek Formation is a very uniform, monotonous, thin bedded black argillite. In the project area, it has been intruded by nine known quartz diorite stocks and bosses, these are likely offshoots of the large Hicks Lake batholith, situated at the eastern fringe of the Harrison Property. Several diorite bosses and a feldspar porphyry dyke about 1,000 metres long also cut into the argillites.

These stocks are generally globular shaped with sizes ranging from 70 by 150 metres to 1,200 by 1,400 metres. The quartz diorite itself is fine to coarse grained with subhedral hornblende and biotite and contains about 10% quartz. Locally, 5% pyrite and pyrrhotite are contained within the quartz diorite. Appendix I contains petrographic descriptions of four core specimen.

In the Jenner and Portal Stocks (see Figure 5, over), as well as in their immediate periphery, quartz vein stockworks are developed. The quartz veins are generally 5 to 50 millimetres thick and usually exhibit tight wallrock contacts, with some assimilation, indicating fairly high pressures when injection took place. These quartz vein



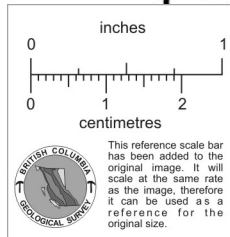
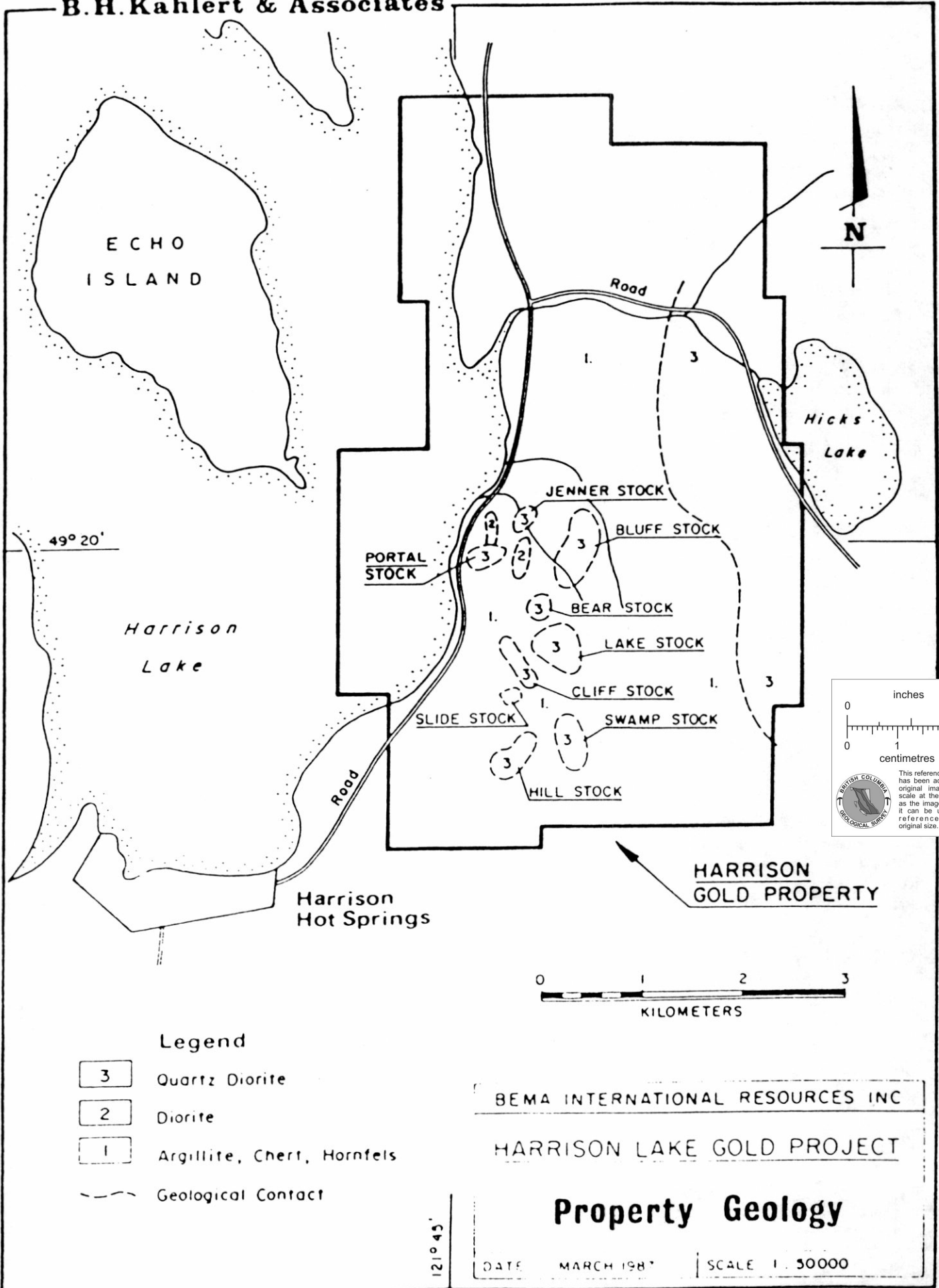


Figure 4

stockwork systems will be discussed further in the following section entitled "Gold Mineralization".

Drilling and geological mapping of the Jenner Stock indicates that it is irregularly ellipsoidal in plan view, elongate north-south. However, it is generally cylindrical in vertical dimension, except near surface, where it widens substantially. Its dimensions are 120 metres long and at its widest, about 75 metres east west. Vertical extent tested by drilling has been tested to 250 metres below surface.

The other quartz diorite stocks are also ellipsoidal in shape, however, insufficient drilling has been completed on those to give definitive indication of their subsurface shape.

Alteration associated with the intrusion of the stocks consists mainly of hornfelsing the argillites with minor associated silicification. Within the intrusives, alteration is generally weak, consisting of minor quartz, epidote, actinolite, calcite and tremolite. Sulphide content is low, main species are pyrite and pyrrhotite, with minor chalcopyrite and traces of molybdenite and several sulphosalts. In proximal hornfels, sulphide content may reach 15-20% over short sections, however, in the quartz diorite average content is 2-3% sulphides.

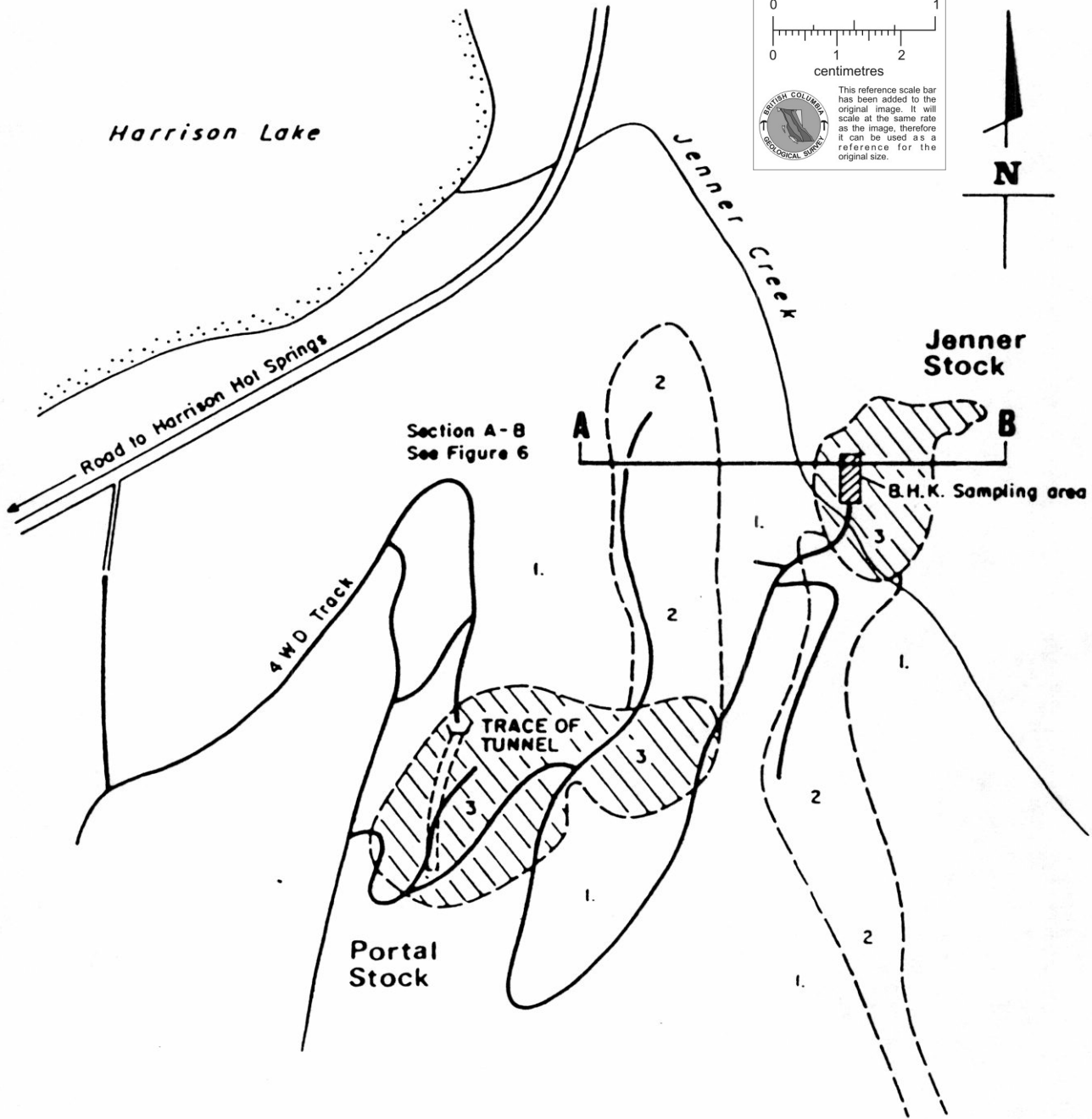
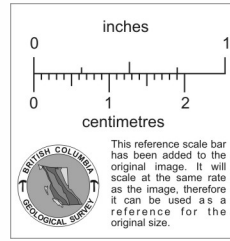
#### GOLD MINERALIZATION

On the Harrison Property, gold occurs mainly as free, visible flakes with or without silver and bismuth tellurides. Large grains may be up to 2 millimetres, while the more common size ranges from 0.2 to 0.6 millimetres and much smaller grains are also found.









The gold invariably occurs with the quartz vein stockworks in association with pyrite and pyrrhotite. It is confined, however, to the quartz stockworks within the intrusives or their immediate periphery. Weak quartz veining also occurs in the argillites, with some sulphides, however, gold is not known to occur distal to the quartz diorite intrusives.

There are at least two types and generations of quartz veins on the property. Older veins are white and barren, while the younger are translucent grey to milky, carry sulphides and may contain gold. Sulphides, besides pyrite and pyrrhotite, are chalcopyrite with traces of bismuth and silver tellurides, molybdenite, arsenopyrite and sphalerite.

During his visit to the property on February 16, 1987, the author collected three rock chip samples. These samples were taken from the uppermost road-cut in the Jenner prospect area. Samples No. 23908, 23909 and 23910 were taken at 9500N, 9475N and 9450N,



**Legend**

-  QUARTZ DIORITE
-  DIORITE
-  ARGILLITE, CHERT, HORNFELS
-  GEOLOGICAL CONTACT
-  ROAD
-  4 W D TRACK
-  TUNNEL
-  B H K SAMPLING AREA



BEMA INTERNATIONAL RESOURCES INC.

HARRISON LAKE GOLD PROJECT

**Geology**

JENNER ZONE

DATE MARCH 1987

SCALE 1 : 5000

Figure 5

respectively (see Figure 5). The first two samples were from the Jenner quartz diorite with visible quartz vein stockwork and three to five percent pyrrhotite-pyrite. Sample No. 23910 was taken from hornfels just west of the quartz diorite contact, it was also from an area containing modest quartz stockwork, however sulphide content averaged eight to ten percent. In the sample from 9475N, several grains of free gold were seen, however, these were rejected from the assay sample.

Assay results of the three samples were 0.360, 0.356 and 0.012 ounces per ton gold respectively for the three samples numbered 23908, 23909 and 23910. (See Certificate of Analysis, Appendix IV). These results indicate that random rock chip sampling can obtain gold assays much higher than averages indicated by diamond drilling also, the hornfels, even with quartz veining, carries little gold.

A grab sample, No. 23911, taken by M.J. Beley, a principal of BIRI, ran 3.748 ounces per ton gold. This sample was of quartz diorite, located at 9480N.

Quartz veins may strike and dip in various directions, however the most frequent trend is a northerly strike with dips varying from  $-20^{\circ}$  to  $-40^{\circ}$  to the east. Holes drilled at azimuth  $090^{\circ}$  at inclinations of  $-60^{\circ}$  and  $+10^{\circ}$  to the east encountered the densest stockwork, averaging three veins per metre, while holes at other inclinations encountered only two veins per metre in the mineralized zones.

Most core was drilled NQ size and sampled at one metre intervals. Due to the coarse nature and irregular distribution of the gold, all Kerr Addison core was crushed completely to obtain a more representative sample. In previous drilling by Abo Oil, samples were of irregular length, selected on the basis of geological criteria.

In the Jenner Stock a large number of drill samples grading in excess of one gram of gold per tonne (0.03 oz/ton) have been encountered. Substantial continuous intervals grading in excess of 2 gm/tonne Au (0.06 oz/ton), ranging in continuous core length from 5 to 102 metres, indicates the presence of a substantial bulk tonnage of gold mineralization.

Table III, shown below, lists the better intersections of gold mineralization encountered in drilling completed to date.

TABLE III - GOLD INTERSECTIONS, JENNER STOCK

<u>DDH</u>	<u>From Meters</u>	<u>To Meters</u>	<u>Interval Meters</u>	<u>Weighted Assays gm/tonne Au</u>
84-28	0	64	64	3.77
84-29	0	40	40	4.56
84-30	0	30	30	2.74
85-35	0	16	16	4.70
85-36	40	142	102	3.54
85-37	148	164	16	2.23
85-38	151	189	38	1.41
86-39	5	86	81	2.04
86-40	87	104	17	2.01
86-41	28	35	7	4.02
86-42	27	50	23	3.71
86-46	10	52	42	3.52
86-47	43	60	17	3.20
86-48	3	27	24	5.28
86-49	4	34	30	2.58
86-50	37	58	21	2.91
86-51	0	41	41	1.94
86-52	1	85	84	3.32
86-53	6	11	5	5.27

Individual high grade gold assays above 6 gm/tonne or 0.2 oz/ton Au range up to 155.76 gm/tonne Au over 1 metre or 5.0 oz/ton Au over 3.3 feet. A total of 92 individual assays exceed 6 gm/tonne Au, of these, 80 are over 1 metre intervals, 12 are from shorter intervals ranging from 9 to 22 cm in length.

OTHER PROSPECTS

PORTAL STOCK

Three diamond drill holes totalling 472 metres were drilled from one site in a fan pattern. Quartz diorite with good quartz stockwork was encountered. One hole was drilled due east, while the others were drilled to the west, one at a shallow angle and the other at a steep angle.

Each of the holes encountered substantial gold mineralization near surface, details are tabulated in Table IV, below.

TABLE IV - PORTAL STOCK GOLD INTERSECTIONS

<u>DDH No.</u>	<u>From Meters</u>	<u>To Meters</u>	<u>Interval Meters</u>	<u>Assay gm/T Au</u>
86-43	7	14	7	9.78
86-44	6	11	5	5.39
86-45	7	13	6	2.48

These holes were drilled in the northeastern apophysis of the portal Stock as shown in Figure 5. Room exists here to expand on the mineralization encountered in the 1986 program.

MINOR PROSPECTS

The extensive geochemical surveys and geological mapping completed on two large grids to the south and east of the Jenner Stock succeeded in locating a number of additional quartz diorite stocks which were related to gold geochemical soil anomalies.

Nine diamond drill holes totalling 391 metres tested four of these stocks. As each hole averaged only 43.5 metres, this was a very minimal, site specific test only.

Five short holes were drilled into the Bluff Stock. All encountered quartz diorite with weak to modest amounts of quartz vein stockwork, however no significant gold assays were returned. Trace molybdenite was encountered in one drill hole.

At the Lake Stock, the two short holes encountered quartz diorite which averaged close to 2.5 quartz veins per metre. The first hole encountered two 1 metre long intervals with sulphides which ran 1.3 gm/T and 1.5 gm/T gold. In the second drill hole, a 1 metre interval with a narrow quartz vein ran 1.07 gm/T gold.

The 29 metre long hole at the Cliff stock encountered only argillite with a 90 cm quartz diorite vein. It did not reach the main intrusive body. No significant assays were encountered.

At the Hill Stock, a 35 metre long drill hole encountered quartz diorite with 1.5 quartz veins per metre. One speck of gold was seen which assayed 0.34 gm/T Au over one metre, however, another one metre interval with only one narrow quartz vein ran 2.06 gm/T gold.

Several soil and stream geochemical anomalies still have to be followed up. Sources of these anomalies is not understood and form good targets for further ground work.

It can be seen from the above that only minimal target definition and testing of other potential gold prospects on this property

have been undertaken. Further detailed investigation of these areas is highly desirable.

#### ECONOMIC POTENTIAL

Drilling on the Jenner Deposit in 1985 and 1986 by Kerr Addison Mines Ltd. encountered extensive gold mineralization in a number of closely spaced diamond drill holes. Grades of gold range from background to over 100 grams per tonne (several ounces per ton) over one metre sample intervals. Virtually all gold occurs as free flakes ranging in size from microscopic to 2 mm in diameter. The gold invariably occurs within a wide spaced quartz vein stockwork, usually in association with iron and minor basemetal sulphides, tellurides and some sulphosalts.

There does not appear to be a specific structural feature or direction which controls the gold mineralization, other than the quartz diorite intrusive body itself, and it is not wholly mineralized. Due to the free nature of the gold, its association with a quartz vein stockwork, and the lack of specific lithological or structural control of the mineralization, it has been difficult to correlate specific mineralized zones between drill holes.

This style of gold mineralization has created problems not only in determining a volume or tonnage of possible ore but also in determining grades to assign to various blocks. The free, coarse gold historically occurs erratically distributed and this phenomenon is expected at Harrison Lake. Grades of gold mineralization as determined from diamond drill core will therefore vary widely from true values of various blocks of gold mineralization.

In order to determine an approximate economic potential, Kerr Addison calculated a "Mineral Inventory" or "Geologic Reserves" based on volumes of rock of similar grade over various intervals of drill holes.

As drill sections are mainly 25 metres apart, blocks of gold mineralization were determined to be halfway between sections, or 12.5 metres, making individual blocks 25 metres long in a North-South direction. As no directional control is known to exist, the East-West block length was also set at 25 metres, thus making the drill hole the centre of a 25 metre square. When holes converged in an east-west direction due to the fan-type drilling pattern, distances halfway between holes was used to determine block size. Where drill sections were wider than 25 metres or were open, 12.5 metres from drill hole section was set as the limit.

Using the above parameters, a density of 2.7 gm/cc and various cutoff grades, an approximate, in situ resource as determined by the diamond drilling to date was calculated.

At a cutoff grade of 1 gm/T, using blocks generally +10 meters long, with internal dilution of less than four metres below grade, a resource of 867,000 metric tonnes grading 2.55 gm/t is indicated. Using a cutoff grade of 0.5 gm/t Au and using all blocks calculated above this grade, a resource potential of 1,783,000 metric tons grading 2.19 gm/t Au is indicated. By increasing cut off grades or reducing low grade blocks, a variety of different volume/grade gold resources can be calculated.

The above quoted resources have been determined to a depth only of 100 metres. Additionally, as no drilling has been completed north of the 9500N section, calculation of resource potential stops at 9512.50N. The surface trace of the Jenner Stock extends to 9535N, the plunge of the northern contact is unknown due to lack of drilling.

Examination of the potential of the Harrison Lake Gold Project can therefore be broken down into the following separate subjects.

1. Mineability of the presently indicated resources
2. Potential to find additional resources at the Jenner Prospect
3. Potential to find mineable reserves at the Portal and other Quartz Diorite stocks on the property.

These subjects are discussed further below.

1. Mineability of the presently indicated resources.

The major factors affecting the mineability of the presently indicated gold resources at Harrison Lake will be final grade recovery and mining costs. In order to determine these, it will be necessary to carry out an underground drifting and raising program to obtain a bulk sample and establish the competency of the host rock. Milling of the bulk sample will determine final grade of gold mineralization as well as recovery factor during processing.

Initial metallurgical test work completed on a number of two kilogram samples using a variety of techniques have been completed by Coastech Research Ltd. of North Vancouver. Results vary widely, with the best method appearing to be a combination of coarse grind with gravity concentration to scavenge coarse free gold, followed by bulk regrinding and bulk flotation with final cyanide leaching. Up to 97.7% of gold has been recovered, however, some further test work is recommended to fine tune the procedure. See Appendix II for detail.

From drill core recovery and surface examination of outcrop, it is apparent that the quartz diorite is very competent and should stand up well. This factor could greatly reduce mining costs if open stopes will stand up without caving, possibly allowing sub-level caving, similar to that utilized in the very low cost porphyry Cu-Mo



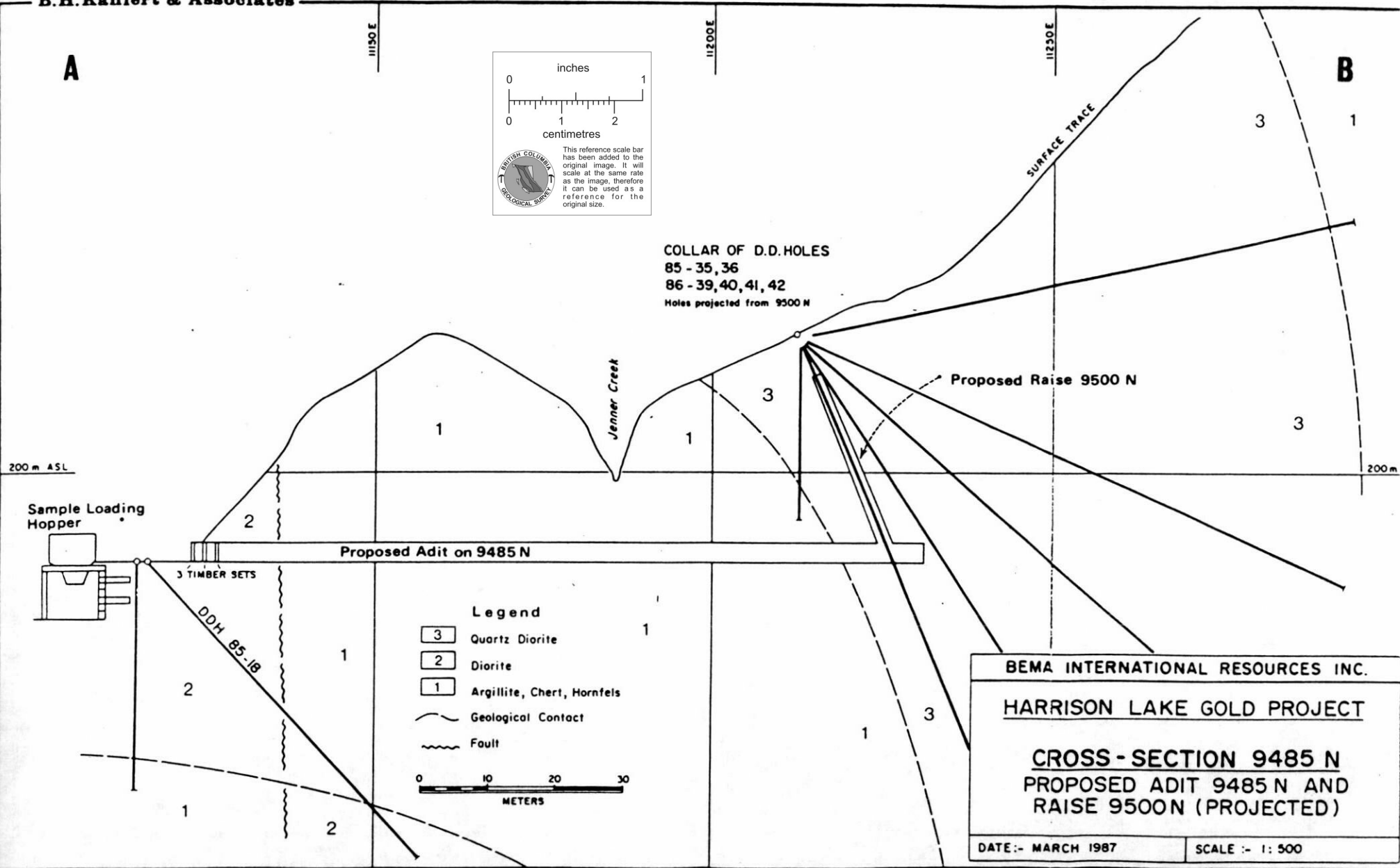


Figure 6

mines. Significant increase in grade of gold mineralization would greatly enhance the mining potential of the Jenner Zone. Individual samples of core and from surface sampling have occasionally been very high grade. This may reflect possible high grade zones within the deposit. (See Figure 6.) The proposed underground exploration work is outlined in Appendix III.

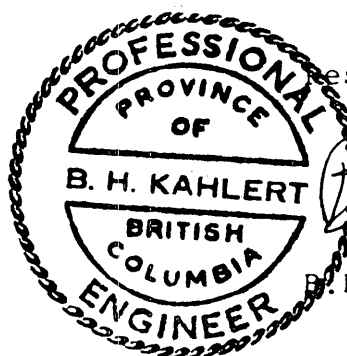
2. Potential to find addition resources at the Jenner Prospect.

Drilling at the Jenner Prospect has not tested the gold potential of the northern portion of the stock or at depth. Drill investigation of the northern contact zone can be undertaken from the underground workings and will likely add additional reserves as gold mineralization at the 9500N section is very strong. The search for additional reserves at depth will likely await results of the underground investigation.

3. Potential to find mineable reserves at the Portal and other Quartz Diorite stocks on the Property.

Diamond drilling at the Portal Stock and several other quartz diorite bodies returned highly encouraging results. Detailed evaluation of the drill results must be carried out very carefully as the potential to find further substantial gold mineralization in these stocks is very good. From recent drilling at the Jenner Stock, it is apparent that a preferred quartz vein direction carries more gold than other veins of the stockwork system. Careful attention to this will assure optimum drilling direction.

In addition to the follow up drilling, further potential exists in several geochemical soil and stream gold geochemical anomalies. The sources of these anomalies have not yet been located, yet the anomaly strengths are similar to that exhibited by the Jenner stock.



Respectfully submitted,

A handwritten signature in black ink, appearing to read "B. H. Kahlert", written over the seal.

B. H. Kahlert, P. Eng.



- 1 ARGILLITE, CHERT, SILTSTONE, SANDSTONE, QUARTZITE, HORNFELS.
- 1q / 2b ARGILLITE - DIORITE CONTACT METAMORPHIC.
- 2b DIORITE.
- 3 QUARTZ DIORITE.

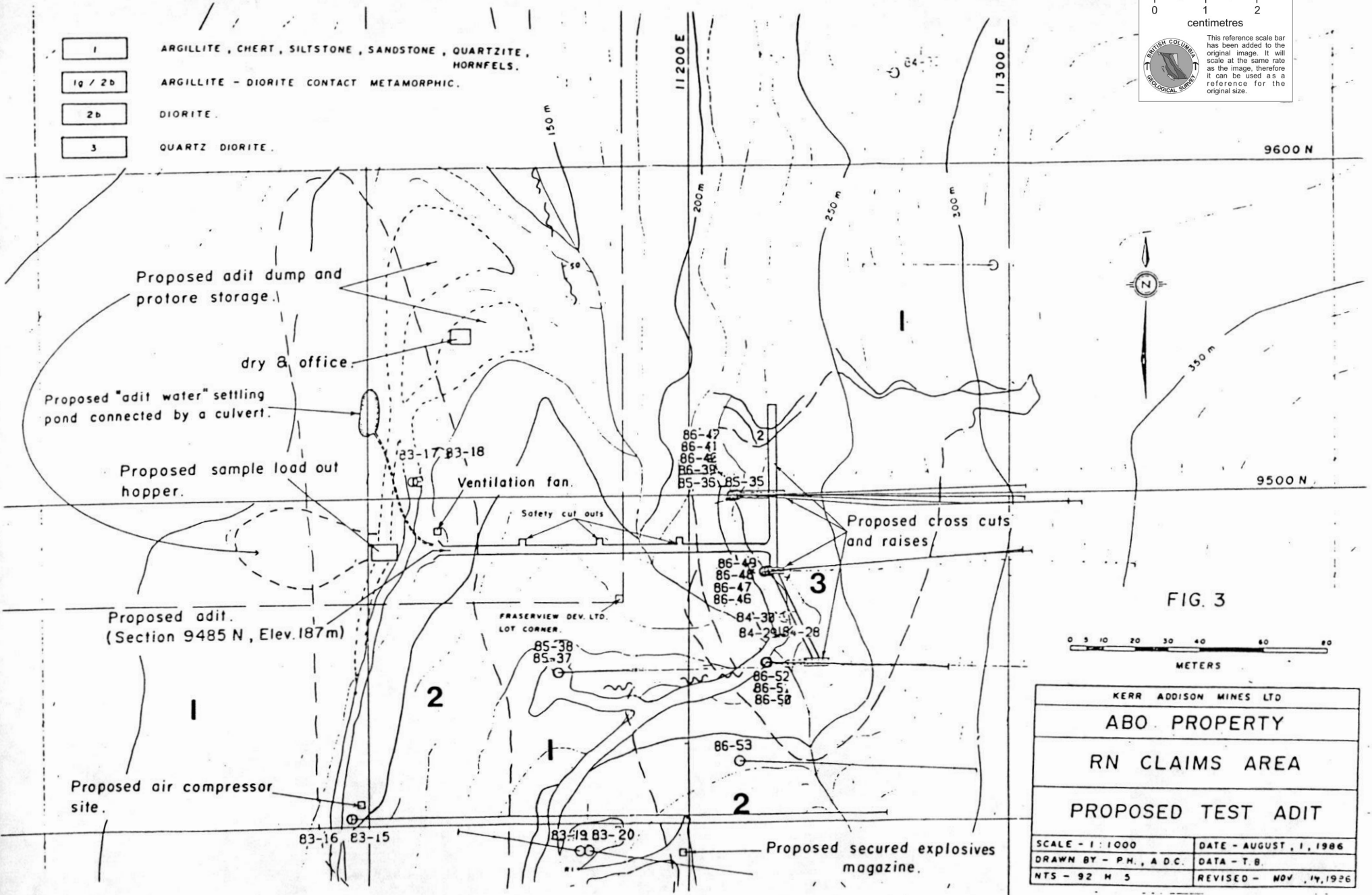
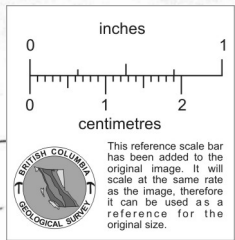
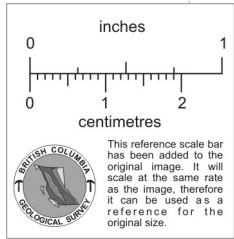
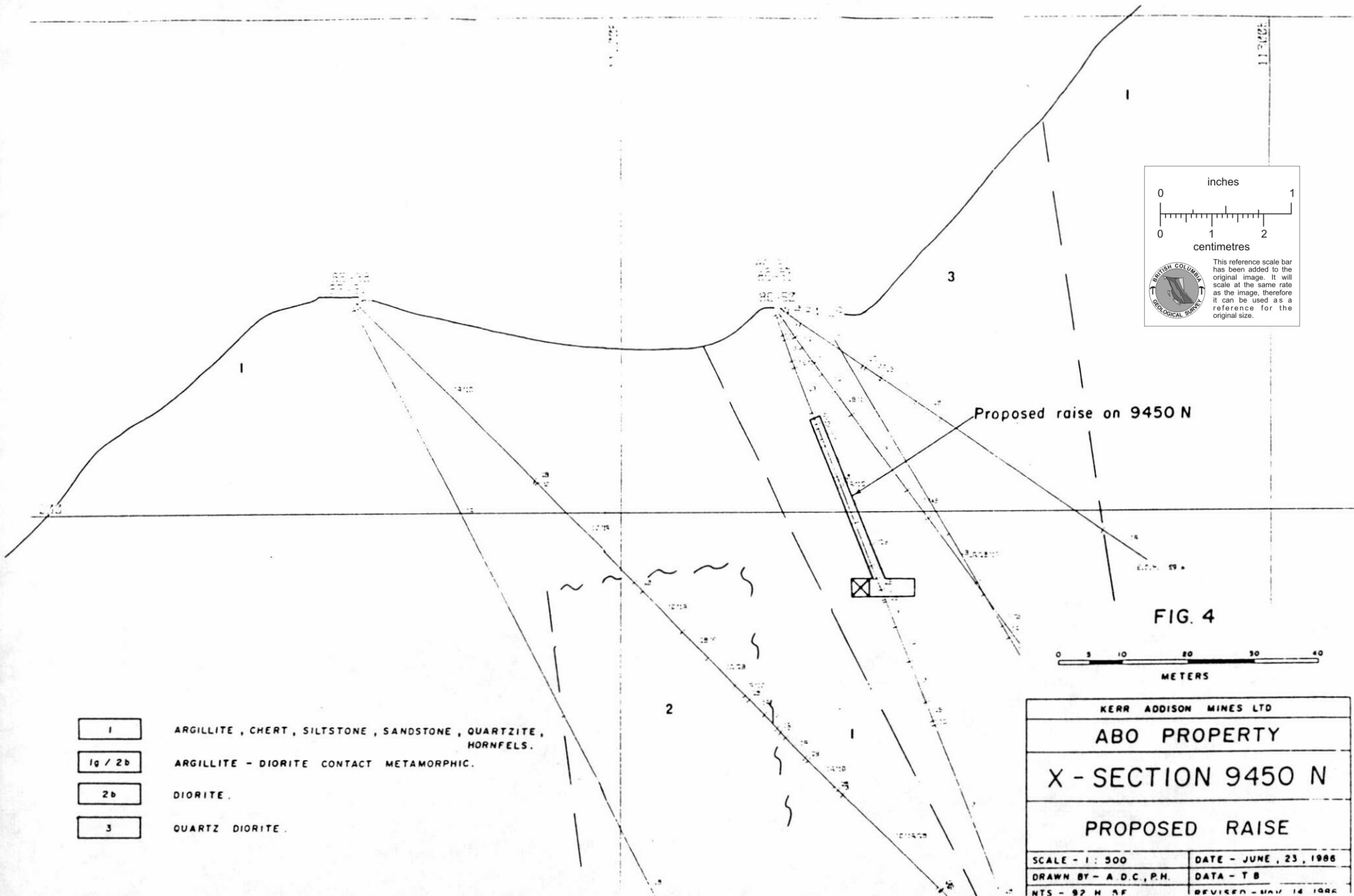


FIG. 3



KERR ADDISON MINES LTD	
ABO PROPERTY	
RN CLAIMS AREA	
PROPOSED TEST ADIT	
SCALE - 1 : 1000	DATE - AUGUST, 1, 1986
DRAWN BY - P.H., A.D.C.	DATA - T.B.
NTS - 92 M 5	REVISED - NOV, 14, 1986



Proposed raise on 9450 N

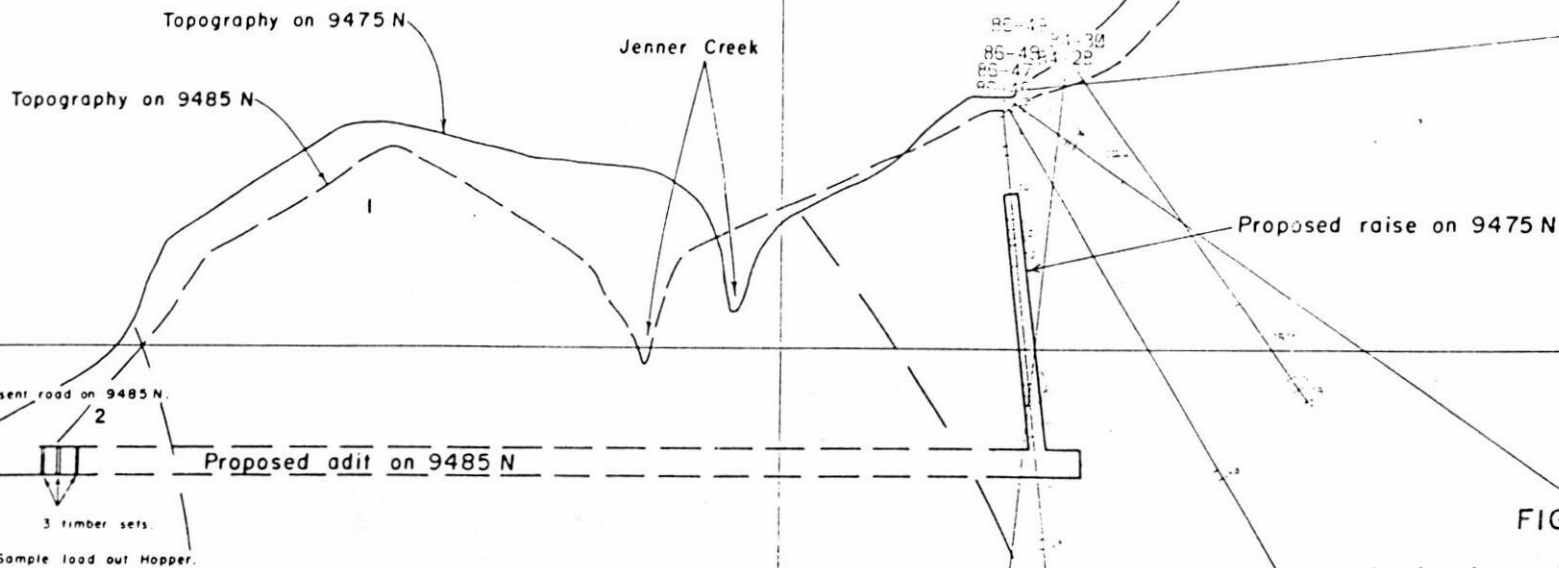
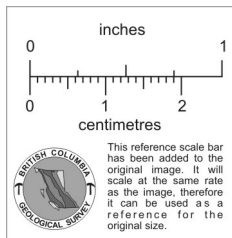
FIG. 4



- 1 ARGILLITE, CHERT, SILTSTONE, SANDSTONE, QUARTZITE, HORNFELS.
- 1a / 2b ARGILLITE - DIORITE CONTACT METAMORPHIC.
- 2b DIORITE.
- 3 QUARTZ DIORITE.

KERR ADDISON MINES LTD	
ABO PROPERTY	
X - SECTION 9450 N	
PROPOSED RAISE	
SCALE - 1 : 500	DATE - JUNE, 23, 1986
DRAWN BY - A. D. C., P.H.	DATA - T B
NTS - 92 N 5F	REVISED - MAY 14, 1986





- 1 ARGILLITE , CHERT , SILTSTONE , SANDSTONE , QUARTZITE , HORNFELS.
- 1g / 2b ARGILLITE - DIORITE CONTACT METAMORPHIC.
- 2b DIORITE .
- 3 QUARTZ DIORITE .

FIG. 5



KERR ADDISON MINES LTD	
ABO PROPERTY	
X - SECTION 9475 N	
PROPOSED ADIT ON 9485 N & RAISE ON 9475 N	
SCALE - 1 : 500	DATE - JULY , 2 , 1986
DRAWN BY - A DC , P.M.	DATA - T.B.
NTS - 92 M 5E	REVISED - NOV. , 14 , 1986

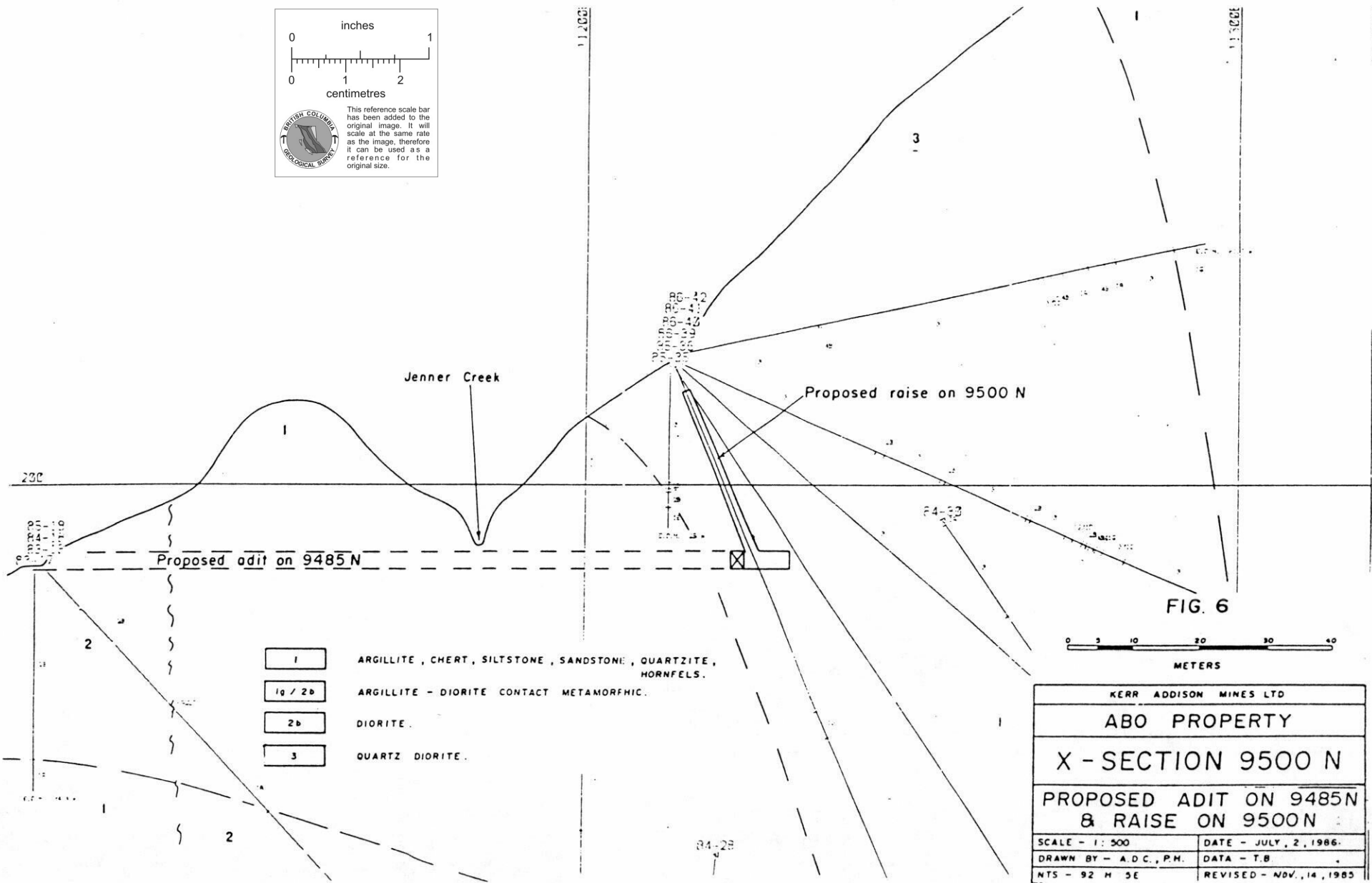
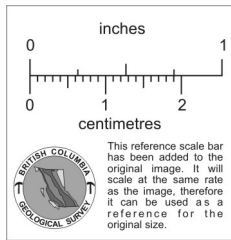


FIG. 6



- 1 ARGILLITE, CHERT, SILTSTONE, SANDSTONE, QUARTZITE, HORNFELS.
- 1a / 2b ARGILLITE - DIORITE CONTACT METAMORPHIC.
- 2b DIORITE.
- 3 QUARTZ DIORITE.

KERR ADDISON MINES LTD	
ABO PROPERTY	
X - SECTION 9500 N	
PROPOSED ADIT ON 9485N & RAISE ON 9500N	
SCALE - 1 : 500	DATE - JULY, 2, 1986.
DRAWN BY - A.D.C., P.H.	DATA - T.B
NTS - 92 H 5E	REVISED - NOV., 14, 1985