

675460  
82M/13

DIMAC RESOURCE CORP.,  
VANCOUVER, B.C.

AN ORE RESERVE ESTIMATE AND  
PRELIMINARY ECONOMIC ANALYSIS OF  
THE SILENCE LAKE PROJECT

BY  
B. MOUNTFORD P.ENG.

OCTOBER 15<sup>TH</sup>, 1980  
BRIAN MOUNTFORD AND ASSOCIATES LTD.  
VANCOUVER, B.C.

# BRIAN MOUNTFORD AND ASSOCIATES LTD.

811 - 675 WEST HASTINGS STREET. VANCOUVER. B.C. V6B 1N2  
TELEPHONE 681-2377

October 15th 1980

Dimac Resource Corp.  
701 - 744 West Hastings Street  
Vancouver, B.C.  
V6C 1A5

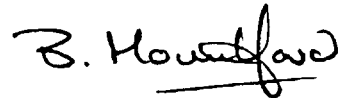
Attention Mr R. Dickinson and Mr M. McClaren

Gentlemen

We have pleasure in submitting our report entitled  
"An Ore Reserve Estimate and Preliminary Economic  
Analysis of the Silence Lake Project".

We trust you will find the study satisfactory and  
are at your disposal for any further assistance in  
this exciting project.

Yours truly

A handwritten signature in cursive script that reads "B. Mountford". The signature is written in dark ink and is positioned above the typed name.

B. Mountford

## TABLE OF CONTENTS

<u>HEADING</u>	<u>PAGE</u>
SUMMARY	1
PREAMBLE	1
LOCATION AND ACCESS	2
CLAIMS AND HISTORY	3
GEOLOGY	4
General	4
Structural and Lithological Controls	5
Geologically possible ore tonnages	6
ORE RESERVES	6
Cut-off Parameters	7
Calculation Procedure	7
Table 1 - Basic Borehole Data	10
Table 2 - Mineable Zones	19
Table 3 - Ore Reserve Summary	21
Table 4 - Ore Reserve Estimates Proven and Probable Ore - Upper Band	22
Table 5 - Ore Reserve Estimates Proven and Probable Ore - Lower Band	23
Table 6 - Ore Reserve Speculation	24
MINING	25
PROCESSING	25
ANCILLARIES	26
ECONOMICS	26
CONCLUSIONS AND RECOMMENDATIONS	27
PRODUCTION ORIENTED PROGRAMME	27
Metallurgy and Process Plant	27
Mining	28
Ancillaries	29
Project Management Control	29
Detailed Report	29
Costs	30
WRITER'S CERTIFICATE	31

TABLE OF CONTENTS (CONT)

<u>DRAWINGS</u>	<u>DRAWING NUMBER</u>
LOCATION MAP	1
CLAIM MAP	2
PLAN	3
CROSS SECTION 140 Showing Mineable Ore Zones	4
"        "    180    "        "        "        "	5
"        "    200    "        "        "        "	6
"        "    220    "        "        "        "	7
"        "    240    "        "        "        "	8
"        "    260    "        "        "        "	9
"        "    280    "        "        "        "	10
"        "    300    "        "        "        "	11
"        "    320    "        "        "        "	12
"        "    340    "        "        "        "	13

## SUMMARY

The Silence Lake Project of Dimac Resource Corp. is a high grade near-surface tungsten deposit located in Central British Columbia.

Based upon the detailed reserve evaluation described in this report, and subject to the preliminary nature of the operational concepts postulated, the project is capable of viable commercial production.

The PROVEN and PROBABLE reserve in the only area explored to date is 50,000 tons of mineable ore containing 1.48% WO<sub>3</sub> (un-cut grade).

In the same area, primarily down dip of the existing reserve, there exists the potential for a further 13,000 tons at 1.62% WO<sub>3</sub>. This tonnage can be considered as "POSSIBLE".

It is reasonable to assume that a 50 ton per day operation, considering the PROVEN and PROBABLE tonnage only, would repay the Capital Cost and generate some \$6,000,000 of pre-tax revenue over a production period of approximately 3½ years. The POSSIBLE ore would increase this revenue, and the prospects of finding additional ore are considered excellent.

## PREAMBLE

The work outlined in this report was initiated by Messrs. R. Dickinson and M. McClaren of Dimac Resource Corp.

Mr McClaren and Mr Dickinson have been developing the Silence Lake tungsten project for several years. During 1979 they reached the stage where the results indicated that a detailed techno-economic assessment should be made to investigate production viability.

As a first phase in these assessments, we were asked to calculate the mineable reserves and confirm the production opportunities. The reserves were to be placed:-

- (a) In categories acceptable for financing, i.e. PROVEN and PROBABLE reserve, and
- (b) "Possible" ore indicated by the present exploratory drilling and sampling.

Additionally, the following factors were to be investigated and included in our report:-

- (1) A conclusion as to the production potential.
- (2) Concepts most logical for mining and processing.
- (3) An order of magnitude summary of the size and scope of the potential operation.
- (4) A description of the potential for further exploration possibilities other than the area presently delineated.
- (5) A suggested development programme.

In order to complete this work statement we have had access to, and utilised the following data.

1. A Geological Report on the Boulder Claim Group by D.L. Cook - specifically the logs of two drill holes (termed 72-2 & 3 in this report).
2. Percussion drilling results on the Gotcha Project by J.P. Elwell. These data were studied to verify the grades used in our evaluation. They in fact do this (see Table Number 1). Mr Elwell also wrote several preliminary reports on the Gotcha Prospect.
3. Progress Reports - Metallurgical Testing by Bacon Donaldson and Associates Ltd.
4. Detailed logs and assay results of a 20 hole drill programme completed by Dimac Resource Corp. during 1979. These data provide the main input to the reserve calculations.

Supplementary to the above, the author visited the property for a general familiarization and reconnaissance tour on June 21st and 22nd 1979 and again on December 11th and 12th 1979 at which time the drilling was seen, the core examined and the representativeness of the drill programme was discussed and confirmed.

LOCATION AND ACCESS  
(See Drawing Number 1.)

The claims comprising the Silence Lake Project are located some 20 miles north-east of Clearwater, B.C. and 80 miles north of Kamloops, B.C. All claims are on the west side of the upper Maxwell Creek, some 2 miles above its confluence with the Raft River within the Kamloops Mining Division. Geographically they are located on N.T. S. sheet 82M/13E.

From Clearwater, access is relatively easy; a main arterial logging road leads directly to the site. This logging road joins the Yellowhead Highway (No. 5) approximately 4 miles east of Clearwater. The distance along the logging road is some 25 miles.

#### CLAIMS AND HISTORY

The Silence Lake property which is owned in good standing by Dimac Resource Corp. comprises the following claims:-

Claim Title	Record Number	Expiry Date
GOTCHA	881	June 24th 1985
GOTCHA 2	2834	July 24th 1989
GOTCHA 3	1927	July 29th 1985
GOTCHA 4	2835	July 24th 1981
GOTCHA 5	2836	July 24th 1981
GOTCHA 6	2837	July 24th 1981

The 1979/80 work programme is sufficient to cover assessment requirements for several years.

During 1972, Union Carbide Exploration Corp. staked the present claim area to cover what appeared to be the source of float containing scheelite. Through the summer of 1972 Union Carbide completed a programme of geological mapping and 8 diamond drill holes totalling 1,770 feet of drilling. Two of these holes intersected ore grade scheelite mineralization, these were 72-2 and 72-3.

A further 3 holes were drilled in 1973 for a total of 1,436 feet, all were exploratory in nature, all were unsuccessful. The report written at the conclusion of this work (by D.L. Cook - Union Carbide) postulated that there was 10,000 tons of ore at 1.5% WO<sub>3</sub>. Union Carbide, eventually dropped the claims, and the area was re-staked by United Mineral Services Ltd.

In 1977 United Mineral Services carried out a trenching programme and confirmed the presence of scheelite mineralization within two skarn bands (ore zones); they also established that some of the near surface mineralization exceeded 3% WO<sub>3</sub>.

At the start of 1978, N.C.A. Minerals Corporation under an option agreement with United Mineral Service Ltd., completed 18 percussive drill holes, grouped primarily around the centre of each band. The assay results confirmed the high tenor of the mineralization (see Table Number 1).

As a result of N.C.A. failing to comply with the terms of the option agreement, the claims subsequently returned to United Mineral Services Ltd.

In 1978 United Mineral Services removed some 1,500-2,000 tons of scheelite ore from the property. This is now stockpiled at Clearwater. No organised representative sampling of the ore was carried out at that time. Since then the stockpile has been grided and an ultra violet survey carried out under the direction of the author. The combined results of five samplers indicated a possible grade of approximately 2%  $WO_3$ . This compares favourably with the high grade near-surface values and the overall average (1.5%  $WO_3$ ) calculated for this study.

Also during 1978, three separate metallurgical tests were carried out by Bacon Donaldson and Associates Ltd., and 200 tons of ore were processed through a flotation mill at Lumby, B.C. These tests indicate that the scheelite is liberated at a relatively coarse grind and is amenable to both gravity and flotation recovery processes. Further testing is essential, and in fact, is being conducted at this time; however, because of the coarse nature of the ore and the apparent clean milling characteristics of the gangue, it seems reasonable to assume that a high grade concentrate will be possible with excellent recoveries.

The pilot-scale test at Lumby was inconclusive, the equipment was in poor shape and the results uncertain; there is no point in describing the work.

During 1979 Dimac Resource Corp. was formed and acquired full title to the Gotcha Claims. In the latter part of the year and beginning of 1980, Dimac drilled 20 holes all in the area of the two bands. The results of this work are described in detail in this report.

#### GEOLOGY

The Gotcha Claim Group lies within the Omineca Crystalline Belt which is the high grade metamorphic core zone of the Eastern Cordilleran Fold Belt. Rocks in the zone have generally been metamorphosed to upper amphibolite facies and have experienced multiple phases of intense penetrative deformation. The deformation and metamorphism were probably completed by late Jurassic to early Cretaceous times but the stratigraphic age of some of the metasediments is considerably older (1,500 MM years).



The property covers an area of contact between the metasediments and a post metamorphic intrusive stock. The stock may be late Cretaceous or early Tertiary in age based on a single muscovite potassium argon age of 64 MM years. Generally, the metasediments consist of a series of north to north-northeast trending pendants of west to northwest dip which lie within intrusive rocks. It is apparent that the metasediments have been folded into overturned isoclinal folds that have been intruded by granitic rocks along their hinge zones.

Contact metamorphism has occurred along the metasedimentary and intrusive rock boundary and a variety of contact metamorphic mineral assemblages have been produced. The calcareous rocks show stages of development from original marble to skarn. Three major types of skarn have been recognized:-

1. Quartz - garnet - idocrase skarn
2. Diopside - quartz skarn
3. Wollastonite - garnet - calcite skarn

Skarn types (1) and (2) are host to scheelite mineralization.

#### Structural and Lithological Controls

Skarn mineralization occurs in replaced calcareous beds. These beds have been traced by surface mapping and diamond drilling. They are known to extend laterally some 500 feet and have a stratigraphic thickness of approximately 45 feet. Within this thickness, scheelite bearing skarn is interspersed with thin beds of biotite schist and quartzite. Contacts between and layering of the various rock types (skarn, biotite schist and quartzite) trend northeast and dip northwest. There does not appear to be any drastic change in orientation. The rock bands vary greatly in thickness and erratically converge and diverge.

In the area of scheelite mineralization presently delineated, the metasediments have been highly folded. The resultant structure is an overturned nearly isoclinal synform. Manifestations of this structure can be seen in the form of minor folds found in drill core and surface exposures. Further evidence is observed in the core area of the fold where composition gneiss has been indentified. Also there are similar lithologies to the northeast.

### Geologically possible ore tonnages

1. The geometry of the structure can be seen on the plan and sections that accompany this report. In the detailed reserve calculation that follows, it should be noted that the reserve estimates do not extend below an elevation of 3,660 feet. Further exploration down dip will possibly expand ore reserves.
2. The limit of the 1979/80 drilling along strike to the south-east was dictated by topographic constraints. Further drilling along strike will possibly extend the known ore zone.
3. Scheelite mineralization is found to be located within replaced calcareous beds in an area proximal to and along the hingeline of the synform structure. The surface expression of this mineralization is only seen where the synform trace emerges at the north-eastern portion of the property. The two limbs of the structure have been traced for approximately 350 feet southwest from the limit of the 1979/80 drilling. It is possible that additional ore may be found along this structurally favourable hinge zone.
4. The primary controls for the localisation of the scheelite mineralization is an intrusive alaskite contact with peripheral calcareous metasediments. The intrusive was emplaced along favourable structural channels such as the core zone of the synform. Air photographs of the claim area display evidence of structural features concentrated in a south-westerly trending zone. It is possible for additional areas of scheelite mineralization to be found within this structural zone where the repetition of favourable structural features may occur.

### ORE RESERVES

The drilling and exploration to date have been concentrated in the area shown on drawing number 3. Here two zones or bands of ore have been outlined, these are termed the Upper and Lower Bands. The ore reserves within these two bands have been estimated as follows:-

Cut-off Parameters

In order to cover both open pit and underground mining possibilities and to allow some "built-in" profit margin and contingency, the economic cut-off criteria was established as:-

Required value of ore in place	\$50.00 per ton
Minimum width for effective mining	5 ft
Cut-off combining width and value	= 5 x 50
	= 250 \$ft.

Therefore every mineable zone must have an overall value of \$50.00 per ton, be at least 5 ft wide and have at least a \$ft. value of 250.00.

Additional criteria to convert assay grade to the above values were:-

Tungsten price	\$160.00 per stu*
Discount for mining dilution	10%
Discount for process recovery	15%
Discount for possible price drop	10%

These factors were applied to the selected metal price to give a "discounted" metal price.

$$\begin{aligned} \text{i.e. } \$160 \times 0.9 \times 0.85 \times 0.9 &= \$110.16 \\ \text{Say} &\$110.00 \end{aligned}$$

The resultant conversion of assay to discounted value is shown in the reserve tables that follow.

Calculation Procedure

Due to the topographical difficulties, it was necessary to drill from a limited number of locations. As a consequence, the drill holes cross the ore zone at varying dips and azimuths. Non-the-less, care was taken to ensure each hole increased the lateral and vertical extent of the exploration. The holes and intersection points are shown on drawing number 3.

The strike of the two bands of ore was calculated and true sections drawn at 20 ft intervals. Each hole was adjusted for a true width on the plane of the drill hole, then this was further adjusted for azimuth so that the intersection could be projected accurately onto true sections.

\* 1 stu - short ton unit = 20 lb.

There was a considerable amount of checking and comparing when projecting the holes to ensure that they were representative of the drill information. This was achieved by plotting all the holes on every appropriate section and then comparing them by overlay methods on a light table. It will be noted that some holes appear on more than one section, this is due to the real location of the hole and its relevance to that particular section.

Tables 1 through 6 show the evolution of the reserves, a brief description of each table follows:-

Table 1 Basic Borehole Data

This table presents the primary data relating to the scheelite mineralization, which has been extracted from the borehole logs. Correction angles, used for conversion of intersection to a true width (described above) were used for projections. The angles were calculated from the difference between the hole dip and the bedding dip, measured on the borehole plane: the azimuth correction being the difference between the azimuth of the hole and the azimuth of the true section. The final columns show the derivation of the individual assay metal price using the criteria previously described.

Table 2 Mineable Zones

This table shows how the individual assays are combined to form overall mineable widths. The method used was to select the "main width", either this was obvious or the highest \$ft. value was taken. Adjacent widths were incorporated into the main one providing they contained sufficient value to "carry" any intervening material.

It should be noted that some holes, particularly holes 10 and 17 have a significant band of intervening waste. It may be that further engineering will show that this waste can either be left in-place or removed separately. However, for the purposes of this report we have assumed that it will be mined since it is readily "carried" by the subsidiary width of ore.

Table 3

This is an overall summary of reserves that are individually developed in Tables 4, 5 and 6.

Tables 4 and 5

These show the reserve estimations. The individual area column is graphically shown on drawing numbers 4-13, they represent equal weight polygons around each borehole intersection. In the case of Section 240 Area K, more emphasis is placed on hole number 2, since number 20 appears to be in and out of the footwall zone.

The selected strike length is:- the halfway distance to the next data point; or, in the case of extremity information, to the estimated intrusive contact in the north. The southern extremity is extended 20 feet beyond the borehole. The lowest hole on each section is extended 30 feet or to the estimated location of the intrusive.

The assignment of proven and probable categories was done on a section by section, hole by hole basis. In any case a conservative approach was made by not exceeding 30 feet from a data point. Principally the percentage of each category was made by applying a judgement assessment based upon experience whilst considering such factors as the following:-

- The information on adjacent sections.
- The estimated position of the intrusive that cuts off the ore.
- The regularity of both the ore zone and the grade.
- The verification of grade by the percussion holes, the exact location of these is uncertain, but they are in the approximate centre of each band.
- The 1,500-2,000 tons of ore removed from the surface, verifies the surface width and the grade is estimated at 1.5 - 2.0% (by ultra violet light grid survey).

Table 6

This table indicates the possible ore that may be found within the same area as the proven and probable tonnage. The bulk of this possible ore occurs in down dip extensions beyond the 30 feet selected to indicate proven and probable ore. These extensions are projected to the estimated elevation of the intrusive. This ore should not be confused with the possible ore that is presently geologically inferred and is described in the geological section of this report.

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATE

PAGE 1

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR				X WIDTH	
D-79-1	180 & 200	9.5	10.5	1.0	30°	25°	0.78	0.78	0.90	99.0	77.22	
		10.5	14.4	3.9				3.04	-	-	WASTE	
		14.4	17.3	2.9				2.26	1.88	206.80	467.37	
		17.3	19.0	1.7				1.33	-	-	WASTE	
		19.0	28.5	9.5				7.41	2.44	268.40	1988.84	
		28.5	40.0	11.5				8.97	-	-	WASTE	
		40.0	42.0	2.0				1.56	3.00	330.0	514.80	
		42.0	46.0	4.0				3.12	0.73	80.30	250.54	
		46.0	49.0	3.0				2.34	3.63	399.30	934.36	
		49.0	54.0	5.0				3.90	1.06	116.60	454.74	
		54.0	63.7	9.7				7.57	2.41	265.10	2006.81	
		63.7	65.5	1.8				1.40	-	-	WASTE	
		65.5	70.3	4.8				3.74	1.74	191.40	715.84	
D-79-2	240 & 260	8.0	13.0	5.0	19°	29°	0.83	4.15	3.08	338.80	1406.02	
		13.0	19.8	6.8				5.64	2.12	233.20	1315.25	
		19.8	64.5	44.7				37.10	-	-	WASTE	
		64.5	71.0	6.5				5.40	2.62	288.20	1556.28	
		71.0	75.0	4.0				3.32	-	-	WASTE	
		75.0	79.6	4.6				3.82	2.44	268.40	1025.29	
		79.6	87.5	7.9				6.56	-	-	WASTE	
87.5	94.5	7.0	5.81	1.84	202.40	1175.94						
D-79-3	220	13.0	18.0	5.0	34°	30°	0.72	3.60	0.59	64.90	233.64	
		18.0	28.0	10.0				7.20	1.03	113.30	815.76	
		28.0	33.0	5.0				3.60	0.41	45.10	162.36	
		33.0	90.0	57.0				41.04	-	-	WASTE	
		90.0	96.5	6.5				4.68	0.96	105.60	494.21	
		96.5	101.3	4.8				3.46	-	-	WASTE	
		101.3	108.0	6.7				4.82	0.36	39.60	190.87	
108.0	113.0	5.0	3.60	3.10	341.0	1227.60						

- 10 -

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

PAGE 2

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR				X WIDTH	
D-79-4	220	0	12.0	12.0	66°	30°	0.35	4.2	0.51	56.10	235.62	
		12.0	18.0	6.0				2.1	1.94	213.40	448.14	
		18.0	28.0	10.0				3.5	2.49	273.90	958.65	
		28.0	38.0	10.0				3.5	2.98	327.80	1147.30	
		38.0	46.0	8.0				2.8	2.20	242.00	677.60	
D-79-5	240 & 260	32.7	38.5	5.8	36°	36°	0.65	3.77	0.03	3.30	12.44	
		38.5	46.0	7.5				4.89	2.10	231.00	1129.59	
		46.0	51.5	5.5				3.58	0.98	107.80	385.92	
		51.5	98.7	47.2				30.68	-	-	-	WASTE
		98.7	99.7	1.0				0.65	0.81	89.10	57.92	
		99.7	101.9	2.2				1.43	-	-	-	WASTE
		101.9	102.5	0.6				0.39	0.93	102.30	39.90	
		102.5	103.5	1.0				0.65	0.13	14.30	9.30	
		103.5	105.0	1.5				0.98	1.08	118.80	116.42	
		105.0	106.0	1.0				0.65	0.11	12.10	7.87	
106.0	106.9	0.9	0.59	3.19	350.90	207.03						
D-79-6	320	8.4	18.7	10.3	42°	44°	0.53	5.46	5.10	561.0	3063.06	
		18.7	23.9	5.2				2.76	-	-	-	WASTE
		23.9	27.2	3.3				1.75	4.30	473.0	827.75	
		27.2	27.9	0.7				0.37	0.54	59.40	21.98	
D-79-7	320	4.0	6.0	2.0	15°	44°	0.69	1.38	0.48	52.80	72.86	
		6.0	13.0	7.0				4.83	3.20	352.0	1700.16	
D-79-8	320	6.0	15.0	9.0	40°	70°	0.26	2.34	2.90	319.0	746.46	
		15.0	17.2	2.2				0.57	-	-	-	WASTE
		17.2	18.4	1.2				0.31	1.19	130.90	40.58	

- 11 -

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE X WIDTH	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR					
D-79-9	220	16.3	24.0	7.7	41°	36°	0.61	4.70	4.08	448.80	2109.36	
		24.0	31.7	7.7				4.70	-	-		WASTE
		31.7	32.5	0.8				0.49	1.40	154.0	75.46	
		32.5	40.0	7.5				4.58	-	-		WASTE
		40.0	43.7	3.7				2.26	5.25	577.50	1305.15	
		43.7	47.2	3.5				2.14	-	-		WASTE
		47.2	49.2	2.0				1.22	0.66	72.60	88.57	
		49.2	50.2	1.0				0.61	-	-		WASTE
		50.2	51.6	1.4				0.85	0.35	38.50	32.73	
		51.6	55.2	3.6	2.20	-	-		WASTE			
		55.2	56.3	1.1	0.67	0.63	69.30	46.43				
D-79-10	240	33.7	35.7	2.0	39°	31°	0.67	1.34	0.75	82.50	110.55	
		35.7	37.3	1.6				1.07	-	-		WASTE
		37.3	41.3	4.0				2.68	2.55	280.50	751.74	
		41.3	53.7	12.4				8.31	-	-		WASTE
		53.7	55.8	2.1				1.41	1.69	185.90	262.12	
		55.8	57.0	1.2				0.80	1.38	151.80	121.44	
		57.0	64.7	7.7				5.16	2.29	251.90	1299.80	
D-79-11	220 & 240	13.0	15.7	2.7	46°	62°	0.33	0.89	4.25	467.50	416.08	
		15.7	29.6	13.9				4.59	-	-		WASTE
		29.6	32.5	2.9				0.96	3.63	399.30	383.33	
		32.5	35.2	2.7				0.89	0.53	58.30	51.89	
		35.2	36.0	0.8				0.26	0.31	34.10	8.87	
		36.0	40.1	4.1				1.35	0.50	55.0	74.25	
		40.1	42.4	2.3				0.76	-	-		WASTE
		42.4	43.0	0.6				0.20	1.58	173.80	34.76	
		43.0	54.0	11.0				3.63	-	-		WASTE
		54.0	58.3	4.3				1.42	2.09	229.90	326.46	
		58.3	59.6	1.3	0.43	-	-		WASTE			
		59.6	74.0	14.4	4.75	2.25	247.50	1175.63				



SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

PAGE 4

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE X		REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR				WIDTH	REMARKS	
D-79-12	220	56.0	57.7	1.7	59°	31°	0.44	0.75	1.56	171.60	128.70		
		57.7	60.1	2.4				1.06	3.18	349.80	370.79		
		60.1	62.0	1.9				0.84	0.28	30.80	25.87		
		62.0	63.6	1.6				0.70	3.60	396.0	277.20		
		63.6	66.2	2.6				1.14	0.08	8.80	10.03		
		66.2	70.8	4.6				2.02	2.30	253.0	511.06		
		70.8	75.8	5.0				2.20	1.93	212.30	467.06		
		75.8	78.8	3.0				1.32	0.03	3.30	4.36		
		78.8	80.5	1.7				0.75	0.01	1.10	0.83		
D-79-13	220	12.6	17.0	4.4	44°	7°	0.71	3.12	3.55	390.50	1218.36		
		17.0	19.0	2.0				1.42	-	-	-		
		19.0	21.0	2.0				1.42	1.51	166.10	235.86		
		21.0	31.0	10.0				7.10	-	-	WASTE		
		31.0	36.0	5.0				3.55	2.98	327.80	1163.69		
		36.0	40.0	4.0				2.84	-	-	WASTE		
		40.0	40.7	0.7				0.50	1.53	168.30	84.15		
		40.7	43.7	3.0				2.13	-	-	WASTE		
		43.7	53.0	9.3				6.60	2.98	327.80	2163.48		
		53.0	55.3	2.3				1.63	-	-	WASTE		
		55.3	62.2	6.9				4.90	1.25	137.50	673.75		
		62.2	65.2	3.0				2.13	-	-	WASTE		
		65.2	67.2	2.0				1.42	0.48	52.80	74.98		
D-79-14		THIS HOLE DID NOT PASS THROUGH OVERBURDEN DUE TO SHALLOW ANGLE											
D-79-15	200	15.4	24.7	9.3	60°	15°	0.48	4.46	2.44	268.40	1197.06		
		24.7	26.5	1.8				0.86	-	-	WASTE		
		26.5	31.5	5.0				2.40	1.79	196.90	472.56		
		31.5	41.1	9.6				4.61	-	-	WASTE		
		41.1	46.6	5.5				2.64	1.34	147.40	389.14		
		46.6	48.0	1.4				0.67	-	-	WASTE		
		48.0	61.2	13.2				6.34	3.35	368.50	2336.29		

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

PAGE 5

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE X WIDTH	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR					
D-79-15 Cont.	200	61.2	62.2	1.0	60°	15°	0.48	0.48	-	-		WASTE
		62.2	64.9	2.7				1.30	0.28	30.80	40.04	
		64.9	65.2	0.3				0.14	-	-		WASTE
		65.2	67.1	1.9				0.91	2.43	267.30	243.24	
		67.1	68.0	0.9				0.43	-	-		WASTE
		68.0	69.7	1.7				0.82	0.65	71.50	58.63	
		69.7	71.7	2.0				0.96	1.70	187.0	179.52	
		71.7	80.0	8.3			3.98	1.35	148.50	591.03		
D-79-16	220	54.0	58.2	4.2	40°	19°	0.72	3.02	2.28	250.80	757.42	
		58.2	59.1	0.9				0.65	-	-		WASTE
		59.1	61.2	2.1				1.51	3.74	411.40	621.21	
		61.2	64.2	3.0				2.16	0.99	108.90	235.22	
		64.2	66.7	2.5				1.80	-	-		WASTE
		66.7	67.3	0.6				0.43	2.40	264.0	113.52	
		67.3	71.7	4.3				3.10	0.10	11.0	34.10	
		71.7	74.8	3.1			2.23	0.83	91.30	203.60		
D-79-17	240 & 260	21.3	28.9	7.6	29°	39°	0.88	6.69	3.16	347.60	2325.44	
		28.9	31.8	2.9				2.55	3.59	394.90	1007.00	
		31.8	38.5	6.7				5.90	-	-		WASTE
		38.5	45.0	6.5				5.72	2.16	237.60	1359.07	
		45.0	47.0	2.0				1.76	1.08	118.80	209.09	
		47.0	51.5	4.5				3.96	4.31	474.10	1877.44	
D-79-18	180 & 200	12.0	13.0	1.0	69°	57°	0.19	0.19	2.43	267.30	50.79	
		13.0	40.5	27.5				5.23	-	-		WASTE
		40.5	41.2	0.7				0.13	0.21	23.10	3.00	
		41.2	57.5	16.3				3.10	-	-		WASTE
		57.5	59.1	1.6				0.30	0.70	77.0	23.10	
		59.1	60.2	1.1			0.21	-	-		WASTE	

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE X WIDTH	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR					
D-79-18 Cont.	180 & 200	60.2	65.0	4.8	69°	57°	0.19	0.91	0.79	86.90	79.08	
		65.0	66.2	1.2				0.23	-	-	WASTE	
		66.2	66.8	0.6				0.11	0.91	100.10	11.01	
		66.8	67.8	1.0				0.19	-	-	WASTE	
		67.8	73.6	5.8				1.10	1.14	125.40	137.94	
		73.6	84.5	10.9				2.07	-	-	WASTE	
		84.5	92.0	7.5				1.43	2.54	279.40	399.54	
	92.0	98.7	6.7	1.27	1.76	193.60	245.87					
D-79-19	260 & 280	8.7	9.7	1.0	7°	52°	0.61	0.61	1.75	192.50	117.43	
		9.7	21.0	11.3				6.89	-	-	WASTE	
		21.0	23.2	2.2				1.34	0.20	22.0	29.48	
		23.2	48.8	25.6				15.62	-	-	WASTE	
		48.8	53.5	4.7				2.87	1.14	125.40	359.90	
		53.5	57.2	3.7				2.26	1.51	166.10	375.39	
		57.2	60.2	3.0				1.83	1.33	146.30	267.73	
		60.2	64.4	4.2				2.56	-	-	WASTE	
		64.4	68.7	4.3				2.62	2.14	235.40	616.75	
		68.7	77.0	8.3				5.06	-	-	WASTE	
		77.0	80.4	3.4				2.07	2.18	239.80	496.39	
D-79-20	240	8.0	10.0	2.0	66°	50°	0.26	0.52	0.81	89.10	46.33	
		10.0	13.0	3.0				0.78	-	-	WASTE	
		13.0	15.2	2.2				0.57	0.95	104.50	59.57	
		15.2	16.5	1.3				0.34	0.10	11.0	3.74	
		16.5	24.2	7.7				2.00	-	-	WASTE	
		24.2	25.0	0.8				0.21	2.91	320.10	67.22	
		25.0	28.0	3.0				0.78	-	-	WASTE	
		28.0	30.7	2.7				0.70	1.85	203.50	142.45	
		30.7	59.2	28.5				7.41	-	-	WASTE	
		59.2	60.7	1.5				0.39	1.15	126.50	49.34	
	60.7	75.0	14.3	3.72	-	-	WASTE					
	75.0	81.0	6.0	1.56	0.89	97.90	152.72					

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

PAGE 7

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR				X WIDTH	
SURFACE TRENCH		0	2.0	2.0				2.0	4.44	488.40	976.80	Width measurements on surface
		2.0	6.8	4.8				4.8	2.83	311.30	1494.24	
		6.8	11.3	4.5				4.5	1.03	113.30	509.85	
		11.3	15.2	3.9				3.9	1.60	176.00	686.40	
		15.2	21.1	5.9				5.9	2.53	278.30	1641.97	
		21.1	25.1	4.0				4.0	0.30	33.00	132.00	
		25.1	29.7	4.6				4.6	0.50	55.00	253.00	
		29.7	34.6	4.9				4.9	0.48	52.80	258.72	
	34.6	40.0	4.6				4.6	0.21	23.10	106.26		

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

PAGE 8

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR				X WIDTH	
P.1		20.0	30.0	10.0					0.03	3.30		70 ft. hole
		30.0	50.0	20.0					1.58	173.80		
		50.0	60.0	10.0					0.85	93.50		
P.2		15.0	20.0	5.0					0.03	3.30		80 ft. hole
		20.0	25.0	5.0					0.03	3.30		
		25.0	75.0	50.0					0.04	4.40		
P.4		45.0	60.0	15.0					0.06	6.60		65 ft. hole
P.5		10.0	30.0	20.0					0.57	62.70		80 ft. hole
		30.0	45.0	15.0					0.14	15.40		
		45.0	75.0	30.0					0.03	3.30		
P.7		25.0	35.0	10.0					0.03	3.30		50 ft. hole
		35.0	50.0	15.0					1.07	117.70		
P.9		25.0	50.0	25.0					4.30	473.0		95 ft. hole
		50.0	75.0	25.0					5.07	557.70		
		75.0	95.0	20.0					1.47	161.70		
P.10		40.0	50.0	10.0					0.89	97.90		55 ft. hole
P.11		10.0	30.0	20.0					2.84	312.40		80 ft. hole
		30.0	60.0	30.0					0.12	13.20		
		60.0	75.0	15.0					0.10	11.0		
P.12		0	10.0	10.0					1.12	123.20		25 ft. hole
		10.0	20.0	10.0					1.25	137.50		

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 1  
BASIC BOREHOLE DATA

HOLE NUMBER	NEAREST SECTION	BOREHOLE LOCATION			CORRECTION ANGLES			TRUE WIDTH (Ft)	ASSAY % WO <sub>3</sub>	DISCOUNTED VALUE	VALUE X WIDTH	REMARKS
		FROM	TO	INTERVAL	ON SECTION	ON PLAN	FACTOR					
P.13		0	15.0	15.0				3.23	355.30		30 ft. hole	
P.14		0	10.0	10.0				3.05	335.50		20 ft. hole	
P.17		0	15.0	15.0				0.06	6.60		35 ft. hole	
		15.0	30.0	15.0				0.35	38.50			
P.18		5.0	20.0	15.0				0.14	15.40		25 ft. hole	
D-72-2		124.5	126.5	2.0			15°	1.07	117.70			
D-72-3		15.0	19.0	4.0	0°		15°	0.97	3.88	2.06	226.60	879.21
		19.0	27.3	8.3					8.05	2.86	314.60	2532.53

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 2  
MINEABLE ZONES

PAGE 1

SECTION	DIAMOND DRILL HOLE NUMBER	FROM	TO	HOLE INTERVAL	TRUE WIDTH (FT)	DISCOUNTED VALUE	DISCOUNTED		REMARKS
							VALUE X WIDTH	% AGE WO <sub>3</sub>	
140	SURFACE TRENCH	0	34.6	34.6	34.6	172.05	5952.98	1.56	Width measurements on surface
180	D-79-1	14.4	70.3	55.9	43.60	168.19	7333.30	1.53	
	D-79-18	60.2	98.7	38.5	7.32	119.32	873.44	1.08	
	D-79-3	90.0	113.0	23.0	16.56	115.5	1912.68	1.05	
200	D-79-15	15.4	80.0	64.6	31.00	177.66	5507.51	1.62	
	D-79-18	60.2	98.7	38.5	7.32	119.32	873.44	1.08	
220	D-79-3	13.0	33.0	20.0	14.40	84.15	1211.76	0.77	
	D-79-4	0	46.0	46.0	16.10	215.36	3467.31	1.96	
	D-79-9	16.3	43.7	27.4	16.71	208.86	3489.97	1.90	
	D-79-11	13.0	74.0	61.0	20.13	122.77	2471.27	1.12	
	D-79-12	56.0	75.8	19.8	8.71	205.59	1790.71	1.87	
	D-79-13	12.6	62.2	49.6	35.22	157.28	5539.29	1.43	
	D-79-16	54.0	74.8	20.8	14.98	131.18	1965.07	1.19	
240	D-79-2	8.0	19.8	11.8	9.79	277.96	2721.27	2.53	
	D-79-2	64.5	94.5	30.0	24.90	150.90	3757.51	1.37	
	D-79-5	38.5	51.5	13.0	8.45	179.35	1515.51	1.63	
	D-79-10	33.7	64.7	31.0	20.77	122.56	2545.65	1.11	
	D-79-20	8.0	30.7	22.7	5.90	54.12	319.31	0.49	
260	D-79-2	64.5	94.5	30.0	24.90	150.90	3757.51	1.37	
	D-79-5	98.7	106.9	8.2	5.33	83.80	437.44	0.76	
	D-79-17	21.3	51.5	30.2	26.57	255.10	6778.04	2.32	
	D-79-19	48.8	80.4	31.6	19.28	109.76	2116.16	1.00	

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 2  
MINEABLE ZONES

PAGE 2

SECTION	DIAMOND DRILL HOLE NUMBER	FROM	TO	HOLE INTERVAL	TRUE WIDTH (FT)	DISCOUNTED VALUE	DISCOUNTED		REMARKS
							X WIDTH	% AGE WO <sub>3</sub>	
280	D-79-19	48.8	80.4	31.6	19.28	109.76	2116.16	1.00	
300	D-72-3	15.0	27.3	12.3	11.93	285.98	3411.74	2.60	
320	D-72-2	124.5	130.0	5.5	5.0	40.00	200.00	0.36	Marginal ore
	D-79-6	8.4	27.2	18.8	9.96	390.64	3890.81	3.55	
	D-79-7	4.0	13.0	9.0	6.21	285.51	1773.02	2.60	
340	D-79-8	6.0	25.2	19.2	5.0	157.41	787.04	1.43	



SILENCE LAKE PROJECT  
 ORE RESERVE SUMMARY

TABLE NO. 3

	PROVEN	GRADE	PROBABLE	GRADE	TOTAL	GRADE
UPPER BAND	17,521	1.51	6,529	1.46	24,050	1.49
LOWER BAND	16,210	1.43	9,342	1.51	25,552	1.46
TOTAL	33,731	1.47	15,871	1.49	49,602	1.48

Include ore at Clearwater assured proven at same grade say:					1,438	1.48
				TOTAL	51,000	1.48

ADDITIONAL "POSSIBLE" ORE 13,200      1.62

SPECULATIVE TOTAL PRESENTLY INDICATED 64,200 TONS

SILENCE LAKE PROJECT  
 ORE RESERVE ESTIMATES

TABLE NO. 4  
 PROVEN AND PROBABLE ORE  
 UPPER BAND

SECTION	AREA	DRILL HOLE	DIMENSION ON SECTION (FT)	STRIKE LENGTH (FT)	PROVEN TONS	GRADE % WO <sub>3</sub>	PROBABLE TONS	GRADE % WO <sub>3</sub>	TOTAL TONS	GRADE % WO <sub>3</sub>	REMARKS
140	A	Trench	35.0 x 16.0	38.0	669	1.56	1358	1.56	2027	1.56	
180	B	18	57.0 x 8.2	30.0	868	1.08	467	1.08	1335	1.08	
	C	1	51.2 x 43.0	30.0	4718	1.53	1573	1.53	6291	1.53	
200	D	18	72.0 x 16.5	20.0	905	1.08	1358	1.08	2263	1.08	
	E	15	55.0 x 34.3	20.0	2515	1.62	1078	1.62	3593	1.62	
220	F	3	18.0 x 28.5	20.0	977	0.77	-	-	977	0.77	
	G	4	15.0 x 44.2	20.0	1263	1.96	-	-	1263	1.96	
	H	13	12.2 x 62.0	20.0	1441	1.43	-	-	1441	1.43	
	I	11	9.0 x 69.0	20.0	1183	1.12	-	-	1183	1.12	
	J	9	10.0 x 58.0	20.0	1105	1.90	-	-	1105	1.90	
240	K	20 & 2 1 : 4	10.0 x 27.5	40.0	734	2.12	314	2.12	1048	2.12	
	L	5	10.0 x 40.0	40.0	1143	1.63	381	1.63	1524	1.63	
TOTALS					17,521	1.51	6529	1.46	24,050	1.49	

SILENCE LAKE PROJECT  
ORE RESERVE ESTIMATES

TABLE NO. 5  
PROVEN AND PROBABLE ORE  
LOWER BAND

SECTION	AREA	DRILL HOLE	DIMENSION ON SECTION (FT)	STRIKE LENGTH (FT)	PROVEN TONS	GRADE % WO <sub>3</sub>	PROBABLE TONS	GRADE % WO <sub>3</sub>	TOTAL TONS	GRADE % WO <sub>3</sub>	REMARKS
180	N	3	17.0 x 50.5	54	2208	1.05	2208	1.05	4416	1.05	
220	O	12 & 16 1:1	14.0 x 76.5	30	1530	1.53	1530	1.53	3060	1.53	
240	P	10	30.0 x 72.0	20	2674	1.11	1440	1.11	4114	1.11	
	Q	2	27.0 x 42.0	20	1620	1.37	540	1.37	2160	1.37	
260	R	17	64.5 x 27.0	20	1990	2.32	1327	2.32	3317	2.32	
	S	19	24.0 x 27.0	20	1234	1.00	-	-	1234	1.00	
	T	2	25.0 x 25.5	20	1214	1.37	-	-	1214	1.37	
	U	5	24.0 x 13.0	20	594	0.76	-	-	594	0.76	
280	V	19	19.5 x 77.5	20	1727	1.00	1151	1.00	2878	1.00	
300	W	72-3	47.5 x 12	20	543	2.60	543	2.60	1086	2.60	
320	X	7	11.0 x 6.5	20	136	2.60	-	-	136	2.60	
	Y	6	40.0 x 9.0	20	411	3.55	274	3.55	685	3.55	
240	Z	8	69.0 x 5.0	20	329	1.43	329	1.43	658	1.43	
TOTAL					16,210	1.43	9,342	1.51	25,552	1.46	

SILENCE LAKE PROJECT  
 ORE RESERVE SPECULATION

TABLE NO. 6  
 POSSIBLE ORE

SECTION	EXTENSION OF AREA	HOLE NUMBER	AREA ON SECTION	POSSIBLE STRIKE LENGTH	TONS	GRADE	REMARKS
240	K	20 & 2 1:4	10.0 x 27.5	10.0	262	2.12	Not to be used definitively until placed in proven or probable categories
	L	5	10.0 x 40.0	10.0	381	1.63	
280	V	19	90.0 x 19.5	20.0	3343	1.00	
300	W	72.3	150.0 x 12.0	20.0	3429	2.60	
320	M	72-2	5 x 110.0	60.0	3143	0.36	
	Y	6	75.0 x 10.0	20.0	1429	3.55	
340	Z	8	85.0 x 5.0	30.0	1214	1.43	
TOTAL					13,201	1.62	

### MINING

A production rate of 50 tons per day has been provisionally selected. This figure anticipates mining the 60,000 tons (TOTAL) presently delineated at 15,000 tons per year. Therefore the production period will be at least 4 years which should result in reasonable economies of scale and allow further reserves to be discovered and developed.

It is anticipated that the detailed mining plan will embody both open-pit and underground extraction. The proportions and locations of each will be decided by economic considerations.

Using order of magnitude estimates it is reasonable to assume that at least 80% of the existing ore will be mineable via open-pit at an approximated 1.5 - 2, :1 stripping ratio. The remainder (plus the POSSIBLE tonnage) will be mineable by cut and fill methods with high efficiencies and low costs. Alternatives for the actual mining of the ore are to purchase equipment and carry out the mining, or to negotiate a Contractor mining agreement. The next stage of the project should include economic and practical evaluations to determine the best mining arrangement. Meanwhile, the costs below reflect to what is estimated as a reasonable "all-in" cost.

Expected cost for open pit: \$20.00 per ton  
(This figure should be the total cost including any capital equipment purchased for Company mining)

Underground mining including development, equipment and ancillaries is estimated at: \$35.00 per ton

$$\begin{aligned} \text{OVERALL MINING COST} &= \frac{20 \times 0.8 + 35 \times 0.2}{1} \\ &= \underline{\underline{\$23.00}} \text{ per ton} \end{aligned}$$

Overall cost to mine the current 50,000 tons (proven and probable reserve) = \$1,150,000.00

### PROCESSING

Previous metallurgical tests indicate that the potential flowsheet will be conventional and simple, using gravity as the main concentrating process with the remainder of the scheelite being recovered by flotation. It may also be economically desirable to incorporate leaching. Tests are underway to finalize the design criteria and optimise the process technology.

With the qualification that they are indicative only, the following figures should bracket the cost of providing the concentrator and operating it in an effective manner.

Based upon 50 tons per day operation

Concentrator Capital Cost including tailing disposal, power plant and water supply	\$450,000 - \$1,500,000
Operating Cost	\$12.50 per ton

ANCILLARIES

Capital Cost of Warehouse, Office, Maintenance and misc. Labour Facilities	\$150,000
Engineering, Design, Testing, Surveys, Studies, Procurement and Project Management	\$250,000
Capital Contingency	\$100,000

TOTAL ANCILLARIES	<u>\$500,000</u>
-------------------	------------------

Operating Costs for Head Office, Mine Office, Administration etc.	\$5.00 per ton
---	----------------

ECONOMICS

Order of magnitude economics are as follows:-

Ore reserves	50,000 tons @ 1.5% WO <sub>3</sub>
Contained scheelite	75,000 stu*
Estimated recovery 85%	= 63,750 stu*
"Net smelter return"	= \$160.00 per stu*
Total recoverable value	= \$10,200,000
Estimated Capital Cost **	\$950,000 - \$2,000,000
Use high figure	= \$2,000,000
Assume 20% interest for 6months	200,000
TOTAL CAPITAL COST***	<u>\$2,200,000</u>
TOTAL OPERATING COST	= <u>\$40.50 per ton</u>
or with 50,000 tons: TOTAL	= <u>\$2,025,000</u>

\* Short ton unit

\*\* Assumes Contract Mining or conversely, if the mining is carried out by Dimac, the Operating Cost will decrease and the Capital Cost increase.

\*\*\* Proposed exploration programme (see recommendations) of \$215,000 is not included in this statement.

Summary

Recovered value		\$10,200,000
Total Costs		\$ 4,225,000
		<hr/>
Net pre-tax revenue		\$ 5,975,000
		<hr/>
Life of project	$\frac{50,000}{15,000}$	= 3.3 years
Net pre-tax revenue per year		= \$1,810,000
R.O.I. per year (simple interest)		= <u>82%</u>
Alternatively this project would repay the Capital Cost in approximately <u>8 months</u> mining at a rate of 15,000 tons per year.		

CONCLUSIONS AND RECOMMENDATIONS

The Gotcha Project is an exceptional production opportunity with considerable potential beyond the presently delineated reserves. The further POSSIBLE reserve of some 13,200 tons will dramatically increase the profitability. Also the "geologically possible" reserve outlined in this report should provide additional plant feed.

We recommend that future work be aimed at developing the project through to production as speedily as practical.

The following programme has the objective of providing a detailed technical design document which can be used to make a final production decision and to obtain any financial requirements. It should be noted that the suggested work statement goes beyond what would normally be acceptable for a conventional "Feasibility Study". This work is justified by the tonnage and grade of the ore and the favourable technical features of the deposit. By detailing design specifications, considerable savings should be made especially in time and probably money. Obviously, should any of the developing design criteria necessitate re-thinking of production concepts, this should be carried out.

PRODUCTION ORIENTED PROGRAMME

Metallurgy and Process Plant

1. Complete the current metallurgical tests, which should develop and optimize a flow sheet and provide design criteria for equipment selection and sizing. In view of the "high-grade" ore gravity, flotation and leaching processes should be evaluated.

2. Carry out optimization studies and select sites for the integration of the mill location, tailing area, power plant location, water supply and waste disposal areas, and plan interconnecting roads and services.
3. Design the process flow sheet, select and size equipment write specifications, obtain and evaluate firm prices. This programme should also include investigations of the benefits of used and/or reconditioned equipment.
4. Design and develop general arrangement drawings, also specific drawing for Site Preparation and programme Construction and Installation (mechanical, electrical, civil, piping and instrumentation sectors).
5. Write specifications, obtain and evaluate firm price bids for all Construction and Installation. This should include procedures, costs and guarantees for plant run-in and "tuning".

#### Mining

1. Derive mining parameters to determine cut-off points for underground and open pit mining.
2. Carry out mine planning to technically and economically develop an open pit and underground mine layout.
3. Develop a mine production schedule to maximize equipment and capital utilisation, this should include "smoothing" of waste removal and specify pre-production stripping, roads etc.
4. Carry out studies to investigate and determine the benefits of mining by Contract, compared to Company mining. Obtain accurate costs for both situations.
5. Design the mining operation in sufficient detail so as to determine costs for the potential surface and underground operations. This should include a detailed timetable.
6. Design and specify service requirements, e.g. labour, staff, fuel, vehicles, power and water. Develop costs for each.



### Ancillaries

1. Specify requirements, design and cost the power supply, water supply, waste disposal, tailing area, offices, warehouse and maintenance building.
2. Specify ancillary equipment and obtain firm price bids for its supply.
3. Design Construction and Installation plans and draft layout requirements. Obtain firm price bids for all ancillary facilities and evaluate Contractors technically and economically.
4. Detail all the "Approval" requirements and Permits needed and lay out a programme to comply with, or obtain them in time for Construction to proceed according to plan.
5. Design and develop infrastructure requirements and costs for manpower, supplies, concentrate shipping, housing, commuting etc.

### Project Management and Control

1. Develop a complete integrated budget (time and money) with constraints and critical areas highlighted.
2. Detail a project control and management programme showing clearly personnel, responsibilities and procedures. Lines of Authority should be clearly identified and progress co-ordination should include Corporate decision making requirements.

### Detailed Report

It would be both logical and expedient to compile all the above features into a single document (plans will be indexed and referenced). This document would be a detailed "Technical Design and Construction Programme for the Silence Lake Project". When presented in report form it would be based upon firm price quotes.

The report could be used to make a final production decision and to obtain the finances necessary to place the project into production.

Costs

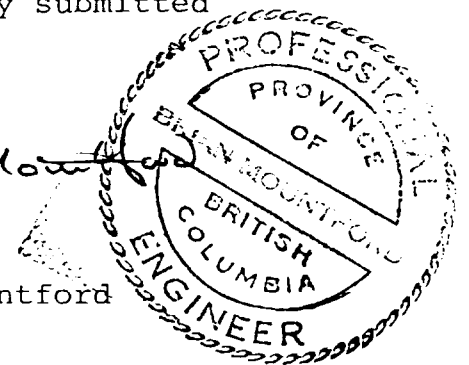
Estimated cost for the work outlined  
above is:

METALLURGY AND PROCESS PLANT	\$85,000
MINING	35,000
ANCILLARIES (Including maps and surveys)	50,000
PROJECT MANAGEMENT AND CONTROL	10,000
DETAILED REPORT	20,000
MISCELLANEOUS EXPENSES, TRAVEL, TEST, ETC	25,000
	<hr/>
TOTAL PROGRAMME COST	\$225,000
	<hr/> <hr/>

Respectfully submitted

*B. Mountford*

B. Mountford



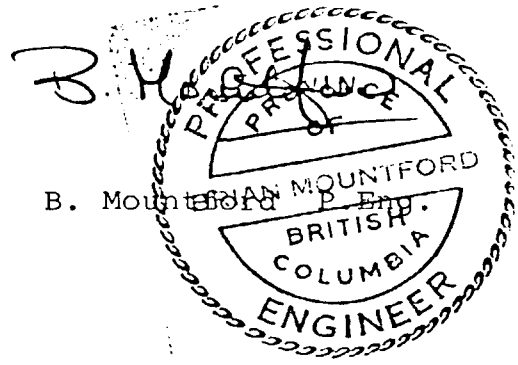
# BRIAN MOUNTFORD AND ASSOCIATES LTD.

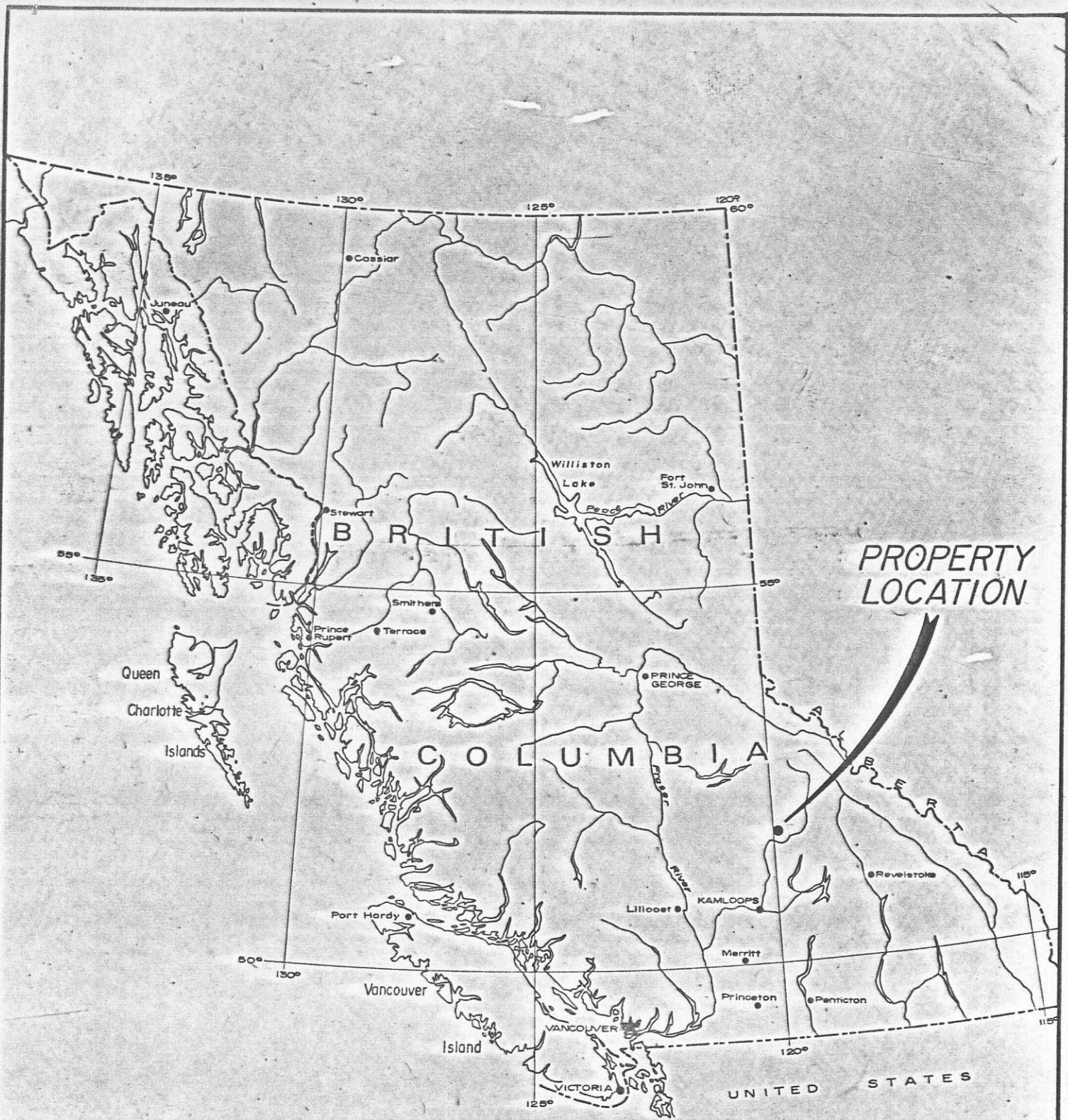
811 - 675 WEST HASTINGS STREET, VANCOUVER, B.C. V6B 1N2  
TELEPHONE 681-2377

## WRITERS CERTIFICATE

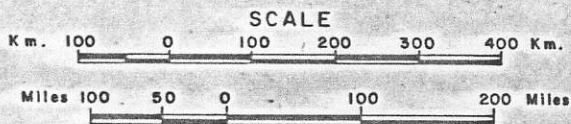
I, Brian Mountford of Vancouver, B.C., hereby certify that:

1. I am a Mining Engineer, residing at 10230 - 173rd Street, Surrey, with an office at #811 - 675 West Hastings Street, Vancouver, B.C.
2. I am an honours graduate from the North Staffs Polytechnic U.K. (1963) and received chartered status in the Engineering Institute of the U.K. in 1964.
3. I am a certified member of the Association of Professional Engineers in the Provinces of British Columbia and Ontario.
4. I am the author of this report.
5. I have practiced my profession continuously since graduation, primarily in the fields of Consulting, Mine Development and Mine Operation.





**PROPERTY  
LOCATION**



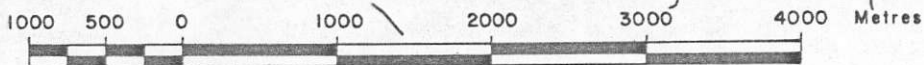
DIMAC RESOURCE CORP.  
 VANCOUVER, B.C.  
 SILENCE LAKE PROJECT

**LOCATION MAP**

BRIAN MOUNTFORD & ASSOCIATES LTD.  
 VANCOUVER, B.C.

DATE: OCT., 1980      DWG. NUMBER:

SCALE 1:50,000



THIS DRAWING IS A PART COPY OF THE OFFICIAL MINERAL TITLES MAP 82 M/13 EAST HALF ISSUED BY THE PROVINCE OF BRITISH COLUMBIA.

MAX 7  
1955 (7)

MAX 8  
1956 (7)

MAX (5)  
1779 (3)

MAX  
1778 (3)

MAX (6)  
1780 (3)

MAX (3)  
1777 (3)

MAX  
1593 (11)

MOSQUITO  
4  
1731 (3)

MOSQUITO  
139 (10)

MAX (2)  
1776 (3)

MAXWELL

MOSQUITO  
5  
1732 (3)

MOSQUITO  
68 (7)

MOSQUITO  
3  
1717 (2)

BUG  
69 (7)

BUG  
2  
1718 (2)

GOTCHA 2  
2834 (6)

GOTCHA 3  
GOTCHA  
881 (6)  
MAX  
1145 (2)

GOTCHA 4

1146 (2) 1927 (6) 2835 (7)  
GOTCHA 6 2837 (7) 2836 (7)

GOTCHA 5

RICHIE CREEK

RIVER

RAFT

WEST R.

SILENCE LAKE

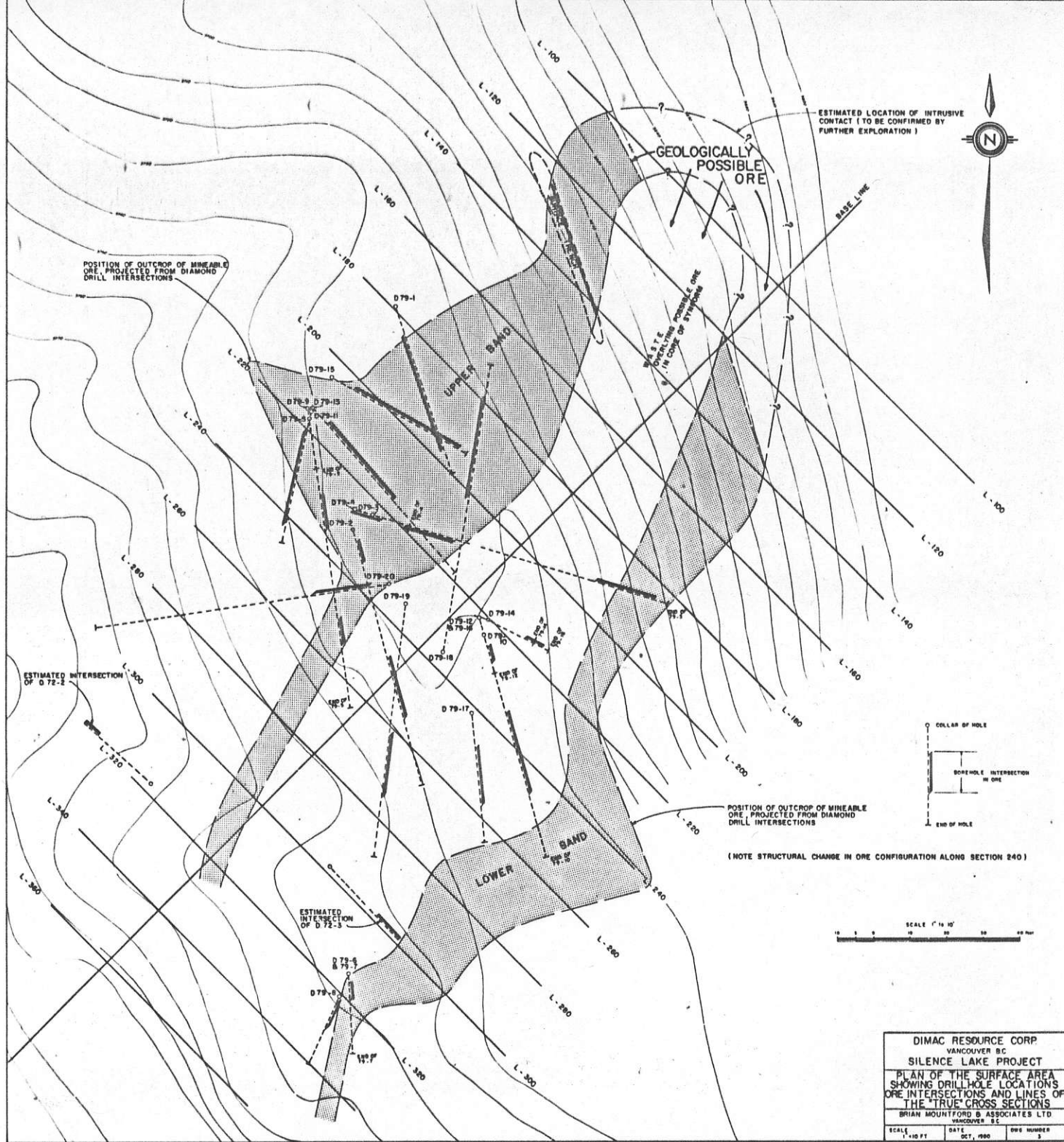
DIMAC RESOURCE CORP.  
VANCOUVER, B.C.  
SILENCE LAKE PROJECT

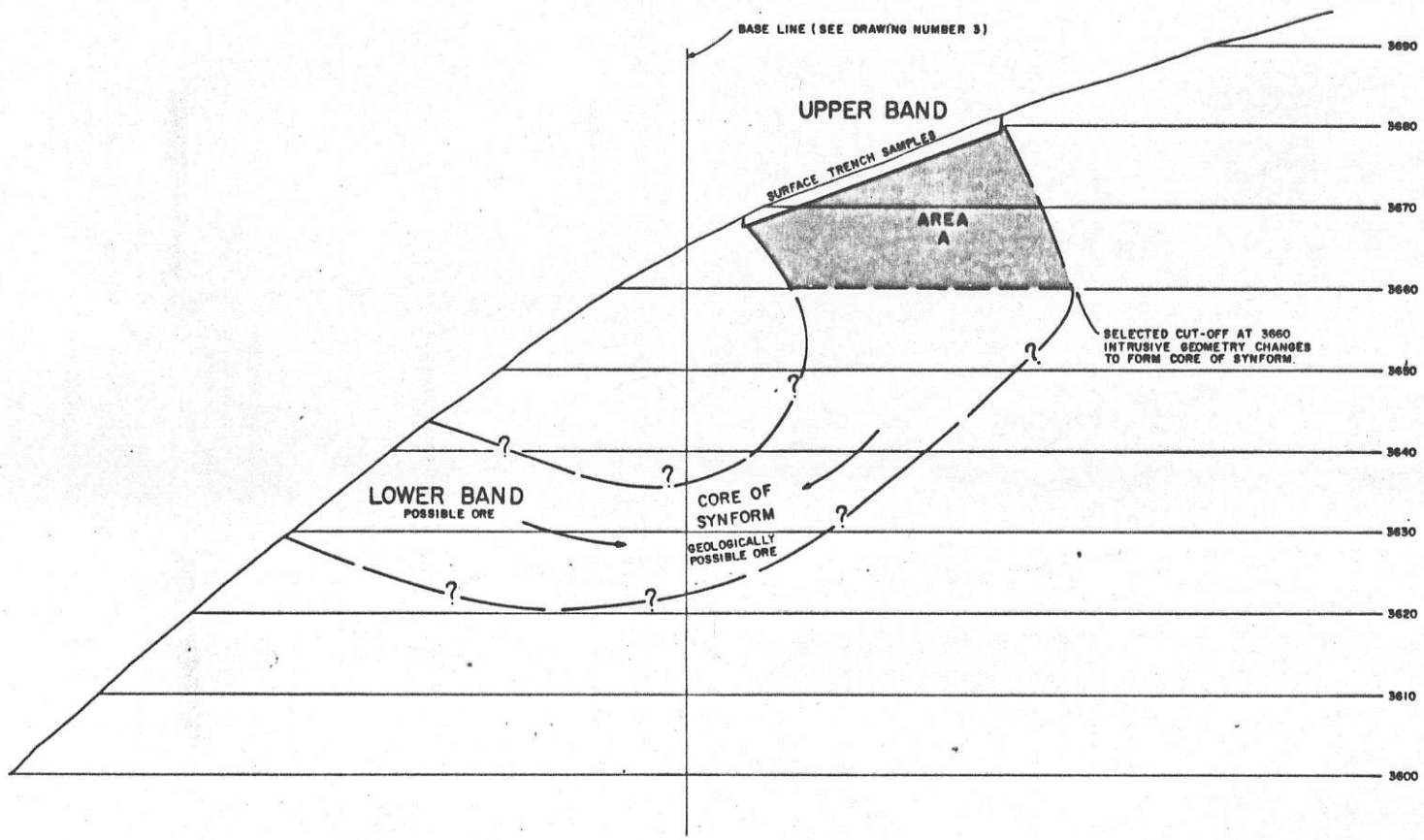
MINERAL CLAIMS


BRIAN MOUNTFORD & ASSOCIATES LTD.  
VANCOUVER, B.C.

DATE: OCT., 1980

DWG. NUMBER: 2

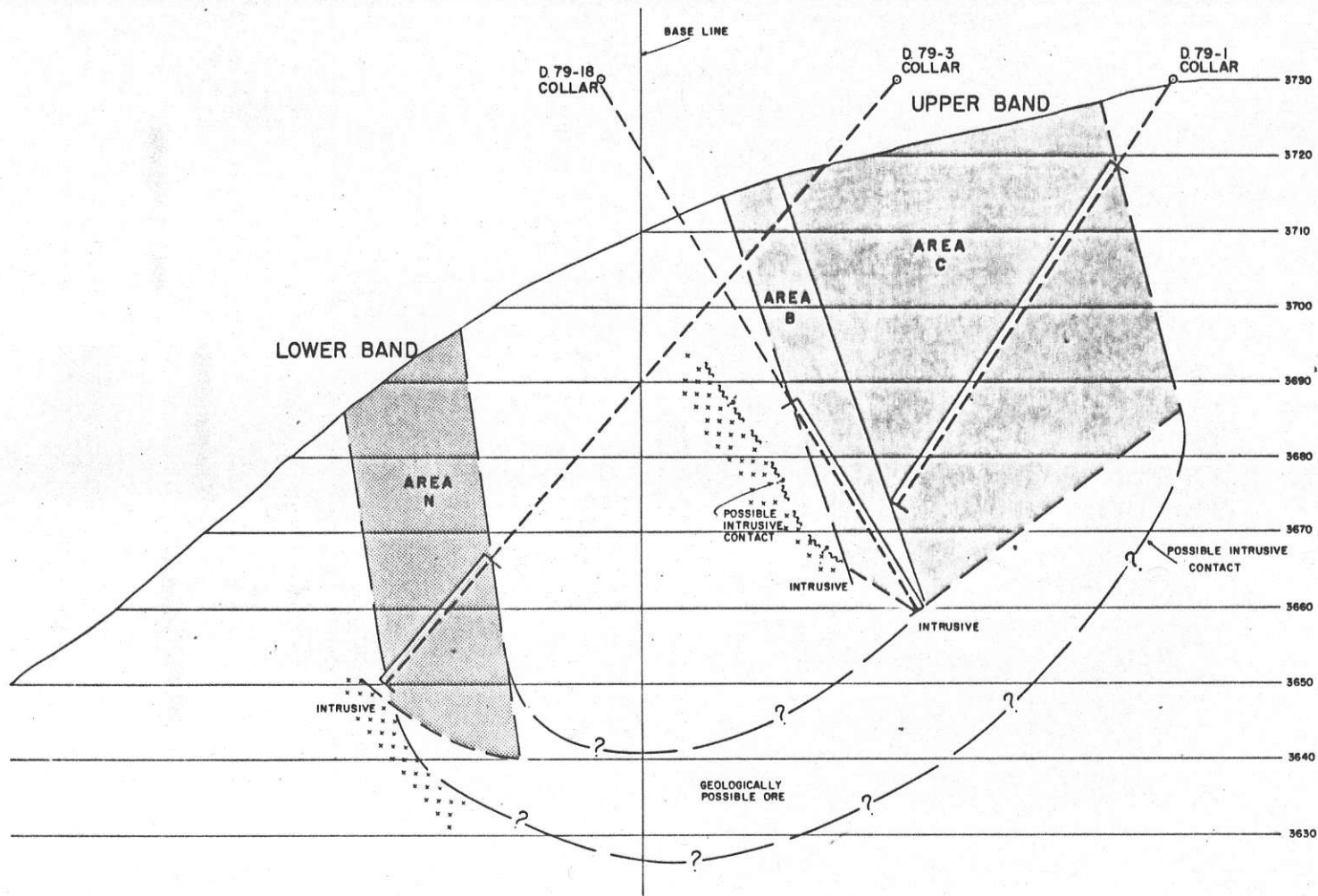





 ... PROVEN AND PROBABLE ORE

**NOTE:**  
 1 FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3.  
 2 SECTION VIEWED LOOKING SOUTH WEST.

DIMAC RESOURCE CORP. VANCOUVER B.C.		
SILENCE LAKE PROJECT		
CROSS SECTION 140 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE 1" = 10 FT	DATE OCT, 1980	DWG NUMBER 4

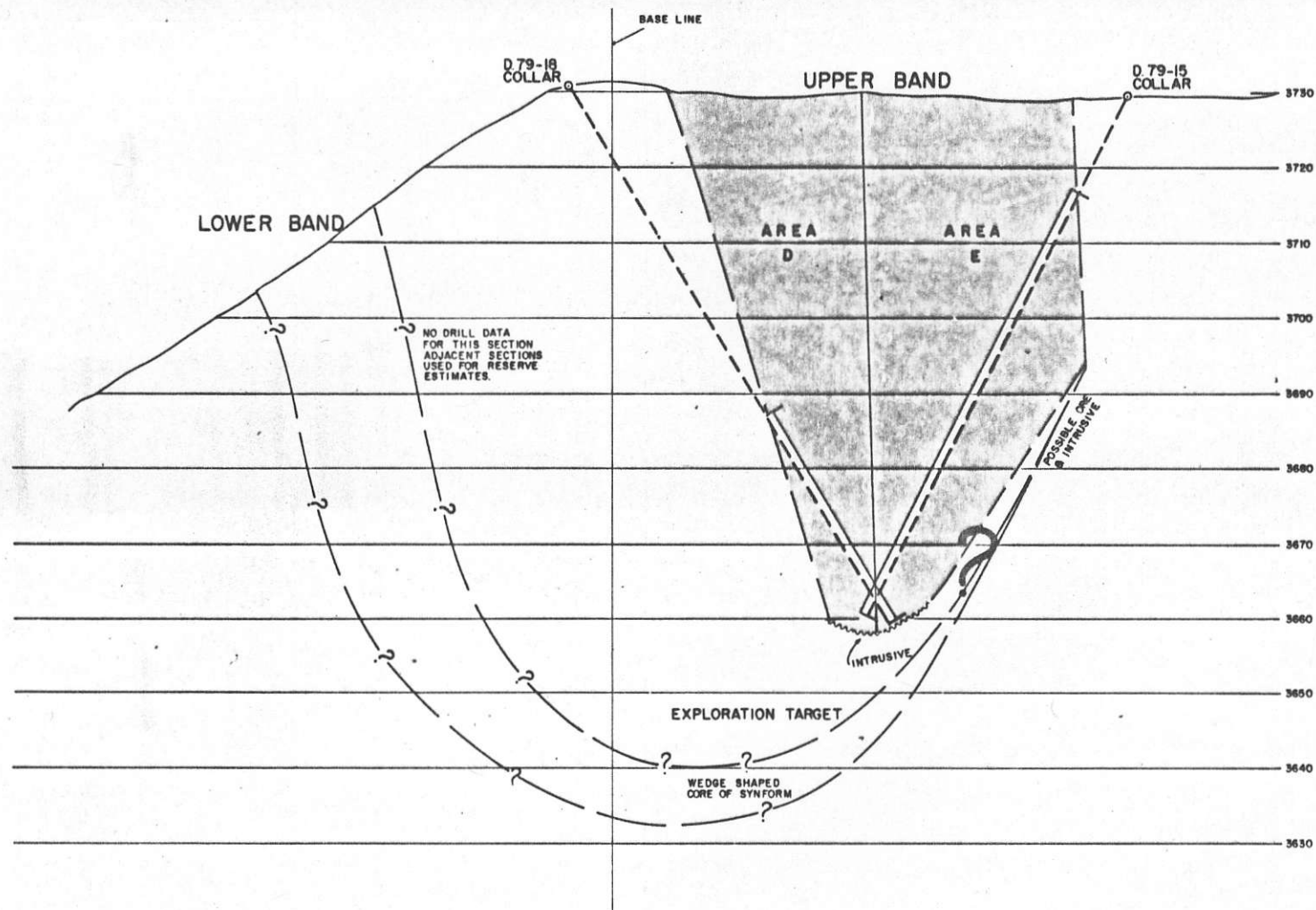



 ... PROVEN AND PROBABLE ORE

**NOTE:**  
 1 FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3  
 2 SECTION VIEWED LOOKING SOUTH WEST

DIMAC RESOURCE CORP. VANCOUVER B.C.		
SILENCE LAKE PROJECT		
CROSS SECTION 180 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD VANCOUVER B.C.		
SCALE: 1" = 10 FT	DATE: OCT, 1980	DWG NUMBER 5



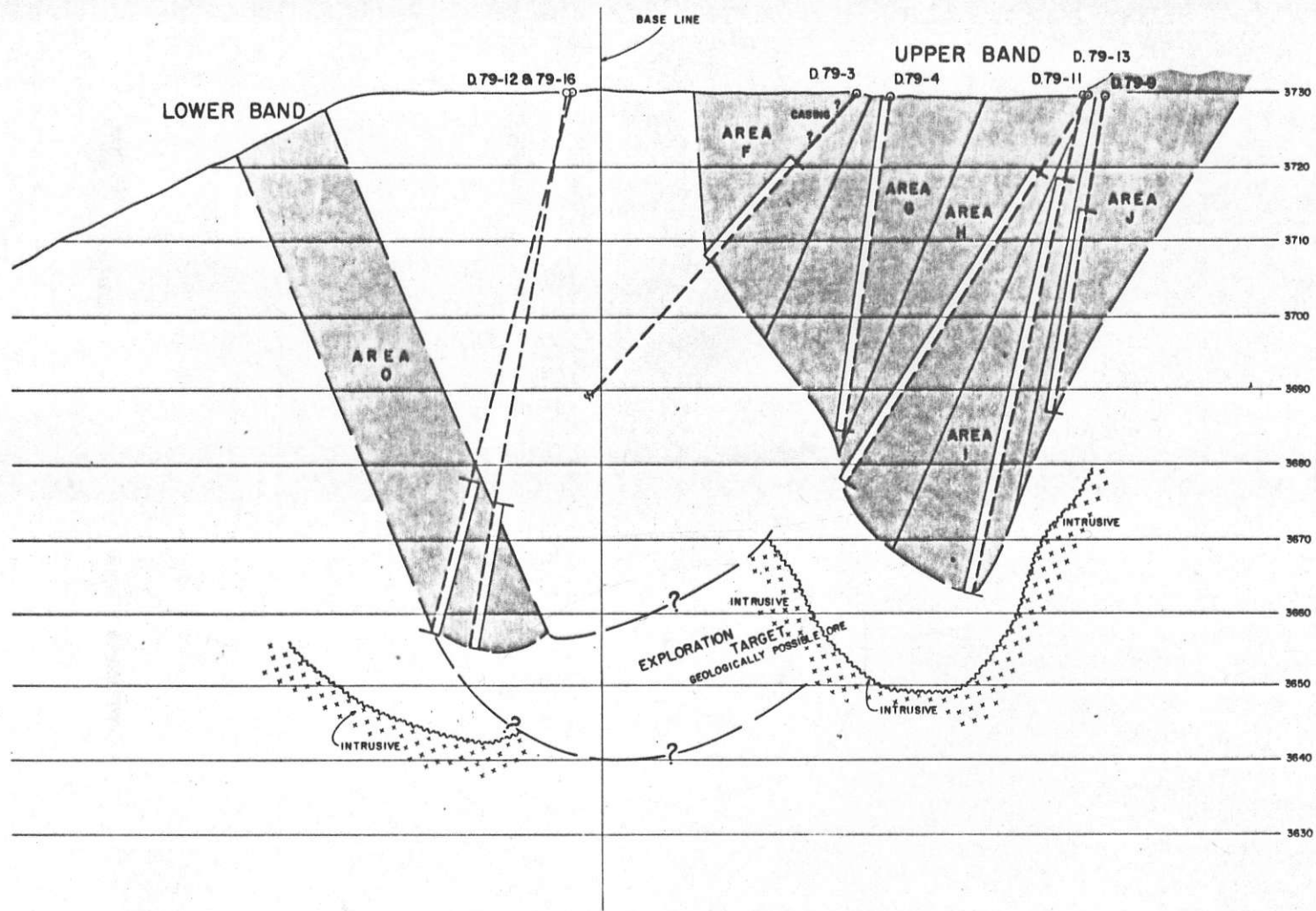



 ... PROVEN AND PROBABLE ORE.

NOTE:

1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3
2. SECTION VIEWED LOOKING SOUTH WEST.

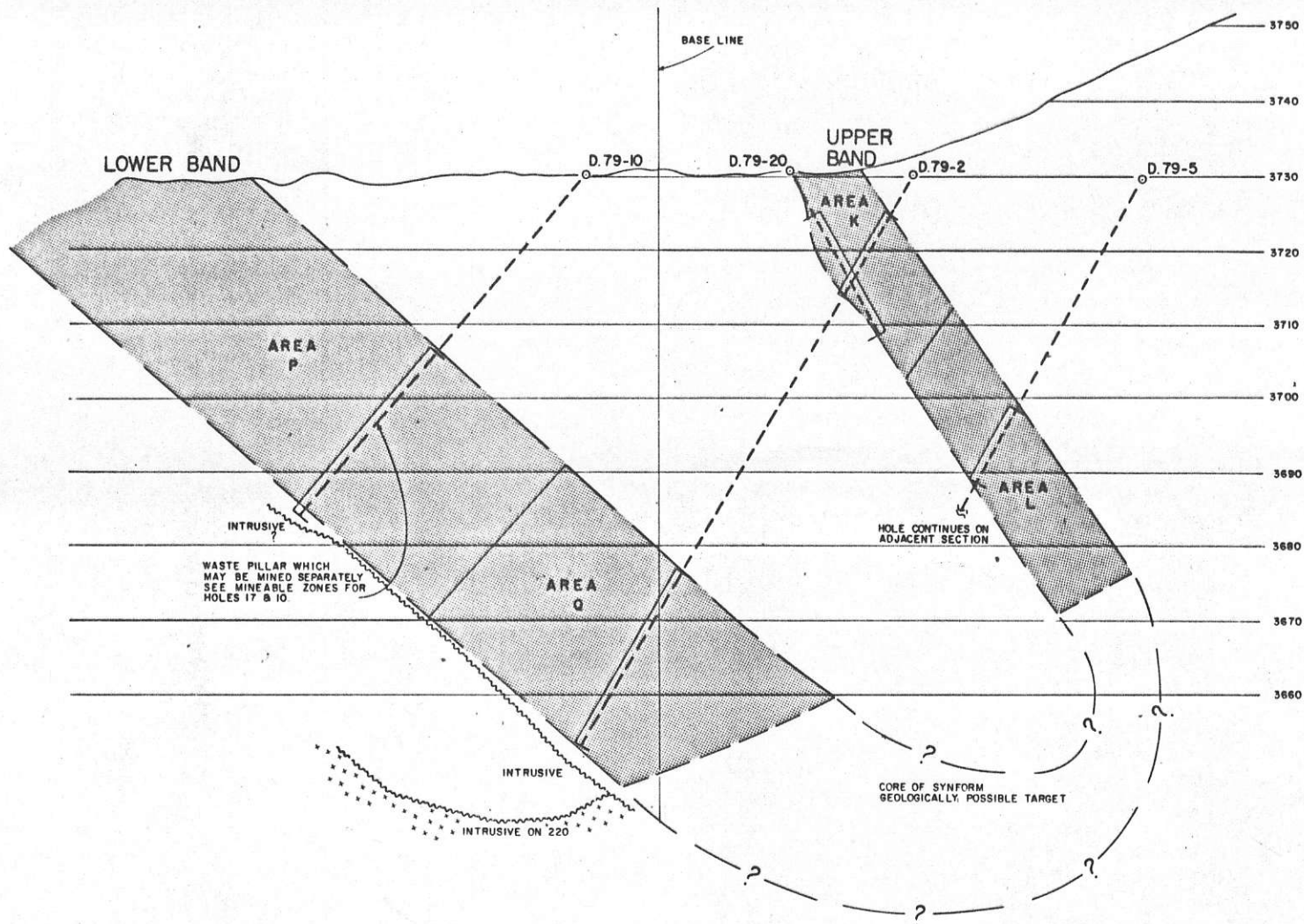
DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
<b>CROSS SECTION 200</b> SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE: 1" = 10 FT	DATE: OCT, 1980	DWG NUMBER 6




 ... PROVEN AND PROBABLE ORE

- NOTE:  
 1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3.  
 2. SECTION VIEWED LOOKING SOUTH WEST.

DIMAC RESOURCE CORP. VANCOUVER B.C.		
SILENCE LAKE PROJECT		
CROSS SECTION 220 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE: 1"=10 FT	DATE: OCT, 1980	DWG NUMBER: 7

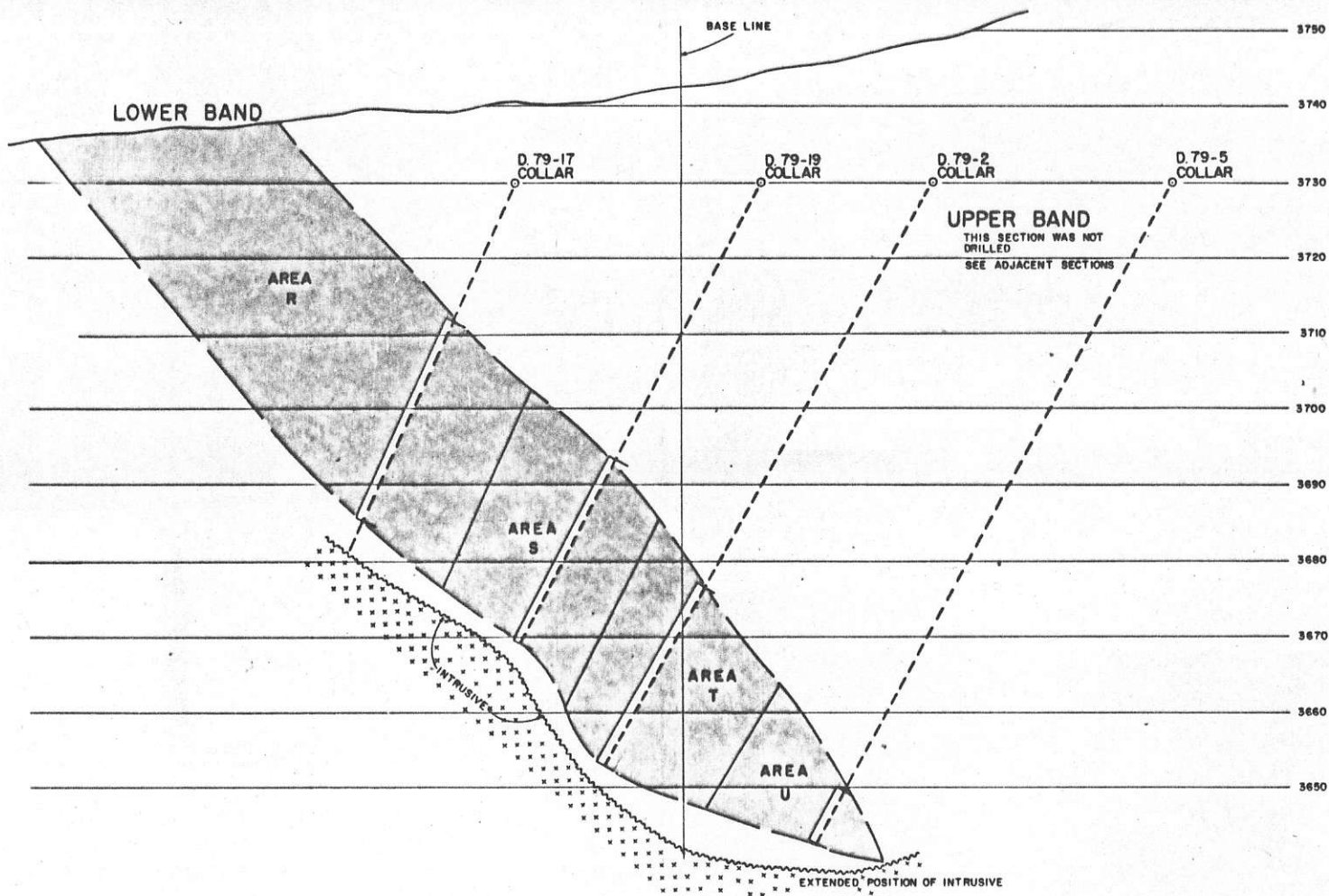



 ... PROVEN AND PROBABLE ORE

**NOTE:**

- 1 FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3
- 2 SECTION VIEWED LOOKING SOUTH WEST.

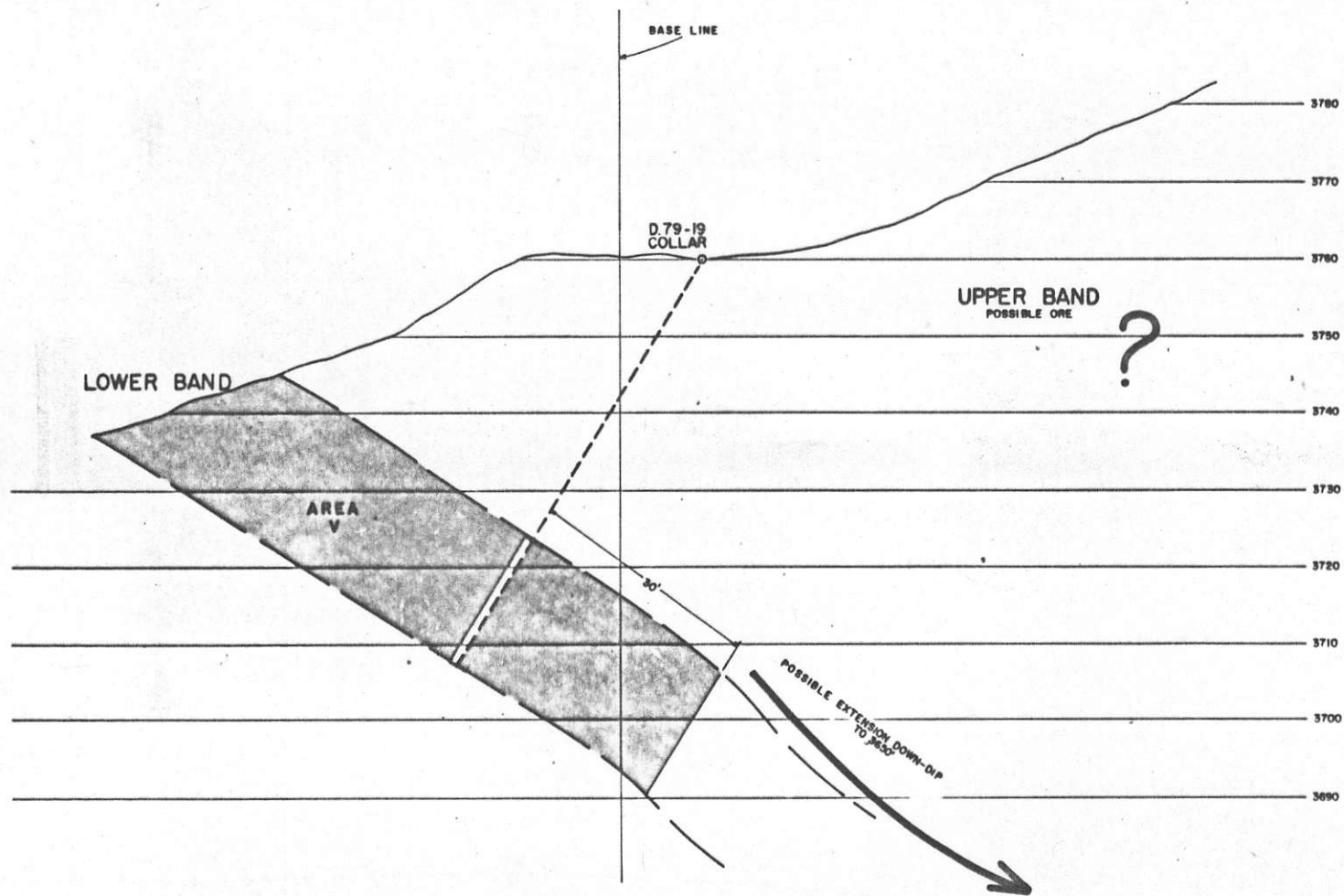
DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
<b>CROSS SECTION 240</b> SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD VANCOUVER B.C.		
SCALE 1" = 10 FT	DATE OCT., 1980	DWG NUMBER 8




 ... PROVEN AND PROBABLE ORE

NOTE:  
 1 FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3.  
 2 SECTION VIEWED LOOKING SOUTH WEST.

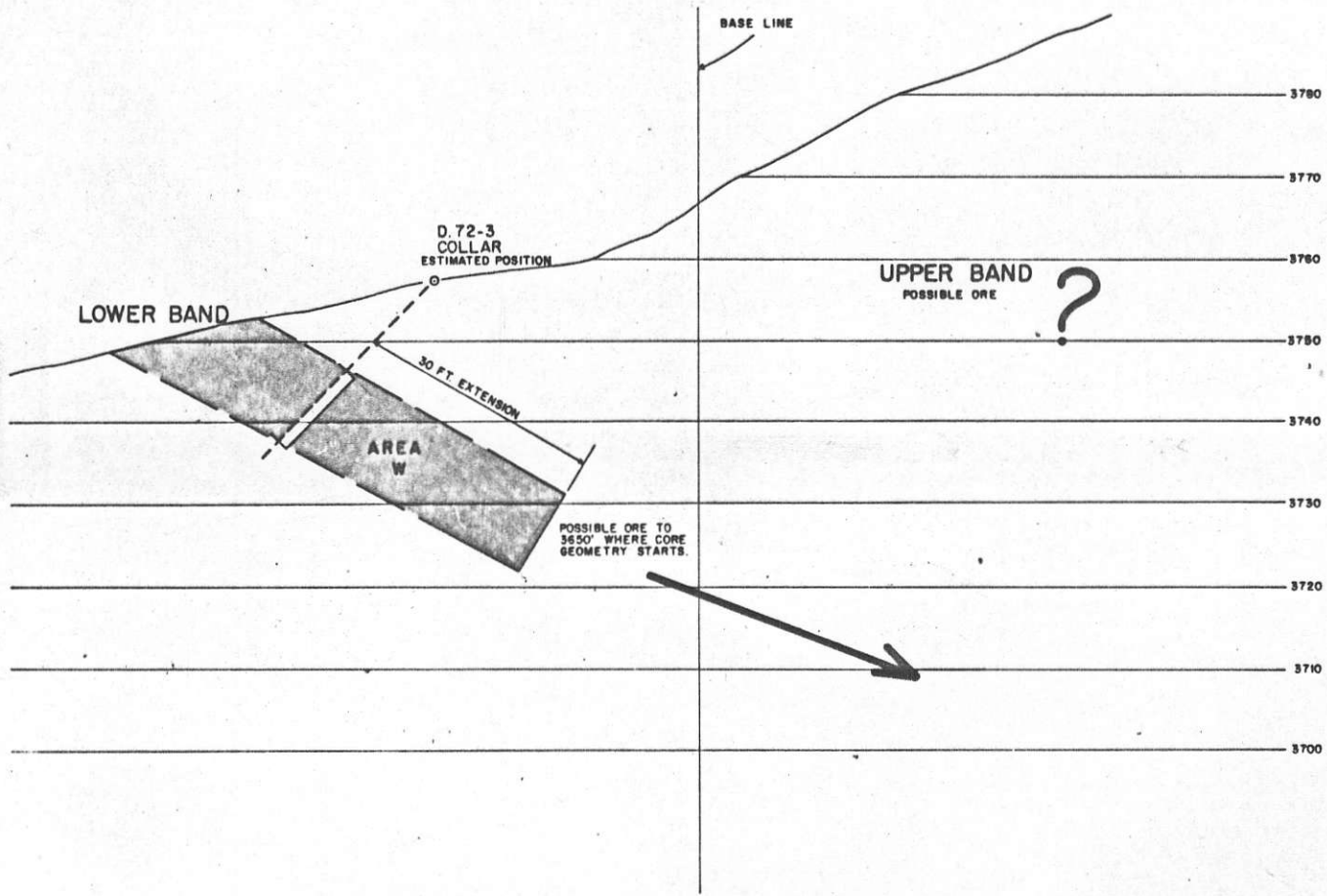
DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
CROSS SECTION 260 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE 1" = 10 FT	DATE OCT, 1980	DWG. NUMBER 9




 ... PROVEN AND PROBABLE ORE

NOTE:  
 1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3.  
 2. SECTION VIEWED LOOKING SOUTH WEST.

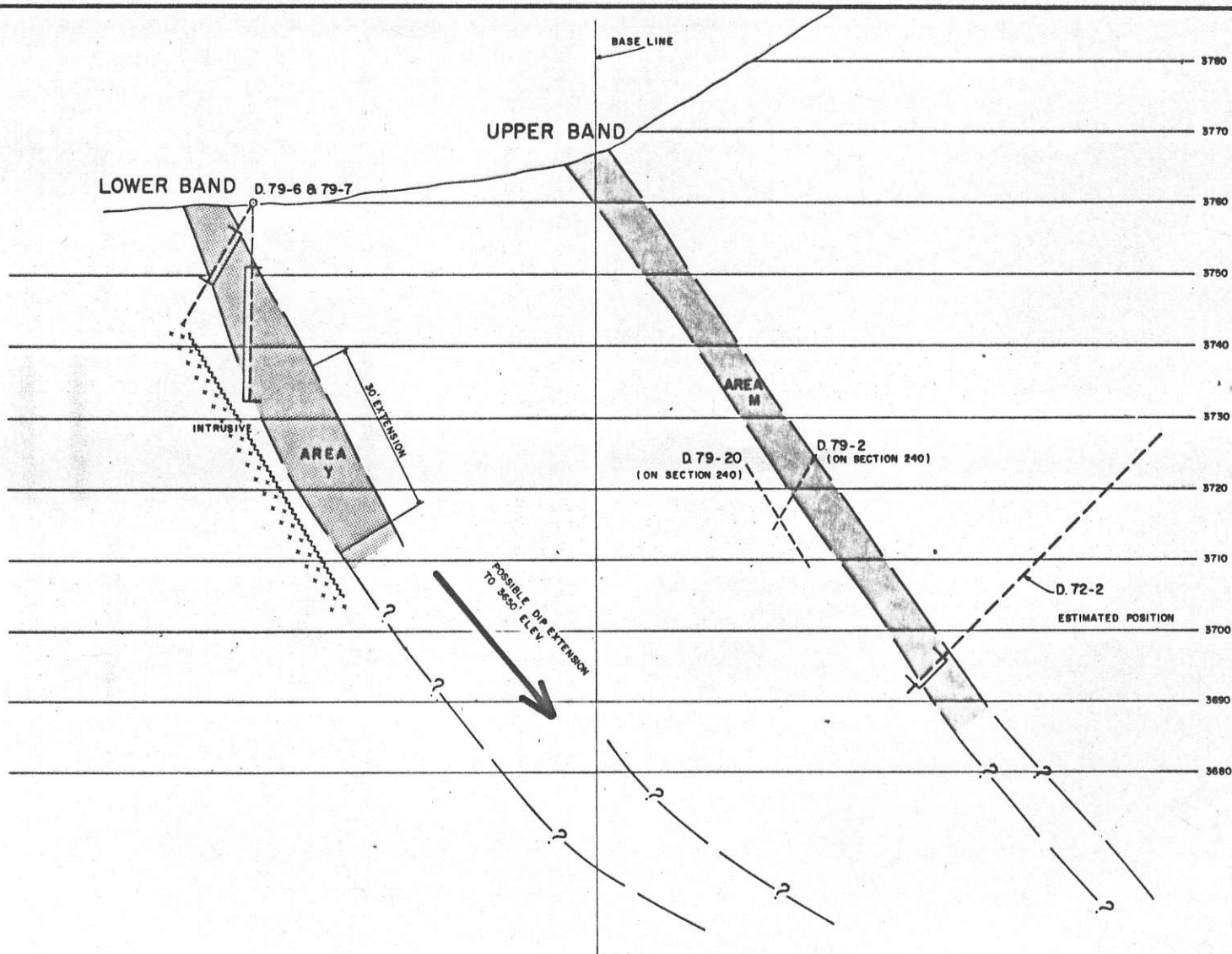
DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
CROSS SECTION 280 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE: 1" = 10 FT	DATE: OCT, 1980	DWG NUMBER 10




 ... PROVEN AND PROBABLE ORE

NOTE:  
 1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3  
 2. SECTION VIEWED LOOKING SOUTH WEST

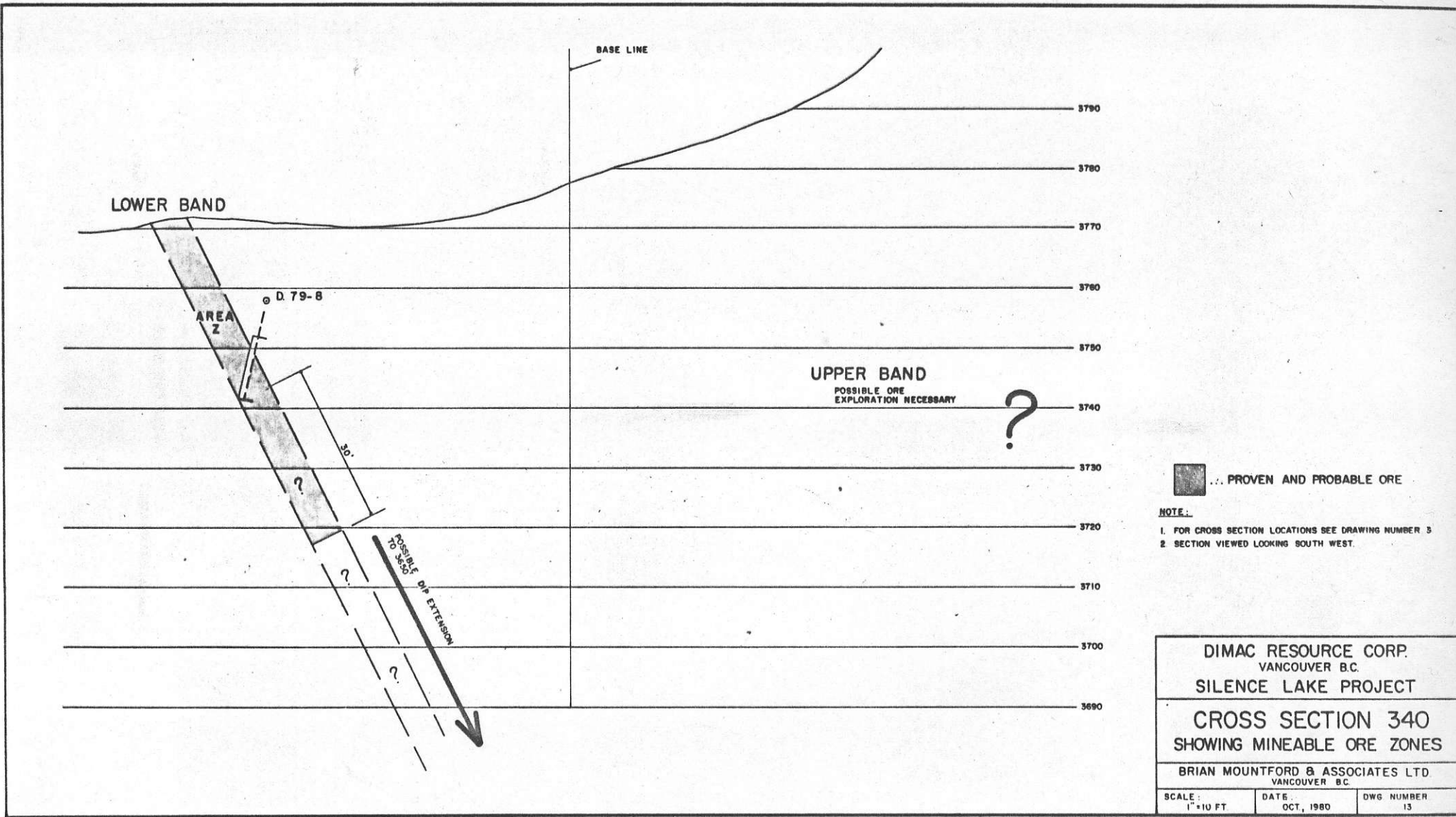
DIMAC RESOURCE CORP. VANCOUVER B.C.		
SILENCE LAKE PROJECT		
CROSS SECTION 300 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE: 1" = 10 FT	DATE:	DWG NUMBER 11



 ... PROVEN AND PROBABLE ORE

- NOTE:**
1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3
  2. SECTION VIEWED LOOKING SOUTH WEST.

DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
<b>CROSS SECTION 320</b> SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD. VANCOUVER B.C.		
SCALE 1" = 10 FT	DATE OCT., 1980	DWG NUMBER 12



■ ... PROVEN AND PROBABLE ORE

NOTE:  
 1. FOR CROSS SECTION LOCATIONS SEE DRAWING NUMBER 3  
 2. SECTION VIEWED LOOKING SOUTH WEST.

DIMAC RESOURCE CORP. VANCOUVER B.C. SILENCE LAKE PROJECT		
CROSS SECTION 340 SHOWING MINEABLE ORE ZONES		
BRIAN MOUNTFORD & ASSOCIATES LTD VANCOUVER B.C.		
SCALE: 1" = 10 FT	DATE: OCT, 1980	DWG NUMBER 13