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RATE OF RETURN SENSITIVITY ANALYSIS ON THE CINNABAR PEAK PROPERTY

August, 1977

Prepared by:

THE ROBERTS CONSULTING CORPORATION
in association with
Mr. Y. H. Freedman, P. Eng., C.A. of
Trimac Consulting Services

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SUMMARY

Twenty-seven sets of input data were processed in the computer model covering the most likely variations in capital expenditure, pre-production costs, productivity and selling price. The results are graphically illustrated in TABLE 1.

The extended line represents the median of cases in practical mining terms which resulted in a DCFROI of 13.2% or 15.7% at a selling price of $58 and $60 per long ton F.O.B.T. Vancouver respectively. With a 25% increase in machine productivity, these DCFROI rates would be 16.7% and 19.4%.

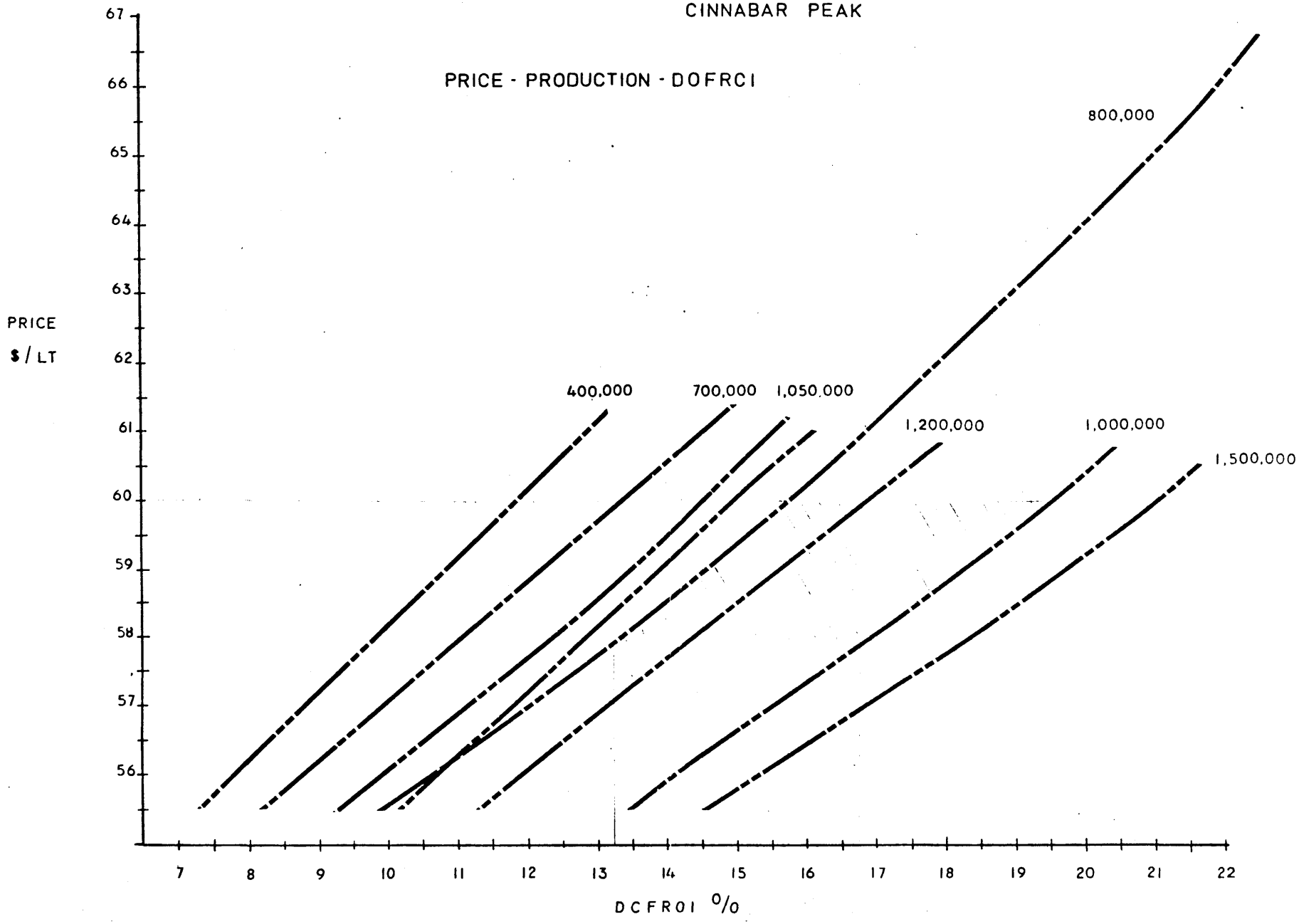
The shaded area on the graph would probably contain the operating point of the project, allowing for a reasonable variation of the mining and cost factors involved.

TABLE 2 gives the scenario summary for the median case with a selling price of $58 F.O.B.T. Vancouver.

TABLE 1

CYPRUS ANVIL MINING CORPORATION

CINNABAR PEAK



PRODUCTION FIGURES EXPRESSED IN RAW SHORT TONS

(ii)

TABLE 2

CYPRUS ANVIL - CINNABAR PEAK
TYPICAL SCENARIO SUMMARY
FOR REPRESENTATIVE YEARS

ITEM	Units	1977	1978	1979	1980	1981	1982	1983	1984	Total 20 Years
Raw Coal Production	short tons	0	0	0	0	100,000	500,000	800,000	800,000	11,800,000
Yield		70%	70%	70%	70%	70%	70%	70%	70%	-
Clean Coal Produced	short tons	0	0	0	0	70,000	350,000	560,000	560,000	8,260,000
Price	$/long tons					58.00	58.00	58.00	58.00	-
Price	$/short tons					51.79	51.79	51.79	51.79	-
Cost (cash before royalties)	$/short tons					35.89	35.89	35.89	35.89	-
Gross Profit	$					1,112,500	5,565,000	8,900,000	8,900,000	104,125,000
Private Royalty	$	357,000	357,000	157,000	157,000	100,000	100,000	100,000	100,000	2,628,000
Management Royalty	$					140,000	700,000	1,120,000	1,400,000	20,160,000
Provincial Royalty	$					105,000	525,000	840,000	840,000	12,400,000
Income and Mining Tax	$					31,391				38,577,329
Cash Profit (Loss)	$	(357,000)	(357,000)	(157,000)	157,000	736,109	4,237,500	6,840,000	6,560,000	57,519,676
Capital Investment:										
Initial Mining	$		600,000	2,400,000	5,100,000	6,750,000	3,200,000	1,000,000		19,050,000
Replacement Mining	$									6,600,000
Pre-Prod. Develop.	$		100,000	300,000	300,000					700,000
Pre-Prod. Expense	$	100,000	400,000	300,000						800,000
Clean Coal Inven.	$					2,000,000				
Stores Inventory	$					1,000,000				
Total Investment		100,000	1,000,000	3,000,000	5,400,000	9,750,000	3,200,000	1,000,000		27,150,000
After Tax Total Net Cash Flow		(457,000)	(1,457,000)	(3,157,000)	(5,557,000)	(9,013,892)	1,037,500	5,840,000	6,560,000	30,369,678

1.0 RECITAL

The Cinnabar Peak property comprises thirty-seven coal licences Nos. 3407 to 3444, totalling 19,456 acres, situated in the Peace River District of B.C. in the general vicinity of the W.A.C. Bennett Dam. In addition, the property has 1,600 acres of freehold ground acquired by Cinnabar Peak from the Gething family who were the original mine operators in the area. Coal occurs on virtually every licence in multiple seams, while the freehold section has potential surface mining reserves.

This property has been brought to the attention of Cyprus Anvil Mining Corporation who are currently examining the terms and conditions whereby they may obtain the mining rights to the property.

2.0 OBJECTIVE OF SENSITIVITY ANALYSIS

In that the property development has, to date, been limited to initial exploration which has broadly defined the reserves, the coal quality in the Trojan seam and the overall geology, there are many undefined variables which will fundamentally affect the rate of return that could be expected from the exploitation of the coal reserves. The cost of acquiring the rights to the property are substantial which, together with further expenditure required to fully examine the feasibility of the project, make it desirable to test the limits of exposure and risk by simulating the range of the variables on a computer programme. This was performed in Calgary on a Rio Tinto model during the week ended 6th August, 1977.

3.0 COMPUTER MODEL - Notes

This particular model is comprehensive in that it will process a wide spectrum of data covering many mining and financial situations. This

input information diversity is shown in Appendix 1 - General Input Format - a perusal of which will provide an appreciation of the usefulness of the model.

Output from the model was programmed to give the following information:-

(a) Before tax internal rate of return,

(b) After tax internal rate of return,

(c) Total revenue,

(d) Depreciation,

(e) Depletion,

(f) Total general expenses,

(g) Federal and Provincial Taxes,

(h) B.C. Mining Tax,

(i) Provincial Royalties,

(j) Allowances - fast write off,

(k) Net income after taxes,

(l) Cash earnings after taxes,

(m) Project Funds Flow.

DCFROI is most commonly defined as the rate of return that makes the present worth of cash flow for a project equal to the present worth of the investment in the project. Salvage values of the project were not considered in this analysis. It should be noted that DCFROI is one of the only methods of analysing investments which considers the time value of money and is the truest method of profitability. The DCFROI calculated herein is commonly referred to as the project return or total return and does not take into account the effects of debt, financing, or leverage. For all the various analyses and

scenarios the DCFROI turned positive only after the 19th year. Therefore, it could be concluded that investment is not returned until that time on a discounted basis.

As indicated above, leverage considerations were not included in the analysis. It should be noted that leverage works for the project if the after-tax cost of borrowed money is less than DCFROI for the project.

In this analysis, no effects of inflation were taken into account. It can be considered that as far as the capital investments are concerned, the costs of these investments are inflated and that, with respect to revenues and operating costs, the effects of inflation would cancel.

Generally, revenues from a project must be sufficient to pay the operating costs and allow for a recovery of the investment through depletion, depreciation, amortization and deferred tax deductions. Therefore, usually these non-cash deductions are not deducted from the cash flow. Thus, cash flow is defined as the revenue minus the operating costs minus income taxes and royalties.

The effects of income tax considerations vary from one project to another and therefore, generally speaking, discounted cash flow returns on investments are always calculated on an after-tax basis.

Tax deductions are deducted as follows:-

(a) capital cost allowances,

(b) resource allowance,

(c) amortization of development expenditures,

(d) exploration expenditure allowance,

(e) earned depletion,

(f) tax loss carried forward, if any.

4.0 CRITERIA FOR EVALUATION

Obviously the rate of return as calculated by the computer can be varied to achieve anything from a low to a high percentage, depending on the data fed into the model. It is therefore important that the assumptions made are realistic and the variations are limited to a reasonable range of possibilities reflecting the probable contingencies likely to be experienced in practice. Furthermore, in order to reduce the number of variables to manageable proportions, certain data was kept constant on a low and conservative basis throughout the analysis; for example, the preparation plant yield at 70%. In this context, the following assumptions were made and the range of the variables fixed:-

4.1 Assumptions

(a) Selling Price

The median selling price is $58 per long ton F.O.B.T. Vancouver. Enquiries indicated that the Denison asking price is $64-$66 per long ton for what is, in our opinion, an equivalent coal. In the current buyer's market, it appears that Denison would have difficulty in concluding a contract at this price, this being one of the difficulties inherent in the Quintette developments, where a high selling price is mandatory to offset the monumental infrastructure capital. McIntyre has a rate of $72 but it is felt this was a concession by the Japanese to keep the mine in operation. A review of this price structure would probably lead to a reduction of this price. Kaiser is selling at $54 per long

ton F.O.B.T. but this coal has somewhat inferior specifications in ash, total moisture and metallurgical properties.

From the above, it is considered that the median price of $58 is realistic. It should also be borne in mind that, should Cinnabar Peak come into production in 1981, the relative price in today's dollars could be higher if the demand for metallurgical coal has increased. From the median, the selling price was varied up and down in $2.00 increments.

(b) Output Per Machine Shift

The median output of a continuous miner is taken as 400 short tons per machine shift - the production being stated in short tons because of some recent changes made to the model whereby it more readily accepted short tons in the input data.

This production is conservative by 100 short tons per machine shift, this opinion resulting from many years of operational experience. For present purposes, the lower figure was chosen as the median and the output varied into the model upward by 100 short tons per machine shift and downward by 50 short tons per machine shift.

(c) Total Mine Capacity - Continuous Miner Operation

Three levels of mine production were progressively analysed, namely 2 units, 4 units, 6 units. It became obvious after the first computer run that a threshold output from four units was required for the cash flows to be commensurate with the pre-production expenditure on the property, with the size

of the company, and for a certain economy of operation in relation to the fixed capital for facilities. However, due to labour constraints and a slow build up, it will be necessary to go through a 2 unit stage for a limited period before commissioning the additional units.

(d) Preparation Plant Yield

This was fixed at 70% as being a conservative figure below which the yield was unlikely to fall, as deduced from perusal of the borehole analyses. Variations in yield are tantamount to variations in machine productivity.

(e) Royalties

The provincial royalty, now $1.50 per clean long ton, was fed into the model at a rate of $1.50 per clean short ton, which is 12% too high. Similarly, the private royalty to Cinnabar Peak was used on a short ton basis as follows:

Production year 1 - 3:
-at $2.00 per clean short ton

Production year 3 onwards:
-at $2.50 per clean short ton

This anomaly gives a slight reduction to the rates of return in the output, calculated to be 0.5%.

(f) Taxes

Federal Tax Rate - 36%

Provincial Tax Rate - 15%

In the model, the Provincial Rate was taken as 13% with the result that the DCFROI was 0.3% too high in the actual printouts. However, in the Summary this error has been corrected.

It should be noted the above two anomalies (the royalty and Provincial Tax Rate) are self-cancelling, so that the overall resulting error on the printout sheets for the DCFROI is only 0.2% too low. It was considered that a re-run was unwarranted to correct these small errors, which give the results a slight conservatism.

(g) Mining Costs

These were taken as constant over all the scenarios at the rate worked out for a 2 unit operation. It was considered that any economy of scale in wage rates at higher mine capacities would be offset by a reduced efficiency of the individual machine production units.

STANDARD BASIS FOR 2 UNIT MINE:

Hourly Paid Employees	- 80
Staff	- 13
Hourly Rate	- $10.00
Fringe Benefits	- 25%
Overtime	- 15%

FREIGHT RATES CHECKED WITH TRIMAC:

Truck to Railhead	- $ 3.20/short ton
Rail Freight/VCR	- $13.85/short ton

SUMMARY OF OPERATIONAL COSTS ($/clean short ton)

Mining	- $13.46
Processing	- $ 2.14
Administration and Overhead	- $ 2.14
Freight (truck and rail)	- $17.05
Terminal	- $ 1.10
TOTAL (not including royalties)	$35.89

(h) Pre-Production Payments for Acquisition

CINNABAR PEAK

Advanced royalty of $50,000 p.a. until first year of Production.

GETHING

Payment of $7,000 p.a. until first year of Production. Balance of approximately $50,000 at that stage would purchase freehold outright.

RAGAN

Project Year 1 - 1977 - $300,000
Project Year 2 - 1978 - $300,000
Thereafter 1979 - 1996 - $100,000

(i) Capital Expenditures

These costs were escalated as projected for the increased capacity of the mining operations - see later schedules.

In the model, the initial capital was subject to fast write off - Class 28, while the replacement capital was subject to a 30% allowance - Class 10.

4.2 Summary of Data

Constant data used for all scenarios:

Yield at clean coal - plant efficiency 70%.

Unit cash costs - $ per clean short ton:

Mining costs	$ 13.46
Processing costs	2.14
Administration and overhead	2.14
Freight (rail and truck)	17.05
Terminal	1.10
Total cash costs before royalties	$ 35.89
Provincial royalties ($/clean ST)	1.50
Agreement royalty ($/clean ST)	2.50
Private Payments - $357,000 decreasing to	$100,000

Capital Cost Allowances:

Initial Mining (Class 28)	10%
Replacement Mining (Class 10)	30%
Federal Tax Rate	36%
Provincial Tax Rate	15%
Percentage of Production Exported	100%

5.0 SCENARIO VARIATION

For each of the mining cases considered, i.e. 2 unit, 4 unit, 6 unit, a median production level was chosen for which capital and pre-production costs, etc., were calculated.

Computer runs were made using this data at a selling price of $58 per long ton to give the median DCFROI for those mining levels. Subsequent runs varied the selling price and the machine unit productivities. In all, 27 computer runs were made to include these variables - Refer to Table 1 reproduced in the Summary to this Report. Details of the individual values allocated to the differing scenarios are reproduced in Appendix III - Details of Scenario Variables.

N. E. ROBERTS

```
1.      \COAL ECONOMIC EVALUATION DATA - GENERAL INPUT FORMAT
2.      \*****************************************
3.      \
4.      \PROJECT SWITCH FACTORS
5.      \=================
6.      /SASK (-1); OR ALBERTA (0) OR B.C. (1),249,C3=
7.      /METALLURGICAL (0) OR THERMAL (1),246,C3=
8.      /DETERMINISTIC (0) OR PROBABILISTIC (1),248,C3=
9.      /DATA INPUT SCALE FACTOR; 1:1 C3=1 <> OR 000'S C3=1000,250,C3=
10.     \ METHOD OF MINING
11.     \ ================
12.     \   C3(256)=0  OPEN PIT
13.     \   C3(256)=1  UNDERGROUND
14.     \   C3(256)=2  COMBINED OP/UG
15.     \
16.     / METHOD OF MINING,256,C3=
17.     /COST INPUT IS RAW $/TONS(0);OR CLEAN $/TONS(1),31,C3=
18.     \
19.     \=============================================================
20.     \
21.     \  C3(16)= 0
22.     \     DATA IS CONSISTENTLY IN LONG TONS,OR,
23.     \     DATA IS CONSISTENTLY IN SHORT TONS.
24.     \
25.     \
26.     \  C3(16)= 1
27.     \     PRICE IS IN LONG TONS
28.     \     UNIT COSTS IN SHORT TONS
29.     \
30.     \
31.     / DON'T CONVERT PRICE(1); CONVERT PRICE(0),16,C3=
32.     \
33.     \
34.     \=============================================================
35.     \
36.     \
37.     \
38.     \PRE-PRODUCTION INVESTMENT
39.     \=======================
40.       \EXPLORATION & DEVELOPMENT STAGE
41.       \-----------------------------
42.     /EXPLORATION EXPEND.(PRE PROD.),176,C1=                    \
43.     ,P1=
44.     /DEVELOPMENT EXPENDITURES,114,C1=                          \
45.     ,P1=
46.     \
47.      \INVESTMENT DURING CONSTRUCTION & PRODUCTION STAGES
48.      \=================================================
49.     /INITIAL CAP. EXPENDITURES-MINING(CLASS 28),220,C1=                \
50.     ,P1=
51.     /REPLACEMENT CAP. EXPENDITURES-MINING(CLASS 10),221,C1=            \
52.     ,P1=
53.     /CAPITAL EXPENDITURE-TOWN & RAILROAD,111,C1=                       \
54.     ,P1=
```

APPENDIX I - (ii)

```
55.       /CAPITAL EXPENDITURE-SPARE- NOT BEING USED,110,C1=                \
56.       ,P1=
57.       \
58.        \PRODUCTION COSTS
59.        \================
60.         \VOLUMES-PRICES-YIELDS
61.         \--------------------
62.       /OVERBURDEN: ROCK BANK CUBIC YARDS,1,C1=                          \
63.       ,P1=
64.       /U/G RAW MET LONG TONS,253,C1=                                    \
65.       P1=
66.       /O/P TONS MET LONG TONS,254,C1=                                   \
67.       P1=
68.       /YIELD-MET.,6,C1=                                                 \
69.       ,P1=
70.       /% MET. TO EXPORT,13,C2=                                          \
71.       ,P1=
72.       /PRICE-MET. COAL $/LT-FOBT,15,C1=                                 \
73.       ,P1=
74.       /BANK CUBIC YARD (BANK CUBIC YARDS) FACTOR,8,C3=1.
75.       \
76.       \ MINING COSTS,ETC.
77.       \-----------------
78.       \THE FOLLING DATA WILL BE CONVERTED FROM $/RAW TON TO
79.       \$/CLEAN TON IF C3(31)=0.
80.       \
81.       /ROCK MINING $/BANK CUBIC YARDS,30,C1=                            \
82.       ,P1=
83.       /U/G COAL MINING $/TONS,255,C1=                                   \
84.       P1=
85.       /O/P COAL MINING $/TONS,35,C1=                                    \
86.       ,P1=
87.       /MET. PROC $/TONS,33,C1=                                          \
88.       ,P1=
89.       /RECLAMATION $/TONS,48,C1=                                        \
90.       ,P1=
91.       /OVERHEAD &ADMINISTRATION $/TONS,40,C1=                           \
92.       ,P1=
93.       /RESERVE AMORTIZATION - $/TONS,300,P1=
94.       /INTEREST DURING CONSTRUCTION,302,P1=
95.       /SPARE OPERATING COST - $/TONS,305,P1=
96.       \
97.       \OVERHEAD-ADMINISTRATION-SHIPPING-ETC.
98.       \-------------------------------------
99.       \THE FOLLOWING DATA IS ASSUMED TO BE INPUT AS $/CLEAN TON
100.      \
101.      /RAIL TRANSPORTATION $/CLEAN TON,19,C1=                           \
102.      ,P1=
103.      /TERMINAL $/CLEAN TON,20,C1=                                      \
104.      ,P1=
105.      /SAMPLING & ASSAY $/CLEAN TON,21,C1=                              \
106.      ,P1=
107.      /COMMISSION $/CLEAN TON,22,C1=                                    \
108.      ,P1=
```

APPENDIX I - (iii)

```
109.      \
110.      \ WORKING CAPITAL
111.      \ ===============
112.      /RAW MET INVENTORY,115,C1=                    \
113.      ,P1=
114.      /CLEAN MET. INVENTORY,117,C1=                  \
115.      ,P1=
116.      /STORES,119,C1=                    \
117.      ,P1=
118.      / RECEIVABLES,120,C1=                    \
119.      ,P1=
120.      /OTHER WORKING CAPITAL,121,C1=                  \
121.      ,P1=
122.      /RESIDUAL SALVAGE %,88,P17=
123.      /%WORKING CAPITAL NOT RELEASED,226,P17=
124.      \
125.      \ ROYALTIES AND TAXES
126.      \==================
127.      /NON-DEDUCTIBLE ROYALTY-$/TON,84,C1=                \
128.      ,P1=
129.      /FEDERAL TAX RATE,170,C1=                \
130.      ,P1=36
131.      /PROVINCIAL TAX RATE,171,C1=                  \
132.      ,P1=
133.      /PRODUCTION START YEAR FOR ROYALTY PURPOSES,242,C1=
134.      /EXPENSE NOT INCLUDED IN ROYALTY CALC.,246,P1=
135.      /PRE-PROD INTEREST FOR ROYALTY,240,C2=
136.      /INFLATION FACTORS FOR ROYALTY,245,P1=
137.       /PRIVATE ROYALTY ($ INPUT-DEDUCTIBLE),304,P1=
138.       /MANAGEMENT OVER-RIDING ROYALTY ($/TON-DEDUCTIBLE),267,P1=
139.      /PROCESS ASSETS FOR B.C. MINING TAX PURPOSES-TOTAL(C3);PERIODS(P1-),228,C3=      \
140.      ,P1=
141.      \
142.      \ FINANCE OPTIONS
143.      \ ===============
144.      \
145.      / % OF PROJECT FUNDED BY DEBT(C2),95,C2=
146.      \
147.      \
148.      \ LOAN OPTIONS
149.      \ ------------
150.      \INPUT LOAN REPAYMENT (-1)
151.      \LOAN REPAYMENT AS % OF POSITIVE CASH FLOW (0)
152.      \LOAN REPAYMENT AS MORTGAGE ANNUAL COMPOUNDING (1)
153.      \LOAN REPAYMENT AS MORTGAGE SEMI-ANNUAL COMPOUNDING (5)
154.      \USE LOANS 1-8 (8)
155.      \
156.      /LOAN OPTIONS,259,C3=
157.      \
158.      \
159.      \LOAN #0 - ALL DEBT AS 1 LOAN
160.      \-------------------------------
161.      /INTEREST START YEAR(C1),127,C1=
162.      /INTEREST RATE(C2);MORTGAGE TERM(C3),128,C2=
```

36
13

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163.      \
164.      \TAKE NEGATIVE CASH FLOW UP TO THIS YEAR(C2);
165.      /% CASH FLOW TO REPAY LOAN(C3);LOAN REPAYMENT SCHED,129,C3=          \
166.      ,P1=
167.      \
168.      \
169.      \FINANCE EXTENSION
170.      \-----------------
171.      \LOAN #1
172.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),275,C1=                \
173.      P1=
174.       /% OF CASH TO REPAY LOAN #1(C3=); LOAN REPAY SCHED(P1=),276,C3=     \
175.       P1=
176.      \
177.      \LOAN #2
178.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),278,C1=                \
179.      P1=
180.       /% OF CASH TO REPAY LOAN #2(C3=);LOAN REPAY SCHED(P1=),279,C3=     \
181.       P1=
182.      \LOAN #3
183.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),281,C1=                \
184.      P1=
185.      LOAN REPAY,282,P1=
186.      \
187.      \LOAN #4
188.      \EQUIPMENT FINANCING
189.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),284,C1=                \
190.      P1=
191.      /LOAN REPAY,285,P1=
192.      \
193.      \LOAN # 5
194.      \OVER-RUN FINANCING
195.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),287,C1=                \
196.      ,P1=
197.      /LOAN REPAY,288,P1=
198.      \LOAN #6
199.      \INCOME DEBENTURE
200.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),290,C1=                \
201.      P1=
202.      /LOAN REPAY,291,P1=
203.      \
204.      \LOAN # 7
205.      \PREFERRED SHARES
206.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),293,C1=                \
207.      P1=
208.      /LOAN REPAY,294,P1=
209.      \
210.      \LOAN # 8
211.      \PREPAYMENT
212.      /INT ST YR (C1=);INT RATE (C2=);AMT OF LOAN (P1=),296,C1=                \
213.      ,P1=
214.      /LOAN REPAY,297,P1=
215.      /COMPANY COST OF CAPITAL,251,C1=
216.      \
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APPENDIX I - (v)

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217.      \ OTHER
218.       \=====
219.      /PRODUCTIVE LIFE OF MINE(IN YEARS),I96,C1=
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APPENDIX II

CYPRUS ANVIL-CINNAB R PEAK

Summary

Out Put File	DCFROI After Tax %	Annual Full Production Raw ST	Price per $/LT	CAPITAL EXPENDITURES						Clean Coal Unit Cost $/ST	Clean Coal Unit Cash Cost $/ST
				Initial Mining	Replace Mining	Inventory Coal	Inventory Stores	Develop. Expense	Pre-Produc. Expense		
CYP 1	9.5	400,000	58.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	39.45	35.89
CYP 1	11.5	400,000	60.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	39.45	35.89
CYP 1	7.5	400,000	56.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	39.45	35.89
CYP 2	12.5	500,000	58.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	38.74	35.89
CYP 2	14.8	500,000	60.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	38.74	35.89
CYP 2	10.3	500,000	56.00	10,650,000	3,600,000	1,000,000	600,000	300,000	650,000	38.74	35.89
CYP 3A	12.8	800,000	58.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89
CYP 3A	15.4	800,000	60.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89
CYP 3A	10.3	800,000	56.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89
CYP 4	16.6	1,000,000	58.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	38.52	35.89
CYP 4	19.3	1,000,000	60.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	38.52	35.89
CYP 4	14.7	1,000,000	56.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	38.52	35.89
CYP 5	10.8	700,000	58.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.65	35.89
CYP 5	13.0	700,000	60.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.65	35.89
CYP 5	8.5	700,000	56.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.65	35.89
CYP 6	14.1	1,200,000	58.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.92	35.89
CYP 6	16.7	1,200,000	60.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.92	35.89
CYP 6	11.5	1,200,000	56.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.92	35.89
CYP 7	18.1	1,500,000	58.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.32	35.89
CYP 7	20.8	1,500,000	60.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.32	35.89
CYP 7	15.0	1,500,000	56.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	38.32	35.89
CYP 8	12.1	1,050,000	58.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	39.35	35.89
CYP 8	14.3	1,050,000	60.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	39.35	35.89
CYP 8	9.5	1,050,000	56.00	25,400,000	9,000,000	3,400,000	1,500,000	900,000	950,000	39.35	35.89
CYP 9	19.7	800,000	64.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89
CYP 9	21.7	800,000	66.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89
CYP 9	17.5	800,000	62.00	19,050,000	6,600,000	2,000,000	1,000,000	700,000	800,000	39.18	35.89

APPENDIX III

DETAILS OF SCENARIO VARIABLES

APPENDIX III - (i)

PRE-PRODUCTION INVESTMENT

	1977	1978	1979	1980	1981	1982	1983
Exploration - Computer Input 43							
Scenarios CYP 1, 2	100	400	150				
Scenarios CYP 3A, 4, 5 and 9	100	400	300				
Scenarios CYP 6, 7 and 8	100	400	450				
Feasibility Studies, Engineering, etc. Payments to Ragan, Cinnabar Peak, Gething - Computer Input 45							
Scenarios 1, 4 and 7	-	100	200				
	357	357	157	157	100	100	100 to 1996
Scenarios 2, 5 and 8	-	100	300	300			
	357	357	157	157	157	157	100 to 1996
Scenarios 3, 6 and 9	-	100	400	300	100		
	357	357	157	157	157	157	100 to 1996

APPENDIX III - (ii) INVESTMENT DURING CONSTRUCTION AND PRODUCTION

Initial Capital Expenditures

Computer Input 50

	1977	1978	1979	1980	1981	1982	1983	1984
SCENARIOS CYP 1, 2								
Power Supply	-	550	1,000					
Preparation Plant	-		300	1,000	1,500			
Mine Dry - Lamp Cabin	-		150	150				
Workshop - Store	-		150	200				
Ventilation and Mine Heating	-			100				
Surface Bins and Conveyors	-			100	450			
Mobile Equipment	-	50	50	200	200			
Roads, Earthwork	-		50	50				
Mobilization - Labour	-		100	100	100			
- Equipment	-			100	100			
Pre-Production labour, etc.	-		100	300	400			
Underground Equipment	-				1,800	800		
Contingencies	-			100	200	200		
TOTALS	-	600	1,900	2,400	4,750	1,000		

APPENDIX III - (iii) INVESTMENT DURING CONSTRUCTION AND PRODUCTION

Initial Capital Expenditures

Computer Input 50

	1977	1978	1979	1980	1981	1982	1983	1984
SCENARIOS CYP 3A, 4, 5 and 9								
Power Supply	-	550	1,500					
Preparation Plant	-		300	3,500	3,500			
Mine Dry - Lamp Cabin	-		150	300				
Workshop - Store	-		150	250				
Ventilation and Mine Heating	-			100				
Surface Bins and Conveyors	-			100	450			
Mobile Equipment	-	50	50	200	200	200		
Roads, Earthwork	-		50	50				
Mobilization - Labour	-		100	100	100	100		
- Equipment	-			100	100	100		
Pre-Production labour, etc.	-		100	300	400			
Underground Equipment	-				1,800	2,600	800	
Contingencies	-			100	200	200	200	
TOTALS	-	600	2,400	5,100	6,750	3,200	1,000	

APPENDIX III - (iv) INVESTMENT DURING CONSTRUCTION AND PRODUCTION

Initial Capital Expenditures

Computer Input 50

	1977	1978	1979	1980	1981	1982	1983	1984
SCENARIOS CYP 6, 7 and 8								
Power Supply	-	550	2,000					
Preparation Plant	-		300	3,500	3,500	3,500		
Mine Dry - Lamp Cabin	-		150	300	150			
Workshop - Store	-		150	350				
Ventilation and Mine Heating	-			200				
Surface Bins and Conveyors	-			100	450			
Mobile Equipment	-	50	50	200	200	200		
Roads, Earthwork	-		50	50				
Mobilization - Labour	-		100	100	100	100	100	
- Equipment	-			100	100	100	100	
Pre-Production labour, etc.	-		100	300	400			
Underground Equipment	-				1,800	2,600	2,600	800
Contingencies	-			100	200	200	200	200
TOTALS	-	600	2,900	5,300	5,900	6,700	3,000	1,000

APPENDIX III - (v)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	
Scenarios CYP 1,2										3,300					3,300	)
Scenarios CYP 3A, 4, 5 and 9										5,900					5,900	) Replacements - 52
Scenarios CYP 6, 7, and 8										8,500					8,500	)