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**CONCEPTUAL STUDY
ON THE
MT. ALCOCK DEPOSIT
OUTLINING**

**Conceptual Mine-Milling Scheme
Environmental Protection Plans
Proposed Reclamation
and with
Economic Analysis**

**FOR
MT. CALVERY RESOURCES LTD.**



**WRIGHT ENGINEERS LIMITED
VANCOUVER CANADA**

PROJECT NO: 1775

JUNE, 1989

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MT. ALCOCK DEPOSIT
CONCEPTUAL STUDY

1.0 INTRODUCTION

This report presents some preliminary concepts for exploitation of the Mt. Alcock deposit and outlines potential environmental concerns with suggestions as regards to safeguards and eventual reclamation for the area. An economic analysis, based on certain assumptions, was carried out so as to assess the potential of the deposit based on anticipated successful exploration at the property.

As there is minimal actual data available on the deposit, the tonnage and grade figures and the configuration of the deposit have been modelled primarily on the published results of work on the nearby Cirque deposit. The Mt. Alcock deposit can be considered to be a grass roots exploration target, with no exploration having been carried out since its discovery in 1978. However it does have some similar geological characteristics to the Cirque deposit.

The metallurgical parameters are based on the assumption that the deposit is similar to others that Wright have worked on. The estimate of operating and capital costs are also based upon Wright's experience of costs at operations with similar locations and characteristics. Therefore, much of the information required to produce the preliminary project economics has been based not on known data but on our experience with other properties and our best judgement in applying these factors to the Mt. Alcock deposit.

Because the deposit lies at the southern end of the Kwadacha Park recreational area, a minimum of disturbance would be made within this area. The main plant site and tailings storage area is located to the south of the Kwadacha River. Disturbance within the park area will be limited to the mine access road and two portal areas. A comprehensive water management plan will be drawn up to ensure there is minimal discharge of silts and other matter from the disturbed areas to the environment.



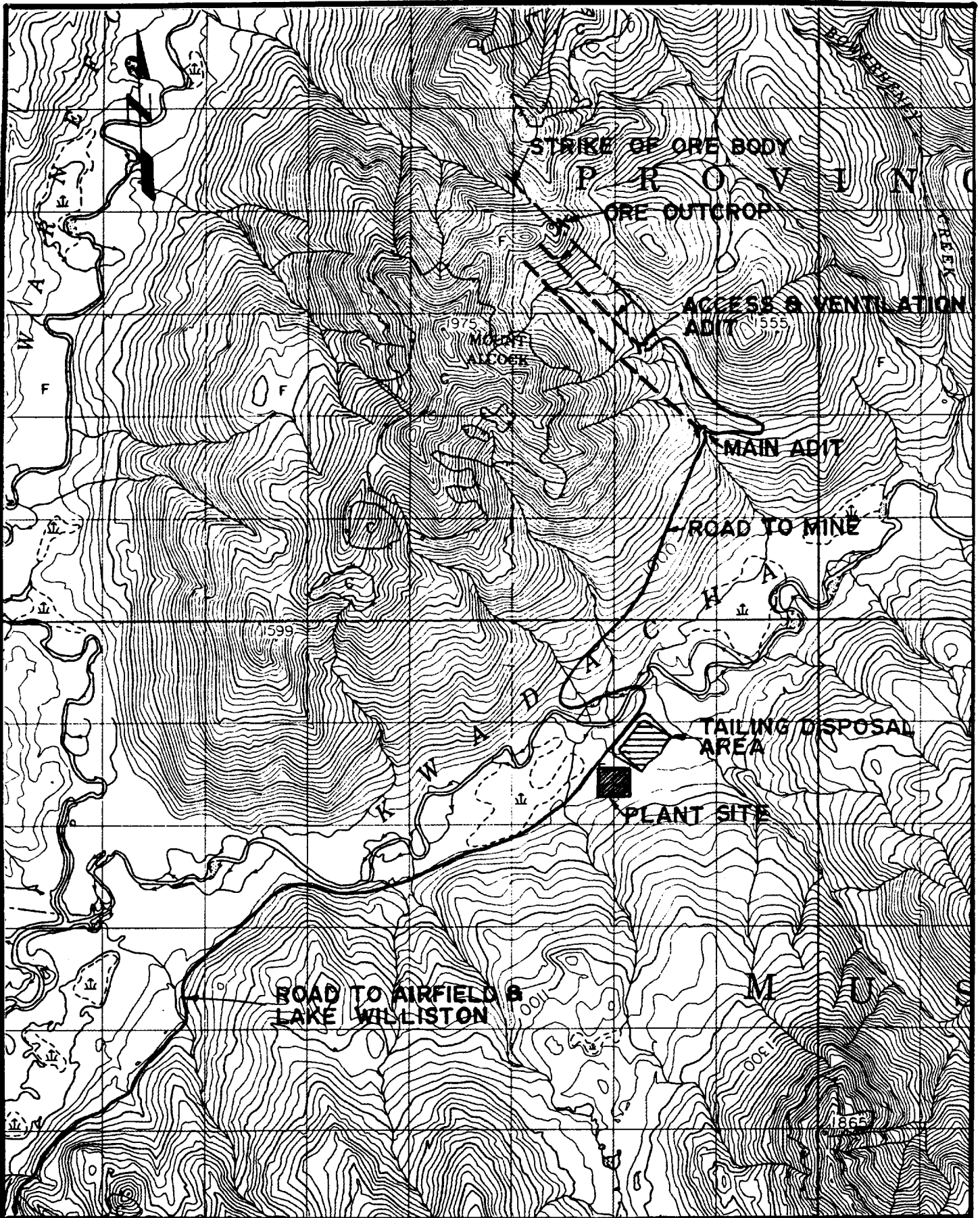
2.0 GENERAL DESCRIPTION AND ASSUMPTIONS

The Mt. Alcock mineral occurrence is located about 6393800N, 357500E (Map 94F/11) in the recreational area of the Kwadacha National Park. current access to the deposit is by helicopter. An airstrip capable of handling Hercules sized aircraft is located about 45 km to the south. The Mt. Alcock occurrence is located about 20 km N.W. of the Cirque deposit, on which exploration has been carried out. Mt. Alcock is a Ba-Pb-Zn-Ag showing consisting of prominent white weathering angular blocks of dark grey bedded barite. The barite horizon, which outcrops on a ridge N.E. of Mt. Alcock summit at about 1600 m.a.s.l., is about 20-25 m thick with a NW-SE strike and a dip SW of about 35°.

For the purposes of this study the thickness of the mineralized portion of the occurrence has been assumed to be 20 m, and the deposit to extend from an elevation of 1600 m.a.s.l. to a maximum depth of 1200 m.a.s.l., giving an inclined strike distance of about 765 m. The strike length is assumed to be about 400-500 m. The in-situ reserves for this deposit have been assumed to be 15,000,000 tonnes with grades of 11% Zn, 3% Pb, 70 g/t Ag.

For the purposes of exploitation of the deposit we have assumed that the ore is relatively competent and mining will be restricted to the sulphide zone within the barite deposit. Conventional bulk mining methods would be used for ore extraction and a conventional crush-grind-flotation process for beneficiation. The mill and tailings area will be located to the south of the Kwadacha River outside the recreational area. It will be connected to the mine by a 4.0 km road used for access and haulage of ore to the mill. Power to the mine will be supplied by overhead line from the diesel-generation powerhouse at the mill site. See Fig. 1 for a general plan of the area. Access to the deposit will require a road joining the Cirque deposit road for construction and supply purposes, and an additional 65 km of new road will have to be built. The operation would be manned using a fly-in, fly-out system. Concentrate will be barged down Williston Lake to Mackenzie on a seasonal basis and supplies and fuel brought in on the backhaul. We have assumed that from Mackenzie, concentrate will be either hauled to the Trail smelter or railed to Prince Rupert and shiploaded for sale to international smelters.





MT CALVERY RESOURCES LTD
MT ALCOCK PROPERTY

LOCATION PLAN SHOWING MILL SITE



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Drawn	Appr.
Check	Appr. Date

DRAWING NO.		REV
A 1775	FIG. I	

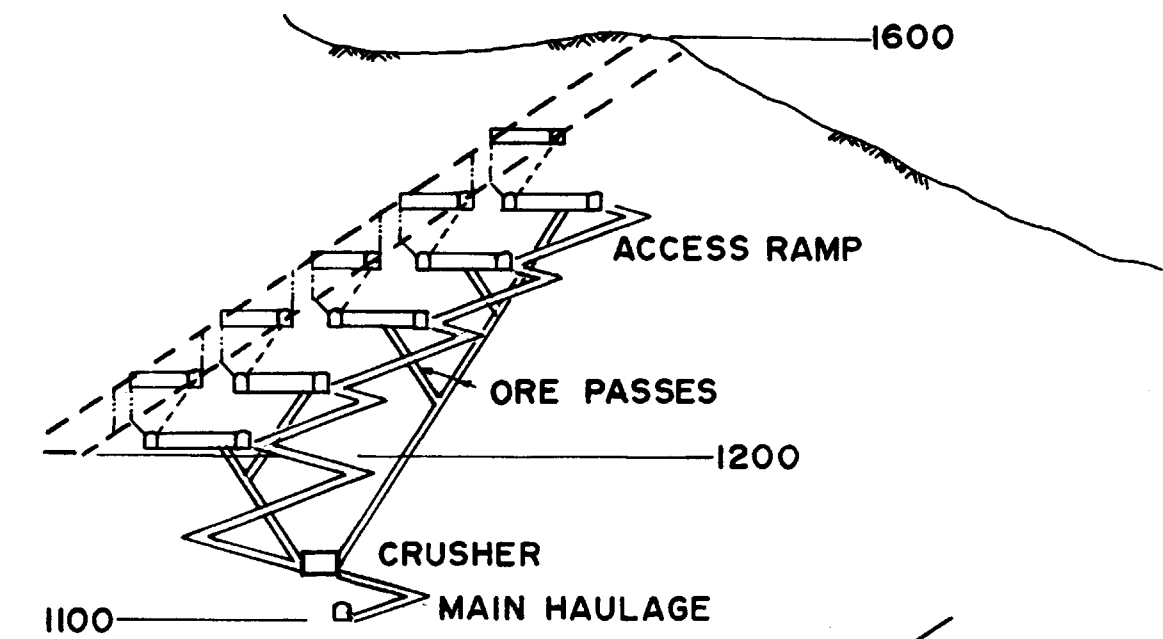
3.0 CONCEPTUAL MINING SCHEME

The thickness and dip of the orebody, plus its medium grade, suggest bulk mining methods should be used. A form of blasthole mining, vertical retreat mining or some combination will be the most suitable. Stopping blocks will be short in the down dip direction and longer on strike. Several extraction levels will be required connected by ramp access and an ore pass system to the main haulage level. The main haulage and access drift will be on about 1100 m.a.s.l. and a 2.5 km tunnel will be required from the portal to the mid point of the orebody. Sizes of extraction and haulage drifts would be about 3.5 x 4.0 m. All extraction would be by trackless LHD's and drilling by long-hole rigs from drilling drifts in the orebody. The stopes will not be filled but caving from the hanging wall will be allowed to fill the stopes. A top access from surface will be required at or about 1500 m.a.s.l. for ventilation and safety reasons. Connections between levels will be by a 10% ramp for movement of diesel equipment. Small underground workshops will be developed on 1100 Level, and a primary underground crusher installed above this level, feeding from the ore-pass system. Crushed ore will be hauled by train to surface bins, and trucked 4.0 km to the mill. See Fig. 2 for a conceptual cross-section of the stoping system.

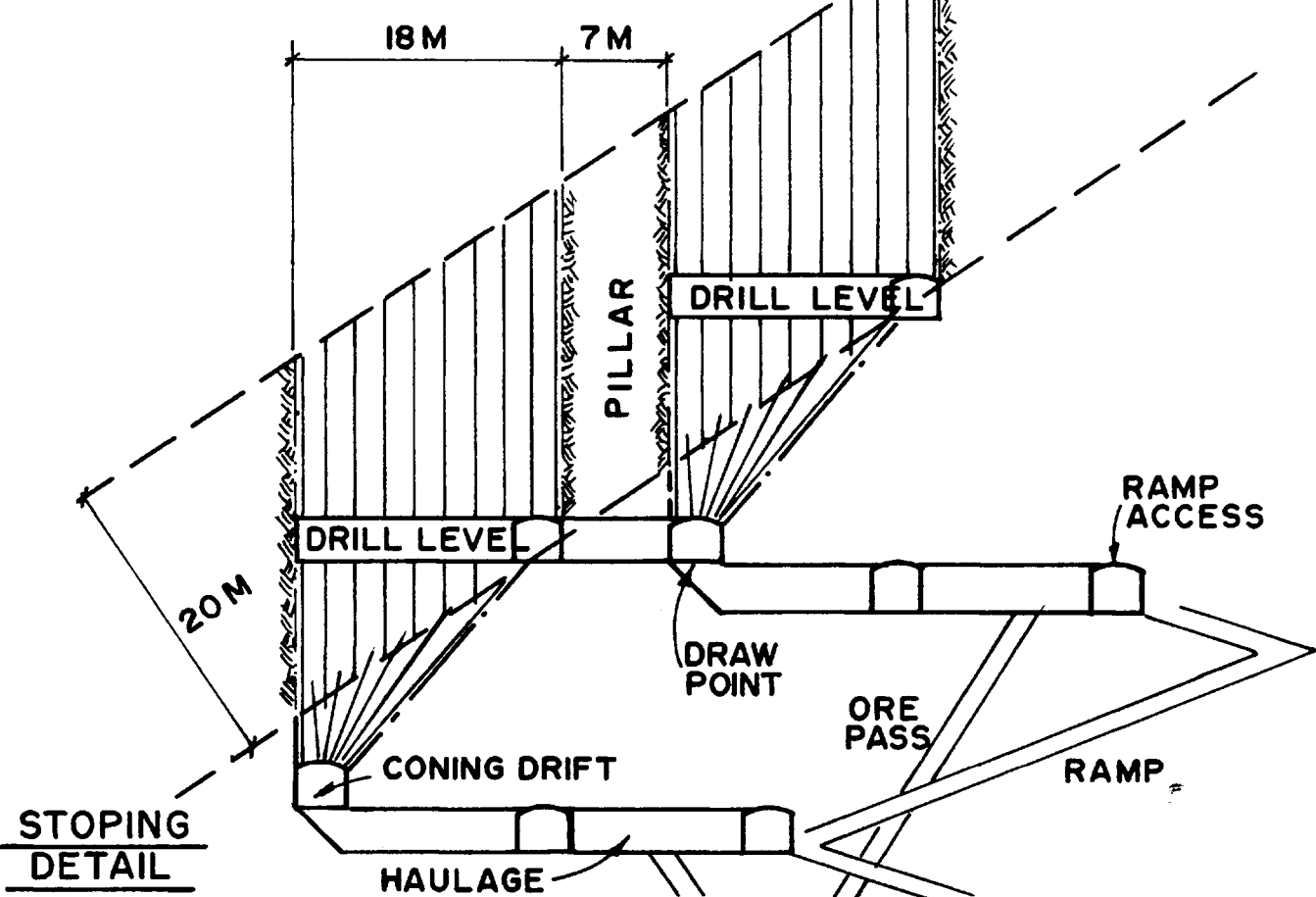
The level of production has been put at 4,000 t.p.d. (1.4 million t.p.y.), and to produce this 4-5 active stopes will be required. Dilution for this type of method will be about 20% and a recovery of 80% has been assumed as pillars will not be completely recoverable.

The mill feed, based on dilution at one-third of in-situ grade, will be as follows: 14,637,000 tonnes at 9.68% Zn, 2.64% Pb, 61.59% g/t Ag. The life of the mine will therefore be 10 years. The mine and mill will operate seven days per week on a 350 day per year schedule.






GENERAL CROSS SECTION



**STOPPING
DETAIL**

MT CALVERY REOURCES LTD MT ALCOCK PROPERTY		CONCEPTUAL MINE LAYOUT				
 WRIGHT ENGINEERS LIMITED VANCOUVER	CANADA		Drawn	Appr.	DRAWING NO.	REV
	Check	Appr. Date	A	1775	FIG 2	

4.0 CONCEPTUAL PROCESS DESIGN

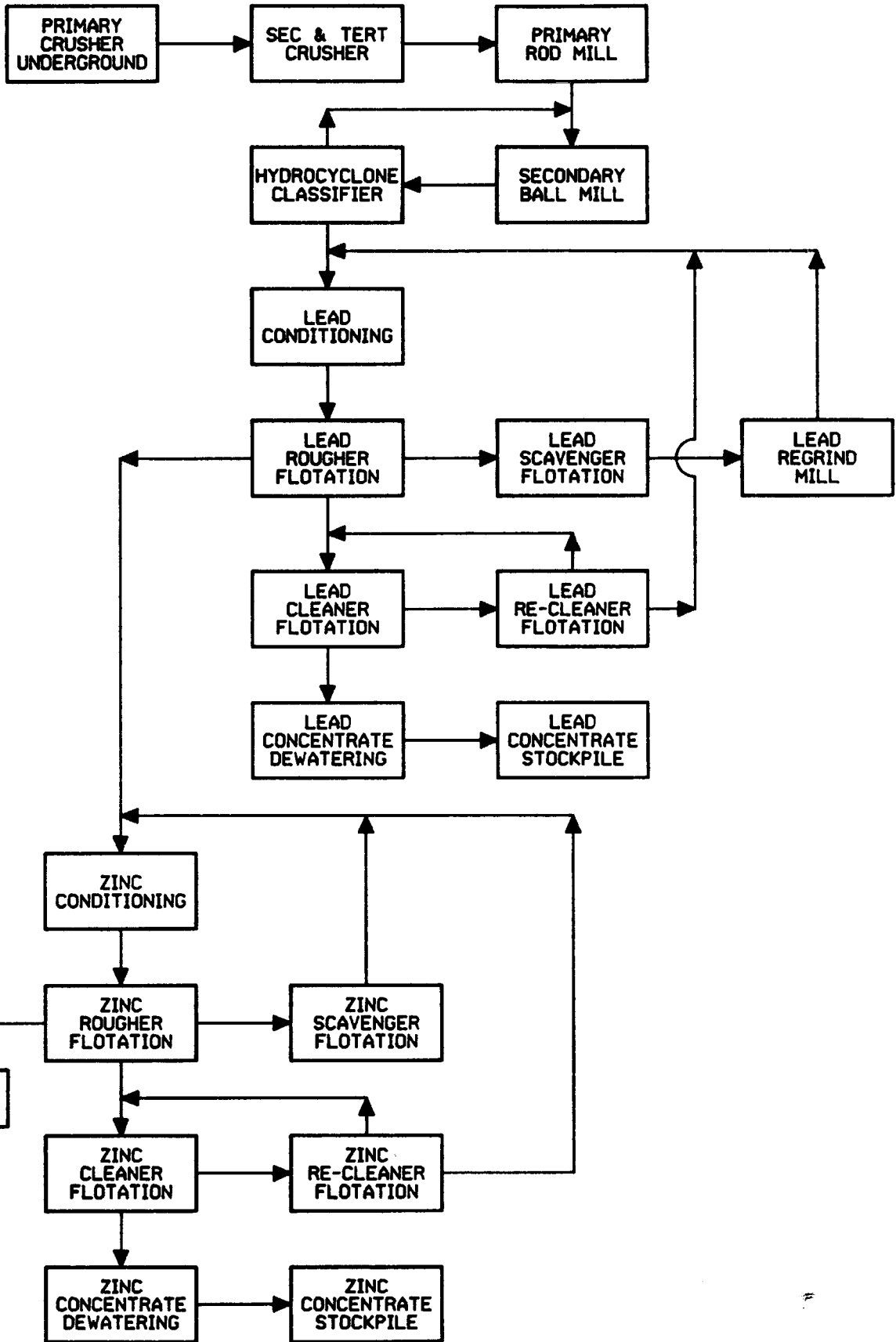
The conceptual process for the Mt. Calvary concentrator is conventional and is based on an annual throughput of 1.4 million tonnes, an average daily throughput of 4,000 tonnes or an average hourly rate of 176 tonnes. The concentrator is designed to process material from underground and produce a lead concentrate and a zinc concentrate.

The conceptual flowsheet consists of primary crushing underground followed by secondary and tertiary crushing on surface. Both the primary and secondary crusher will be in open circuit, however the tertiary crusher will be in closed circuit with a screen. Crushed material from the crushing plant will be conveyed to two fine ore bins. The concentrator is divided into two identical parallel circuits, each circuit beginning at the fine ore bins. The grinding circuits each consist of two-stage rod mill-ball mill grinding. The primary rod mill will be in open circuit and the secondary ball mill will be in closed circuit with hydrocyclones. Cyclone overflow from the grinding circuit reports to the lead flotation circuits. Each lead flotation circuit includes conditioning of the pulp, rougher flotation, scavenger flotation and two-stages of cleaner flotation. In addition, each lead flotation circuit has a regrind mill which regrinds the scavenger tails. The tailings from the lead flotation circuits are the feed to the zinc flotation circuit. The feed to each zinc flotation circuit is conditioned and followed by rougher flotation, scavenger flotation and two stages of cleaner flotation. The tailings from the zinc flotation circuits are the final tailings of the concentrator and consequently report to the tailings dam. The concentrate from each flotation circuit is thickened, filtered and stockpiled for seasonal transportation off the site.

Based on conceptual design criteria, the concentrator is expected to produce approximately 30,000 tonnes of lead and 110,000 tonnes of zinc per annum. In addition, 1,200,000 oz of silver are expected to be recovered in the zinc flotation concentrate per annum.

The flowsheet block diagram, Fig. 3, shows the basic process based on the following conceptual design criteria:





MT. CALVARY RESOURCES LTD

BRITISH COLUMBIA CANADA

PRELIMINARY BLOCK FLOWSHEET



WRIGHT ENGINEERS LIMITED
VANCOUVER CANADA

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NOTED 29 MAY 1989

Crushing

12 hrs crushing per day
 95% availability
 350 stph design rate
 Feed size F₈₀ = 16"
 Product size P₈₀ = -3/4"

Grinding

Feed size F₈₀ = -3/4"
 Product size P₈₀ = 270#
 Circulating load on ball mill 300%

Pb Flotation

Cleaning 2 stages
 Recovery 90% Pb, 7% Ag
 Conc. grade 60% Pb
 Conc. S.G. 6.2

Zn Flotation

Cleaning 2 stages
 Recovery 90% Zn, 40% Ag
 Conc. grade 55% Zn
 Conc. S.G. 4.0

Concentrate Transportation

The concept is to truck haul the concentrates from the mill about 110 km to a barge loading dock on Williston Lake. Barges would transport the concentrates the 200 km down the lake to the rail head at Mackenzie. From here concentrates would be either hauled to Cominco's smelter at Trail, B.C. or transported by rail to Prince Rupert and ship-loaded for sale overseas. The barge operation would be seasonal and concentrate shipped about 8 months of the year. The estimated cost for the transport of concentrate to market is \$75.00 per D.M.T. The concentrate haulage operation would probably be undertaken by a contractor.



5.0 SITE FACILITIES

The plant site would be constructed in one single location to minimise impacts on the environment. The design and layout of buildings would be such that run-off water and any other forms of discharge could be easily collected in retention ponds to avoid direct discharge to the environment. In addition to the main concentrator building, the following additional facilities will be required.

Tailings Pond

This would be built at a short distance from the plant in a suitable containment area. Tailings from the plant would either be pumped or allowed to flow by gravity, depending on relative elevations. Full use would be made of reclaim water to minimise discharge from the pond. All discharge would be treated to ensure confirmation with governing Provincial and Federal water quality regulations.

Power Generation

Power will be produced at site using a number of diesel generator units housed in a powerhouse close to the concentrator. Waste heat will be used for heating purposes. Initial estimates are for an installed capacity of about 13,000 HP. Distribution to plant and mine areas will be by overhead pole-lines.

Water

Process water will be required at the plant site. The amount required will be minimised by use of reclaim water from the tailings pond. No water source has been identified for this conceptual study. However, many sources exist in the area and no supply problems are foreseen.

Plant site buildings, and roads

Additional buildings required at the plant site will be a small warehouse, an



analytical laboratory and a general/engineering office. These can be of semi-permanent design or, for the office, trailer-type buildings. At the mine site a small surface workshop with dry, lamp-room, and offices will be required at the portal.

Roads connecting the plant site to the mine and tailings pond will be built to logging road standard, with suitable drainage to collect run-off and minimise silt discharge to the natural waterways. The access road to the property, which will also connect to the airfield will be of similar design. Minor upgrading of airfield facilities will also be required.

6.0 ENVIRONMENTAL CONSIDERATIONS AND RECLAMATION

The primary environmental concern will be water run-off from the disturbed areas. The material likely to affect the environment will be silt and other fine material. However, it is recognised that acidic drainage particularly from the tailings storage area may be a problem given that there are pyritic zones within the deposit. To mitigate any drainage problems during the operation a comprehensive water management plan will be put into effect. Proper reclamation of the area after the end of the mine life will ensure there will be no disturbances to the environment in later years.

The disturbance within the recreational area will be confined to the access road and mine portals. Ditching around these areas will catch any run-off and divert it to retention ponds where silt will settle out before discharge to the natural water courses.

At the plant site area extensive ditching will also be used to catch run-off of water and any plant solutions spilled during operation. This run-off will be treated before discharge. Water discharge from the tailings pond will be minimised by using the maximum amount of reclaim water possible. All discharge will be treated to meet government regulations.



Reclamation of the site will be carried out at end of life. The mine accesses will be permanently sealed and regraded. All plant site buildings and equipment will be removed, foundations buried and the site regraded. The tailings pond will be covered and seeded to create a stable structure. Long term diversion ditches will be constructed to minimise percolation into the tailings area. If necessary, the access roads will be ripped and re-seeded to prevent vehicle access to the area.

7.0 CAPITAL AND OPERATING COST ESTIMATES

The capital and operating costs were derived using Wright's capital and operating cost computer programs. Manual adjustments were made as considered necessary based on our judgement and experience. As the basic data input to the programs is very preliminary, the resulting cost estimates must also be considered to be preliminary.

Capital Cost Summary (Millions) (For a 4000 t.p.d. facility)

The capital cost for the mine is based on a requirement to develop all the major access prior to production and stope development for 5 stoping blocks. Total development is about 8,000 metres. Major installations at mine include compressor house and primary crusher, plus the main haulage tunnel, maintenance shops and trolley line train system.

The capital for the process plant is based on a conventional 4,000 t.p.d. crushing-grinding-flotation-filtration plant. Building would probably be of pre-engineered design and built to withstand moderate snow loads.

Capital Cost for the tailings system includes initial construction of a starter dam and equipment for reclaim water supply.

It has been assumed that construction and mine development will take place over a two year pre-production period. The capital has been split on a one-third, two-third basis for these years.



Reclamation costs will be incurred in the last year of production and a year beyond for site rehabilitation. Basic reclamation will include removal of buildings and facilities, and stabilisation of the tailings storage area by seeding. For cash flow purposes the cost of reclamation has been offset by the assumed salvage value of the property.

CAPITAL COST SUMMARY (Millions) - For a 4000 t.p.d. Facility

	<u>\$ Million</u>
<u>MINING</u>	
Mine Development	7.9
Mine U/G Facilities (Crusher & Maintenance area)	2.1
Mine Equipment (Incl. LHD's, Trains, Ventilation Fans, Compressors & Crusher)	<u>11.4</u>
Subtotal Mining	21.3
<u>CONCENTRATOR</u>	
Plant Site Clearing	1.7
Foundations	3.0
Crushing Plant, Coarse Ore Storage/Reclaim	7.9
Concentrator Building	4.6
Grinding Section, Fine Ore Storage	8.5
Flotation Section	5.8
Thickening, Filtration	2.2
Conc. Handling & Loading	1.0
Assay Laboratory	0.5
Allowance for Piping, Mechanical, Electrical & Instrumentation (30%)	<u>15.2</u>
Subtotal Concentrator	50.4
<u>PLANT UTILITIES & GENERAL SERVICES</u>	
Power Generation & Distribution (9810 kW Installed)	8.9
Tailings Storage	3.4
Water Supply	0.6
General Plant Building & Roads	2.4
Access Road (65 km)	5.9
Fly-in/Fly-out Accommodation	6.0
Barge Loading/Unloading Facility	0.5
Upgrade Airstrip	<u>0.5</u>
Subtotal Utilities & General Services	28.2



PROJECT OVERHEAD COSTS**\$ Million**

Studies, Design, Technical Planning	3.9
Construction Management & Construction Indirects	5.9
Owners Costs (Accounting, Legal, etc.,)	<u>3.4</u>
Subtotal Project Overhead	13.3
Contingency @ 20% of Capital	22.6
TOTAL CAPITAL COSTS	135.8
Working Capital (4 Months)	15.5
Sustaining Capital per Year	0.8
Reclamation Cost	3.0



Operating Costs

<u>Mining</u>	<u>Pers.</u>	<u>\$/tonne</u>
<u>Labour</u>		
Supervision, Engineering	22	1.07
Operation	100	5.71
Maintenance	<u>20</u>	<u>1.10</u>
	142	7.87
Supplies		<u>4.33</u>
		\$12.20
 <u>Milling</u>		
<u>Labour</u>		
Supervision	16	0.80
Operation	27	1.72
Maintenance	<u>14</u>	<u>0.76</u>
	57	\$ 3.28
 <u>Supplies</u>		
Steel		1.74
Reagents		3.12
Maintenance		<u>0.61</u>
		\$ 5.47
		\$ 8.75
 <u>Admin. & Surface Services</u>		
Staff	10	0.51
Hourly	32	1.79
G & A		0.21
Camp Costs		2.11
Fly-in/Fly-out Costs		<u>0.64</u>
		\$ 5.26



Power Generation (\$0.20/kWhr)

	<u>Installed H.P.</u>	<u>Av.Demand kW</u>	<u>kWh/Year (10⁶)</u>	<u>\$/Year</u>
Crushing/Conveying	1,500	839	6.68	1,335,600
Grinding	3,500	1958	15.58	3,116,400
Flotation	3,000	1679	13.36	2,671,200
Filtration	200	112	0.90	179,200
Misc. & Services	800	448	3.57	714,000
Mine Crushing	150	84	0.67	134,400
Mine Compressed Air	2,000	1119	8.90	1,780,800
Mine Ventilation	800	537	4.27	854,000
Mine General	1,000	560	4.45	890,400
Town site	<u>200</u>	<u>134</u>	<u>1.06</u>	<u>212,800</u>
	13,150	7,470		11,888,800
				\$8.49/tonne
Total Unit Operating Costs				\$34.70/tonne
Yearly Operating Cost				\$48,566,000



8.0 FINANCIAL ANALYSIS

This project has been investigated for various reserve and grade scenarios using a discounted cashflow approach. This method of valuation requires projecting yearly cash inflows or revenue, and subtracting yearly cash outflows such as operating cost, capital costs, royalties and taxes and discounting the difference back to the date of the valuation. Each of the major components of the cashflow has been previously discussed. In addition to this it should be noted that no inflation was used for revenue or costs, no debt or interest was included and all taxes were calculated as applicable to a mine in B.C.

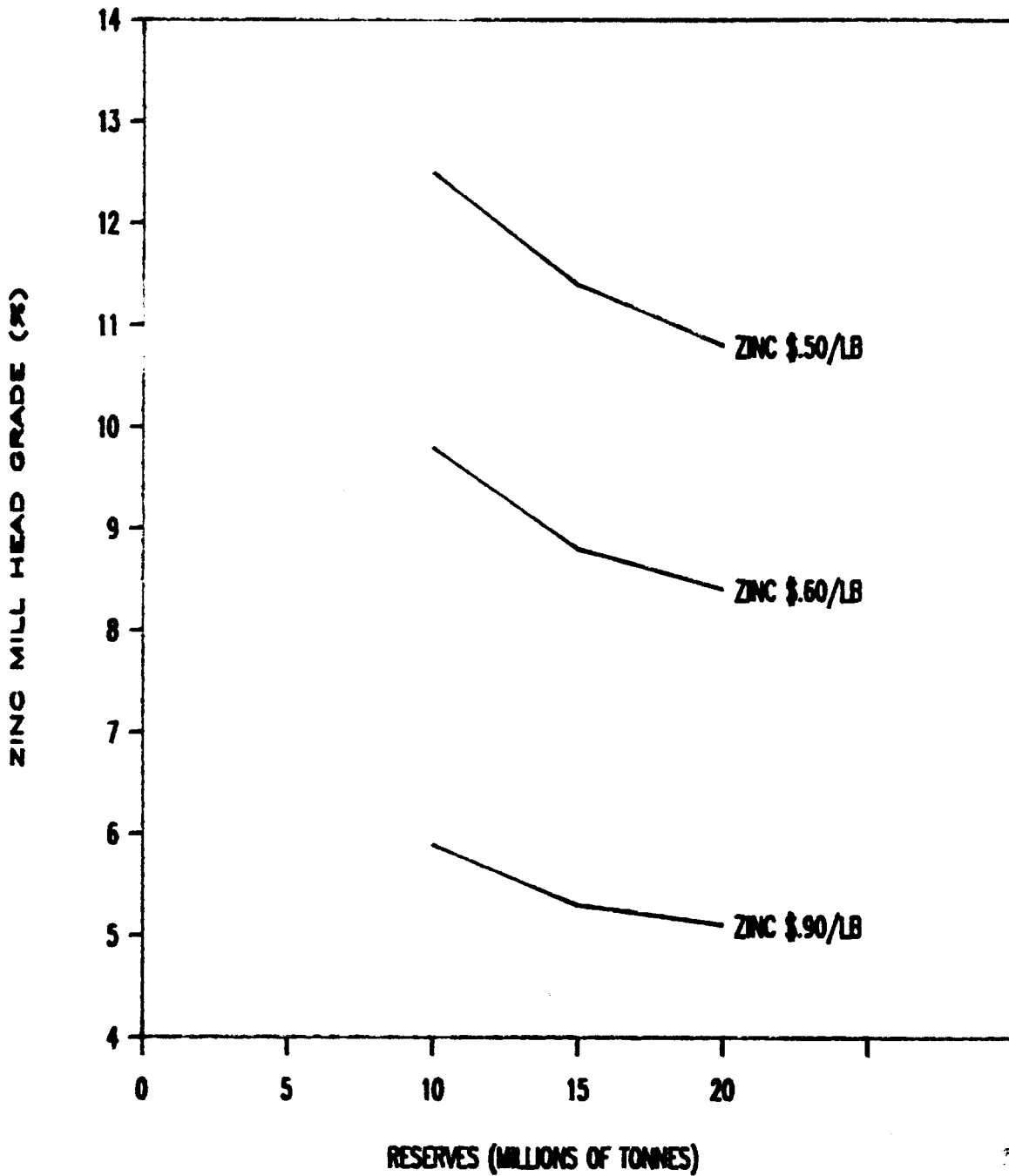
A base case analysis resulted in a rate of return of 9.3% at \$.50/lb zinc, 18.0% at \$.60/lb zinc and 39.5% at \$.90/lb zinc. The cashflows for these runs and grade sensitivities are summarized below and attached. In addition a Breakeven Analysis was performed to get a 15% rate of return at various combinations of Reserves and Grade at \$.50/lb, \$.60/lb and \$.90/lb zinc. A graph showing the results of this analysis is presented on the following page.

	Rate of Return (%)	Net Present Value (Million \$) at discount rates of			
		<u>0%</u>	<u>5%</u>	<u>10%</u>	<u>15%</u>
Zinc \$.50/lb	9.25	87.1	30.5	-4.2	-26.1
Grade +10%	13.51	129.4	61.9	20.2	-6.8
Grade -10%	4.80	45.5	-1.4	-29.5	-46.7
Zinc \$.60/lb	18.02	176.9	96.7	46.5	14.0
Grade +10%	22.54	228.2	133.8	74.4	35.8
Grade -10%	13.18	126.0	59.4	18.1	-8.3
Zinc \$.90/lb	39.50	447.6	291.0	191.5	125.8
Grade +10%	44.97	526.0	347.0	232.9	157.6
Grade -10%	33.86	369.2	235.1	150.1	94.1



BREAKEVEN: GRADE vs RESERVES

AT A 15% DISCOUNT RATE



DETAILS OF CASH FLOWS



OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	20.460	20.460	9.309	0.000	213.911
ZINC	114.279	114.279	51.997	0.000	1194.782
SILVER	5.489	5.489	2.497	0.000	57.383

TOTAL GROSS REVENUE	140.227	140.227	63.803	0.000	1466.075
- LEAD TREATMENT	7.762	7.762	3.532	0.000	81.148
- ZINC TREATMENT	45.711	45.711	20.799	0.000	477.913
- LEAD FREIGHT	4.520	4.520	2.056	0.000	47.252
- ZINC FREIGHT	18.078	18.078	8.226	0.000	189.008

NET MINEGATE REVENUE (\$US MILLION)	64.156	64.156	29.191	0.000	670.755
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	77.297	77.297	35.170	0.000	808.139

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	28.731	28.731	13.073	0.000	300.381
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
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GRADES

LEAD (%)	2.64	2.64	2.64	2.64	2.64
ZINC (%)	9.68	9.68	9.68	9.68	9.68
SILVER (OZ/T)	1.98	1.98	1.98	1.98	1.98

RECOVERIES (%)

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	55.4	55.4	25.2	0.0	579.6
ZINC	221.8	221.8	100.9	0.0	2318.5

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	68200.4	68200.4	31031.2	0.0	713035.6
ZINC (LBS)	228557.1	228557.1	103993.5	0.0	2389565.0
SILVER IN LEAD CONC (OZS)	138.6	138.6	63.1	0.0	1449.1
SILVER IN ZINC CONC (OZS)	776.2	776.2	353.2	0.0	8114.8

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.50	0.50	0.50	0.50	0.50
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	64.156	64.156	29.191	0.000	670.755
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	77.297	77.297	35.170	0.000	808.139
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	5.885	5.880	2.831	0.000	32.012
-PROVINCIAL INCOME TAX	3.923	3.920	1.888	0.000	21.896
-MINING TAX	3.573	3.570	1.418	0.000	19.357
CASH FLOW BEFORE CAPITAL COSTS	15.349	15.360	6.936	0.000	227.117
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	14.549	14.560	25.436	0.000	87.117
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	14.549	14.560	25.436	0.000	87.117
ACCUMULATIVE TOTAL	47.121	61.681	87.117	87.117	0.000
DISCOUNTED NCF (5.0 %)	8.717	8.308	13.822	0.000	30.543
DISCOUNTED NCF (10.0 %)	5.348	4.866	7.728	0.000	-4.221
DISCOUNTED NCF (15.0 %)	3.354	2.918	4.433	0.000	-26.139
DISCOUNTED NCF (20.0 %)	2.145	1.789	2.604	0.000	-40.208
DISCOUNTED NCF (25.0 %)	1.397	1.119	1.563	0.000	-49.323
DISCOUNTED NCF (30.0 %)	0.926	0.713	0.958	0.000	-55.225
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	9.25

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	20.460	20.460	9.309	0.000	213.911
ZINC	137.134	137.134	62.396	0.000	1433.739
SILVER	5.489	5.489	2.497	0.000	57.383

TOTAL GROSS REVENUE	163.083	163.083	74.203	0.000	1705.032
- LEAD TREATMENT	7.762	7.762	3.532	0.000	81.148
- ZINC TREATMENT	54.854	54.854	24.958	0.000	573.495
- LEAD FREIGHT	4.520	4.520	2.056	0.000	47.252
- ZINC FREIGHT	18.078	18.078	8.226	0.000	189.008

NET MINEGATE REVENUE (\$US MILLION)	77.870	77.870	35.431	0.000	814.129
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	93.819	93.819	42.688	0.000	980.878

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	45.253	45.253	20.590	0.000	473.121
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
GRADES					

LEAD (%)	2.64	2.64	2.64	2.64	2.64
ZINC (%)	9.68	9.68	9.68	9.68	9.68
SILVER (OZ/T)	1.98	1.98	1.98	1.98	1.98

RECOVERIES (%)					
LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	55.4	55.4	25.2	0.0	579.6
ZINC	221.8	221.8	100.9	0.0	2318.5

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	68200.4	68200.4	31031.2	0.0	713035.6
ZINC (LBS)	228557.1	228557.1	103993.5	0.0	2389565.0
SILVER IN LEAD CONC (OZS)	138.6	138.6	63.1	0.0	1449.1
SILVER IN ZINC CONC (OZS)	776.2	776.2	353.2	0.0	8114.8

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.60	0.60	0.60	0.60	0.60
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	77.870	77.870	35.431	0.000	814.129
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	93.819	93.819	42.688	0.000	980.878
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	9.355	9.350	4.410	0.000	68.287
-PROVINCIAL INCOME TAX	6.237	6.233	2.940	0.000	46.079
-MINING TAX	5.680	5.677	2.545	0.000	41.833
CASH FLOW BEFORE CAPITAL COSTS	23.982	23.993	10.695	0.000	316.922
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	23.182	23.193	29.195	0.000	176.922
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	23.182	23.193	29.195	0.000	176.922
ACCUMULATIVE TOTAL	124.534	147.727	176.922	176.922	0.000
DISCOUNTED NCF (5.0 %)	13.889	13.234	15.865	0.000	96.737
DISCOUNTED NCF (10.0 %)	8.522	7.751	8.869	0.000	46.521
DISCOUNTED NCF (15.0 %)	5.343	4.649	5.088	0.000	14.040
DISCOUNTED NCF (20.0 %)	3.418	2.850	2.989	0.000	-7.538
DISCOUNTED NCF (25.0 %)	2.226	1.782	1.794	0.000	-22.181
DISCOUNTED NCF (30.0 %)	1.475	1.135	1.099	0.000	-32.275
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	18.02

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	20.460	20.460	9.309	0.000	213.911
ZINC	205.701	205.701	93.594	0.000	2150.608
SILVER	5.489	5.489	2.497	0.000	57.383

TOTAL GROSS REVENUE	231.650	231.650	105.401	0.000	2421.901
- LEAD TREATMENT	7.762	7.762	3.532	0.000	81.148
- ZINC TREATMENT	82.281	82.281	37.438	0.000	860.243
- LEAD FREIGHT	4.520	4.520	2.056	0.000	47.252
- ZINC FREIGHT	18.078	18.078	8.226	0.000	189.008

NET MINEGATE REVENUE (\$US MILLION)	119.010	119.010	54.150	0.000	1244.250
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	143.386	143.386	65.240	0.000	1499.097

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	94.820	94.820	43.143	0.000	991.339
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BACKGROUND STATISTICS

ORE MILLED (MILLION T) GRADES	1.400	1.400	0.637	0.000	14.637
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LEAD (%)	2.64	2.64	2.64	2.64	2.64
ZINC (%)	9.68	9.68	9.68	9.68	9.68
SILVER (OZ/T)	1.98	1.98	1.98	1.98	1.98

RECOVERIES (%)					
LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	55.4	55.4	25.2	0.0	579.6
ZINC	221.8	221.8	100.9	0.0	2318.5

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	68200.4	68200.4	31031.2	0.0	713035.6
ZINC (LBS)	228557.1	228557.1	103993.5	0.0	2389565.0
SILVER IN LEAD CONC (OZS)	138.6	138.6	63.1	0.0	1449.1
SILVER IN ZINC CONC (OZS)	776.2	776.2	353.2	0.0	8114.8

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.90	0.90	0.90	0.90	0.90
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	119.010	119.010	54.150	0.000	1244.250
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	143.386	143.386	65.240	0.000	1499.097
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	19.764	19.759	9.146	0.000	177.113
-PROVINCIAL INCOME TAX	13.176	13.173	6.097	0.000	118.630
-MINING TAX	11.999	11.996	5.553	0.000	108.038
CASH FLOW BEFORE CAPITAL COSTS	49.881	49.892	22.346	0.000	587.559
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	49.081	49.092	40.846	0.000	447.559
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	49.081	49.092	40.846	0.000	447.559
ACCUMULATIVE TOTAL	357.621	406.712	447.559	447.559	0.000
DISCOUNTED NCF (5.0 %)	29.405	28.011	22.197	0.000	291.027
DISCOUNTED NCF (10.0 %)	18.042	16.406	12.409	0.000	191.455
DISCOUNTED NCF (15.0 %)	11.313	9.840	7.119	0.000	125.800
DISCOUNTED NCF (20.0 %)	7.236	6.031	4.182	0.000	81.119
DISCOUNTED NCF (25.0 %)	4.714	3.772	2.511	0.000	49.863
DISCOUNTED NCF (30.0 %)	3.123	2.402	1.538	0.000	27.473
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	39.50

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	22.475	22.475	10.226	0.000	234.978
ZINC	125.730	125.730	57.207	0.000	1314.507
SILVER	6.045	6.045	2.751	0.000	63.205

TOTAL GROSS REVENUE	154.251	154.251	70.184	0.000	1612.689
- LEAD TREATMENT	8.526	8.526	3.879	0.000	89.139
- ZINC TREATMENT	50.292	50.292	22.883	0.000	525.803
- LEAD FREIGHT	4.965	4.965	2.259	0.000	51.906
- ZINC FREIGHT	19.890	19.890	9.050	0.000	207.948

NET MINEGATE REVENUE (\$US MILLION)	70.578	70.578	32.113	0.000	737.894
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	85.034	85.034	38.690	0.000	889.028

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	36.468	36.468	16.593	0.000	381.271
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BACKGROUND STATISTICS

ORE MILLED (MILLION T) GRADES	1.400	1.400	0.637	0.000	14.637
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LEAD (%)	2.90	2.90	2.90	2.90	2.90
ZINC (%)	10.65	10.65	10.65	10.65	10.65
SILVER (OZ/T)	2.18	2.18	2.18	2.18	2.18

RECOVERIES (%)

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	60.9	60.9	27.7	0.0	636.7
ZINC	244.0	244.0	111.0	0.0	2550.8

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	74917.2	74917.2	34087.3	0.0	783258.9
ZINC (LBS)	251460.0	251460.0	114414.3	0.0	2629014.0
SILVER IN LEAD CONC (OZS)	152.7	152.7	69.5	0.0	1596.9
SILVER IN ZINC CONC (OZS)	854.8	854.8	388.9	0.0	8937.2

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.50	0.50	0.50	0.50	0.50
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	70.578	70.578	32.113	0.000	737.894
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CAN\$)	85.034	85.034	38.690	0.000	889.028
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	7.510	7.505	3.571	0.000	48.999
-PROVINCIAL INCOME TAX	5.007	5.003	2.380	0.000	33.220
-MINING TAX	4.560	4.557	1.946	0.000	29.666
CASH FLOW BEFORE CAPITAL COSTS	19.392	19.403	8.696	0.000	269.386
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	18.592	18.603	27.196	0.000	129.386
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	18.592	18.603	27.196	0.000	129.386
ACCUMULATIVE TOTAL	83.587	102.190	129.386	129.386	0.000
DISCOUNTED NCF (5.0 %)	11.139	10.615	14.779	0.000	61.948
DISCOUNTED NCF (10.0 %)	6.834	6.217	8.262	0.000	20.025
DISCOUNTED NCF (15.0 %)	4.285	3.729	4.740	0.000	-6.824
DISCOUNTED NCF (20.0 %)	2.741	2.286	2.784	0.000	-24.428
DISCOUNTED NCF (25.0 %)	1.786	1.429	1.672	0.000	-36.165
DISCOUNTED NCF (30.0 %)	1.183	0.910	1.024	0.000	-44.071
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	13.51

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	18.445	18.445	8.393	0.000	192.844
ZINC	102.827	102.827	46.786	0.000	1075.057
SILVER	4.932	4.932	2.244	0.000	51.561

TOTAL GROSS REVENUE	126.204	126.204	57.423	0.000	1319.462
- LEAD TREATMENT	6.997	6.997	3.184	0.000	73.156
- ZINC TREATMENT	41.131	41.131	18.715	0.000	430.023
- LEAD FREIGHT	4.074	4.074	1.854	0.000	42.598
- ZINC FREIGHT	16.267	16.267	7.401	0.000	170.068

NET MINEGATE REVENUE (\$US MILLION)	57.735	57.735	26.269	0.000	603.616
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	69.560	69.560	31.650	0.000	727.249

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	20.994	20.994	9.552	0.000	219.491
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
GRADES					

LEAD (%)	2.38	2.38	2.38	2.38	2.38
ZINC (%)	8.71	8.71	8.71	8.71	8.71
SILVER (OZ/T)	1.78	1.78	1.78	1.78	1.78

RECOVERIES (%)

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	50.0	50.0	22.7	0.0	522.5
ZINC	199.5	199.5	90.8	0.0	2086.2

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	61483.7	61483.7	27975.1	0.0	642812.5
ZINC (LBS)	205654.1	205654.1	93572.6	0.02150113.0	
SILVER IN LEAD CONC (OZS)	124.5	124.5	56.6	0.0	1301.2
SILVER IN ZINC CONC (OZS)	697.5	697.5	317.4	0.0	7292.3

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.50	0.50	0.50	0.50	0.50
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	57.735	57.735	26.269	0.000	603.616
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	69.560	69.560	31.650	0.000	727.249
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	4.260	4.255	2.092	0.000	15.025
-PROVINCIAL INCOME TAX	2.840	2.837	1.395	0.000	10.571
-MINING TAX	2.438	2.435	0.890	0.000	8.420
CASH FLOW BEFORE CAPITAL COSTS	11.455	11.467	5.176	0.000	185.475
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	10.655	10.667	23.676	0.000	45.475
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	10.655	10.667	23.676	0.000	45.475
ACCUMULATIVE TOTAL	11.133	21.800	45.475	45.475	0.000
DISCOUNTED NCF (5.0 %)	6.384	6.086	12.866	0.000	-1.416
DISCOUNTED NCF (10.0 %)	3.917	3.565	7.193	0.000	-29.534
DISCOUNTED NCF (15.0 %)	2.456	2.138	4.126	0.000	-46.689
DISCOUNTED NCF (20.0 %)	1.571	1.311	2.424	0.000	-57.219
DISCOUNTED NCF (25.0 %)	1.023	0.820	1.455	0.000	-63.629
DISCOUNTED NCF (30.0 %)	0.678	0.522	0.891	0.000	-67.412
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	4.80

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	22.475	22.475	10.226	0.000	234.978
ZINC	150.876	150.876	68.649	0.000	1577.408
SILVER	6.045	6.045	2.751	0.000	63.205

TOTAL GROSS REVENUE	179.397	179.397	81.625	0.000	1875.591
- LEAD TREATMENT	8.526	8.526	3.879	0.000	89.139
- ZINC TREATMENT	60.350	60.350	27.459	0.000	630.963
- LEAD FREIGHT	4.965	4.965	2.259	0.000	51.906
- ZINC FREIGHT	19.890	19.890	9.050	0.000	207.948

NET MINEGATE REVENUE (\$US MILLION)	85.666	85.666	38.978	0.000	895.634
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	103.212	103.212	46.961	0.000	1079.078

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	54.646	54.646	24.864	0.000	571.320
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
GRADES					

LEAD (%)	2.90	2.90	2.90	2.90	2.90
ZINC (%)	10.65	10.65	10.65	10.65	10.65
SILVER (OZ/T)	2.18	2.18	2.18	2.18	2.18

RECOVERIES (%)					
LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	60.9	60.9	27.7	0.0	636.7
ZINC	244.0	244.0	111.0	0.0	2550.8

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	74917.2	74917.2	34087.3	0.0	783258.9
ZINC (LBS)	251460.0	251460.0	114414.3	0.0	2629014.0
SILVER IN LEAD CONC (OZS)	152.7	152.7	69.5	0.0	1596.9
SILVER IN ZINC CONC (OZS)	854.8	854.8	388.9	0.0	8937.2

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.60	0.60	0.60	0.60	0.60
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	85.666	85.666	38.978	0.000	895.634
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	103.212	103.212	46.961	0.000	1079.078
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	11.327	11.322	5.300	0.000	88.909
-PROVINCIAL INCOME TAX	7.551	7.548	3.538	0.000	59.827
-MINING TAX	6.877	6.874	3.186	0.000	54.380
CASH FLOW BEFORE CAPITAL COSTS	28.890	28.901	12.832	0.000	368.205
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	28.090	28.101	31.332	0.000	228.205
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	28.090	28.101	31.332	0.000	228.205
ACCUMULATIVE TOTAL	168.772	196.873	228.205	228.205	0.000
DISCOUNTED NCF (5.0 %)	16.829	16.034	17.026	0.000	133.837
DISCOUNTED NCF (10.0 %)	10.326	9.391	9.519	0.000	74.433
DISCOUNTED NCF (15.0 %)	6.475	5.632	5.461	0.000	35.755
DISCOUNTED NCF (20.0 %)	4.141	3.453	3.208	0.000	9.842
DISCOUNTED NCF (25.0 %)	2.698	2.159	1.926	0.000	-7.936
DISCOUNTED NCF (30.0 %)	1.787	1.375	1.179	0.000	-20.366
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	22.54

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	18.445	18.445	8.393	0.000	192.844
ZINC	123.392	123.392	56.144	0.000	1290.068
SILVER	4.932	4.932	2.244	0.000	51.561

TOTAL GROSS REVENUE	146.769	146.769	66.780	0.000	1534.473
- LEAD TREATMENT	6.997	6.997	3.184	0.000	73.156
- ZINC TREATMENT	49.357	49.357	22.457	0.000	516.027
- LEAD FREIGHT	4.074	4.074	1.854	0.000	42.598
- ZINC FREIGHT	16.267	16.267	7.401	0.000	170.068

NET MINEGATE REVENUE (\$US MILLION)	70.074	70.074	31.884	0.000	732.623
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	84.426	84.426	38.414	0.000	882.679

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	35.860	35.860	16.317	0.000	374.921
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
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GRADES

LEAD (%)	2.38	2.38	2.38	2.38	2.38
ZINC (%)	8.71	8.71	8.71	8.71	8.71
SILVER (OZ/T)	1.78	1.78	1.78	1.78	1.78

RECOVERIES (%)

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	50.0	50.0	22.7	0.0	522.5
ZINC	199.5	199.5	90.8	0.0	2086.2

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	61483.7	61483.7	27975.1	0.0	642812.5
ZINC (LBS)	205654.1	205654.1	93572.6	0.02150113.0	
SILVER IN LEAD CONC (OZS)	124.5	124.5	56.6	0.0	1301.2
SILVER IN ZINC CONC (OZS)	697.5	697.5	317.4	0.0	7292.3

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.60	0.60	0.60	0.60	0.60
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	70.074	70.074	31.884	0.000	732.623
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CANS)	84.426	84.426	38.414	0.000	882.679
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	7.382	7.377	3.513	0.000	47.665
-PROVINCIAL INCOME TAX	4.922	4.918	2.342	0.000	32.331
-MINING TAX	4.482	4.479	1.904	0.000	28.946
CASH FLOW BEFORE CAPITAL COSTS	19.074	19.086	8.558	0.000	265.979
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	18.274	18.286	27.058	0.000	125.979
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	18.274	18.286	27.058	0.000	125.979
ACCUMULATIVE TOTAL	80.635	98.921	125.979	125.979	0.000
DISCOUNTED NCF (5.0 %)	10.949	10.434	14.704	0.000	59.443
DISCOUNTED NCF (10.0 %)	6.718	6.111	8.220	0.000	18.111
DISCOUNTED NCF (15.0 %)	4.212	3.665	4.716	0.000	-8.335
DISCOUNTED NCF (20.0 %)	2.694	2.247	2.770	0.000	-25.652
DISCOUNTED NCF (25.0 %)	1.755	1.405	1.663	0.000	-37.180
DISCOUNTED NCF (30.0 %)	1.163	0.895	1.019	0.000	-44.926
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	13.18

OPERATING SUMMARY

YEAR 9 YEAR 10 YEAR 11 YEAR 12

GROSS REVENUE (\$US MILLION)

LEAD	22.475	22.475	10.226	0.000	234.978
ZINC	226.314	226.314	102.973	0.000	2366.113
SILVER	6.045	6.045	2.751	0.000	63.205

TOTAL GROSS REVENUE	254.835	254.835	115.950	0.000	2664.295
- LEAD TREATMENT	8.526	8.526	3.879	0.000	89.139
- ZINC TREATMENT	90.526	90.526	41.189	0.000	946.445
- LEAD FREIGHT	4.965	4.965	2.259	0.000	51.906
- ZINC FREIGHT	19.890	19.890	9.050	0.000	207.948

NET MINEGATE REVENUE (\$US MILLION)	130.928	130.928	59.572	0.000	1368.857
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205

NET MINEGATE REVENUE (\$CDN MILLION)	157.745	157.745	71.774	0.000	1649.225
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- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	109.179	109.179	49.677	0.000	1141.468
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
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GRADES

LEAD (%)	2.90	2.90	2.90	2.90	2.90
ZINC (%)	10.65	10.65	10.65	10.65	10.65
SILVER (OZ/T)	2.18	2.18	2.18	2.18	2.18

RECOVERIES (%)

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0

CONCENTRATE PRODUCTION (000'S DRY T)

LEAD	60.9	60.9	27.7	0.0	636.7
ZINC	244.0	244.0	111.0	0.0	2550.8

PAYABLE PRODUCTION (000'S)

LEAD (LBS)	74917.2	74917.2	34087.3	0.0	783258.9
ZINC (LBS)	251460.0	251460.0	114414.3	0.0	2629014.0
SILVER IN LEAD CONC (OZS)	152.7	152.7	69.5	0.0	1596.9
SILVER IN ZINC CONC (OZS)	854.8	854.8	388.9	0.0	8937.2

METAL PRICES (\$US/UNIT)

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.90	0.90	0.90	0.90	0.90
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	130.928	130.928	59.572	0.000	1368.857
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CAN\$)	157.745	157.745	71.774	0.000	1649.225
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	22.779	22.774	10.518	0.000	208.640
-PROVINCIAL INCOME TAX	15.186	15.183	7.012	0.000	139.648
-MINING TAX	13.830	13.827	6.386	0.000	127.179
CASH FLOW BEFORE CAPITAL COSTS	57.383	57.395	25.760	0.000	666.001
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	56.583	56.595	44.260	0.000	526.001
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	56.583	56.595	44.260	0.000	526.001
ACCUMULATIVE TOTAL	425.146	481.741	526.001	526.001	0.000
DISCOUNTED NCF (5.0 %)	33.900	32.292	24.052	0.000	347.018
DISCOUNTED NCF (10.0 %)	20.800	18.913	13.446	0.000	232.944
DISCOUNTED NCF (15.0 %)	13.043	11.344	7.714	0.000	157.559
DISCOUNTED NCF (20.0 %)	8.342	6.953	4.532	0.000	106.122
DISCOUNTED NCF (25.0 %)	5.434	4.348	2.720	0.000	70.026
DISCOUNTED NCF (30.0 %)	3.600	2.770	1.666	0.000	44.071
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	44.97

OPERATING SUMMARY

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	

GROSS REVENUE (\$US MILLION)					

LEAD	18.445	18.445	8.393	0.000	192.844
ZINC	185.089	185.089	84.215	0.000	1935.103
SILVER	4.932	4.932	2.244	0.000	51.561

TOTAL GROSS REVENUE	208.466	208.466	94.852	0.000	2179.507
- LEAD TREATMENT	6.997	6.997	3.184	0.000	73.156
- ZINC TREATMENT	74.035	74.035	33.686	0.000	774.041
- LEAD FREIGHT	4.074	4.074	1.854	0.000	42.598
- ZINC FREIGHT	16.267	16.267	7.401	0.000	170.068

NET MINEGATE REVENUE (\$US MILLION)	107.092	107.092	48.727	0.000	1119.644
- EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
NET MINEGATE REVENUE (\$CDN MILLION)	129.026	129.026	58.707	0.000	1348.969

- OPERATING COSTS	48.566	48.566	22.098	0.000	507.758
- ROYALTIES	0.000	0.000	0.000	0.000	0.000

OPERATING PROFIT	80.460	80.460	36.609	0.000	841.211
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BACKGROUND STATISTICS

ORE MILLED (MILLION T)	1.400	1.400	0.637	0.000	14.637
GRADES					

LEAD (%)	2.38	2.38	2.38	2.38	2.38
ZINC (%)	8.71	8.71	8.71	8.71	8.71
SILVER (OZ/T)	1.78	1.78	1.78	1.78	1.78
RECOVERIES (%)					

LEAD	90.0	90.0	90.0	90.0	90.0
ZINC	90.0	90.0	90.0	90.0	90.0
SILVER IN LEAD	7.0	7.0	7.0	7.0	7.0
SILVER IN ZINC	40.0	40.0	40.0	40.0	40.0
CONCENTRATE PRODUCTION (000'S DRY T)					

LEAD	50.0	50.0	22.7	0.0	522.5
ZINC	199.5	199.5	90.8	0.0	2086.2
PAYABLE PRODUCTION (000'S)					

LEAD (LBS)	61483.7	61483.7	27975.1	0.0	642812.5
ZINC (LBS)	205654.1	205654.1	93572.6	0.02150113.0	
SILVER IN LEAD CONC (OZS)	124.5	124.5	56.6	0.0	1301.2
SILVER IN ZINC CONC (OZS)	697.5	697.5	317.4	0.0	7292.3
METAL PRICES (\$US/UNIT)					

LEAD (/LB)	0.30	0.30	0.30	0.30	0.30
ZINC (/LB)	0.90	0.90	0.90	0.90	0.90
SILVER (/OZ)	6.00	6.00	6.00	6.00	6.00

CASHFLOW SUMMARY - PAGE 1

\$ MILLION CAN.

	YEAR 9	YEAR 10	YEAR 11	YEAR 12	
TOTAL REVENUE (MILLION US\$)	107.092	107.092	48.727	0.000	1119.644
EXCHANGE RATE	1.205	1.205	1.205	1.205	1.205
TOTAL REVENUE (MILLION CAN\$)	129.026	129.026	58.707	0.000	1348.969
-TOTAL OPERATING COST	48.566	48.566	22.098	0.000	507.758
-ROYALTY	0.000	0.000	0.000	0.000	0.000
-FEDERAL INCOME TAX	16.748	16.743	7.774	0.000	145.586
-PROVINCIAL INCOME TAX	11.166	11.162	5.183	0.000	97.612
-MINING TAX	10.169	10.166	4.720	0.000	88.765
CASH FLOW BEFORE CAPITAL COSTS	42.378	42.389	18.933	0.000	509.248
-MINE CAPITAL	0.800	0.800	0.000	0.000	28.500
-PROCESSING CAPITAL	0.000	0.000	0.000	0.000	50.400
-OTHER CAPITAL	0.000	0.000	0.000	0.000	64.100
-CAPITALIZED INTEREST LOAN #1	0.000	0.000	0.000	0.000	0.000
-CAPITALIZED INTEREST LOAN #2	0.000	0.000	0.000	0.000	0.000
-WORKING CAPITAL REQUIRED	0.000	0.000	0.000	0.000	15.500
+WORKING CAPITAL RECOVERY	0.000	0.000	15.500	0.000	15.500
+SALVAGE	0.000	0.000	3.000	0.000	3.000
TOTAL CAPITAL COSTS	0.800	0.800	-18.500	0.000	140.000
CASH FLOW BEFORE FINANCING	41.578	41.589	37.433	0.000	369.248
+LOAN DRAWDOWN #1	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #1	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #1	0.000	0.000	0.000	0.000	0.000
+LOAN DRAWDOWN #2	0.000	0.000	0.000	0.000	0.000
-LOAN REPAYMENT #2	0.000	0.000	0.000	0.000	0.000
-INTEREST EXPENSE #2	0.000	0.000	0.000	0.000	0.000
NET EQUITY CASH	41.578	41.589	37.433	0.000	369.248
ACCUMULATIVE TOTAL	290.227	331.816	369.248	369.248	0.000
DISCOUNTED MCF (5.0 %)	24.910	23.730	20.341	0.000	235.148
DISCOUNTED MCF (10.0 %)	15.284	13.898	11.372	0.000	150.061
DISCOUNTED MCF (15.0 %)	9.584	8.336	6.524	0.000	94.122
DISCOUNTED MCF (20.0 %)	6.130	5.110	3.833	0.000	56.185
DISCOUNTED MCF (25.0 %)	3.993	3.195	2.301	0.000	29.759
DISCOUNTED MCF (30.0 %)	2.645	2.035	1.400	0.000	10.926
RATE OF RETURN (%)	0.00	0.00	0.00	0.00	33.86