

**BACON & CROWHURST LTD.**  
CONSULTING ENGINEERS

673743

*J.D.C.*

*Incorporate all  
this in one  
report please*

July 9, 1973

Mr. F.W. Fitzpatrick,  
President,  
Bralorne Resources Limited,  
1005 Two Bentall Centre,  
Vancouver 1, B.C.

Dear Mr. Fitzpatrick:

With relation to my preliminary report on Bradina, dated July 5, 1973, I have studied a fourth alternative procedure prepared by Mr. K.G. Collins. This fourth alternative consists of continuing present mining and milling operations as is, but gradually increasing the monthly tonnage milled from 11,665 in July 1973 to 16,660 in October 1973 and thence forward.

An on-site net loss, amounting to a total of \$68,900 is forecast during July and August 1973. An on-site operating profit of \$34,000 is predicted for September, and approximately \$49,000 per month on-site operating profit is shown thence forward.

Capital expenditures for a new change house and extensions to the tailings dam system, each amounting to an estimated \$30,000, or a total of \$60,000, are contemplated forthwith.

It will be noted that no Vancouver costs are considered in this alternative proposal, and current metal prices have been used in the analysis of revenue.

Stope development raises and subdrifts as outlined previously in Alternatives Nos. 1 and 2 would be commenced immediately and are expected to be completed during July and August 1973. Conversion to cut and fill stopes in all but a few areas will take place.

The underground mine crew will be increased from the present 60 men to a total of 100. Both these figures represent the effective portion of the work force, after allowing for annual vacations, absenteeism and turnover, etc.

Mr. F.W. Fitzpatrick

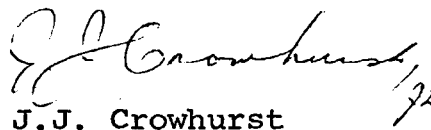
July 9, 1973

The following comments and opinions are offered for your consideration:-

1. It is my opinion that the proposed schedule is perhaps compressed too much and full tonnage production could easily be delayed for up to a month beyond that predicted, i.e., October and forward operating profit levels will not be attained until November.
2. Selective mining and rejection of low grade material is essential. The \$21.68 net smelter return used in the No. 1 Alternative analysis however has been revised downwards to \$20.75 in view of very recent information concerning an analysis of the relative assay values of muck samples and millhead samples.
3. Quick settlement of current labour negotiations at a reasonable economic level must be completed. This procedure will have a direct bearing on securing an efficient work force at an early date, as assumed in Mr. Collins' proposal.
4. Close observation during the next two or three months must be made of tonnage, grade, revenue and cost, and results obtained. Of particular interest will be the raising and subdrifting, which will indicate the grade of ore to be mined ahead of the operating stopes.
5. Definition diamond drilling, amounting to a possible 4,000 feet, estimated to cost \$30,000 may or may not be necessary during the initial period. Hopefully, as assumed by Mr. Collins, this can be avoided if good values are indicated by the raising and subdrifting.

It would appear that, despite all of the above factors, this Alternative No. 4 presents the best solution to the current problem. Two approximate operating profit possibilities, No. 4A and No. 4B are attached, which show what effect a slowdown in performance might present.

Respectfully submitted,

  
J.J. Crowhurst

JJC:jd  
Encls.

ALTERNATIVE 4A

ESTIMATED STATISTICS

<u>MONTH</u> <u>1973</u>	<u>TONS</u> <u>MILLED</u>	<u>NET SMELTER RETURN</u>		<u>OPERATING</u> <u>COSTS</u>	<u>ON SITE</u> <u>OPERATING PROFIT</u> <u>(LOSS)</u>
		<u>Per ton of</u> <u>ore milled</u>	<u>Total</u>		
July	10,500	\$17.62	\$185,000	\$247,000	\$(62,000)
Aug.	12,000	18.09	217,100	276,100	(59,000)
Sept.	13,500	20.75	280,100	294,500	(14,400)
Oct.	15,500	20.75	321,000	296,400	24,600
Nov.	16,660	20.75	345,700	296,200	49,500
Dec.	16,660	20.75	345,700	296,600	49,100
	<u>          </u>		<u>          </u>	<u>          </u>	<u>          </u>
TOTALS	84,820		\$1,694,600	\$1,706,800	\$(12,200)
	<u>          </u>		<u>          </u>	<u>          </u>	<u>          </u>

JJC:jd  
July 9, 1973

ALTERNATIVE 4B

ESTIMATED STATISTICS

<u>MONTH</u> <u>1973</u>	<u>TONS</u> <u>MILLED</u>	<u>NET SMELTER RETURN</u>		<u>OPERATING</u> <u>COSTS</u>	<u>ON SITE</u> <u>OPERATING PROFIT</u> <u>(LOSS)</u>
		<u>Per ton of</u> <u>ore milled</u>	<u>Total</u>		
July	11,600	\$17.62	\$204,400	\$247,000	\$(42,600)
Aug.	13,500	18.09	244,200	276,100	(31,900)
Sept.	15,000	20.75	311,200	294,500	16,700
Oct.	16,000	20.75	332,000	296,400	35,600
Nov.	16,660	20.75	345,700	296,200	49,500
Dec.	16,660	20.75	345,700	296,600	49,100
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TOTALS	89,420		\$1,783,200	\$1,706,800	\$ 76,400
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JJC:jd  
July 9, 1973