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THE ELK GOLD PROJECT
SIMILKAMEEN MINING DIVISION
BRITISH COLUMBIA

A PRELIMINARY EVALUATION FOR

VICEROY RESOURCE CORPORATION

NOVEMBER 21ST, 1993

PREPARED BY

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ELK GOLD PROJECT

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1.0 INTRODUCTION

Mr. Paul F. Saxton, P. Eng., Senior Vice President, Viceroy Resource Corporation (Viceroy), commissioned P. Taggart & Associates to conduct a preliminary review of the Elk Gold Project and adjacent claims which are held in whole, or in part, by Fairfield Minerals Ltd. The property is located at an elevation of 5,300 ft and approximately 25 miles southeast of Merritt, British Columbia.

Viceroy may wish to conduct an in-depth due diligence study of the Elk Gold Project, based, in part, upon the results of this study, the advice of other specialist consultants and internal reviews of the Project. Since this report is required only for internal purposes, and time is of the essence, this evaluation does not comprise a "stand-alone" document. Rather, it should be read in conjunction with the material on file in Viceroy's offices.

Unless otherwise noted, this report has used short tons and ozs/short ton to be consistent with the units used by Fairfield.

P. Taggart & Associates wishes to acknowledge the significant input provided by Allyn Steward, P. Eng. and R. M. Samuels Consulting Inc., upon whose work most of this evaluation is based.

2.0 SUMMARY AND CONCLUSIONS

2.1 General

The Elk Gold Project comprises a series of steeply dipping quartz veins which contain high values of free gold within the size range 1 to 50 microns. The mineable reserves are currently estimated to be as shown below.

Source	Tonnage (tons)	Grade (ozs Au/ton)	Mineable Gold (ozs)
Open pit *	10,000	2.5	25,000
Underground	185,000	0.9	163,000
Total	195,000	0.96	188,000

*Based upon recently published information and historical performance.

Fairfield recently announced that the Company expects to produce approximately 12,000 ozs of gold from the 1993 open pit operations. Further, as a result of recent experience, it has announced that shipments of open pit ore to the smelter in 1994 will contain 25,000 ozs of gold.

The results of limited metallurgical test programs, conducted by reputable laboratories indicate that 95% of the gold can be recovered by a combination of gravity concentration and froth flotation techniques. The mineralization is also amenable to cyanide leaching. The ore contains no deleterious elements.

While the Siwash North Deposit is the focus of the field activities at present, the results of geological mapping, surface trenching and geochemical surveys suggest that the area offers considerable potential for the discovery of additional reserves. Accordingly, two case studies have been prepared to examine the effect which a hypothetical increase in ore reserves could impart upon the value of the project.

The first case, designated the BASE CASE, provides an approximate valuation of the project, based upon the reserves noted above. The EXTENDED CASE is predicated upon the assumption that an additional 156,000 tons of ore will be discovered, of identical grade, and mined by underground methods.

A number of features are common to both case studies. Thus, it is assumed that the ore production rate will be 62,000 tons per annum from underground sources, commencing mid-1995. In addition, both schedules provide for the production of 25,000 ozs of gold from 10,000 tons of open pit ore in 1994. Further, it is assumed that the ore will be processed at a mill to be located at the Craigmont site, near Merritt to produce bullion, from a gravity concentrate and a flotation concentrate for sale to a smelter. Estimates of the capital expenditures were prepared by Allyn Steward, and Rod Samuels. P. Taggart has reviewed this data and believes the same to be sufficient for the purpose of conducting a preliminary project evaluation. Some minor ehanges to certain operating costs have been included.

The two cases are summarized in Section 11.

2.2 A Comparison of the Two Case Studies

A net present value of the *pretax cash flows* was calculated for each case and used as a means for comparing the various scenarios. A discount rate of 15% was applied. The respective cash flow schedules are included in the following pages.

The table below serves to provide a brief comparison of the two cases.

			BASE CASE	EXTENDED CASE
	Open pit ore	tons	10,000	10,000
	Open pit grade	ozs/ton Au	2.5	2.5
	Underground ore	tons	185,000	341,000
	UG grade	ozs/ton Au	0.9	0.9
	Gold recovered	ozs	183,175	316,555
	Operating cost	US$/oz Au	176.54	174.59
	Initial capital	$(000)	8,151	8,151
**	Total capital	$(000)	8,151	11,851
	Discount rate	%	15	15
	Net Present Value	**$(000)**	**19,855**	**30,749**

** Includes direct capital and sustaining capital, but excludes working capital

Detailed cash flow schedules may be found overleaf.

2.3 Sensitivity Analyses

A series of sensitivity analyses was conducted to examine the effects of fluctuating ore grades, metal prices, operating costs and capital expenditures on the Net Present Value of the project. The results of these cash flows are presented in the table following the cash flow analyses.

2.4 Discussion of Results

The net present value of the *pretax* cash flows for the BASE CASE is approximately $20 million. On a "stand-alone" basis, this would be the value to Fairfield, since no project acquisition fees have been included in the cash flows.

The current market capitalization of Fairfield is thought to be $17.2 million. Based upon the limited data in hand, it could be reasonably argued that the acquisition costs of the project, in whole, or in part, would approximate the values of the pro-rated cash flows. Thus, while the project constitutes a profitable venture for Fairfield, it may be close to a break-even situation were an investor to negotiate a purchase price based upon the market capitalization of Fairfield. This

ELK GOLD PROJECT - BASE CASE

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	TOTAL
PRODUCTION								
Ore								
Annual ore production	tons/yr	10,000	31,000	62,000	62,000	30,000	0	195,000
Reserve grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.00	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.00	
Grade sensitivity factor		1.0	1.0	1.0	1.0	1.0	1.0	
Effective reserve grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.00	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.00	
Dilution	%	0.00	0.00	0.00	0.00	0.00	0.00	
Plant feed grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.00	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.00	
Bullion								
Gold recovery to bullion	%	0	65	65	65	65	65	
Silver recovery to bullion	%	0	30	30	30	30	30	
Gold production in bullion	ozs	0	18,135	36,270	36,270	17,550	0	108,225
Silver production in bullion	ozs	0	8,370	16,740	16,740	8,100	0	49,950
Flotation concentrate								
Gold recovery to conct.	%	100	30	30	30	30	30	
Silver recovery to conc.	%	100	65	65	65	65	65	
Gold production in conct.	ozs	25,000	8,370	16,740	16,740	8,100	0	74,950
Silver production in conct.	ozs	25,000	18,135	36,270	36,270	17,550	0	133,225
Flotation concentration ratio		1	20.8	20.8	20.8	20.8	20.8	
Concentrate production	tons	10,000	1,490	2,981	2,981	1,442	0	18,894
Concentrate grade	ozs/ton Au	2.50	5.62	5.62	5.62	5.62	0.00	
Concentrate grade	ozs/ton Ag	2.50	12.17	12.17	12.17	12.17	0.00	
Total gold production	**ozs**	**25,000**	**26,505**	**53,010**	**53,010**	**25,650**	**0**	**183,175**
Total silver production	**ozs**	**25,000**	**26,505**	**53,010**	**53,010**	**25,650**	**0**	**183,175**

ELK GOLD PROJECT - BASE CASE

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	TOTAL
VALUE OF PRODUCTION								
Gold price	US$/oz	365.00	365.00	365.00	365.00	365.00	365.00	365.00
Silver price	US$/oz	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sensitivity factor		1	1	1	1	1	1	1
Gold price	US$/oz	365.00	365.00	365.00	365.00	365.00	365.00	365.00
Silver price	US$/oz	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Exchange rate	US$:CDN$	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Gold price	CDN$/oz	481.80	481.80	481.80	481.80	481.80	481.80	481.80
Silver price	CDN$/oz	5.94	5.94	5.94	5.94	5.94	5.94	5.94
Gold payments in bullion								
Gold payable in total	%	98	98	98	98	98	98	
Payable gold in bullion	ozs	0	17,772	35,545	35,545	17,199	0	106,061
Gold revenue from bullion	$	0	8,562,694	17,125,388	17,125,388	8,286,478	0	51,099,949
Silver payments in bullion								
Silver payable in total	%	98	98	98	98	98	98	
Payable silver in bullion	ozs	0	8,203	16,405	16,405	7,938	0	48,951
Silver revenue from bullion	$	0	48,723	97,447	97,447	47,152	0	290,769
Gold payments in concentrate								
Net TC, frt., insurance	%	100	86	86	86	86	86	
Payable gold in concentrate	ozs	25,000	7,198	14,396	14,396	6,966	0	67,957
Gold revenue from conct.	$	12,045,000	3,468,093	6,936,186	6,936,186	3,356,219	0	32,741,683
Silver payments in concentrate								
Net TC ,frt. and insurance	%	100	86	86	86	86	86	
Payable silver in concentrate	ozs	25,000	15,596	31,192	31,192	15,093	0	118,074
Silver revenue from conct.	$	148,500	92,641	185,282	185,282	89,652	0	701,357
SUMMARY OF REVENUES								
Bullion								
Gold	$	0	8,562,694	17,125,388	17,125,388	8,286,478	0	51,099,949
Silver	$	0	48,723	97,447	97,447	47,152	0	290,769
Subtotal	$	0	8,611,418	17,222,835	17,222,835	8,333,630	0	51,390,718
Concentrate								
Gold	$	12,045,000	3,468,093	6,936,186	6,936,186	3,356,219	0	32,741,683
Silver	$	148,500	92,641	185,282	185,282	89,652	0	701,357
Subtotal	$	12,193,500	3,560,734	7,121,467	7,121,467	3,445,871	0	33,443,039
Value of production	**$**	**12,193,500**	**12,172,151**	**24,344,302**	**24,344,302**	**11,779,501**	**0**	**84,833,757**

ELK GOLD PROJECT - BASE CASE

PRELIMINARY PRETAX ECONOMIC EVALUATION

			1994	1995	1996	1997	1998	1999	TOTAL
OPERATING COSTS									
Unit costs	$/ton ore								
Area of Expense									
Underground mining			0.00	131.20	131.20	131.20	131.20	131.20	
Open pit mining total $/oz		275	687.50						
Processing & local admin.			0.00	45.72	45.72	45.72	45.72	45.72	
Subtotal			687.50	176.92	176.92	176.92	176.92	176.92	
Craigmont capital ammort.			0.00	15.00	15.00	15.00	15.00	15.00	
Head office costs			0.00	4.50	4.50	4.50	4.50	4.50	
Total operating costs	$/ton ore		687.50	196.42	196.42	196.42	196.42	196.42	
Sensitivity factor			1.00	1.00	1.00	1.00	1.00	1.00	
Effective operating costs			**687.50**	**196.42**	**196.42**	**196.42**	**196.42**	**196.42**	
Ore production	tons/yr		10,000	31,000	62,000	62,000	30,000	0	195,000
Annual operating costs	**$**		**6,875,000**	**6,089,020**	**12,178,040**	**12,178,040**	**5,892,600**	**0**	**43,212,700**
Total gold production	ozs		25,000	26,505	53,010	53,010	25,650	0	183,175
Total silver production	ozs		25,000	26,505	53,010	53,010	25,650	0	183,175
Equivalent gold production	ozs		25,308	26,832	53,664	53,664	25,966	0	185,433
Unit cost of production	**US$/equiv. oz**		**205.80**	**171.92**	**171.92**	**171.92**	**171.92**	**0.00**	**176.54**
DIRECT CAPITAL EXPENDITURES									
Mine equipment	$		700,000	1,000,000					1,700,000
Mine development	$		1,000,000	950,000					1,950,000
Preproduction costs	$		297,000						297,000
Craigmont site infrastructure	$			294,000					294,000
Crushing plant	$		275,000	1,000,000					1,275,000
Fine ore storage and reclaim	$			258,000					258,000
Concentrator	$		500,000	1,477,000					1,977,000
E.P.C.M.	$		200,000	200,000					400,000
Subtotal	$		2,972,000	5,179,000	0	0	0	0	8,151,000
Contingency	%		0	0	0	0	0	0	
Total capital expenditures	$		2,972,000	5,179,000	0	0	0	0	
Sensitivity factor			1	1	1	1	1	1	
Effective capital costs	**$**		**2,972,000**	**5,179,000**	**0**	**0**	**0**	**0**	**8,151,000**

ELK GOLD PROJECT - BASE CASE

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	TOTAL
PRETAX CASH FLOW								
Sensitivity factors								
Ore grade		1						
Metal prices		1						
Operating costs		1						
Capital costs		1						
Project aquisition cost	$	0						
Value of production	$	12,193,500	12,172,151	24,344,302	24,344,302	11,779,501	0	84,833,757
Operating costs	$	6,875,000	6,089,020	12,178,040	12,178,040	5,892,600	0	43,212,700
Operating profit	$	5,318,500	6,083,131	12,166,262	12,166,262	5,886,901	0	41,621,057
Direct capital expenditures	$	2,972,000	5,179,000	0	0	0	0	8,151,000
Sustaining capital	$		0	0	0	0		0
Project aquisition cost	$	0						0
Working capital	$	1,718,750					(1,718,750)	0
Cash flow	**$**	**627,750**	**904,131**	**12,166,262**	**12,166,262**	**5,886,901**	**1,718,750**	**33,470,057**
Cumulative cash flow	**$**	**627,750**	**1,531,881**	**13,698,144**	**25,864,406**	**31,751,307**	**33,470,057**	
Discount rate	**%**	**15**						
Net Present Value	**$**	**19,855,031**						

ELK GOLD PROJECT - EXTENDED CASE STUDY

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	2000	TOTAL
PRODUCTION									
Ore									
Annual ore production	tons/yr	10,000	31,000	62,000	62,000	62,000	62,000	62,000	351,000
Reserve grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
Grade sensitivity factor		1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Effective reserve grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
Dilution	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Plant feed grade	ozs/ton Au	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
	ozs/ton Ag	2.50	0.90	0.90	0.90	0.90	0.90	0.90	
Bullion									
Gold recovery to bullion	%	0	65	65	65	65	65	65	
Silver recovery to bullion	%	0	30	30	30	30	30	30	
Gold production in bullion	ozs	0	18,135	36,270	36,270	36,270	36,270	36,270	199,485
Silver production in bullion	ozs	0	8,370	16,740	16,740	16,740	16,740	16,740	92,070
Flotation concentrate									
Gold recovery to conct.	%	100	30	30	30	30	30	30	
Silver recovery to conc.	%	100	65	65	65	65	65	65	
Gold production in conct.	ozs	25,000	8,370	16,740	16,740	16,740	16,740	16,740	117,070
Silver production in conct.	ozs	25,000	18,135	36,270	36,270	36,270	36,270	36,270	224,485
Flotation concentration ratio		1	20.8	20.8	20.8	20.8	20.8	20.8	
Concentrate production	tons	10,000	1,490	2,981	2,981	2,981	2,981	2,981	26,394
Concentrate grade	ozs/ton Au	2.50	5.62	5.62	5.62	5.62	5.62	5.62	
Concentrate grade	ozs/ton Ag	2.50	12.17	12.17	12.17	12.17	12.17	12.17	
Total gold production	**ozs**	**25,000**	**26,505**	**53,010**	**53,010**	**53,010**	**53,010**	**53,010**	**316,555**
Total silver production	**ozs**	**25,000**	**26,505**	**53,010**	**53,010**	**53,010**	**53,010**	**53,010**	**316,555**

ELK GOLD PROJECT - EXTENDED CASE STUDY

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	2000	TOTAL
VALUE OF PRODUCTION									
Gold price	US$/oz	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00
Silver price	US$/oz	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Sensitivity factor		1	1	1	1	1	1	1	1
Gold price	US$/oz	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00
Silver price	US$/oz	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Exchange rate	US$:CDN$	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Gold price	CDN$/oz	481.80	481.80	481.80	481.80	481.80	481.80	481.80	481.80
Silver price	CDN$/oz	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94
Gold payments in bullion									
Gold payable in total	%	98	98	98	98	98	98	98	
Payable gold in bullion	ozs	0	17,772	35,545	35,545	35,545	35,545	35,545	195,495
Gold revenue from bullion	$	0	8,562,694	17,125,388	17,125,388	17,125,388	17,125,388	17,125,388	94,189,636
Silver payments in bullion									
Silver payable in total	%	98	98	98	98	98	98	98	
Payable silver in bullion	ozs	0	8,203	16,405	16,405	16,405	16,405	16,405	90,229
Silver revenue from bullion	$	0	48,723	97,447	97,447	97,447	97,447	97,447	535,958
Gold payments in concentrate									
Net TC, frt., insurance	%	100	86	86	86	86	86	86	
Payable gold in concentrate	ozs	25,000	7,198	14,396	14,396	14,396	14,396	14,396	104,180
Gold revenue from conct.	$	12,045,000	3,468,093	6,936,186	6,936,186	6,936,186	6,936,186	6,936,186	50,194,020
Silver payments in concentrate									
Net TC ,frt. and insurance	%	100	86	86	86	86	86	86	
Payable silver in concentrate	ozs	25,000	15,596	31,192	31,192	31,192	31,192	31,192	196,557
Silver revenue from conct.	$	148,500	92,641	185,282	185,282	185,282	185,282	185,282	1,167,549
SUMMARY OF REVENUES									
Bullion									
Gold	$	0	8,562,694	17,125,388	17,125,388	17,125,388	17,125,388	17,125,388	94,189,636
Silver	$	0	48,723	97,447	97,447	97,447	97,447	97,447	535,958
Subtotal	$	0	8,611,418	17,222,835	17,222,835	17,222,835	17,222,835	17,222,835	94,725,593
Concentrate									
Gold	$	12,045,000	3,468,093	6,936,186	6,936,186	6,936,186	6,936,186	6,936,186	50,194,020
Silver	$	148,500	92,641	185,282	185,282	185,282	185,282	185,282	1,167,549
Subtotal	$	12,193,500	3,560,734	7,121,467	7,121,467	7,121,467	7,121,467	7,121,467	51,361,570
Value of production	$	**12,193,500**	**12,172,151**	**24,344,302**	**24,344,302**	**24,344,302**	**24,344,302**	**24,344,302**	**146,087,163**

ELK GOLD PROJECT - EXTENDED CASE STUDY

PRELIMINARY PRETAX ECONOMIC EVALUATION

			1994	1995	1996	1997	1998	1999	2000	TOTAL
OPERATING COSTS										
Unit costs	$/ton ore									
Area of Expense										
Underground mining			0.00	131.20	131.20	131.20	131.20	131.20	131.20	
Open pit mining total $/oz		275	687.50							
Processing & local admin.			0.00	45.72	45.72	45.72	45.72	45.72	45.72	
Subtotal			687.50	176.92	176.92	176.92	176.92	176.92	176.92	
Craigmont capital ammort.			0.00	15.00	15.00	15.00	15.00	15.00	15.00	
Head office costs			0.00	4.50	4.50	4.50	4.50	4.50	4.50	
Total operating costs	$/ton ore		687.50	196.42	196.42	196.42	196.42	196.42	196.42	
Sensitivity factor			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Effective operating costs			**687.50**	**196.42**	**196.42**	**196.42**	**196.42**	**196.42**	**196.42**	
Ore production	tons/yr		10,000	31,000	62,000	62,000	62,000	62,000	62,000	351,000
Annual operating costs	$		**6,875,000**	**6,089,020**	**12,178,040**	**12,178,040**	**12,178,040**	**12,178,040**	**12,178,040**	**73,854,220**
Total gold production	ozs		25,000	26,505	53,010	53,010	53,010	53,010	53,010	316,555
Total silver production	ozs		25,000	26,505	53,010	53,010	53,010	53,010	53,010	316,555
Equivalent gold production	ozs		25,308	26,832	53,664	53,664	53,664	53,664	53,664	320,458
Unit cost of production	US$/equiv. oz		**205.80**	**171.92**	**171.92**	**171.92**	**171.92**	**171.92**	**171.92**	**174.59**
DIRECT CAPITAL EXPENDITURES										
Mine equipment	$		700,000	1,000,000						1,700,000
Mine development	$		1,000,000	950,000			2,000,000			3,950,000
Preproduction costs	$		297,000			100,000	100,000			497,000
Craigmont site infrastructure	$			294,000						294,000
Crushing plant	$		275,000	1,000,000						1,275,000
Fine ore storage and reclaim	$			258,000						258,000
Concentrator	$		500,000	1,477,000						1,977,000
E.P.C.M.	$		200,000	200,000						400,000
Subtotal	$		2,972,000	5,179,000	0	100,000	2,100,000	0	0	10,351,000
Contingency	%		0	0	0	0	0	0	0	
Total capital expenditures	$		2,972,000	5,179,000	0	100,000	2,100,000	0	0	
Sensitivity factor			1	1	1	1	1	1	1	
Effective capital costs	$		**2,972,000**	**5,179,000**	**0**	**100,000**	**2,100,000**	**0**	**0**	**10,351,000**

ELK GOLD PROJECT - EXTENDED CASE STUDY

PRELIMINARY PRETAX ECONOMIC EVALUATION

		1994	1995	1996	1997	1998	1999	2000	TOTAL
PRETAX CASH FLOW									
Sensitivity factors									
Ore grade		1							
Metal prices		1							
Operating costs		1							
Capital costs		1							
Project aquisition cost	$	0							
Value of production	$	12,193,500	12,172,151	24,344,302	24,344,302	24,344,302	24,344,302	24,344,302	146,087,163
Operating costs	$	6,875,000	6,089,020	12,178,040	12,178,040	12,178,040	12,178,040	12,178,040	73,854,220
Operating profit	$	5,318,500	6,083,131	12,166,262	12,166,262	12,166,262	12,166,262	12,166,262	72,232,943
Direct capital expenditures	$	2,972,000	5,179,000	0	100,000	2,100,000	0	0	10,351,000
Sustaining capital	$		0	500,000	500,000	500,000	0	0	1,500,000
Project aquisition cost	$	0							0
Working capital	$	1,718,750						(1,718,750)	0
Cash flow	**$**	**627,750**	**904,131**	**11,666,262**	**11,566,262**	**9,566,262**	**12,166,262**	**13,885,012**	**60,381,943**
Cumulative cash flow	**$**	**627,750**	**1,531,881**	**13,198,144**	**24,764,406**	**34,330,668**	**46,496,931**	**60,381,943**	
Discount rate	**%**	**15**							
Net present value	$	30,749,152							

SENSITIVITY ANALYSES

NET PRESENT VALUES EXPRESSED IN $(MILLIONS)

Variable	sensitivity factor 80%	sensitivity factor 90%	sensitivity factor BASE	sensitivity factor 110%	sensitivity factor 120%
Base Case					
Ore Grade	10.1	15.0	19.9	24.7	29.6
Metal Price	8.7	14.3	19.9	25.4	31.0
Operating Cost	25.7	22.8	19.9	16.9	14.0
Capital Cost	21.2	20.5	19.9	19.2	18.6
Extended Case					
Ore Grade	15.8	23.3	30.7	38.2	45.7
Metal Price	14.4	22.6	30.7	38.9	47.0
Operating Cost	39.2	35.0	30.7	26.5	22.2
Capital Cost	32.3	31.5	30.7	30.0	29.2

assessment, however, does not take into consideration two important elements, namely, the effects of fluctuations in the BASE CASE variables, and, the potential to discover additional reserves.

a) The Base Case Variables

The sensitivity analyses indicate that the principal variables assume the usual order of importance with respect to their effect on the profitability of an operation. In decreasing order of importance, the principal variables are listed below, together with their respective BASE CASE values and the effect which a 10% change in the variable causes on the Net Present Value.

Variable	BASE CASE Value	Change in NPV caused by 10% change
Metal Price	US$365 /oz Au	$5.5 million
Ore Grade	0.9 ozs/ton	$4.9 million
Operating Costs	$221.60/ton	$2.9 million
Capital Costs	$8.15 million	$0.7 million

Given recent projections for the price of gold and the potential for a weakening in the Canadian dollar, it is thought that the BASE CASE price of gold is realistic to conservative. Changes in these, the most important variables, should favour the project economics.

Mineable ore grade projections were prepared by Allyn Steward based upon limited information. Allyn has not audited the reserve calculations. Based upon reports issued by Fairfield, however, it would appear that grades, and tonnages, mined from the open pit have both exceeded expectations. It is recognized that the results of the test stoping will also have an impact on the mining methods and mineable grades.

The operating cost and capital cost estimates are both considered to conservative. While this is appropriate for the purpose of conducting such a preliminary evaluation, it is reasonable to expect that some savings could be made in each of these cost centres.

b) The Potential to Discover Additional Reserves

Based upon the results of exploration programs conducted on land controlled in whole, or in part, by Fairfield, it is reported that the potential to discover additional mineralization is high.

It is to be expected, and evident from the results of the EXTENDED CASE cash flows, that increased reserves favour the Project. *The potential could exist to further enhance the economics by using additional reserves to increase the rate of production.*

The most important aspects of any future due diligence study would be the confirmation of existing reserve estimates and the detailed review of all local and regional geological data to determine the probability of finding more economic reserves. Given favourable results in this regard, an arrangement to purchase an interest in the Project could be considered. It would be preferable, however, to negotiate an "earn in" agreement whereby Viceroy has the right to increase its equity interest, based upon the results of exploration programs of predetermined value. It is understood that Fairfield is reluetant to consider such an arrangement.

2.5 Conclusions

The following conclusions are noted, in point form.

- The Siwash North vein contains free-milling gold which can be processed by gravity concentration and flotation to recover approximately 95% of the gold.

- There are no deleterious elements in the mineralization. Properly designed and managed, the proposed operation will not compromise the environment, regardless of the mill location.

- The estimates of the operating costs and capital expenditures developed by Allyn Steward, Rod Samuels and, to a lesser extent, Peter Taggart are sufficiently accurate for a study of this nature.

- The pretax Net Present Value of the project to Fairfield is approximately $20 million.

- Should Viceroy elect to acquire equity in the Project, based solely upon the current mineable reserves, it is possible that the return on investment could be limited, if Fairfield's market capitalization is used, on a pro-rata basis to determine the acquisition costs.

- The Project has the potential to offer a significant return on investment, based upon the ability to discover additional ore reserves which could extend the life of the operation and/or, increase the rate at which ore is mined.

- A due diligence study should be focused primarily upon the confirmation of existing reserve estimates, the results of test stoping and the potential to find more ore.

- An "earn in" option agreement with Fairfield would limit Viceroy's exposure. Given the reported locations and numbers of surface showings, it is possible that initial exploration programs could enhance the reserve estimates at a relatively low cost.

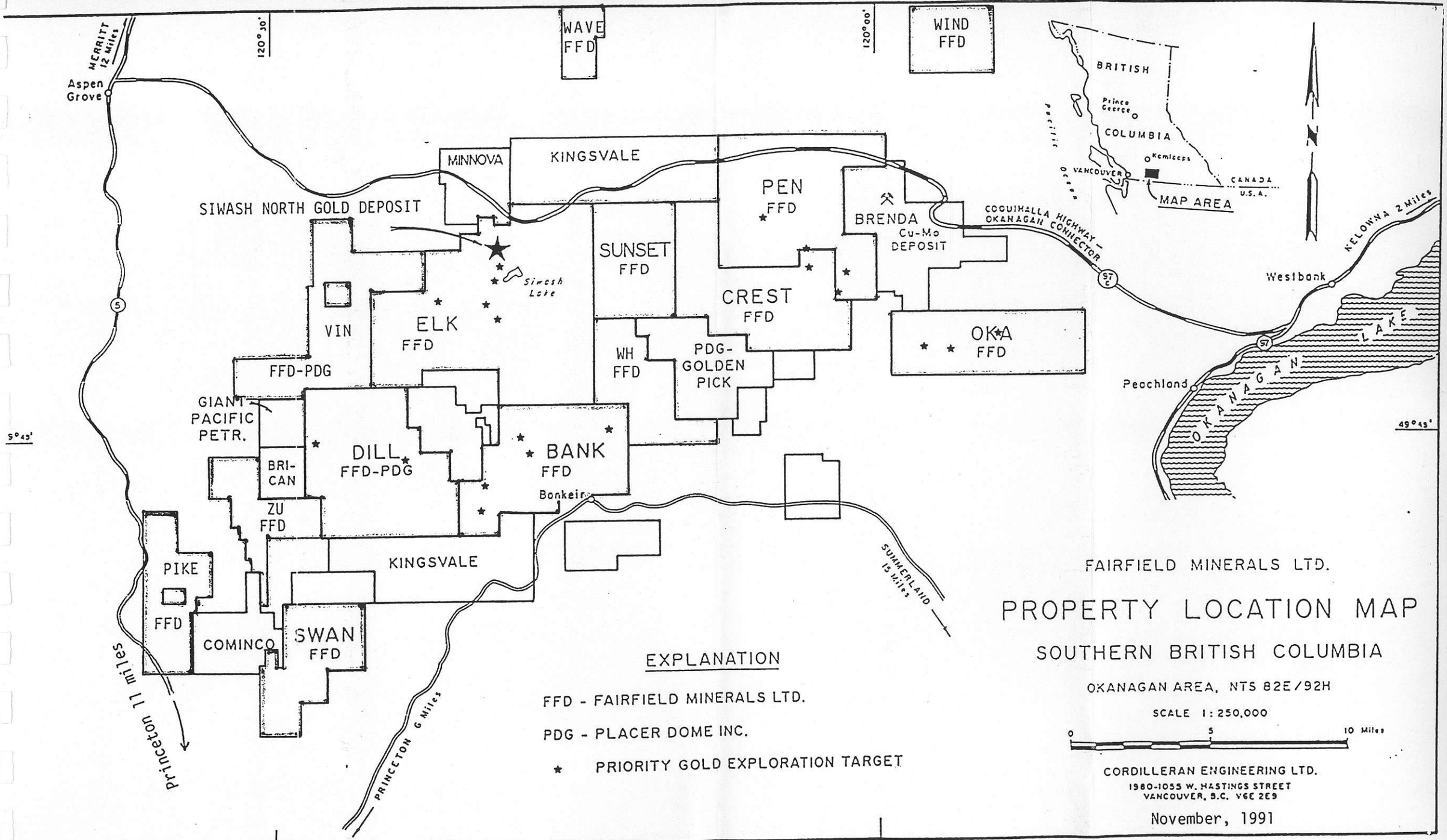
3.0 GEOLOGY

The principal feature of interest on the Elk Property is a series of vein structures which comprise the Siwash North Deposit. Surface mining and underground development is currently taking place in the Mother Shoot vein. This is believed to be part of a deep-seated, mesothermal system. Surface indications of the mineralized trend indicate an approximate east-west strike direction in that portion of the vein which is currently being mined by open pit methods. While the dip of the vein is approximately 20 degrees for the initial 100 feet, the dip angle increases to 70 degrees at depths below the 5300 elevation. The width of the vein intersections varies from a few inches to 3 feet. Drilling has defined the structure to a depth of 1,000 feet below the surface. Mr. Steward reports that "geometrically and grade-wise, the vein appears to be remarkably uniform." The vein is open at depth.

The Siwash North Vein is only one of a number mineralized showings in the general area, as demonstrated by the results of surface mapping, trenching and geochemical analyses. For this reason, Fairfield has acquired a substantial land holding (250 square miles), as shown on the property location map overleaf. It is beyond the scope of this assignment, and also beyond the author's area of expertise, to pass comment on the potential to locate significant gold bearing structures in the area. Nevertheless, as would be expected, and the economic analyses clearly indicate, the presence of incremental reserves could profoundly affect the value of the property to a prospective purchaser.

Gold mineralization is hosted by quartz veins and silicified granite which contain 10-15% pyrite together with minor amounts of galena, sphalerite and chalcopyrite. The gold is free and within the size range 1 to 50 microns. Gold grades in excess of 11 ozs/ton have been reported. On average, it is reported that gold:silver ratio approximates 1:1.

The ore contains no deleterious elements in quantities which could adversely affect the usual environmental protection plans. Similarly, the ore contains no elements which impair the various process options. Metallurgical test reports have made reference to difficulties in settling tailings due to the presence of clay-like mineralization. It is possible that the high contents of clay and sericite altered granites may only exist near the surface.


MERRITT 12 Miles
Aspen Grove
120° 30'
WAVE FFD
120° 00'
WIND FFD
BRITISH COLUMBIA
Prince George
Kamloops
VANCOUVER
CANADA
U.S.A.
MAP AREA
Pacific Ocean
N
MINNOVA
KINGSVALE
SIWASH NORTH GOLD DEPOSIT
Siwash Lake
PEN FFD
BRENDA Cu-Mo DEPOSIT
COQUIHALLA HIGHWAY — OKANAGAN CONNECTOR
KELOWNA 2 Miles
Westbank
SUNSET FFD
CREST FFD
VIN
ELK FFD
FFD-PDG
WH FFD
PDG-GOLDEN PICK
OKA FFD
GIANT PACIFIC PETR.
BRI-CAN
DILL FFD-PDG
BANK FFD
Bonkeir
ZU FFD
KINGSVALE
SUMMERLAND 15 Miles
PIKE FFD
COMINCO
SWAN FFD
Princeton 11 miles
PRINCETON 6 Miles
Peachland
OKANAGAN LAKE
49° 45'
5° 45'
EXPLANATION
FFD - FAIRFIELD MINERALS LTD.
PDG - PLACER DOME INC.
★ PRIORITY GOLD EXPLORATION TARGET
FAIRFIELD MINERALS LTD.
PROPERTY LOCATION MAP
SOUTHERN BRITISH COLUMBIA
OKANAGAN AREA, NTS 82E/92H
SCALE 1:250,000
0 5 10 Miles
CORDILLERAN ENGINEERING LTD.
1980-1055 W. HASTINGS STREET
VANCOUVER, B.C. V6E 2E9
November, 1991

4.0 RESERVES

4.1 Geologic Reserve

The Project's total geologic reserve, as reported in the November 8th, 1993 edition of the Northern Miner, is estimated to be 200,000 ozs. An independent verification of the reserve estimate would comprise an important element of Viceroy's due diligence study, should such work be planned.

4.2 Mineable Reserve

The estimate of the mineable reserve shown below was submitted by Allyn Steward to Viceroy in a letter to Mr. Saxton dated October 7th, 1993. The estimate was prepared based upon the application of alternative mining methods, as shown below.

Pilot and Slot mining for both steeply dipping and shallow dipping ore.

Ore Attitude	Short Tons	Grade Au ozs/ton	Contained Gold ozs Au
Steep dip	68,000	1.26	86,000
Flat dip	117,000	0.66	77,000
Total	**185,000**	**0.88**	**163,000**

Shrinkage and Room and Pillar mining methods

Ore Attitude	Short Tons	Grade Au ozs/ton	Contained Gold ozs Au
Steep dip (Shrinkage)	105,000	0.86	90,000
Flat dip (Room & Pillar)	155,000	0.50	78,000
Total	**260,000**	**0.65**	**168,000**

In a telephone conversation with Mr. Steward, it was confirmed that the above grades make allowance for mining dilution.

It is noted in Mr. Steward's estimate that " a proper assessment requires a complete reserve calculation incorporating mining width parameters for the various stoping methods. The actual mining methods could end up to be some blend of all of the above."

Underground development is now well-advanced in preparation for test-stoping activities.

In addition to the underground reserves, Mr. Steward estimated that approximately 23,000 to 28,000 ozs of gold could be mined by open pit methods. (September 27th report). It is noted in the November 8th Northern Miner article that Fairfield "had increased its near-surface reserve by

nearly 30% to 45,000 ozs from 35,000 ozs, based upon production of 20,000 ozs during the past two years."

It is known that a mining cut-off grade of 0.6 ozs Au / ton was applied in Fairfield's reserve calculation. It is understood that high gold values have been cut, but it is not known to what extent. Such critical information would be determined during due diligence examinations. In addition, given some of the particularly high gold values, it would be important to conduct some basic statistical analyses which would include a grade distribution diagram. By so doing, the effects caused by a small number of very high gold values can be quantified upon the total reserve data.

5.0 MINING

Mr. Steward notes that the vein "is technically mineable by various stoping methods including conventional shrinkage, modified room and pillar, or, by a method utilizing pilot raises followed by narrow, vein width pillar slashes." His "preliminary assessment is that the mining cost per ounce may not differ significantly between the various stoping options, and that the total (capital plus operating) costs of ore delivered to the portal in a bare-bones type mining operation would be C$170 to C$190 per ounce mined."

Details of the mining methods, capital costs and operating expenses are included in Mr. Steward's report dated September 27th, 1993. The preliminary cost estimates proposed by Mr. Steward are appropriate and useful for the purpose of carrying out this preliminary economic assessment of the property.

In those instances where narrow vein, highly-selective mining is required, it is believed that the use of contractors should be carefully considered. Generally, the control of the mining is tighter when the owner deploys his own personnel. For the purpose of this study, the capital and operating costs are predicated upon the use of the Owner's employees, rather than contract miners. This results in a modest increase in capital costs with an attendant reduction in operating expenses, and, hopefully, mining dilution!

6.0 PROCESSING

6.1 Process Testwork

Laboratory testwork has been performed upon samples of the Siwash North Vein ore by a number of reputable firms, including:

Testing Authority	Type of testwork
McGill University	Gravity
Bacon & Donaldson	Gravity, flotation, cyanidation, acid-base accounting, April, 1992.
Placer Dome Inc.	Gravity and cyanidation February, 1990
Brenda	Gravity, flotation, cyanidation, acid-base accounting, ICP analysis of the tails August, 1992

Highlights of the test programs are summarized in point form below. Mr. Rod Samuels has prepared a detailed synopsis of all the work done to date and has compiled the various reports into one volume.

General

- Free gold occurs within the size range 1 to 50 microns.
- The free-milling ore is amenable to gravity concentration, flotation and cyanidation processes to recover gold and silver.
- The ore contains no minor elements in sufficient quantity to cause environmental or marketing problems.
- Total gold recoveries of 99% have been achieved using a gravity/flotation circuit to treat 130 gmt Au samples of Siwash North ore.

Grinding

The work index of one sample of Siwash North ore was determined to be 10.9 kwh/ton. While grinding optimization studies are yet to be conducted, it would appear that a grind of 50 to 75% minus 74 microns would be adequate.

Gravity Concentration

A variety of gravity concentration tests has been conducted upon samples of Siwash North ore grading roughly between 1.5 ozs Au /ton and 4.2 ozs Au / ton. The laboratory procedures have included the use of Knelson Concentrators, Falcon Concentrators, spirals and jigs to produce rougher gravity concentrates. Testwork has also been carried out at various levels of grind.

As would be expected, the best recoveries of gold to the gravity concentrates were obtained when testing the higher grade samples. It would be prudent to conduct a series of tests, at a constant grind, to determine the effects which fluctuations in feed grade impart upon the recovery of gold to

the gravity concentrate. Based upon the test data reviewed, it is possible that the *overall* gravity/flotation circuit recovery may not be seriously affected by reasonable reductions in feed grade. However, given the better payments for gold in dore when compared to those for gold in concentrates, it is important to maximize the recovery of gold to the gravity concentrate at all times.

It is probable that the recovery of gold to the gravity concentrate will be enhanced in the full-scale plant operation. The circulating load in the grinding circuit will tend to reduce the tendency for gold to "smear" and will provide a higher effective feed grade to the gravity circuit. In addition, the closed circuit ball mill/cyclone arrangement will minimize the tendency to slime and, therefore, reduce the slime losses in the flotation tailings.

Flotation

Testwork has indicated that the gravity circuit tailing is readily amenable to the flotation process. It can be expected that most of the gold not recovered in the gravity circuit will report to the flotation concentrate. As noted above, it will be important to maximize the recovery to the gravity circuit for economic reasons.

Locked cycle gravity/flotation testwork could demonstrate the need to install a gravity concentrator on the flotation tail to recover gold which is less than 25 microns in size.

For the purpose of this study, the BASE Case assumes gravity and flotation recoveries as shown below.

Product	Gold recovery (%)	Silver recovery (%)
Gravity circuit	65	30
Flotation circuit	30	65
Total recovery	**95**	**95**

Cyanidation

Testwork indicates that the ore is readily amenable to cyanidation. Given the relatively small size of the resource, and the permitting difficulties anticipated when seeking approval for a leaching circuit, no consideration is being given to this option at present. However, should the results of further exploration delineate a much larger reserve, further examination of this option could be justified.

Dewatering

Poor settling characteristics, attributed to clay and clay-like minerals, have been reported by two laboratories. Studies should be conducted to determine how, if at all, these characteristics vary with depth. Should these characteristics prevail throughout the deposit, increases in operating costs and capital expenditures could result.

6.2 The Conceptual Plant

Rod Samuels has outlined the principal features of a plant, based upon a flowsheet that incorporates the unit processes of:

- primary crushing
- secondary crushing
- single-stage ball mill grinding and closed-circuit cyclone classification
- gravity concentration of the mill discharge product
- gravity concentrate cleaning and refining to produce dore metal
- flotation of the gravity circuit tailing
- flotation coneentrate thickening, filtration and drying

For this purpose, Rod has assumed that the plant will be located on a permitted site near Merritt and that some existing equipment may be incorporated into the new mill. Rod notes that the capacity of the conceptual mill is greater than theoretieally required and that the capital cost estimate of the facility is probably conservative. It is also noted, however, that the "oversized" mill will permit operations to be scheduled on a four day per week basis, with attendant savings in operating costs.

The author is in concurrence with all of the above and believes it of little value to refine the capital cost estimate *at this time* since the magnitude of the "savings" which could be realized will not be a major factor in determining the viability of the Project.

Should due diligence studies proceed, however, it is recommended that a study be carried out to determine the optimum size and location of the plant. While it is convenient and timely to consider the use of the site in Merritt for a plant site, this may not offer the most financially-attractive scenario. Given the innocuous nature of the tailings, the cost of raw ore transportation and anticipated pro-development attitude by government to responsible mining developments, the construction of a plant at the minesite may constitute a viable option.

7.0 SERVICES

7.1 Power Supply

The mining cost estimates, prepared by Mr. Steward, are based upon the use of diesel generated power.

Provision has been made at the Craigmont site to spend $1 million on power supply. On the basis that B.C. Hydro service will be provided for the milling operations, it is believed that the estimate of either the power consumption and/or the power cost may be a little conservative. The BASE CASE assumes a consumption of 35 kwh/ton at a unit cost of 5 cents/kwh.

7.2 Water Supply

Given the proximity of the minesite to Siwash Lake, and the many other small lakes in the general area, it is assumed that water supply would not be a problem at the mine. It should be noted that, were the mill to be located at the minesite, there is no evident technical reason which would preclude the total recycling of process water.

Fresh water is available at the Craigmont site.

7.3 Tailings Impoundment

No tailings pond exists at the minesite. Given the undulating nature of the terrain and the reported presence of clay, it is reasonable to assume that safe tailings impoundment could be achieved in close proximity to the minesite.

An allowance of $600,000 has been included in the "Craigmont capital cost contribution" for a tailings pond starter dam.

8.0 OPERATING COSTS

8.1 Summary

A summary of the operating cost estimate is shown below.

Area of Expense	Unit cost ($/ton)	Unit Cost (Cdn. $/0z) **
Underground Mining	131.20	116.25
Processing and Local Admin.	45.72	40.51
Head Office	4.50	3.99
Subtotal	181.42	160.75
Craigmont capital; repayment	15.00	13.29
Total	**196.42**	**174.04**

**

Based upon: A feed grade of 0.9 ozs/ton Au,
A total gold recovery of 95%,
An exchange rate of US$:Cdn$ of 1.32:1.00

8.2 Mining Costs

For the purpose of this analysis, the mine operating cost estimate prepared by Allyn Steward have been used in the BASE CASE. The unit cost of $131.20 per ton mined is predicated upon a blend of shrinkage and pilot and slot stopes. This operation cost estimate is based on the assumption that all mining is performed by the company's employees.

8.3 Processing and Local Administration Costs

A summary of the direct processing costs is shown below.

Area of Expense	Unit Cost ($/Ton)
Load out/Trucking	6.88
Craigmont costs	1.00
Power supply	1.75
Staff/ Op. labour	16.44
Operating Supplies	4.00
Maintenance Supplies	5.65
Local Administration	10.00
Total	**45.72**

The processing costs are based upon the assumption that the plant is constructed on Craigmont's site. P. Taggart has prepared independent order-of-magnitude estimates for some of these cost centres. Differences between these and earlier estimates are minimal and will have no significant effect on the project economics.

a) Ore Load-Out and Trucking

Based upon a haulage distance of 55 km (34.4 miles) and a unit cost of 20 cents per ton.mile, the cost of loading and hauling the raw ore to the Craigmont site would be **$6.88/ton.**

b) Craigmont's Operating Costs

An allowance of **$1.00/ton** is provided

c) Power Supply Costs

The work index of the ore 10.9 kwh/ton. It is assumed that the total plant and infrastructure at Craigmont would consume 35 kwh/ton. Based upon a hydro cost of 5 cents/kwh, the unit cost of energy would be **$1.75/ton.**

d) Staff and Operating Labour

The operating cost of staff and labour is derived in the table below. Manpower schedules are predicated upon the four days per week operating schedule which was incorporated into the mill design.

Position	Number of Employees	Annual Salary ($)	Annual Cost ($)
Mill Superintendent	1	70,000	70,000
Metallurgist	1	55,000	55,000
Crushing Op.	2	30,000	60,000
Grinding Op.	2	35,000	70,000
Flotation Op. & L.H.	2	40,000	80,000
Dewatering/ Load-out	2	30,000	60,000
Shift helpers	4	25,000	100,000
Labourers	2	20,000	40,000
Tradesmen	7	40,000	280,000
Subtotal	23		815,000
Payroll burden @ 25%			204,000
Total			1,019,000

At an annual mill throughput rate of 62,000 tons, the above costs equate to **$16.44/ton.**

e) Operating Supplies

An allowance of **$4.00/ton** is included.

f) Maintenance Supplies

It is assumed that the cost of maintenance supplies equals the cost of maintenance labour, or $350,000 per annum. This is equivalent to a unit cost of **$5.65/ton.**

g) Local Administration Costs

The administration costs will comprise salaries and local administrative expenses, as shown overleaf.

Salaries

Position	Number of Employees	Annual Salary ($)	Annual Cost ($)
Project Manager	1	80,000	80,000
Accounting Clerks	2	30,000	60,000
Warehouse/Purch.	3	30,000	90,000
Clerical	2	25,000	50,000
Subtotal	8		280,000
Payroll burden @ 25%			70,000
Total Salaries			350,000

Local Administrative Expenses

Item	Annual Cost ($)
Insurance	100,000
Taxes	50,000
Communications	40,000
Travel	10,000
Supplies	10,000
Donations/Memberships	10,000
Equipment Rentals/Contracts	20,000
Consultants	30,000
Miscellaneous	20,000
Total local administrative expenses	290,000

Thus, the total local administration costs are estimated to be:

Salaries	$350,000
Expenses	$290,000
Total	**$640,000**

This cost is equivalent to a unit cost of **$10.00/ton.**

8.4 Head Office Expenses

An allowance of **$4.50/ton** is included to cover legal, audit and similar head office expenses.

8.5 Craigmont's Capital Repayment

It has been estimated that Craigmont would pay approximately $3.25 million toward the initial development of the Project. This will be repaid to Craigmont based upon the tonnage processed.

Since P. Taggart has not visited the site, and has no inventory of the assets currently on site, the value of this contribution is accepted as stated. Apart from the repayment of this initial capital, and the payment of $1.00/ton for out-of-pocket expenses, it is assumed that Craigmont will receive no other considerations for the use of the site. This should be reviewed during any future due diligence studies.

9.0 CAPITAL COSTS

9.1 Mining and Processing

The capital costs used in the cash flow analyses are those which were estimated by Messers. Steward and Samuels. As reported earlier, and noted by Rod Samuels, it is probable that the capital cost estimate for the process plant is conservative. However, pending the results of more detailed studies with regard to the capacity and location of the plant, the estimate is considered to be more than adequate for this purpose.

A summary of the capital costs is provided below for completeness.

Area of Expense	Estimated Cost $(000)
Mine equipment	1,700
Mine development	1,950
Preproduction costs	297
Craigmont site infrastructure	294
Crushing plant	1,275
Fine ore storage and reclaim	258
Concentrator	1,977
E.P.C.M.	400
Total Direct Capital	8,151

Adequate provision for a contingency is believed to be included in the above estimate.

9.2 Sustaining Capital

No provision is included in the cash flows for an operation of only three years duration. However, for operations in excess of this duration, allowances have been included and are shown in the Pretax Cash Flow schedule.

9.3 Working Capital

A provision for working capital has been included and is deemed to be equal to the total operating costs incurred over a three month period.

9.4 Project Acquisition Costs

Unless otherwise noted, no provision has been included for the cost of acquiring all, or part, of the Elk Gold Project.

The price of one Fairfield Minerals share, as of November 23rd, 1993, was $2.60. Based upon 6.63 million common shares outstanding, as reported August 18th, 1993, the market capitalization of the Company is approximately $17.2 million.

10.0 MARKETING CONSIDERATIONS AND ASSOCIATED COSTS

The costs of marketing the dore and the flotation concentrates are indicated in the calculations of the value of production.

For this purpose, it is assumed that the operator will receive 98% of the value of the gold and silver contained in the dore. Thus, the costs of transportation, insurance and metal refining are assumed to equal 2% of the value of the gold contained in the dore.

Based upon recent experienee, it is probable that only 86% of the gold's value contained in the flotation concentrate will be received as payment. The remaining 14% will he paid for treatment charges, gold and silver refining charges, freight, insurance, sampling representatives, umpire's assays and the like. Clearly, it is advantageous to recover as much gold as possible to the gravity concentrate, without unduly sacrificing the grade of the product.

11.0 DESCRIPTION OF THE CASE STUDIES

11.1 The Base Case

The following table summarizes the key criteria which have been incorporated in the BASE CASE.

Underground Mineable Reserves	
Quantity	185,000 tons
Grade	0.9 ozs/ton Au
	0.9 ozs/ton Ag
Dilution	included in above
Open Pit Mineable Reserves	
Quantity	10,000 tons
Grade	2.5 ozs/ton Au
	2.5 ozs/ton Ag
Dilution	included in above
Mining Rate Underground	62,000 tons per annum
Underground mining commences	July 1st, 1995
Underground mining completed	mid-1998
Open Pit Mining Schedule	
Production in 1994	10,000 tons
Mill Location	Craigmont Site
Mill Operating Schedule	
Days per week	4
Shifts per day	2
Hours per shift	12
Mill Throughput Rate	310 tons per operating day
Gold recovery	
To the gravity concentrate	65%
To the flotation concentrate	30%
Silver recovery	
To the gravity concentrate	30%
To the flotation concentrate	65%

Operating Costs	
Open pit mining (all inclusive)	Cdn.$275/oz Au shipped
Mining	$131.20/ton
Processing and local admin.	$45.72/ton
Head office	$4.50/ton
Craigmont capital amortization	$15.00/ton
Marketing Costs	
Bullion, %age of contained Au	2
Concentrate, %age of contained Au	14
Capital Costs	
Initial Capital	$8.15 million
Sustaining Capital	0
Working Capital	3 month's operating costs
Project Acquisition Cost	Not included

11.2 The Extended Case

The following table indicates the key criteria which differ from the corresponding values in the BASE CASE scenario.

Underground Mineable Reserves	
Quantity	341,000 tons
Underground Mining Commences	July 1st, 1995
Underground Mining is Completed	December 31st, 2000
Capital Cost	
Initial Capital	$8.15 million
Later Development Capital	$2.20 million
Sustaining Capital	$1.5 million

(D

PRELIMINARY ASSESSMENT OF UNDERGROUND MINING POTENTIAL

FAIRFIELD MINERAL'S SIWASH NORTH PROJECT

SUBMITTED TO VICEROY RESOURCE CORPORATION

SEPTEMBER 27, 1993

BY: A.J. STEWARD, P.ENG.

1. INTRODUCTION AND CONCLUSIONS:

This report is issued in response to a request by Mr. Ed Holt of Viceroy Resource Corporation for a preliminary assessment of underground mining potential at Fairfield Mineral's Siwash North gold deposit, near Merritt, B.C.

Pertinent information was collected from Mr. Jeffrey Rowe during a minesite tour on September 23, 1983. The ore bearing vein was exposed in the open pit and in two underground crosscuts which are accessed from a 3.0 x 3.6 m decline presently advanced to the 1570 meter elevation. Geometrically and grade-wise, the vein appears to be remarkably uniform.

The vein appears technically mineable by various stoping methods including conventional shrinkage, modified room and pillar, or by a method utilizing pilot raises followed by narrow, vein-width pillar slashes. My preliminary assessment is that the mining cost per ounce might not differ significantly between the various stoping options, and that total (capital plus operating) cost of ore delivered to the decline portal in a "bare-bones" type mining operation would be $C 170 to $C 195 per ounce mined. Surface trucking and milling would reap the economies of more selective mining.

Cost estimation variance is probably in the $\pm$35% range due to the "quick" nature of my assessment and the various assumptions made. A more definitive assessment following completion of test stoping planned by Fairfield during the upcoming weeks might be in order.

2. ORE RESERVE:

Fairfield Minerals has tabulated various sets of reserve calculations based on differing assumptions as to minimum stoping widths which are predicated on different mining methods.

Fairfield's reserve calculations indicate a mineable gold content of 215,000 to 220,000 troy ounces.

It appears that Fairfield considers about 192,000 oz. within the above reserve will be most likely mined by underground methods.

Fairfield's reserve calculations were not checked as part of this study.

I separated the underground reserve into the following categories by quick perusal of sections:

Zones dipping greater than 45°	91,000 oz.
Mineable in zones dipping less than 45°	77,000 oz.
Permanent pillars in zones less than 45°	14,000 oz.
Zones too small & isolated to bear development costs at this time	10,000 oz.
TOTAL	192,000 oz.

The 168,000 oz. mineable could likely be separated into 11 steeply dipping stopes, and about 20 - 22 flatter stopes.

3. STOPING METHODS:

Methods suggested by Fairfield include:

i) conventional shrinkage for steeper dipping zones

ii) modified room and pillar for flatter zones

iii) a method which I shall refer to as pilot raise and slot for lack of a better name. This involves advancing raises straight updip at strike intervals of approx. 8 meters center to center; followed by slashing the intervening pillars. The pillar slashes would be limited to 60 cm. true width in order to reduce dilution.

I have the following comments:

i) All three methods appear to be technically feasible. Wall rock conditions are generally competent except for a very narrow altered zone in the immediate hangingwall; and the vein has unusual geometric and grade regularity. Test stoping, which will be completed in the next few weeks, will provide more definitive observations.

For steeper zones (>60°), I believe the reserve could be recalculated using a 1.5 meter min. stoping width rather than 2.0 meters. This could raise the grade 25 - 30 % for these areas.

For conventional mining in zones dipping < 60° , a two meter minimum width is appropriate except in upper and lower drifts where it appears ore might be successfully resued.

For pilot and slot methods, my initial impression is that about 35% of the contained ounces would be mined in openings of width 1.5 to 2 meters depending on dip. In flat zones, slightly more than half of the contained ounces could be mined in slots of 60 cm. with, with the remaining 13 - 15% forming unrecoverable pillars or remnants. In steeper zones, the portion mined in 60 cm slots could approach 60% of contained ounces.

STOPE PRODUCTIVITY:

PRELIMINARY ASSESSMENT-

a) Narrow (1.5m) Shrinkage Stopes (figures below do not include stope raises)-

- 18 tons per manshift
- 2 miners per stope per shift; 2 shifts/day; 350 days/yr
- ore reserve grade @ 2.0 m min. width = 0.647 opt
- mined grade @ 1.5 m min. width = 0.8 opt ???
- ounces per shrinkage stope per year = 20,000
- use factor of 85% (arbitrary) to allow for time requirements to build up shrinkage inventory, etc
- therefore assume 17,000 oz/yr for one continuous shrinkage stope operation

b) Pilot Raise & Slot Stopes-

- 15 tons per manshift
- 2 miners/stope/shift; 2 shifts/day; 350 days/yr
- reserve grade @ 60 cm = 1.565 opt
- reserve grade @ 2.o m = 0.647 opt

- mined grade (Typical stope = 50m strike x 31 m updip) (0.647 x 3744 t x 1.565 x 1698 t)/5442 t = 0.93 ounces per ton
- therefore ounces per PR&S stope per year = 19,500

c) Modified Room & Pillar Stope (jackleg & slusher)
- 20 tons per manshift
- mined grade = 0.647 opt
- ounces per stope/ year = 18,000

Therefore, three producing stopes of the types described above should produce 52,000 to 54,000 ounces per annum. The stopes I envision are quite small so that maintaining the rate of development will be essential to bring new stopes on stream on a timely basis, and the rate of development will be the limiting factor.

At an underground ore reserve of 168,000 ounces, the production life of the mine would be 3.25 years.

5. MINE DEVELOPMENT:

CRITERIA:

- 3.0 x 3.6 m main access decline to elevation 1400.
- For shrinkage stopes, the selected level interval is 40 meters (vertical) with drawpoints, footwall haulage drifts, and ore sills at each level. Each shrinkage stope has a central stope raise.
- For pilot raise & slot stopes in steeply dipping ore, the level interval (vertical) is 14 meters. Drifting (and ore extraction) is located within the ore zones wherever possible.
- For flat lying ore zones, the level interval is approx. 20 meters, depending on actual dip. Drifting is within the ore zones.

DEVELOPMENT QUANTITIES:

a) Stoping with a combination of shrinkage in steep zones and room & pillar or pilot & slot in flatter zones-
- Estimated decline & lateral dev. ..... 8000 meters
- Shrinkage stope raises & vent/escapeways ...1000 meters
- Advance rate req'd (decline + lateral) = 7.62 m/day for 3 yrs

b) Stoping with pilot & slot and/or room & pillar (no shrinkage) -
- Estimated lateral dev. + decline ..... 8600 meters
- Pilot raises integral part of stoping.... by stope crews
- Vent / escapeway raises .....375 meters
- Advance rate req'd (decline + lateral) +8.19 m/day for 3 yrs

6. MANPOWER:

Estimated manpower requirements for underground operations (including a rotation shift) are as follows:

STAFF	
Superintendent	1
Shiftbosses	3
Geologist	1
Jr. engineer/survey	1
Technician-samplers	2
Accountant- timekeeper	1
HOURLY	
Development miners	8
Stope miners	16
Scoop/ truck operators	5.5
Construction/ labourers/ janitorial	9
Working mech. foreman	1
Mechanics/welders	5
Electrician	1
Diamond drillers	2
TOTAL	56.5

At 62,000 tons per annum & 250 manshifts/worker year,
MINE TONS / MANSHIFT = 4.4

7. COST ESTIMATES:

7.1 OWNER OPERATIONS

A. CAPITAL -

Surface plant & mine equipment (reconditioned)	$1,700,000
Preproduction mine development 3 mos.x $650,000	1,950,000
TOTAL	$3.7MILLION

B. OPERATING - (168,000 oz mined from 190,000 tons)*

ITEM	PROJECT TOTAL	COST PER OZ
Staff & support labour	$4,757,000	$C 28.32
Stoping	4,913,000	29.24
Development	8,079,000	48.09
Ore & waste haulage	1,758,000	10.46
Auxiliary equipm't op cost	1,075,000	6.40
Dia. drilling & testholes	650,000	3.87
Misc. supplies/commun./frt	296,000	1.76
Assays	212,000	1.26
Power (assume onsite gen.)	3,023,000	17.99
Propane	163,000	.97
TOTAL	$C 24,926,000	$C 148.37*

OPERATING COST PER TON MINED* = $131.20
TOTAL COST PER OUNCE MINED (OP.+ CAP) = $170.39

* Assumes a blend of shrinkage and pilot & slot stopes. For various

blends of the stoping methods outlined above, the mine operating cost estimate varies from $147 per ounce to 153 per ounce. This difference is less than the cost estimate variance and cannot therefore be used to suggest the most suitable stoping method without field testing.

7.2 CONTRACTOR OPERATIONS:

A. CAPITAL -
Surface plant and preprod. mine dev. $2.3 million

B. OPERATING -
(168,000 oz.) $180.95/ $30.4 million

TOTAL COST / OZ. (capital & operating) $C 195/ oz

7.3 MAJOR COST CRITERIA ASSUMED:

- Lateral & ramp development direct cost incl. ground support ..... $ 985 / meter
- 1.5 m x 1.5 m open raise direct cost ..... 800 / meter
- Miner labor cost / manshift 280
- Tradesman labor cost / manshift 250
- Labourer cost / manshift .....$ 160
- Average one way U/G truck haul ..... 750 meters
- Average U/G 13 t. truck productivity . 130 tons/truckshift
- Power generation onsite @..... $0.13/KWH

P.O. Box 1025
Kaslo, B.C. V0G 1M0
Tel. 604 353 7169
Oct. 7, 1993

Paul Saxton
Viceroy Resource Corp.

Dear Paul:

RE: FAIRFIELD MINERALS

I have estimated mineable grade and tonnage parameters for various stoping methods. Please remember that I do not have complete data here so these estimates will contain inaccuracies.

A proper assessment requires a complete reserve recalculation incorporating mining width parameters for the various stoping methods.

My preliminary assessment is as follows:

ORE ATTITUDE	STOPING OPTION	SHORT TONS	GRADE(OPT)	OUNCES
Steeply dipping	Option A -Shrinkage*	105,000	0.86	90,000
	or			
	Option B -Pilot & slot	68,000	1.26	86,000
Flat dipping	Option A1 -Room & pillar	155,000	0.50	78,000
	or			
	Option B1 - Pilot & slot	117,000	0.66	77,000

The actual mining methods could actually end up to be some blend of all of the above.

Allyn: Use above arrays as diluted values

Reserve tables
2 tables 1 narrow, 1 a wider.
Flags did cut.
Nov 8 @ N.M.

Use shrinkage & Room + Pillar.

Yours sincerely,

Allyn Steward

Allyn J. Steward, P. Eng

* 1.5 meter min. stoping width.

R.M. SAMUELS CONSULTING, INC.

R. Samuels.

1516 BAYBROOK DR.
COMOX, B. C.
V9N 6R5

TELEPHONE: (604-339-3306)
FAX: (604-339-3306)

TRANSMITTAL SHEET

TO: VICEROY RESOURCES

FAX NUMBER: 682 - 3941

ATTENTION: PAUL SAXTON

RE: FAIRFIELD COST ESTIMATES.

DATE: OCT 1 / 93

NO. OF DOCUMENTS (including transmittal sheet) 5.

PAUL :

ATTACHED IS THE CAPITAL COST ESTIMATE & OPERATING COSTS FOR A 300 TON PER DAY (OPERATES 4 DAYS PER WEEK) MILL ON THE CRAIGMONT SITE. THE ESTIMATE IS BASED ON NEW EQUIPMENT, AND I ESTIMATE THE EQUIPMENT COSTS COULD BE REDUCED BY 25% IF GOOD USED EQUIPMENT WAS SECURED. NOTE IN THE OPERATING COST I HAVE PUT IN A FIGURE FOR USE OF THE MERRITT SITE: A REPAYMENT FOR THEIR INPUT. THE COST OF SALES IS TRANSPORTATION OF CONC. TO ASARCO & BULLION TO THE MINT. I'M @ CSFM UNTIL 6 PM & IN COMOX UNTIL MONDAY IF YOU WANT TO DISCUSS.

R.M. Samuels Consulting, Inc.

1516 Baybrook Drive
Comox, B.C. V9N 6R5

Bus. & Fax: (604) 339-3306

TO: Paul Saxton, Viceroy Resource Corp.

FROM: Rod Samuels R. M. Samuels.

DATE: October 1, 1993

RE: CAPITAL COST TO PROCESS FAIRFIELD ORE AT THE CRAIGMONT SITE

Capital Cost is as follows:

1.	Preproduction Costs	297,000
2.	Craigmont Site Infrastructure	294,000
3.	Crushing Plant	1,275,000
4.	Fine Ore Storage & Reclaim	258,000
5.	Concentrator	1,977,000
6.	E.P.C.M.	400,000
7.	Working Capital	1,060,000
8.	Contingency	400,000
		$ 5,961,000

Total operating costs (exclusive of mining) to utilize the Craigmont site for processing Fairfield ore is estimated at $76.60 per metric ton.

A detailed breakdown of costs is attached.

Yours truly,

Rod Samuels.

R.M. Samuels

1. PREPRODUCTION COSTS

Geotechnical (Soils Report)	15,000
Test Work (Bioassay Data)	8,000
Craigmont Permit Amendment	50,000
Feasibility Study	80,000
Construction Insurance	30,000
Head Office Costs	50,000
Construction Security	36,000
Recruiting	10,000
Power During Construction	12,000
Trash Disposal	6,000
	297,000

2. CRAIGMONT SITE INFRASTRUCTURE

Site Preparation (Roads & Yards)	30,000
Process Water Pumping System	14,000
Septic System	12,000
Communications	20,000
Power (Primary Sub-Station)	25,000
Power (Yard Distribution & Lighting)	17,000
Laboratory Equipment	100,000
Fencing	21,000
Warehouse (Shelving, Furniture & Computer)	15,000
Small Tools	40,000
	294,000

3. CRUSHING PLANT

Excavation & Backfill	20,000
Concrete	120,000
Building Structures (Installed)	227,000
Internal Steel	75,000
Chute & Platework	30,000
Equipment	398,000
MCC/Control Room/Switch Gear	105,000
Electrical Distribution (Material & Installation)	70,000
Lighting & Heating	20,000
Mechanical (Installation)	140,000
Piping (Materials & Installation)	20,000
Instrumentation & PLC	50,000
	1,275,000

4.	FINE ORE STORAGE & RECLAIM	
	Excavation & Backfill	10,000
	Concrete	15,000
	Covered Structure	100,000
	Multi-Plate Tunnel	40,000
	Equipment	38,000
	Mechanical (Installation)	40,000
	Electrical Distribution & Lighting	15,000
		258,000
5.	CONCENTRATOR	
	Excavation & Backfill	30,000
	Concrete	180,000
	Building Structures (Installed)	275,000
	Internal Steel	150,000
	Chute, Platework & Tanks	93,000
	Equipment	579,000
	MCC/Control Room/Switch Gear	105,000
	Refinery Equipment & Supplies	45,000
	Reagent Systems	30,000
	Electrical Distribution (Materials & Installation)	80,000
	Lighting & Heating	30,000
	Mechanical (Installation)	200,000
	Piping (Materials & Installation)	110,000
	Instrumentation & PLC	70,000
		1,977,000
6.	E.P.C.M.	400,000
7.	WORKING CAPITAL	
	Commissioning	50,000
	Spare Parts	100,000
	Initial Reagents	10,000
	Operating Cost (3 Months)	900,000
		1,060,000
8.	CONTINGENCY	400,000

OPERATING COSTS

		$ / metric ton	
1.	Ore Load Out & Trucking	* 6.50	7.20
2.	Craigmont Site — includes Repayment of $3.25 mm.	15.00	16.70
3.	Craigmont Force Account — includes?	1.00	1.10
4.	Power	6.40	7.10
5.	Staff & Operating Labor	15.00	16.70
6.	Operating Supplies	4.40	4.90
7.	Maintenance Supplies	5.30	5.90
8.	Administration Costs	7.40	5.20
9.	Cost of Gold Sales — Smelter, Refine etc.	* 11.10	12.30
10.	Head Office Expenses	4.50	5.00
		$ 76.60/t	

hydro at Craigmont. 5 cells @ 128 kwh/t. must assume diesel

G.P.

$485.00/oz.

Based on:
- 62,400 t/year milled — NB BID 11.9% Au feed
- 3,000 t/year concentrate
- 55,000 oz/year production
- 34% of gold in concentrate → 6.23 ozs/ton. (18,700 ozs. — 36,300 ozs.)
- 66% of gold in bullion
- Craigmont's contribution repaid in 3.25 years

CRAIGMONT'S CONTRIBUTION TO CAPITAL COST

1.	Environmental Permitting	500,000
2.	Bonds	500,000
3.	Water Supply	50,000
4.	Tailings Pond (Starter Dam)	600,000
5.	Power Supply	1,000,000 ?
6.	Site Preparation	100,000
7.	Tailings Disposal (years 3 & 4)	200,000
8.	Reduced E.P.C.M.	200,000
9.	Reduced Labor Transportation	100,000
		3,250,000