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TO: R. A. Dujardin
FROM: S. Gardiner
DATE: September 14, 1988

CINOLA DEPOSIT, Graham Island, Queen Charlotte Islands, B.C.

(A) RESERVES

(1) Source: City Resources Geostatistical Study (March 1988) Report

Geological Reserves (Geostatistical Calc.) 56.44 million tonnes
@ 1.64 g/tonne.
(Hand Calculated) 47.04 million tonnes
@ 1.69 g/tonne
Cutoff Grade 0.69 g/tonne

Mineable Reserves (Geostatistical calc.) 22.63 million
tonnes @ 2.36 g tonne
(Hand Calculated) 23.44 million tonnes
@ 2.35 g/tonne.
Cutoff Grade 1.10 g/tonne.

(2) Source: William Hill Mining Consultants (H.M.C.) April, 1988 Report

Geological Reserves 43.5 million tonnes @ 1.65 g/tonne
using 0.69 g/tonne
cutoff.

Mineable Reserves 24.8 million tonnes @ 2.11 g/tonne
cutoff 1.10 g/tonne

Additional "Possible" Mining Reserves 200,000 tonnes @
1.90 g/tonne

(B) PIT DESIGN AND MINING PLAN Source: (H.M.C.)

10M BENCH HEIGHT, 80° SLOPE ANGLE
24M HAUL ROAD WIDTH, RAMP GRADE 8%
6000 tonnes/day (6600 st/d).
Waste:ore ratio over mine life 2.07:1

1-3 yrs: low grade to stockpiles (blended into mill feed
later) higher grade (2.74 g Au/tonne) to mill (to reduce
payback pd).
stripping ratio 1.16:1

3 yrs-end: 1.90 g Au./tonne ave grade material milled
4-8 yrs stripping ratio 3.37:1
8 yrs-end " 1.91:1

Rockmovement 6,400,000 tonnes/year
2,310,000 tonnes Ore
4,090,000 Waste

Waste Rock to 3 waste dumps:

(1) Acid producing waste rock: total estimate over mine life 25,850,000 tonnes.

Design of dump: capacity 30 million tonnes

(i) Rhyolite rock (741,000 tonnes) as base

(ii) Lime trucked from mill and sprayed on waste rock
as it is dumped

(iii) Each bench covered with mudstone

(iv) 1,165,000 tonnes mudstone clumped on top as
impermeable cap

(v) Plastic liner placed on side slopes

(vi) Complete dump reclaimed and back filled into
pit at end of mine

(2) Mudstone waste rock dumped adjacent to overburden dump. 11,245,000 tonnes

(3) Argillically altered waste rock dumped in tailings/
waste rock dump, washed into tailings pond,
capped with mudstone. 8,831,000 tonnes

C. METALLURGY Source: 1987 Annual Report

Process (1) 3 stage comminution (i) crushing & stockpiling
(ii) grinding (a) autogenous mill
(b) pebble mill

(2) Oxidation by treating c nitric and sulphuric acid
@ 75-85°C for 1-2 hours.

(3) Neutralize with limestone and slaked lime.

(4) Cyanidation: combination carbon-in-pulp, carbon-in-
leach + heavy metals
stabilization->tailings.

- (5) (a) Stripping, Electrowinning
- (b) Cathodes retorted; mercury collected as saleable
by product
- (c) Furnaces gold & silver poured as dore' bars

Au Recovery: generally quoted as 90%
Data sheets from U. Doran state 85-90%, 90% (yr 1,2)
92% (yr 3 - on)
G.C. Newsletter July 25, 1988 90-92% recovery,
(Minproc Engineers).

D. EXPLORATION AND PROPERTY ACQUISITION COSTS*

\$17,669,789 to March 31, 1988 Source:1988 Quart Rpt.
15,887,029 to Dec 31, 1987 Source:1987 Ann.Rpt.

\$1,782,760 in 1988 (Pre production ??)

* includes money to "buy out" Energy Reserves who retain a royalty based on price of gold, currently 1.5%.

E. DEVELOPMENT AND OPERATING COSTS:

Source: William Hill Mining Consultants

(i) Preproduction costs: \$1.4 million (\$0.65/tonne)
assuming equipment is purchased for operations
in advance, estimated 4 months for overburden
and waste rock stripping

(ii) Capital cost: (a) Mining
new equipment \$23.1 million
used equipment \$12.1 million
no provision for: power to open pit
contingencies
ore stockpile reclamation costs
working capital allowances
water treatment
lime production
inflation and interest rates

(b) MILL, ENVIRONMENTAL, ETC
not mentioned in William Hill Study

(iii) Operating Costs:

\$18.20/tonne ore milled includes mill,
mine, general
\$1.30/tonne rock mined

(iv) Reclamation costs: \$17.5 million (\$0.60/tonne)

Estimated 2 yrs to reclaim Acid generating waste rock,
back fill to open pit, cover with overburden.

(2) Source: City Resources Limited Prospectus, February 1988.
Quotes from Feasibility Study by Wright Engineers dated
December 2, 1987.

Total Capital Costs: \$110,000,000.

PARAMETERS USED IN FINANCIAL ANALYSIS:

Reserves:	24.8 million tonnes @ 2.11 g Au/tonne*
Cut off:	1.10 g Au/tonne
Waste:Ore	1.16:1
Processing:	6000 tonnes/d; 350 days/yr
Recovery:	90%
Operating Cost:	\$18.20/tonne
Refining Cost:	\$5/oz
Mine Life:	12 years
Reclamation:	2 years
Capital Cost:	\$110 million
Gold Price:	\$425 (US)/oz

all figures in \$ CANADIAN unless otherwise indicated

*see Mining Schedule attached

CINOLA Cut off 1.10 g/t (Values in thousands of \$CDN)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ore Mined ('000s tonnes)		2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	1700		
Au Grade (g/t)		2.9	3.16	2.16	1.74	1.59	1.49	1.85	1.77	1.81	2.04	2.25	2.75		
Au Rec (o/o)		0.9-->													
Payable Au g		5481	5972.40	4082.4	3288.6	3005.1	2816.1	3496.5	3345.3	3420.9	3855.6	4252.5	4207.5		
Au Price US \$/Oz		425-->													
E xch RTE		1.2-->													
Au P CDN		510-->													
Gross Au Rev		89881.4	97939.7	66946.1	53928.8	49279.8	46180.4	57338.1	54858.6	56098.4	63226.9	69735.5	68997.6		
Refining (\$5/oz)		881.2	960.2	656.3	528.71	483.1	452.8	562.1	537.8	550	619.9	683.7	676.5		
Net Au Rev		89000.2	96979.5	66289.8	53400.1	48796.7	45727.6	56776	54320.8	55548.4	62607	69051.8	68321.1		
Operating Costs:															
Mining]															
Milling] 18.20/tonne		38220	38220-->										30940		
Anc]															
*Royalty (1.5%)		1335.0	1454.7	994.4	801	732	685.9	851.6	814.8	833.2	939.1	1035.8	1024.8		
Cash Flow (C.F.)		49445.2	57301.8	27075.4	14379.1	9844.8	6821.7	17704.4	15286	16495.2	23447.9	29796.0	36356.3		
Pre Prod	1400														
Post Prod														8750	8750
Env															
Capital Cost	110,000														
Total Inv	111,400														
Pretax C.F.	(111,400)	49445.2	57301.8	27075.4	14379.1	9844.8	6821.7	17704.4	15286	16495.2	23447.9	29796.0	36356.3	(8750)	(8750)
Cum. C.F.	(111,400)	(61954.8)	(4653.0)	22422.4	36801.5	46646.2	53467.9	71172.3	86458.3	102953.5	126401.4	156917.5	192553.8	183803.8	175053.8

NPV 10% \$70,474,613

NPV 20% \$20,509,551

I R of Return ~ 25%

*based on gold price

APPENDIX I-0

MINING SCHEDULE

- Thousands of tonnes @ grams per tonne -
 - At 1.10 grams per tonne cut-off grade -

<u>YEAR</u>	<u>ORE MINED FROM OPEN PIT</u>	<u>ORE STOCKPILED (RECLAIMED)</u>	<u>ORE MILLED</u>	<u>WASTE MINED</u>	<u>TOTAL MOVED IN-PIT</u>
	Preproduction			2160	2160
1	4208 @ 2.27	686 @ 1.26 1422 @ 1.84	2100 @ 2.90	2192	6400
2	3335 @ 2.62	280 @ 1.26 955 @ 1.84	2100 @ 3.16	3065	6400
3	1358 @ 2.20	258 @ 1.18 (1000 @ 1.84)	2100 @ 2.16	5042	6400
4	1140 @ 1.65	(960 @ 1.84)	2100 @ 1.74	5180	6320
5	1730 @ 1.64	(112 @ 1.84) (258 @ 1.18)	2100 @ 1.59	4573	6303
6	829 @ 1.63	(966 @ 1.26) (305 @ 1.84)	2100 @ 1.49	5475	6304
7	2100 @ 1.85		2100 @ 1.85	4300	6400
8	2100 @ 1.77		2100 @ 1.77	4300	6400
9	2100 @ 1.81		2100 @ 1.81	4300	6400
10	2100 @ 2.04		2100 @ 2.04	4300	6400
11	2100 @ 2.25		2100 @ 2.25	4073	6173
12	1700 @ 2.75		1700 @ 2.75	2340	4040
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TOTAL	24800 @ 2.11	3601 @ 1.64 (3601 @ 1.64)	24800 @ 2.11	51300	76100

DEMONSTRATED
MINEABLE
RESERVES

APPENDIX I-L

BREAKDOWN OF COSTS PER TONNE OF ORE

Mining costs = \$1.30/tonne ore delivered to the mill.
Milling costs = \$16.00/tonne ore
General = \$0.90/tonne ore

TOTAL= \$18.20/tonne ore

Note: Mining costs have been determined by H.M.C.
The remaining costs are the latest estimates provided
to H.M.C. by City.