

October 13th, 1982

cc: T.W. Janes
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POPLAR DEPOSIT : EVALUATION CHECKMemo: A.J.Schmidt/G.F. Andrews - Sept. 29/82
" T.W.Janes et al/K.W.Pickering, Mar.4/80.

In March, 1980, an evaluation of the Poplar Deposit indicated a constant dollar 15.37% DCRR, on an initial investment of Cdn. \$92,445,000 (1980 \$). A similar evaluation in September, 1982, yielded a deflated dollar 1.93% DCRR on an initial investment of Cdn. \$127,108,000 (1982 \$). A comparison between the two proforma has been summarized in the attached table and the variance between discount rates reconciled as shown on the attached graph.

The following is a brief description of those variables which most contribute to the apparent discrepancy between the 1980 and 1982 discount rates.

Metal Prices

Metal price estimates alone account for 61% of the variance between the 1980 and 1982 discount rates. The 1980 estimates were as stated "taken at recent average prices", while the 1982 estimates are from the G.E. metal forecast.

Constant Dollar Evaluation

A constant dollar evaluations serve well to illustrate real dollar revenue, capital and operating costs but will over-state the value of capital deductions for income tax purposes during periods of inflation. For this reason, it is Utah policy to report DCRR for deflated dollars evaluations and include a constant dollar proforma for reference only. The difference between constant and deflated dollar proforma accounts for 18% of variance between the 1980/82 discount rates.

Other Variables

The effect on the 1982 proforma of other variables such as 1980 metal grades, capital and operating costs was both favourable and unfavourable with the cumulative effect of lowering the DCRR by approximately 1%. It is difficult to estimate the effect of only one variable as all are interdependent.

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To complete the evaluation comparison, the 1982 proforma was run with 1980 metal grades, capital and operating costs, metal prices and in constant dollars.

While some of the above changes could only be approximated due to programming constraints it was possible to produce a DCRR of 13.39%, within 2% of the 1980 DCRR. The remaining difference was due primarily to the effect of additional tax considerations such as U.S. tax and Branch Tax.

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BLT:ebh

attachments:

POPLAR DEPOSIT

EVALUATION COMPARISON

\$ U.S.

<u>Description</u>	<u>1980 Proforma</u> <u>1980 \$</u>	<u>1980 Proforma</u> <u>1982 \$</u>	<u>1982 Proforma</u> <u>1982 \$</u>
Tonnage	71,393,000 tonnes		73,538,000 tonnes
T.P.D. Ore	13,608 tonnes		15,000 tonnes
T.P.D. O + W	40,824 tonnes		39,989 tonnes
Stripping Ratio	2.11 : 1		1.787 : 1
<u>Metal Prices:</u>			
Cu	\$0.88/lb	\$1.142/lb	\$1.274/lb
Mo	\$9.60/lb	\$12.46/lb	\$3.05/lb
Ag	\$28.00/oz	\$36.35/oz	\$6.10/oz
Au	\$560/oz	\$727/oz	\$355/oz
<u>Metal Grades:</u>			
Cu	0.324%		0.341%
Mo	0.015%		0.013%
Ag/Tonne Conc	2.16 oz/tonne		2.11 oz/tonne
Au/Tonnes Conc	0.187 oz/tonne		0.142 oz/tonne
<u>Metal Recoveries:</u>			
Cu	85%		88%
Mo	65%		74%
Ag	N/A		49%
Au	N/A		56%

POPLAR DEPOSIT

EVALUATION COMPARISON

\$ U.S.

<u>Description</u>	<u>1980 Proforma 1980 \$</u>	<u>1980 Proforma 1982 \$</u>	<u>1982 Proforma 1982 \$</u>
Initial Capital	\$72,520,000	\$94,134,000	\$100,346,000
Sustaining Capital	4,800,000	6,231,000	12,534,000
Working Capital	5,600,000	7,269,000	3,966,000
Buy-Out	1,436,000	1,864,000	1,340,000
	<u> </u>	<u> </u>	<u> </u>
TOTAL:	<u>\$84,356,000</u>	<u>\$109,498,000</u>	<u>\$118,186,000</u>

Operating Costs
Per Tonne Milled:

Mining	\$2.108	\$2.737	\$2.254
Milling	1.543	2.003	2.517
G + A	0.549	0.712	0.482
Conversion	1.545	2.006	1.809
	<u> </u>	<u> </u>	<u> </u>
	<u>\$5.745</u>	<u>\$7.458</u>	<u>\$7.062</u>

Constant \$ DCRR 15.37% 5.15%

Deflated \$ DCRR N/A 1.93%