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INTER-OFFICE CORRESPONDENCE

TO L.P. STARCK

DATE OCTOBER 26, 1982

FROM F. HOLLAND

COPIES TO


SUBJECT RE: MOSQUITO CREEK COSTS AND INDICATED PROFIT

The attached tabulations and notes indicate the profit that can be achieved, at various tonnages, prices per ounce, and head grades.

Table 3 shows the indicated profit per month, for various combinations and as an addendum the profit that can be achieved at a Grade of 0.40 oz/ton, at three price levels.

If a grade of 0.50 oz per ton could be realized, then at a price of \$600.00 Canadian, the profit per annum would be \$3,192,000; other combinations can be extrapolated from the Tables.

Yours truly,


F. Holland

FH/sb

Encl.

October 26, 1982

MOSQUITO CREEK GOLD MINES LIMITED
NOTES TO
ESTIMATES OF COST AND PROFIT

The following tabulations indicate the costs to be anticipated, and the profit potential for various tonnages milled, ore grades (oz. Au) and varying prices per ounce of gold, expressed in Canadian dollars.

The exchange rate assumed is 20%, that is \$1.00 U.S. is equivalent to 1.2 dollars Canadian.

Production is assumed to continue on a 20/21 day month basis, and three production levels are assumed:

2,000 TPM	I:E	100 T.P.D.
2,200 TPM	I:E	110 T.P.D.
2,800 TPM	I:E	140 T.P.D.

The 2,000 and 2,200 tons per month production rates are attainable with present crew and staff.

The 2,800 tons per month is based upon information that the mill equipment can handle this tonnage; and is the limit of capacity of the thickener.

The cost per ton is based upon the Mosquito recorded costs, and tonnage milled, for the period January to July inclusive 1982 and is \$182.19 per ton milled. This is only the direct operating cost as recorded at the mine office in Wells. There is no significant economy of scale, although the 2,800 ton per month rate is costed at \$178.00 per ton milled, also based upon the cost data recorded at the mine office. Costs have not been increased, as with certain changes that may be implemented, and with the sharing of certain costs with a capital development program these costs should hold in to the early part of 1982.

A general increased costs can be generally considered to be offset by changes in the price for gold, and it is not unreasonable to anticipate that the price for gold will increase with inflation.

The cut off grade, at \$510.00 CDN - \$425.00 U.S. is approximately .39 oz. per ton in all three cases, and at .37 oz. per ton and \$510.00 CDN, a loss is recorded.

All cases reflect a modest profit, when the head grade rises to 0.40 oz. ton, or when the price rises to \$550.00 Canadian. At the other end of the Tables, at \$600 CDN per ounce, all head grades reflect a profit which is outlined in Table 3.

At \$600 Canadian and a head grade of .50 ounces per ton, the indicated profit is \$3,192,000 per year.

TABLE 1

EQUIVALENT VALUES US/CDN DOLLARS

<u>Exchange Rate</u> U.S.	<u>20%</u> Cdn.	<u>22%</u>	<u>18%</u>
\$425.00	\$510.00	\$518.50	\$507.50
430.00	516.00	524.60	507.40
440.00	528.00	536.00	519.20
450.00	540.00	549.00	531.00
460.00	552.00	673.44	542.80
470.00	564.00	573.40	554.60
480.00	576.00	585.60	566.40
500.00	600.00	610.00	590.00
508.00	610.00		

ESTIMATE OF OPERATING PROFIT @ VARIOUS TONNAGES
GRADES AND DOLLAR VALUE

		CANADIAN DOLLARS PER OUNCE OF GOLD				
		<u>\$510</u>	<u>\$550</u>	<u>\$575</u>	<u>\$600</u>	<u>\$610</u>
<u>2000 TPM</u>						
@ 0.37 = 740 oz.	Value	343,434	370,370	387,505	404,040	410,774
@ 91% 673.4	Cost	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>
	Profit	(20,946)	5,990	22,825	39,660	46,394
@ 0.40 = 800 oz.	Value	371,280	400,400	418,600	436,800	444,080
@ 91% 728 oz.	Cost	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>
	Profit	6,900	36,020	54,220	72,420	79,700
@ 0.45 = 900 oz.	Value	417,690	450,450	470,925	491,400	499,590
@ 91% 819	Cost	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>
	Profit	53,310	86,070	106,545	127,020	135,210
@ 0.50 = 1000 oz.	Value	464,100	500,500	523,250	564,000	555,100
@ 0.91 = 910 oz.	Cost	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>	<u>364,380</u>
	Profit	99,720	136,120	158,870	181,620	190,720
<u>2200 TPM</u>						
@ 0.37 = 814 oz.	Value	377,757	407,385	425,903	444,420	451,827
@ 91% 740.7	Cost	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>
	Profit	(23,061)	6,567	25,085	43,602	51,009
@ 0.40 = 880 oz.	Value	408,408	440,440	460,460	480,480	488,488
@ 91% 800.8	Cost	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>
	Profit	7,590	39,622	59,642	79,662	87,670
@ 0.45 = 990 oz.	Value	459,459	495,495	518,018	540,540	549,549
@ 91% 900.9	Cost	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>
	Profit	58,641	94,677	117,200	139,722	148,731
@ 0.50 = 1001 oz.	Value	510,510	550,550	575,575	600,600	610,610
	Cost	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>	<u>400,818</u>
	Profit	109,692	149,732	174,757	199,782	209,792

ESTIMATE OF PROFIT (2)
VARIOUS TONNAGES, GRADES AND DOLLAR VALUES

	<u>\$510</u>	<u>\$550</u>	<u>\$575</u>	<u>\$600</u>	<u>\$610</u>
2800 TPM					
@ 0.37 = 1036 oz Value	480,807	518,518	542,087	565,656	573,084
@ 91% = 942.7 oz Cost	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>
Profit	(17,593)	20,118	43,687	67,256	74,684
@ 0.40 = 1120 oz Value	519,792	560,560	586,040	611,520	621,712
@ 91% = 1019.2 oz Cost	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>
Profit	21,392	62,160	87,640	113,120	123,312
@ 0.45 = 1260 oz Value	584,766	630,630	659,295	687,960	699,426
0.91 = 1146.6 oz Cost	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>
Profit	86,366	132,230	160,895	189,560	207,026
@ 0.50 = 1274 oz Value	649,740	700,700	732,550	764,400	777,140
Cost	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>	<u>498,400</u>
Profit	151,340	202,300	234,150	266,000	278,740

TABLE 3

ESTIMATE OF OPERATING PROFIT PER MONTH AT VARIOUS TONNAGES MILLED
 VARYING GOLD PRICE (CDN \$) AND INCREASING GRADE

Tons Milled Per Month	Assay Oz/Ton	<u>Gold Price Per Ounce CDN Dollars</u>						
		510	550	575	600	610		
2000								
			<u>Estimated Profit per Month</u>					
	0.37	<20946>	5990	22825	39660	46394	The Estimated Profit with a Tonnage	
	0.40	6900	36020	54220	72420	79700	Milled of 24000 Ton per Year.	
	0.45	53310	86070	106545	127020	135210	@ 0.40 oz. Ton \$550.00 CDN \$432,240.00	
0.50	99720	136120	128870	181620	190720	@ \$575.00 \$660,640.00 @ \$600.00 \$869,040.00		
2200	0.37	<23061>	6567	25085	43602	51009	The Estimated Profit with a Tonnage	
	0.40	7590	39622	59642	79662	87670	Milled of 26400 Tons per Year	
	0.45	58641	94677	117200	139722	148731	@ 0.40 oz Ton \$550.00 CDN \$475,464.00	
	0.50	109692	149732	174757	199782	209792	@ \$575.00 \$715,704 @ \$600.00 \$955,944.00	
	0.37	<17593>	20118	43687	67256	74684	The Estimated Profit with a Tonnage	
0.40	21392	62160	87640	113120	123312	Milled of 33600 Tons per Year		
0.45	86366	132230	160895	189560	201026	@ 0.40 oz Ton \$550.00 CDN \$745,920.00		
0.50	151340	202300	234150	266000	278740	@ \$575.00 \$1,051,680.00 @ \$600.00 \$1,357,440.00		

These Tables assume a 20 day working month.

At 2000 and 2200 T.P.M. the direct operating cost is \$182.19 per ton milled.

At 2800 tons per month the direct operating cost is \$178.00 per ton milled.

The lowest grade in oz./ton of 0.37 is close to cutoff.

These tables assume no significant economy of scale.

91% metallurgical recovery including smelter losses is assumed

Reductions in costs resulting from shared use of certain facilities, with a capital development program, are not included in this Table.

TABLE 4

OPERATING PROFIT 12 MONTH PERIOD

<u>Tons Milled Per Year</u>	<u>Assay Oz/Au Ton</u>	<u>Gold Price Per Ounce Canadian Dollars</u>		
		550	575	600
<u>Estd. Operating Profit 12 Month Period</u>				
24,000	0.40	\$ 432,240	\$ 660,640	\$ 869,040
	0.45	1,032,840	1,278,540	1,524,240
	0.50	1,633,440	1,546,440	2,179,440
26,400 SDT	0.40	475,464	715,704	955,944
	0.45	1,136,124	1,406,400	1,676,664
	0.50	1,796,784	2,097,084	2,397,384
33,600 SDT	0.40	745,920	1,051,680	1,357,440
	0.45	1,586,760	1,930,740	2,274,720
	0.50	2,422,760	2,809,800	3,192,000

This Table assumes 1982 mine operating costs
does not include provision for capital development.