

Reflections re above prospect.
Preliminary Economic Evaluation
of

The Tonnage Potential ← of Lacana's estimate
to Glory hole & ADIT ZONES

021371
104K

11,270,000 cuft of mineralized rock (6.2 oz/T silver
1 ton = 10 cuft 6% Pb + Zn)

Reserve potential = 1,127,000 T

This estimate refers only to the southern section of the deposit, south of the main fault.

However this estimate also assumes that mineralization goes down only 500 ft deep in depth (could be much deeper!)

Comins stated: 2000 T/vertical ft. of mineral ore is available in the Glory hole area.

Grade Au 0.06 oz/T, Ag 10.0 oz/T
Pb 1.9% Zn 1.8%

(Glory hole area)

In 1964 New ore zones # 5 & # 8 were discovered. These have not been considered neither by ~~Lacana~~ Comins nor by Lacana.

One interpretation suggests a mineralized zone of 25-35 ft width carrying 4.8-10.2 oz/T silver and lead, zinc values.

In 1965 a report states "700 ft length x 30 ft width, carrying 8 oz/T silver".

IN the North
3000 ft to
NNW of Glory Hole

600

80 = 300

$$7.5 \times 300 = 2200 \text{ ft} \times 1000 \times 25$$

(2)

There is little doubt by only looking at the available data that we have an excellent potential for several million tons of mineralized Rock carrying ^{over} gross value basis over 100 - 110 US \$/T (or say 120 \$ (or CAN \$/T 125)

Apparently Cominco worked similar deposits in to a depth ~~practically~~ equal practically to the strike length.

the area

The appropriate strike length appears exposed !! to be over 2200 ft

It is almost certain that with ~~little~~ field work of ~~trenching~~ this length some good will be considerably increased. (I.P. & E.M. surveys, trenching, short hole drilling etc)

the
Tonnage
Potential

Assuming ~~however only 2000~~ an orebody of the following dimensions:

2000 ft long x 25 ft wide x 1000 ft deep we have a potential volume of:

$$V = 50,000,000 \text{ cuft of mineralized Rock}$$

$$1 \text{ ton (2000 lb)} = 10 \text{ cuft}$$

$$\text{Tonnage Potential} = \frac{50,000,000}{10} = 5 \text{ million tons.}$$

a) ~~6000~~ Au

~~Assuming furthermore the present metal prices say~~

Assuming: an average grade of ~~minerals~~

	Average grade	Recovery	Gold prices US\$
Silver	6.5 oz/T	90%	8.0 \$/oz
Lead	3.2%	85%	0.55 \$/lb
Zn	3.0%	80%	0.40 \$/lb
Copper	0.04	60%	2.25 \$/lb

Annual production

we could recover \$/T (at mine site)

6.5 x 0.9 x 8.0 = 46.8

3.2 x 20 x 0.85 x 0.55 = 29.9

3.0 x 20 x 0.8 x 0.40 = 19.2

0.04 x 0.6 x 225 = 5.4

101.3 \$/T

operating costs \$

40.0 \$/T

operating profit

61.3 \$/T

IN other words the total operating profit potential of the ~~to be made~~ on this project

is in the order of 5 x 61.3 = ~~306~~ 306 Million US\$

With some government support for public in infrastructure, Roads, (loading dock?), power, township etc. the investments could be reduced

The Sam Goosley Mine will cost 75 M \$ for OR 17,000 \$/T production capacity
Carlin Mine 1,500T/D operation requires investment 13,000 \$/T capacity. 4,500T/D operation

(4)

St. Joe in Chile will invest 40 million dollars on 27,500 T capacity in a mine which is at 14,000 ft ~~at~~ elevation, in a remote ~~no roads, no infrastructure area~~.

Considering the freight costs to Chile from the US and inland transport costs to the mine site one can say this figure is comparable to our environment,

Considering ^{the} high labor costs, a figure in the order of 40-50 million dollars seems reasonable

ASSUMPTIONS

$$\begin{aligned} \text{Net Smelter Return} &= 85\% \text{ of Recoverable Values} \\ &= 0.85 \times 101.3 = 86 \text{ \$/T} \end{aligned}$$

$$1500 \times 300 = 450,000 \text{ T/yr} \quad \times 51.3$$

Yearly Revenue	US \$ / yr
$1,500 \text{ T/D} \times 300 \text{ D/yr} \times 86 =$	38,700
$- \text{Op. Costs } 300 \times 1500 \times 40 =$	<u>18,000</u>
Operating Profit	20,700

Thus from the Operating Profit (before ~~tax~~ amortization & tax & financing charges)

The investment can be paid back in $\frac{50}{20.7} = 2.4$ or less than 2 1/2 years.