

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

E.O.D. 15445

*Vangorda
Swim Lakes
57 ✓*

To... M. D. Rowswell, J. H. Stovel From... J. K. Carrington

Subject. Net Smelter Returns-Vangorda-Swim Lake Property Date. March 27, 1973

As per your requests I have recalculated net smelter return values for the Vangorda-Swim Lakes Property. Up to date information on smelter contract prices for differential flotation products was obtained from D. Bumstead. No recent information was available for bulk flotation products. The following summary is presented based on the results of two Noranda Mines test, V-24 and V-32. Detailed calculations follow.

Test V-24

Pb Conc Grade: 37.6% Pb, 14.6oz Ag
Zn Conc Grade: 48.1% Zn

	1970 Estimate	1973 Estimate
NSR, \$/lb, Pb	0.063	0.0321
Zn	0.0374	0.0707

\$/ton Ore

Vangorda O.P	6.48	6.98
Vangorda U/G	5.74	6.04
Swim Lakes U/G	5.90	5.70

TEST V-32

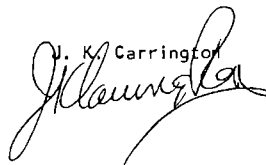
Pb Conc Grade: 54.1% Pb, 18.0oz. Ag
Zn Conc Grade: 56.2% Zn

	1970 Estimate	1973 Estimate
NSR, \$/lb, Pb	0.081	0.0672
Zn	0.0487	0.0732

\$/ton Ore

Vangorda O.P	8.22	9.30
Vangorda U/G	7.28	8.15
Swim Lakes U/G	7.15	8.04

The 1973 estimate does not indicate a sufficient NSR increase to justify further study.

J. K. Carrington


Detailed Calculations

Test V-24

Payments:

Pb Conc: Pb: $2000 \times .80 \times .376 \times .16 =$ \$ 96.25
 Ag: $(14 \times 6 - 1) \times .95 \times 2.00 =$ 25.85
 Zn Conc: Zn: $2000 \times .85 \times .481 \times .205 =$ \$122.10
 \$167.60

Price
concentr. Price

Charges:

Transportation (to Japan) - 1970 est + 10% \$ 30.50
 Treatment Pb 67.50
 Zn $0.42 \times 0.205 \times \sqrt{(2000 \times .481) - 160}$ 69.05

Net Smelter Returns

Pb Conc. 122.10 - 30.50 - 67.50 = 24.10 SDT
 (752 lbs.) \$ 0.0321/lb)
Zn Conc/ 167.60 - 30.50 - 69.05 68.05 SDT
 (962 lbs.) \$ 0.0707/lb)

Therefore:

		<u>\$/ton Ore</u>
Vangorda O.P.	61# Pb, 71# Zn/ton	6.98
Vangorda U/G	56#Pb, 60# Zn/ton	6.04
Swim Lake U/G	63#Pb, 52# Zn/ton	5.70

Test V-32

Payments:

Pb Conc: Pb: $2000 \times .80 \times .541 \times .16 =$ \$138.50
 Ag: $(18.0 - 1) \times 0.95 \times 2.00 =$ 32.30
 Zn Conc: Zn: $2000 \times .85 \times .562 \times .205 =$ \$170.80
 \$195.85

Charges:

Transportation (as per V-24) \$ 30.50
 Treatment - Pb (as per V-24) \$ 67.50
 Zn $0.42 \times 0.205 \times (2000 \times .562 - 160)$ \$ 83.00

Net Smelter Returns

Pb Conc 170.80 - 30.50 - 67.50 = \$ 72.80
 (1082 lbs.) = \$ 0.0672/lb)
Zn Conc 195.85 - 30.50 - 83.00 = \$ 82.35
 (1124 lbs) = \$ 0.0732/lb)

Therefore:

		<u>\$/ton Ore</u>
Vangorda O. P.	61# Pb, 71# Zn/ton	\$ 9.30
Vangorda U/G	56# Pb, 60# Zn/ton	\$ 8.15
Swim Lake U/G	63# Pb, 52# Zn/ton	\$ 8.04

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37

Vangorda

M.D. Rowswell

MEMO TO: J.E. Kraft

July 2, 1971

FROM: R.J. Beggs

SUBJECT: Vangorda Net Smelter Returns

H.S.
P.M.K.
G.M.H.
R.D.S.
O.C.B.
I.D.B.
M.D.R.
J.H.F.

Calculations were based on the Brunswick 1969 laboratory tests which gave the following results:

<u>TEST A</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>
Grade of Concentrate	51.55%	56.25%	18.52 O.p.t.
Recovery	86.51%	72.2%	

<u>TEST B</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>
Grade of Concentrate	51.7%	55.4%	17.06 o.p.t.
Recovery	89.7	78.1	

The grade of the Vangorda ore is 3.58% Pb and 5.95% Zn as stated in the review of July 20, 1970 by M.D. Rowswell.

CASE A

Pb - Assumed Market Price		13.5¢	
N.S.R. in concentrate (incl. Ag)		7.9¢	
Zn - Assumed Market Price	16¢	18¢	20¢
N.S.R. in concentrate	6.6¢	7.8¢	8.9¢
Total N.S.R. per ton of ore	<u>\$10.55</u>	<u>\$11.55</u>	<u>\$12.55</u>

CASE B

Pb - Assumed Market Price		13.5¢	
N.S.R. in concentrate (incl. Ag)		7.7¢	
Zn - Assumed Market Prices	16¢	18¢	20¢
N.S.R. in concentrate	6.5¢	7.7¢	8.8¢
Total N.S.R. per ton of ore	<u>\$10.96</u>	<u>\$12.04</u>	<u>\$13.12</u>

Calculations were based on transportation and treatment charges as used in the above mentioned review with the exception that escalation charges of \$6.00 for 18¢ Zn and \$12.00 for 20¢ Zn were added to the treatment charges per ton of zinc concentrate.

RJBeggs/hc

R. J. Beggs