

KERR ADDISON MINES LIMITED

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003326 (7)  
APR 28 1977

To J.K. Carrington From W.M. Sirola

Subject VANGORDA MINERAL RESERVE CALCULATIONS Date April 25, 1977

I.D.B.
A.H.C.
P.S.C.
W.J.
S.P.
J.B.S.
JK
FILE

I asked Jim Paxton to do a quick estimate on the higher grade sections of the Vangorda deposit because I felt that this would be useful both from your standpoint and mine.

These calculations were based on cross sections drawn in 1966 at this office by Clyde Smith and were considered more likely to be representative of the shape of the structure than the horizontal rectangular forms used by Prospectors Airways. Jim's estimate of the higher grade mineralization is 7.66 million tons at 8.67% combined lead-zinc. The estimate made by Prospectors Airways was 9.4 million tons of 8.16% combined lead-zinc.

None of the sections we have on hand show the assay values of the lower grade mineralization, but Jim has assumed a grade of 3% (presumably by looking over a clutch of assays in the drill log file). He estimates that there are 10.45 million tons with an assumed grade of 3% Pb and Zn, making a grand total of 18.11 million tons of 5.39% combined lead-zinc.

It would be a relatively simple matter to plot the lower grade intersections on Clyde Smith's structural sections and do a better estimate of the lower grade portions of the deposit, but I think this should only be done after we have made our own set of cross sections, many of which have already been completed. In other words, it is a low priority item.

If indeed serious consideration is being given to the Vangorda property as a possible source of early mill feed, then we are certainly justified in producing at least a pencilled set of cross sections oriented in the manner of the Grum cross sections and drawn to the same scale. As I mentioned over the phone, this procedure had already been started by Jim when I returned from a week off.

To summarise then, our next order of business will be to draw these sections which will show both structure and grade for at least as much of the Vangorda deposit as might be considered mineable as a source of early mill feed. The Vangorda deposit has been drilled over a total length of 6,000 ft. and, consequently, there are in excess of 30 cross sections to be drawn. Despite the despatch with which both Jim and Alex produce these sections, I can appreciate that it could take two months to come up with a reliable mineral reserve estimate and, hopefully, a meaningful structural concept.

*W.M. Sirola*  
W.M. Sirola

Encl.: Check Calculation - Vangorda Ore Zone  
April 22, 1977

WMS:mcb

*JK*  
*JK*

CHECK CALCULATION

VANGORDA ORE ZONE

APRIL 22, 1977

SECTION	LOW GRADE		HIGH GRADE	
	TONS	TONS	GRADE	G x T (000)
4W	80,000	—		
2W	568,000	96,000	8.4	806.4
0	188,000	864,000	8.3	7171.2
2E	1,328,000	880,000	8.9	7832.0
4E	1,160,000	1,424,000	8.0	11392.0
6E	1,184,000	744,000	9.2	6844.8
8E	968,000	848,000	9.6	8140.8
10E	664,000	384,000	8.0	3072.0
12E	368,000	168,000	6.7	1125.6
14E	432,000	344,000	9.3	3199.2
16E	400,000	232,000	6.2	1438.4
18E	376,000	260,000	9.3	2604.0
20E	208,000	256,000	9.3	2380.8
22E	72,000	440,000	8.8	3872.0
24E	640,000	488,000	9.8	4782.4
26E	1,128,000	176,000	8.0	1408.0
28E	392,000	32,000	9.4	300.8
30E	296,000	8,000	9.0	72.0
	10,452,000	7,664,000		66442.4

$$\frac{66442,400}{7,664,000} = 8.67\%$$

7.66 million tons @ 8.67% Pb+Zn

10.45 million tons @ assumed grade 3.0% Pb+Zn

18.11 million tons @ 5.39% Pb+Zn

# Notes on Calculations

where in those sections

9 April 1971

1. Sections and geological interpretations used were those made by C.L. Smith Jan 25 1966.
2. Scale of sections was  $1" = 200'$
3. Areas were calculated by laying a sheet of 10x10 inch cross section tracing paper over each sections and counting squares. Each square =  $400 \text{ ft}^2$
4. High grade intersections only were shown on the sections. No check was made on the method of calculating these intersection grades.
5. It was assumed that the deposit would be mined by open pit. Ore zones that were obviously small, deep, low grade etc. were excluded.

Sp. Gr. ? 8 Cuft = 1 ton ✓

Cut-off ? + 8% combined

Influences ?

J. Pastor P. Eng

April 22 1977











BASED ON  
SECTIONS BY  
Clyde Smith 1966

# SECTION 6E

HIGH GRADE AREAS			LOW GRADE AREAS			HIGH GRADE AREA 37200
NO	SQ	AREA FT. <sup>2</sup>	NO	SQ	AREA FT. <sup>2</sup>	HIGH GRADE VOLUME 74400
1	57	22800	1	51	20400	HIGH GRADE = 9.17
2	29	11600	2	97	38800	HIGH GRADE TONS = 74400
3	2	800	3	Too	Small	LOW GRADE AREA 59200
4	5	2000	4	Too	Small	LOW GRADE VOLUME 118400
		<u>37200</u>			<u>59200</u>	LOW GRADE (ASSUMED) =
						LOW GRADE TONS = 11840

AREA NO	HOLE NO	WIDTH (FT.)	GRADE (Pb+Zn)	WXG	WEIGHTED GRADE	AREA FT <sup>2</sup>	VOLUME FT. <sup>3</sup>	TON (10.0 T)
1	20	18	16.4	295				
	95	65	12.8	838				
	47	95	8.0	760				
	94	40	8.4	336				
2	96	15	6.5	97				
	95	20	8.8	176				
	47	15	7.4	111				
	94	40	8.4	336				
	35	10	6.1	61				
	126	15	10.5	158				
3	47	15	8.6	129				
4	96	15	6.5	97				
	20	15	5.0	75				
		<u>378</u>		<u>3469</u>				
			$\frac{3469}{378} = 9.17$					
<b>TOTALS</b>								











sections by  
Clyde Smith 1966

# SECTION 20E

HIGH GRADE AREAS			LOW GRADE AREAS			HIGH GRADE AREA 12,800
NO	SQ	AREA FT. <sup>2</sup>	NO	SQ	AREA FT. <sup>2</sup>	HIGH GRADE VOLUME 25600
1	20	8000	1	3	1200	HIGH GRADE = 9.34
2	2	800	2	15	6000	HIGH GRADE TONS = 25600
3	10	4000	3	8	3200	LOW GRADE AREA 10,40
		12800	4	10	NOT RECOR?	LOW GRADE VOLUME 20800
		7			10400	LOW GRADE (ASSUMED) =
						LOW GRADE TONS = 20800

AREA NO	HOLE NO	WIDTH (FT.)	GRADE (Pb+Zn)	WXG	WEIGHTED GRADE	AREA FT <sup>2</sup>	VOLUME FT.3	TONS (10.0)
1	8	10	7.8	78				
	5	16	13.0	208				
	75	20	6.8	136				
2	5	5	9	45				
3	5	14	10	140				
		65		607				
			607	9.34				
			65					
TOTALS								

sections by  
Clyde Smith 1966

SECTION 22 E

HIGH GRADE AREAS			LOW GRADE AREAS			HIGH GRADE AREA 22000		
NO	SQ	AREA FT. <sup>2</sup>	NO	SQ	AREA FT. <sup>2</sup>	HIGH GRADE VOLUME 44000		
1	SS	22000	1	9	3600	HIGH GRADE = 8.80		
			2	5	Not Recovered	HIGH GRADE TONS = 4400		
			3	2	"	LOW GRADE AREA 3600		
			4	8	"	LOW GRADE VOLUME 7200		
						LOW GRADE (ASSUMED) =		
						LOW GRADE TONS = 7200		

AREA NO	HOLE NO	WIDTH (FT.)	GRADE (Pb+Zn)	W X G	WEIGHTED GRADE	AREA FT <sup>2</sup>	VOLUME FT.3	TON (10.0 F)
1	58	45	9.28	417				
	9	31	9.5	294				
	78	16	8.4	134				
	99	15	6.2	93				
	77	20	9.0	180				
		127		1118				
			$\frac{1118}{127} =$	8.80				
<b>TOTALS</b>								







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(FOR INTER-OFFICE USE ONLY)

VA7 DL

To.....W. M. Sirola.....From.....J. K. Carrington.....

MINES LTD

Subject.....Swim Lakes and Vangorda Reassessment.....Date.....January 26, 1978.....

Bill:

This will outline what we have in mind regarding a review of our Swim Lakes and Vangorda deposits by Jim and Alex. I see that this work can be a part of the regional assessment Dave has asked for, but Bud has reminded me that he wishes a detailed look at Swim and Vangorda by Alex and Jim, and their efforts should not be diverted to the regional picture until this has been done. Obviously, there will be considerable overlap between the two studies and I am not suggesting they be done each to the exclusion of the other.

As you know, I am not very familiar with the details of either Swim or Vangorda, or with the amount and quality of information we have on them. What we want to do is to take a look at the existing data in the light of what we know about the Grum. This could lead to a completely new geological interpretation at one extreme to no change at all at the other. I daresay we'll end somewhere in between. We want to know what additional work, short of going underground, is required to bring these properties to a reasonable level of knowledge, re the geology, tonnage and grade. If we were to start looking at these properties in earnest, what would be the next steps in their evaluation?

I agree with your suggestion that an overall regional metric map system be investigated, but, as you say, we should not replot all the existing cross-sectional data onto metric sections at this time.

Should questions arise as this develops, please do not hesitate to contact me.

Regards,

J. K. Carrington

JKC:LFR

cc: D. A. Lowrie

V-D [unclear]

