

C.F.P. / Rea Cld - Adam's Lake Project.

(1) Samples important.

(A) - surface sample

	oz/ton
Ag = 4694 g/tonne =	136,9
Au = 4,22 g/tonne =	0,123
Pb = 55%	
Zn = 6,5%	
Cu = 3,2%	

Is this typical?

Approx value based on recoveries shown & present day prices (in \$ CAN)

Gross worth = \$1546/ton [CAN \$]

		\$ CAN	\$ CAN
Ag (80%) @ 55	x 136	=	807
Au (85%) @ 400	x 124	=	56
24% Pb @ 95%		=	336
39% Zn @ 90%		=	61
16% Cu @ 90%		=	46
			<u>\$ 1306/ton</u>

(B) - drill sample

	oz/ton
Ag = 649 g/tonne	= 18,9
Au = 0,98 g/tonne	0,028
Pb = 3,39%	
Zn = 6,05%	
Cu = 1,63%	

Approx value with recoveries & present prices as shown. (\$ CAN)

Gross worth = \$265/ton

		\$ CAN
Ag (80%)	55 x 134	= 111,40
Au 50%	400 x 1,34	= 7,50
90% Pb	3,39(20) x 0,24 x 1,34	= 19,60
90% Zn	6,05(20) x 0,39 x 1,24	= 56,90
90% Cu	1,63(20) x 0,60 x 1,24	= 23,60
		<u>\$ 221/ton</u>

ADAM'S LAKE [CFC/R.G. J.V.]

(LAKEFIELD TESTS FEB '87) — H.G. Silver Zone

R.C.B.:

Head Analyses
(S.G. = 3.07)

Pb = 3.39%	—	\$ 12.20	}	\$ 244.20
Zn = 6.05%	—	\$ 59.90		
Cu = 1.63%	—	\$ 19.55		
Fe = 4.30%				
S = 8.65%		\$ 15.40		
Au = 0.98 g/tonne		\$ 137.25		
Ag = 649 —		(18.93 oz/ton)		

- In place value for \$/ton

Gross worth (based on current prices, and payable returns from smelter)

Pb payable @ 92%	w conc	[18¢/lb conc]	~ \$ 11.20	(5%)
Zn " " 85%	w conc	[49.5¢/lb "]	~ \$ 50.90	(22%)
Cu " " 98%	" "	[60¢/lb "]	~ \$ 19.10	(8%)
Ag ..	0.2oz deduction	[\$ 7.25/oz "]	~ \$ 135.50	(59%)
Au ..		[\$ 400/oz x 1.35]	~ \$ 13.80	(6%)
			\$ 230/ton	(100%)

Comments:

- (i) Ag is most important.
- Silver follows the lead. Therefore lead is important.
- Gold appears to follow Ag & Pb.

Thoughts:

- (i) Mill & make bulk float product (~ 97-98% recovery in Bulk Conc)
- (ii) Hydromet (pressure leach) —

(a) Neglect Pb.

(b) Recover high grade Zn & Cu from solution

(c) Leach or separate & recover Ag/Au from pressure leach product

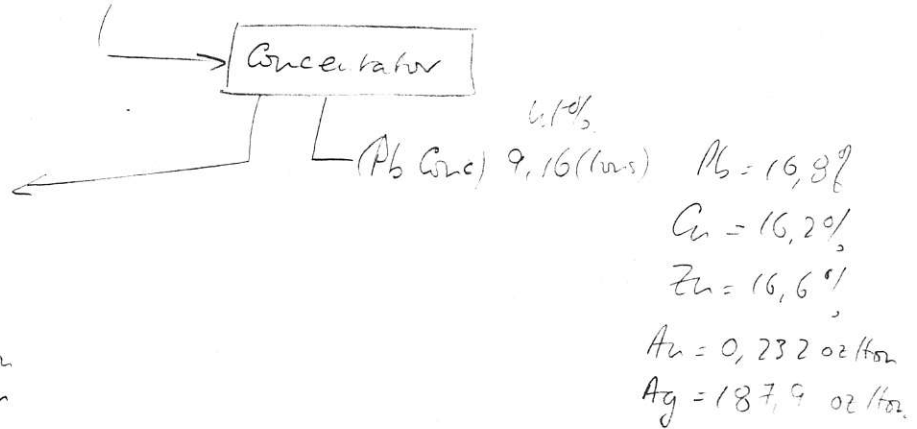
FIRST:

Look @ characteristics of Bulk Conc with view to being able to regain pattern and then to make higher grade products

What is best expectations from a conventional smelter schedule.

Lead Conc (RGB sample - Test #2)

Basis = 100 tons feed to Mill



Zinc Conc

4.82 tons Cu = 0.18%
 Pb = 2.26%
 Zn = 48.5%
 Au = 0.02 oz/ton
 Ag = 2.83 oz/ton

Payment for Pb: (Pencil for Cu)

Pb	$(16.8 - 1.52) \times 20 \times 0.92 \times 0.18 =$	\$ 50.52
Zn	$(16.6 - 1.0) \times 20 \times 0.60 \times 0.495 =$	97.07
Cu	$-(16.2 \times 20 - 10) \times 0.4 \times 0.6 =$	75.36
Au	$= 0.229 \times 0.93 \times 400 \times 1.35 =$	115.00
Ag	$= [187.9 - 9.24] \times 0.93 \times 7.25 =$	1245.07

Total Smelter = \$ 1578.02

Smelter charge \$ 150/ton = 150.00

Net = \$ 1428.00 / ton conc.

ie) $\frac{9.16 \times 1428}{100} = \underline{\underline{\$ 130.80}}$ from smelter / ton of mill feed

\$ 57.50 Zn
 \$ 11.90 Pb
 \$ 69.40

Payment for Zinc Conc:

(Zn) $(48.5 \times 20) \times 0.85 \times 0.495 =$ \$ 408.13

Au - not payable

Ag $(2.83 - 1.5) \times 0.93 \times 7.25 =$ \$ 8.96

Total = \$ 417.09 / ton

Smelter charge = 220.00
 net = \$ 197.09 / ton conc.

ie) $\frac{197.09 \times 4.82}{100} =$ from smelter = \$ 9.50 / ton of mill feed

Total return = \$ 140.30 / ton mill feed

Overall
 Ag = 114.50
 137.25 = 83.4%