

POWER REQUIREMENTS FOR NOVEMBER OPENING

<u>Month</u>	<u>Tonnes Milled</u>	<u>Required M Kw hr</u>	<u>Kw hr/Tonne</u>
November	135	9,208	68.20
December	292	12,921	44.25
January	288	12,826	44.54
February	260	12,164	46.78
March	279	12,613	45.20
April	269	12,377	46.00
May	284	12,732	44.83
June	280	12,637	45.13
July	287	12,802	44.61
August	285	12,755	44.75
September	335	12,938	41.60
October	346	12,198	41.03
November	335	12,937	41.60
December	346	14,198	41.03

Notes:

- o Above forecast is based on the following regression equation

$$\text{M Kw hr} = 6015 + (23.65 \times \text{tonnes milled})$$
- o It is expected that the above forecast will be the upper limit on power usage.
- o Required KVA for the above usage is expected to range between 20 and 23 thousand KVA.

$$\text{Annual } \# = \left[72180 + (23.65 \times \text{annual tonnage}) \right] \times \# / \text{Kwhr.}$$

MAJOR BULK PURCHASES

1985

	<u>\$MM</u>
Anfo	4.0 - 4.5
Tires	1.8 - 2.0
Antifreeze	.5 - .6
Fuel	4.5 - 5.0
Soda Ash	1.5 - 2.1
Lime	1.6 - 2.6
CuSo ₄	1.7 - 1.9
Xanthate	2.1 - 2.2
Cyanide	.7 - .8
Sodium Sulfide	.5 - .6
Rods	1.1 - 1.2
Balls	<u>4.3</u> - <u>4.8</u>
	24.3 - 28.3

BULK SUPPLIES

SUMMARY - 1984 USAGE

Non Fuel

		<u>Tonnes</u>
Mine	Anfo	5,298
	Tires	564
	Antifreeze	<u>196</u>
	Total	6,058
Mill	Soda Ash	5,534
	Lime	9,942
	CuSo ₄	1,960
	Xanthate	1,163
	Cyanide	349
	Sodium Sulfide	827
	Others	219
	Rods	1,711
	Balls	5,545
	Antifreeze	<u>74</u>
	27,324	

Fuel

		<u>M Litres</u>	<u>Tonnes</u>
Mine	Diesel	7,549	6,496
	Gasoline	120	103
Mill	Heating Oil	2,604	2,241
Townsite	Heating Oil	<u>888</u>	<u>764</u>
		11,161	9,604

MILL SUPPLIES

TONNES

M Tonnes	<u>Flotation Supplies</u>							<u>Grinding</u>	
	<u>Milled</u>	<u>Soda Ash</u>	<u>Lime</u>	<u>CuSO₄</u>	<u>Xanthate</u>	<u>Cyanide</u>	<u>Sodium Sulfide</u>	<u>Rods</u>	<u>Balls</u>
Nov.	135	-	945	95	54	12	135	64	208
Dec.	<u>292</u>	<u>-</u>	<u>2044</u>	<u>204</u>	<u>117</u>	<u>25</u>	<u>292</u>	<u>139</u>	<u>481</u>
Total	427	-	2989	299	171	37	427	203	659
Jan.	288	-	2016	202	115	24	288	137	444
Feb.	260	-	1820	182	104	22	260	124	401
March	279	-	1953	195	112	24	279	133	430
April	269	538	404	140	81	27	-	128	415
May	284	568	426	142	85	28	-	135	438
June	280	560	420	140	84	28	-	133	432
July	287	574	431	144	86	29	-	137	443
Aug.	285	570	428	143	86	29	-	136	440
Sept.	335	670	503	163	101	34	-	159	517
Oct.	346	692	519	173	104	35	-	165	534
Nov.	335	670	503	163	101	34	-	159	517
Dec.	<u>346</u>	<u>692</u>	<u>519</u>	<u>173</u>	<u>104</u>	<u>35</u>	<u>-</u>	<u>165</u>	<u>435</u>
Total	3594	5534	9942	1960	1163	349	827	1711	5545

Notes:

o Oxide ore is milled from November, 1984 to the end of March, 1985.

MINE SUPPLIES

	BCY <u>Mined</u>	<u>Blasting</u>		<u>Drilling</u>	<u>Trucks</u>		<u>Other</u>	
		Power	Diesel	Antifreeze	Diesel	Tires	Diesel	Gasoline
		<u>M Kg</u>	<u>ML</u>	<u>ML</u>	<u>ML</u>	<u>Tonnes</u>	<u>ML</u>	<u>ML</u>
Jan.	1020	444	32.1	34.1	510	47	96	10
Feb.	952	419	30.0	30.9	476	47	96	10
March	1020	449	32.1	34.1	510	47	96	10
April	986	434	31.1	16.3	493	47	96	10
May	1020	449	32.1	-	510	47	96	10
June	1020	449	32.1	-	510	47	96	10
July	1020	449	32.1	-	510	47	96	10
Aug.	1020	449	32.1	-	510	47	96	10
Sept.	986	434	31.1	16.3	493	47	96	10
Oct.	1020	449	32.1	34.1	510	47	96	10
Nov.	986	434	31.1	30.9	493	47	96	10
Dec.	<u>986</u>	<u>434</u>	<u>31.1</u>	<u>30.9</u>	<u>493</u>	<u>47</u>	<u>96</u>	<u>10</u>
	-	5298	379.1	227.6	6018	564	1152	120
Tonnes	-	5298	326	196	5179	564	991	103

Notes:

- o Power Factor - .44 kg/BCY, diesel for blasting - 31.5 L/1000 BCY
- o Drilling antifreeze - 190.7 gallons/1000 BCY, 200 BCY per foot
- o Trucks average is estimated at .5 litres/BCY, tires - 3500 hours
- o Conversion - 1162 litres/tonne
- o Gasoline usage based on a 50% increase of 1984 budget

OTHER SUPPLIES

	<u>Townsite</u>	
	Housing	Other
	<u>M Litres</u>	<u>M Litres</u>
January	95.0	8.6
February	95.0	8.6
March	95.0	8.6
April	40.7	3.7
May	40.7	3.7
June	40.7	3.7
July	40.7	3.7
August	40.7	3.7
September	40.7	3.7
October	95.0	8.6
November	95.0	8.6
December	<u>95.0</u>	<u>8.6</u>
	814.2	73.8

Notes:

- o Increase housing fuel usage by 50% from 84 budget for work force expansion

July 1984

Time Period	Grind P ₈₀ Microns	Operating Time %	HEADS				LEAD CONCENTRATE					ZINC CONCENTRATE			
			Tonnes	% Pb	gpt Ag	% Zn	(1) Tonnes	Grades % Pb gpt Ag		Recoveries % Pb Ag		(1) Tonnes	Grade % Zn	Recovery Zn %	
1984 (2)															
November	78	77	(3) 137,800	2.90	37.6	4.70	4,560	58.00	526.1	65.75	46.00	9,337	48.00	68.75	
December	91	80	(4) 288,300	2.90	37.6	4.70	9,370	58.00	529.3	65.00	45.75	19,055	48.00	67.50	
1984 Totals	87	79	427,000	2.90	37.6	4.70	13,930	58.00	528.3	65.24	45.83	28,392	48.00	67.91	
1985 January	86	80	288,300	2.90	37.6	4.70	9,685	60.00	559.7	69.50	50.00	20,325	48.00	72.00	
February	86	80	260,400	2.90	37.6	4.70	8,747	60.00	559.7	69.50	50.00	18,358	48.00	72.00	
March	82	80	288,300	2.90	37.6	4.70	9,684	60.00	559.7	69.50	50.00	20,396	48.00	72.25	
April	82	80	279,000	3.18	44.9	4.84	11,202	59.20	567.9	74.80	50.75	21,021	49.79	77.52	
May	82	80	288,300	3.13	45.1	5.43	11,380	60.16	591.6	75.98	51.73	24,468	49.72	77.68	
June	78	80	279,000	3.24	41.8	5.61	12,121	60.08	542.0	80.46	56.33	25,394	50.99	82.67	
July	78	80	288,300	2.75	37.4	4.68	10,608	60.23	572.5	80.54	56.26	21,839	50.98	82.54	
August	78	80	288,300	2.35	34.1	3.95	9,063	59.82	604.2	79.93	55.70	18,389	51.09	82.43	
September	78	95	(5) 334,800	2.77	37.4	4.17	12,451	60.57	580.3	81.38	57.70	22,856	51.12	83.60	
October	78	95	345,960	2.37	32.8	3.47	10,979	61.28	606.8	82.07	58.70	19,630	51.25	83.86	
November	78	95	334,800	2.09	28.2	3.28	9,319	61.76	595.7	82.25	58.80	17,876	51.42	83.71	
December	78	95	345,960	2.55	29.6	3.63	11,783	61.73	512.2	82.42	59.01	20,532	51.28	83.87	
1985 Total	80	85	3,621,420	2.74	36.7	4.38	127,021	60.41	570.1	77.36	54.51	251,084	50.16	79.42	
			January (Sulfide)	2.9	37.0	5.30	1	60.9	487.0	79.7	57.40		50.3	82.8	

- (1) To the nearest tonne
- (2) 'B' grinding circuit only
- (3) 4500 MTPD
- (4) 9300 MTPD
- (5) 11,160 MTPD

July 1984

Time Period	Grind P ₈₀ Microns	Operating Time %	HEADS				LEAD CONCENTRATE					ZINC CONCENTRATE		
			Tonnes	% Pb	gpt Ag	% Zn	(1) Tonnes	Grades		Recoveries %		(1) Tonnes	Grade % Zn	Recovery Zn %
								% Pb	gpt Ag	Pb	Ag			
1986	200 M													
1st Quarter		95	1,004,400	2.88	34.5	4.60	38,493	61.79	527.2	82.30	58.64	75,178	51.42	83.68
2nd Quarter		95	1,015,560	2.68	30.7	4.25	36,349	61.24	502.2	81.82	58.47	70,405	51.48	83.88
3rd Quarter		95	1,026,720	3.04	33.2	4.89	41,352	62.25	487.6	82.56	59.15	81,557	51.66	83.90
4th Quarter		95	1,026,720	2.75	35.1	3.82	37,819	60.98	555.0	81.74	58.20	64,091	51.30	83.88
1986 Total	75	95	4,073,400	2.84	33.4	4.39	154,013	61.59	517.5	82.12	58.61	291,231	51.48	83.84
1987	70	95	4,073,400	2.80	35.7	3.95	152,456	62.15	571.8	83.16	60.00	263,651	51.56	84.51
1988	70	95	4,084,560	3.36	45.2	4.45	185,368	61.21	587.4	82.55	58.93	299,836	51.08	84.19
1989	70	95	4,073,400	3.16	40.2	4.68	172,920	61.51	560.2	82.67	59.21	313,338	51.28	84.26
1990	70	95	4,073,400	3.05	35.8	4.61	167,443	60.67	508.3	81.78	58.40	308,252	51.26	84.23
(2) 1991	70	95	3,098,680	2.45	26.6	4.11	101,929	60.41	469.2	81.26	58.04	208,599	51.41	84.16

(1) to the nearest tonne
 (2) end of proven reserves

27,523 ← 33-4.0mm