

To R. C. Smith

Date June 13, 1977

From W. Muir

Subject Second Quarter Review - 1977 Plan

Metallurgy should conform to plan provided heads are near plan.

1. Throughout

- No change from plan for June to end of the year.
 - percent operating time - 92.5
 - milling rate - 450 short dry tons per hour.

2. Metallurgy

As little difference exists between first half actual and second half forecasted heads, results from the first half have been viewed influential.

Lead Metallurgy

- a) Grade - lowered one unit from original 1977 plan to 65.5%. Accent on attaining lower lead scavenger tailings for first half. Year to date average at 0.5% lead, 0.45% desired.
- b) Recovery - based on historical data* and attaining target 0.45% scavenger tailing.

Zinc Metallurgy

- a) Grade - unchanged at 50.50 percent zinc.
- b) Recovery - Based on historical data** and attaining final tailing target of 1.01 percent zinc. With reference to year to date, May production figures increase by one unit.

* $\frac{\%Pb \text{ Head} - \%Pb \text{ S.T.}}{\%Pb \text{ Head}}$ / 1.0159 Memo R.B.F. to W.N.W. 16/9/76
 Production and Metallurgy Forecast for 1977.

** $\frac{\%Zn \text{ Head} - \%Zn \text{ F.T.}}{\%Zn \text{ Head}}$ / 1.0192 Memo R.B.F. to W.N.W. 14/3/77
 First Quarter Review of 1977, Plan and First Quarter 1978 Forecast.

3. Bulk Production

June production reduced. Hopeful to recover lead from old stockpile this month as well.
 As per plan for remainder of the year.
 Concentrate grade 18.0% lead, 29.8% zinc.

4. Silver

No data from engineering.

With heads at approximately 0.8 - 1.0 ounces per short
dry ton of ore assume: 8 - 11 ounces per short dry ton of lead concentrate,
3 - 5 ounces per short dry ton of bulk concentrate.

5. Iron

- a) In selective zinc - 10.4% for remainder of the year.
- b) In bulk - lead and zinc content year to date is high with iron assaying 12 percent. Iron for June will again be low 12 - 14 percent. For the remainder of the year 16 percent.

6. Operating Time

As per plan at 92.5 percent.

7. Moistures

Year to date moistures are: lead selective - 4.7%,
zinc selective - 5.7%,
bulk - 5.5%.

With these figures in mind, change plan figures to the
following: lead selective - from 5.8% - 5.0%,
zinc selective - from 6.3% - 6.0%,
bulk remains at 5.8%.

for 
W. Muir
Plant Metallurgist

/klc

To

J. C. Devitt

Date

June 10, 1977

From

J. W. Mustard



Subject 1977 SECOND QUARTER REVIEW

Attached is a copy of the expected feed grades for June, third quarter of 1977 by month, fourth quarter of 1977 by quarter and the first and second quarters of 1978 by quarter. Grades were calculated using the following parameters:

- 1) Milling rate of 10,000 SDT/Day
- 2) April 1975 Tonnage and Grade Model
- 3) December 7, 1976 Mining Schedule
- 4) September 1, 1976 Mining Schedule
- 5) May 31, 1977 Pit Status
- 6) 3.50 SDT/BCY
- 7) Maximum of 6.8% Pb per Tonnage Block
- 8) Maximum of 7.5% Zn per Tonnage Block
- 9) Overall Reduction of 0.2% Zn



J. W. Mustard
Mine Geologist

JWM/mm

cc. B. Muir

Attach.

CYPRUS ANVIL MINING CORPORATION
PRODUCTION AND GENERAL ADMINISTRATIVE

JUNE 10/77

Schedule 1
1977

SECOND QTR REVIEW

	Jan.	Feb.	Mar.	1st Qtr.	Apr.	May	June	2nd Qtr.	1st Half	July	Aug.	Sept.	3rd Qtr.	3rd Qtr. YTD	Oct.	Nov.	Dec.	4th Qtr.	Qtr. REV.	Memo Plan
Feed Grade %				2.70	2.76	2.66	2.7	2.70	2.70	3.1	3.2	2.9	3.07	2.83	3.2	3.2	3.2	3.2	2.93	
Lead				5.16	4.41	4.87	7.4	4.54	4.83	7.7	7.9	5.0	4.87	4.85	5.2	5.2	5.2	5.2	4.94	
Zinc				7.86	7.17	7.47	7.1	7.24	7.53	7.8	8.1	7.9	7.94	7.68	8.4	8.4	8.4	8.4	7.87	
Total																			12.81	
Cu. Yds. Moved (000's)																				
Waste & Low Grade																				
Ore																				
Total				785	279	310	300	889	1674	310	310	300	920	2894	310	300	310	920	3514	
Tons Milled (000's)																				
Mill Feed (000 lbs)				42414	15379	16480	16200	48067	90481	19220	19840	17400	56460	14689	19840	19200	19840	58880	205821	
Lead				81059	24573	29814	26400	80147	161846	29140	30380	30000	89520	25376	32240	31200	32240	95680	247040	
Zinc																				
Metal Recovered (000 lbs)																				
Lead Select				29987	11583	11673	12284	35540	65527	14479	15099	12846	42424	10795	15099	14612	15099	44810	158561	
Lead Bulk				4772	1127	1764	1000	3891	8663	1685	1185	1631	5001	1364	1685	1630	1685	5000	18664	
Lead Total				34759	12710	13437	13284	39431	74190	16164	16784	14477	47425	12165	16784	16243	16784	49810	177425	
Zinc Select				58200	17914	19478	18722	56114	114314	19939	21180	21090	62209	17652	23034	22291	23034	68359	244882	
Zinc Bulk				7992	1619	3769	1500	4888	14880	2790	2790	2700	8280	33160	2790	2700	2790	8280	31410	
Zinc Total				66192	19533	23247	20222	61002	129194	22729	23970	23790	70489	20968	25824	24997	25824	76639	276292	
Recoveries %																				
Lead Select				70.70	75.32	70.80	75.83	73.94	72.42	75.33	76.11	73.83	75.14	73.47	76.11	76.11	76.11	76.11	74.22	
Lead Bulk				11.25	7.33	10.70	6.17	8.09	9.57	8.77	8.49	9.37	8.86	9.30	8.49	8.49	8.49	8.49	9.07	
Lead Total				8135	82.65	81.50	82.00	82.03	81.99	84.10	84.60	83.20	84.00	82.77	84.60	84.60	84.60	84.60	83.29	
Zinc Select				71.80	72.90	65.33	70.92	69.46	70.63	68.43	69.22	70.30	69.49	70.23	71.45	71.45	71.45	71.45	70.56	
Zinc Bulk				9.86	6.59	12.64	5.68	6.53	9.19	9.57	9.18	9.00	9.25	9.21	8.65	8.65	8.65	8.65	9.06	
Zinc Total				81.66	79.49	77.97	76.60	77.99	79.82	78.00	78.90	79.30	78.74	79.44	80.10	80.10	80.10	80.10	79.62	
Concentrate Grades %																				
Select Lead				63.82	63.82	64.99	65.50	64.76	64.33	65.50	-	-	-	64.78	65.50	-	-	-	64.99	
Select Zinc				50.69	50.50	50.62	50.50	50.57	50.60	50.50	-	-	-	50.42	50.50	-	-	-	50.31	
Bulk - Lead				18.77	20.77	16.76	20.00	10.53	16.67	18.00	-	-	-	50.56	18.00	-	-	-	50.55	
Bulk - Zinc				31.44	24.82	35.83	30.00	31.57	32.08	29.80	-	-	-	31.22	29.80	-	-	-	30.84	
Silver in Sel. Pb																				
Silver in Bulk Pb																				
Fe in Sel. Zinc				10.26	10.5	10.6	10.4			10.4	10.4	10.4	10.4		10.4	10.4	10.4	10.4		
Fe in Bulk				14.96	13	12	13			16.0	16.0	16.0	16		16.0	16.0	16.0	16.0		

507
 MAY 77 41557 9377 2747 50934 11053 11526 9806 32785 83319 11526 11155 11526 34207 117526
 18537 55525 112963 19742 20970 20881 61593 174556 22806 22070 22606 67682 2412235
 20695 2500 11017 23195 4681 4681 4530 13892 37087 4681 4530 4681 13892 50979

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