

CURRAGH RESOURCES  
FARO MINE START-UP

006763

MONTHLY PROGRESS REPORT NO. 11  
(period ending October 31, 1986)

CURRAGH RESOURCES  
MONTHLY PROGRESS REPORT

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1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY1.1 General

Mill performance for the month of October showed a strong improvement over the previous month. The average daily mill feed rate reached 12,863 TPD in comparison to 10,226 TPD for September. The mine production rate declined to 58,064 TPD of waste removal for the month. Had it not been for extended maintenance downtime on two shovels the mine would have achieved its ore and waste production targets for the month.

Overall, mine and mill production forecasts to the end of 1986 have been revised downward by about 1%, reflecting current month shortfalls and the brief period left in 1986 to make up production.

The overall production and shipping schedule to the end of 1986 is shown in the following table:

1986 PRODUCTION AND SHIPPING SCHEDULE

(Updated November 7, 1986)

(000's DMT)

	<u>Waste</u> (Incl. L.G.)	<u>Ore</u> (H.G.)	<u>Oxide</u> <u>Stockpile</u>	<u>Mill</u> <u>Feed</u>	<u>Production</u>	<u>Shipments</u>
<u>To Date</u>	17,830	1,351	114	1,309	125.5	105.1
November	2,145	445	10	405	45.2	33.1
December	2,398	210	27	405	39.0	50.0
Total	<u>22,373</u>	<u>2,006</u>	<u>151</u>	<u>2,119</u>	<u>209.7</u>	<u>188.2</u>
Previous						
Total	<u>22,630</u>	<u>1,891</u>	<u>334</u>	<u>2,152</u>	<u>211.4</u>	<u>191.6</u>
Net Change	( 257)	115	(183)	( 33)	( 1.7)	( 3.4)

## 1.2 Mine Operations

Total material hauled during the month was 2,664,149 tonnes which included 1,800,000 tonnes of waste, 544,913 tonnes of ore, 45,479 tonnes of oxide ore and 273,757 tonnes of rehandle. Year to date the mine has moved 17,564,000 tonnes of waste and 1,617,000 tonnes of ore compared to the January 1986 plan of 20,960,706 tonnes of waste and 1,575,080 tonnes of ore.

Shovel fleet mechanical availability decreased from 73 percent in September to 66 percent this month primarily due to a scheduled undercarriage overhaul requiring 15 days on 02-006 shovel and unscheduled electrical repairs on 02-005 shovel lasting 10 days. The Euclid truck fleet mechanical availability decreased slightly from 76 percent in September to 72 percent in October. An engine changeout after 11,567 hours on Euclid 03-050 accounted for most of the decrease. Wabco truck fleet mechanical availability increased from 65 percent in September to 71 percent in October.

While the lower physical availability of shovels accounted for the lower waste movement the effect of trucking up the shovels can be seen in the shovel productivity which increased to 1447 tonnes/hour versus the year-to-date average of 1257 tonnes/hour. A contract 10 yard backhoe arrived on site and started production on October 19, 1986.

All in mine costs were \$3,035,000 compared to the forecast of \$3,259,000. Unit cost per tonne of ore and waste hauled was \$1.29 compared to the forecast of \$1.32 for the month.

## 1.3 Mill Operations

The mill processed 398,763 tonnes grading 6.96 percent combined lead and zinc compared to the forecast of 418,500 tonnes grading 7.54 percent. Concentrate production was 12,110 tonnes of lead grading 60.4 percent and 25,155 tonnes of zinc grading 49.2

percent. Lead and zinc recoveries were 66.3 percent and 75.3 percent respectively, an 8 percent improvement for lead and a 1 percent improvement for zinc over the previous month.

45,000 tonnes of coarse oxide ore were treated with the following results: lead concentrate grade of 59.8 percent and a recovery of 67.6 percent; zinc concentrate grade of 47.0 percent and a recovery of 71.1 percent. Recoveries were slightly above the forecast, however zinc grade was low by 2.0 percent.

Mechanically the mill operated near expectations with the exception being the period October 17 - 21. During this period throughput was restricted while conveyor belts were vulcanized, lifters in one mill were changed and repairs were made to the slot feeders.

Metallurgically, the mill is still short of expectations although improvement is noted. Major areas of concern that are being addressed are, operator training, mechanical reliability and losses to final tails through in-plant spills. Boliden's assistance in providing mineral analysis with their microprobe and their on-site help has been of great value.

Mill costs which include all electrical power charges for the mine were \$2,817,000 versus the forecast of \$3,075,000. Unit costs per tonne of mill feed were \$7.06 versus the forecast of \$7.35. The lower costs reflect the reduction in the amount of oxide ore treated.

#### 1.4 General & Administrative

At the end of the month there were 475 persons on site which include 24 contract personnel and 397 Altus personnel.

The U.S.W.A. conducted a certification drive of Altus employees during the month and on October 28, 1986 the union made application to the CLRB for certification. The matter is being reviewed by our council and that of Altus.

There were 8 lost-time accidents during the month bringing our year-to-date frequency rate up to 52.4 percent. Although there were no extremely serious accidents, our frequency rate is much too high for this type of operation. All supervision is aware and must give this area more of their attention.

Account reconciliations, warehouse inventory control and preparation work related to the new BBJ software package is on-going and on schedule. With the great amount of effort expended by all concerned with this project, monthend startup and implementation during December should have every chance of being successful.

#### 1.5 Concentrate and Backhaul Transport

Transfer of the weigh scale computer equipment to the new scale house was delayed to late November. Moderate success was obtained from the installation of teflon lining in the loadout hoppers and chutes.

The status of the container offloading system remains unchanged from September. It has been decided to retain a consultant specializing in offloading bulk materials. This study should be completed in November.

The full complement of 40 B-Train units went into operation in October. Y.A.T. transported 38,741 tonnes of concentrate in 830 trips, resulting in an average payload of 46.68 WMT/trip. This is down slightly from September's transport rate of 46.97 WMT/trip.

The M.V. Oriental Castle was loaded on October 20 with 18,730 WMT of zinc and 9,480 WMT of lead in accordance with the current shipping plans.

#### 1.6 Engineering and Geology

Whitehorse Engineering staff were resident at Faro during October assisting with 1987 mine planning and budgeting. Programming for mine planning software was completed this month.

Whitehorse geological staff were also at Faro all month assisting with mapping, grade control and interpretation. Several modifications to the HP-3000 based geological software were made to enhance the usefulness of these tools.

A drilling program was started in the AY Phase. Twelve holes totaling 3791.5' were drilled during October. Preliminary analysis of the results show general accord with the existing mine model but local differences as expected.

All filing of outstanding assessment and rentals was completed during October and plans made to deal with certain joint ventured properties no longer of interest to Curragh. Transfer of the excluded assets is on hold pending clarification of Dome's position on each and every property.

1987 budgets were made up for Whitehorse and various exploration and development drilling programs.

#### 1.7 Monthly Forecast Comparison

In comparison to the September forecast of costs to the end of 1986, there has been no change in either the capital projects or the operating cost accounts.

A net decrease of \$317,000 in the mine and mill operating accounts is attributable mainly to underruns in mine operating supplies (\$168,000) and mill maintenance labour (\$148,000). An adjustment of the timing of coal payments to reflect the actual coal delivery contract advances \$259,000 from January '87 to December '86. Other savings in the services accounts result in a net increase of \$176,000.

General and administration costs for all three offices show a net increase of \$176,000, attributable for the most part to accounting and auditing services as well as recruiting services. All concentrate and backhaul transportation costs net out at a savings of \$35,000.

A summary reconciliation of the significant internal account adjustments is provided later in this section of the report, and a detailed version in each of the capital and operating cost sections.

1.8 Revenue Development

This section of the report is considered redundant with detailed projections of cash and revenue now being prepared by Curragh Resources. Accordingly, it has been deleted from the report.

**BUDGET / FORECAST COMPARISON (\$Cdn.000's)**  
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		JANUARY BUDGET UPDATE	FORECAST TOTAL to DEC/1986	CURRENT MONTH VARIANCE	VARIANCE TO DATE
CAPITAL PROJECTS		-----	-----	-----	-----
110	Mine Equipment Rehabilitation	2,640	2,825	0	185
120,130	Other Mine Projects	1,283	1,035	0	(248)
150,160	Mill Projects	2,870	2,296	0	(574)
180,190	Services & Indirects	4,488	5,647	0	1,159
	<b>Total Capital Projects</b>	<b>11,281</b>	<b>11,803</b>	<b>0</b>	<b>522</b>
OPERATING COSTS		-----	-----	-----	-----
200	Mine	26,628	28,310	(118)	1,682
300	Mill	16,521	14,048	(199)	(2,473)
400	Services	5,122	6,092	176	970
500	General & Administration	10,241	14,341	176	4,100
600	Road Transport	11,200	13,203	204	2,003
700	Port Site	2,370	2,094	(465)	(276)
800	Ocean Transport	5,603	5,856	226	253
900	Marketing / Finance	3,984	5,544	0	1,560
	<b>Total Operating Cost</b>	<b>81,669</b>	<b>89,488</b>	<b>0</b>	<b>7,819</b>
<b>TOTAL CAPITAL &amp; OPERATIONS</b>		<b>92,950</b>	<b>101,291</b>	<b>0</b>	<b>8,341</b>

FORECAST TO COMPLETE REPORT (\$Cdn.000's)

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		JANUARY BUDGET UPDATE	EXPENDED TO-DATE	FORECAST TO COMPLETE	FORECAST TOTAL DEC/86
	CAPITAL PROJECTS	-----	-----	-----	-----
110	Mine Equipment Rehabilitation	2,640	2,630	195	2,825
120,130	Other Mine Projects	1,283	767	268	1,035
150,160	Mill Projects	2,870	2,019	277	2,296
180,190	Services & Indirects	4,488	4,827	820	5,647
		-----	-----	-----	-----
	Total Capital Projects	11,281	10,243	1,560	11,803
		-----	-----	-----	-----
	OPERATING COSTS	-----	-----	-----	-----
200	Mine	26,628	22,337	5,973	28,310
300	Mill	16,521	9,858	4,190	14,048
400	Services	5,122	4,539	1,553	6,092
500	General & Administration	10,241	12,335	2,006	14,341
600	Road Transport	11,200	8,961	4,242	13,203
700	Port Site	2,370	997	1,097	2,094
800	Ocean Transport	5,603	3,505	2,351	5,856
900	Marketing / Finance	3,984	4,916	628	5,544
		-----	-----	-----	-----
	Total Operating Cost	81,669	67,448	22,040	89,488
		-----	-----	-----	-----
	TOTAL CAPITAL & OPERATIONS	92,950	77,691	23,600	101,291
		-----	-----	-----	-----

CURRAGH RESOURCES

MONTHLY FORECAST RECONCILIATION

(\$ 000's)

SUMMARY

	<u>AMOUNT</u>
A. Current Forecast to December 31, 1986.	101,291
B. September Forecast to December 31, 1986.	<u>101,291</u>
Variance	0

Summary of Major Variances

1. Mine Operating Equipment (317)

The net total savings in mine labour and mill maintenance labour of \$212,000 is a reflection of slower than expected labour expenditures and an extension of additional maintenance costs into 1987. The removal of previous explosives accruals (-\$168,000) and the continued pre-winter purchasing of fuels and lubricants (+\$141,000), combines with all other mine and mill operating accounts for a net savings of \$105,000.

2. Services 176

The details of the coal delivery schedule require the final 1986 payment to be made by December 31, and accordingly the expenditure of \$259,000 is now reflected in the 1986 expenditure flow. A net savings of \$83,000 in concentrate loadout costs and NCPC power costs makes up the remainder of the Services variance.

3. General and Administration

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The additional assistance for accounting and auditing services in the Toronto and Faro offices, and recruiting services in general, have resulted in a forecast cost increase of \$231,000. Offsetting these increases are savings in payments to-date on commercial and recreational buildings in Faro as well as the recovery of employee housing loans for October. The net change is an increase of \$176,000.

4. Concentrate and Backhaul Transport

(35)

The net change in transportation costs for concentrate and backhaul material, including all sampling and discharge costs, is a savings of \$35,000.

TOTAL CAPITAL AND OPERATIONS

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2.0 PRODUCTION STATISTICS

2.0 PRODUCTION STATISTICS

Ore and waste production for the month of October have been summarized in the following table and expressed in terms of average daily production. The movement of high grade and low grade ores for the month was satisfactory, showing a marked improvement over September. Waste removal however, continues to lag behind planned rates, due mainly to declines in shovel and loader availabilities as well as generally increasing haul distances.

Oxide stockpile ore was processed during a four day period in late October. Approximately 45,000 tonnes of coarse material (+1") was consumed versus a plan of 84,000 tonnes.

	October <u>Actual</u> (tonnes)	Average <u>Rate</u> (tonnes/day)	October Excess or <u>(Shortfall)</u> (tonnes)	Excess or <u>(Shortfall)</u> (prod. days)
high grade ore	437,400	14,110	122,400	8.7
low grade ore	107,600	3,471	73,600	21.2
waste	<u>1,800,000</u>	<u>58,064</u>	<u>(314,000)</u>	<u>( 5.4)</u>
Total	2,345,000	75,645	(118,000)	( 1.6)

FLEET PERFORMANCEProduction Drills

(waste)

	<u>Drill</u> <u>01-004</u>	<u>Drill</u> <u>01-006</u>	<u>Total</u>
Tonnes drilled - October	914,081	689,501	1,603,582
Drilled and Broken Inventory @ Monthend (tonnes)	-	-	N/A
Tonnes/operating hour	2,341	2,043	2,200
Mechanical Availability	73.1	62.3	67.7
Utilization	74.2	75.2	74.7

Shovels

(waste)

	<u>Shovel</u> <u>02-005</u>	<u>Shovel</u> <u>02-006</u>	<u>Shovel</u> <u>02-007</u>	<u>Shovel</u> <u>02-008</u>	<u>Loaders</u> <u>9 &amp; 12</u>
Monthly Production (tonnes)	402,085	390,429	575,209	288,288	82,959
Tonnes/Operating Hour	1,368	1,392	1,530	1,471	191
Mechanical Availability	50.2	48.7	75.8	85.0	43.5
Utilization	81.3	80.0	85.3	80.8	72.0

Trucks

(Waste)

	<u>Euclids</u>	<u>Wabcos</u>	<u>Total</u>
Tonnes/Operating Hour	330	209	256
Mechanical Availability	72.4	70.2	71.0
Utilization	84.5	73.0	77.1
Tonnes Hauled	1,070,835	668,135	1,738,970

\*\*\*Reconciled waste for September  
and reconciled ore for October

MINE STATISTICAL SUMMARY  
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MONTH	TONNES WASTE	TONNES H.G. ORE	TONNES L.G. ORE	ORE&WASTE TOTAL (TONNES)	SHOVEL PRODUCTIVITY (TONNES/OpHr)	TRUCK PRODUCTIVITY (TONNES/OpHr)	DRILL PRODUCTION (TONNES)	MANHOURS WORKED	TONNES PER MANHOUR	ACCIDENT FREQUENCY RATE	ACCIDENT SEVERITY RATE
JANUARY	431,718	0	0	431,718	1,092	440	768,087	17,251	25.03	0.00	0.00
FEBRUARY	1,385,472	1,500	0	1,386,972	1,463	296	1,640,799	31,043	44.68	96.64	161.07
MARCH	1,771,099	17,112	0	1,788,211	1,623	389	2,210,083	52,954	33.77	56.65	547.65
1ST QTR.	3,588,289	18,612	0	3,606,901	1,475	351	4,618,969	101,248	35.62	59.26	335.81
APRIL	2,068,646	17,112	7,668	2,093,426	1,419	362	1,650,356	55,318	37.84	36.15	108.46
MAY	2,088,879	20,220	5,844	2,114,943	1,278	341	2,140,886	73,633	28.72	13.58	40.74
JUNE	2,166,020	94,103	41,688	2,301,811	1,238	327	2,290,208	76,710	31.88	117.32	378.05
2ND QTR.	6,323,545	131,435	55,200	6,510,180	1,325	342	6,081,451	205,661	31.65	58.35	184.77
JULY	2,074,585	207,236	31,740	2,313,561	1,125	272	2,341,770	90,988	25.43	43.96	307.73
AUGUST	1,783,725	263,290	14,460	2,061,475	1,267	255	2,094,472	91,418	22.55	32.81	32.81
SEPTEMBER	1,993,319	292,595	57,299	2,343,213	1,306	265	1,729,078	94,088	24.90	53.14	63.77
3RD QTR.	5,851,629	763,121	103,499	6,718,249	1,196	257	6,165,320	276,494	24.30	39.78	75.95
OCTOBER	1,800,132	437,361	107,552	2,345,045	1,447	255	1,737,885	104,245	22.50	76.74	326.15
NOVEMBER											
DECEMBER											
4TH QTR.	1,800,132	437,361	107,552	2,345,045	1,447	255	1,737,885	104,245	22.50	76.74	326.15
Y.T.D.	17,563,595	1,350,529	266,251	19,180,375	1,312	296	18,603,625	687,648	27.89	52.35	231.22

The mill production statistics are summarized in the following table.

Comparison of October Plan vs Actual

	<u>Plan</u>	<u>Actual</u>	<u>Excess or (Shortfall)</u>
Feed Tonnage	418,500	398,763	(19,737)
Average Daily Rate:			
(a) Mill Feed	13,500	12,863	( 637)
(b) Concentrate	1,390	1,202	( 188)

Continued improvement in mill performance over last month is shown by an increase in the daily feed rate from 10,226 tpd to 12,863 tpd, along with 8 percent and 1 percent improvements in the lead and zinc recoveries respectively. Lead grade for the month was up by 3.0 percent while the zinc grade was off by 0.4 percent. Mechanically, the mill operated near expectations, although metallurgically there is still room for improvement.

Complete mill statistics are shown on the following table.

MILL STATISTICAL SUMMARY

MONTH	FEED TONNES	FEED GRADE			CONCENTRATE TONNES		RECOVERY %			Pb CONCENTRATE				Zn CONCENTRATE				
		Pb %	Zn %	Ag(g/t)	Pb	Zn	Pb to	Zn to	Ag to	Pb %	Zn %	Ag(g/t)	% MOIST	Pb %	Zn %	Ag(g/t)	Fe %	% MOIST %
							Pb conc	Zn conc	Pb conc	Pb %	Zn %	Ag(g/t)	% MOIST	Pb %	Zn %	Ag(g/t)	Fe %	% MOIST %
JANUARY																		
FEBRUARY																		
MARCH																		
1ST QTR	0	0.00	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
APRIL																		
MAY																		
JUNE	98,299	2.83	4.76	43.23	3,896	4,342	69.76	45.92	48.89	49.81	8.53	533.30	7.71	2.04	49.48	56.30	10.34	9.99
2ND QTR	98,299	2.83	4.76	43.23	3,896	4,342	69.76	45.92	48.89	49.81	8.53	533.30	7.71	2.04	49.48	56.30	10.34	9.99
JULY	217,676	3.62	4.75	57.92	7,994	12,080	50.07	56.39	32.27	49.36	11.25	508.92	6.50	2.81	48.27	58.60	11.38	6.93
AUGUST	287,654	3.08	5.08	39.22	10,432	21,236	64.03	73.49	42.71	54.38	7.67	461.85	5.50	2.75	50.57	53.80	11.32	6.72
SEPTEMBER	306,776	2.63	4.37	33.30	8,201	20,086	58.38	74.37	34.74	57.43	9.14	432.76	5.73	3.43	49.64	55.92	11.37	7.09
3RD QTR	812,106	3.05	4.72	42.00	26,627	53,402	58.15	69.24	36.90	53.81	9.20	467.02	5.87	3.02	49.70	55.68	11.35	6.91
OCTOBER	398,763	2.84	4.12	39.62	12,110	25,155	66.27	75.33	45.64	61.97	6.43	595.38	6.54	3.23	49.20	65.85	11.58	7.08
NOVEMBER																		
DECEMBER																		
4TH QTR	398,763	2.84	4.12	39.62	12,110	25,155	66.27	75.33	45.64	61.97	6.43	595.38	6.54	3.23	49.20	65.85	11.58	7.08
YTD	1,309,168	2.97	4.54	41.36	42,633	82,899	61.50	69.35	40.46	55.76	8.35	509.54	6.23	3.03	49.54	58.80	11.37	7.12

CONCENTRATE TRANSPORT

During October, Yukon Alaska Transport delivered 830 loads of concentrate to Skagway for a total of 38,741 WMT. The resultant average payload of 46.68 WMT/trip was a slight decrease from the September average of 46.97 WMT/trip.

Ocean shipments during October consisted of one Asian-bound vessel, M.V. Oriental Castle. Shipment statistics were as follows:

	<u>Zinc</u>	<u>Lead</u>
Quantity (DMT)	17,350	8,900
(WMT)	18,730	9,450
Grade (%)	49.97	61.70
Silver (g/DMT)	-	580

INVENTORY AND SALES ANALYSIS

MONTH	PRODUCTION		TRUCK SHIPMENTS		MINE INVENTORY		SALES		PORT INVENTORY	
	Pb Conc	Zn Conc	Pb Conc	Zn Conc	Pb Conc	Zn Conc	Pb Conc	Zn Conc	Pb Conc	Zn Conc
	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes	Tonnes
OPENING BAL.					0	0			0	0
JANUARY										
FEBRUARY										
MARCH										
1ST QTR.	0	0	0	0	0	0	0	0	0	0
APRIL										
MAY										
JUNE	3,896	4,342	1,675	2,239	2,221	2,103	0	0	1,675	2,239
2ND QTR.	3,896	4,342	1,675	2,239	2,221	2,103	0	0	1,675	2,239
JULY	7,994	12,080	9,698	13,304	517	879	0	0	11,373	15,543
AUGUST	10,432	21,236	10,414	20,965	535	1,150	17,117	31,203	4,670	5,305
SEPTEMBER	8,201	20,086	6,205	18,847	2,531	2,389	10,267	20,224	608	3,928
3RD QTR.	26,627	53,402	26,317	53,116	2,531	2,389	27,384	51,427	608	3,928
OCTOBER	12,110	25,155	11,759	24,307	2,882	3,237	8,901	17,348	3,466	10,887
NOVEMBER										
DECEMBER										
4TH QTR.	12,110	25,155	11,759	24,307	2,882	3,237	8,901	17,348	3,466	10,887
Y.T.D.	42,633	82,899	39,751	79,662	2,882	3,237	36,285	68,775	3,466	10,887

Notes: 1) Mine inventory includes "wet" inventory in lead and zinc thickeners, considered fixed at 500 DMT and 800 DMT respectively.

2) Port inventory excludes inventory at Skagway on start-up (est. 500 DMT lead and 1500 DMT zinc).



3.0 REVENUE DEVELOPMENT

### 3.0 REVENUE DEVELOPMENT

#### 3.1 General

The original Kilborn financial analysis programs which provided life-of-mine cash and revenue projections, have been replaced by more detailed cash requirements projections developed Curragh Resources. The new programs reflect actual operating conditions for concentrate production and shipment, as well as current sales and marketing arrangements.

Accordingly, this section of the Kilborn progress report is considered redundant with other Curragh activities and has been deleted.



4.0 CAPITAL PROJECTS

## 4.0 CAPITAL PROJECTS

### 4.1 Introduction

This section of the progress report deals mainly with the mine equipment reactivation, pit dewatering and drainage, and capital projects for the mine, mill and service areas. In relation to the expenditure flow forecasts, the following work covers Area 100.

### 4.2 Pit Dewatering and Drainage

#### PRECIPITATION

Total precipitation was equivalent to 30.5 mm of rain. The 11 year mean is 36.6 mm. However, rainfall was 29.1 mm versus the 11 year October mean of 2.9 mm. Snowfall was 1.4 cm versus the 11 year mean of 33.7 cm.

#### DEWATERING

##### JB Pit

Pumping was not continuous due to the number of times the sump was relocated. Increasing wall height increases the work load for each sump relocation. However, the Flygt 2400B in this pit ran only 10% of the time.

The small diameter pump for blastholes and shallow wells had not arrived on site by monthend.

##### Zone II

The Flygt 2400B in Zone II ran continuously all month except for power failures and a barge move. Drawdown is now approximately 15 feet from the peak level. Approximately 10 feet of water remains.

Zone I

Operating time was 50%. A rapidly lowering water level necessitated three moves, which were prolonged by a manpower shortage. Power supply continues to be a problem to this area. Drawdown was 16 feet to the 3615 elevation. The present barge will pump another 10 million gallons only, at which time there will not be sufficient water for safe operation. Two Flygt 2400B's will be installed by mid-October.

East Wall Interceptor Ditch

The lining of the ditch was completed at mid-month, two weeks ahead of schedule and \$60,000 under budget - estimated cost is \$90,000 versus a projected cost of \$150,000. Flows into the pit along the wall have diminished but not ceased. Some reduction in flow is due to lower ambient temperature, thus it is premature to estimate the effectiveness of the ditch.

Faro Valley

The sump on the 4030 elevation at the base of the valley till was excavated and a 13 hp pump was recovered. Further work was not possible due to time and manning constraints.

4.3 Fresh Water Wells

Midnight Sun Drilling drilled a further two wells (for a total of four). Yield is somewhat lower than projected:

PW3	(MSD 1)	526 igpm
PW4	(MSD 2)	1012 igpm
<u>PW6</u>	<u>(MSD 4)</u>	<u>650 igpm</u>
TOTAL		2188 igpm

Well PW5 (MSD 3) requires further development as it blinds off rapidly when pumped at high rates.

## CAPITAL COST REPORT (\$Cdn.000's)

=====

		JANUARY						
		BUDGET	COMMITTED	EXPENDED	TOTAL TO	CURRENT	VARIANCE	
		UPDATE	TO DATE	TO DATE	DEC/1986	VARIANCE	TO DATE	
		-----						
<b>MINE PROJECTS</b>		-----						
111,112	Truck Rehabilitation	1,288	1,156	1,156	1,351	0	63	
113-115	Other Equipment Rehabilitation	1,352	1,474	1,474	1,474	0	122	
121	Pit Stabilization	689	687	687	955	0	266	
122	Gravel Crusher	220	1	1	1	0	(219)	
123,124	Other Mine Projects	218	79	79	79	0	(139)	
130	Mine Indirects	156	0	0	0	0	(156)	
		-----						
	Total Mine Projects	3,923	3,397	3,397	3,860	0	(63)	
<b>MILL PROJECTS</b>		-----						
150	Process Areas	2,446	1,603	1,603	1,880	0	(566)	
160	Other Mill Projects	424	416	416	416	0	(8)	
		-----						
	Total Mill Projects	2,870	2,019	2,019	2,296	0	(574)	
<b>SERVICES PROJECTS</b>		-----						
181	Tailings Impoundment	1,200	86	86	226	0	(974)	
182	Water Reservoir	875	973	973	1,303	0	428	
183	Coal Handling	36	0	0	0	0	(36)	
184	Bulk Reagent Station	100	13	13	100	0	0	
185	Sustaining Capital	147	0	0	0	0	(147)	
		-----						
	Total Services Projects	2,358	1,072	1,072	1,629	0	(729)	
<b>OTHER CAPITAL COSTS</b>		-----						
191	Port Site Unloading	450	639	639	728	0	278	
192	Camp Facilities	160	663	663	673	(208)	513	
193	Travel & Subsistence	1,067	1,691	1,691	1,743	189	676	
194	Other Contractor Indirects	453	462	462	574	19	121	
195	Whitehorse Truck Terminal	0	300	300	300	0	300	
		-----						
	Total Capital Indirects	2,130	3,755	3,755	4,018	0	1,888	
		-----						
	<b>TOTAL CAPITAL PROJECTS</b>	11,281	10,243	10,243	11,803	0	522	
		-----						

BUDGET/FORECAST RECONCILIATION

CAPITAL PROJECTS - DETAILS

(\$000's)

	<u>Amount</u>
Current Forecast to December 31, 1986	\$ 11,803
September Progress Report Forecast of Capital Projects to December 31, 1986.	<u>\$ 11,803</u>
Variance	\$ 0

GENERAL

Overall, there is no variance in the forecast of capital projects to December 31, 1986. The internal variance within Account 190, Other Capital Costs, involves the reallocation of actual costs to date from the Camp Facilities to the Travel and Subsistence, and the Other Contractor Indirects accounts.

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
100	CAPITAL PROJECTS							
110	Mine Equipment Reactivation							
111	Trucks - Euclid							
001	Reactivate trucks	100	100			100	100	0
002	Euclid box rebuilds	8	8			8	8	0
Total for Account 111		108	108	0	0	108	108	0
112	Trucks - Wabco							
001	Reactivate Wabco trucks	550	550			550	550	0
002	Wabco engine rebuild & upgrade	435	435	65	130	630	630	0
003	Wabco tires (initial purchase)	0	0			0	0	0
004	Technical assistance	63	63			63	63	0
Total for Account 112		1,048	1,048	65	130	1,243	1,243	0
113	Drills							
001	Marion diesel rebuild	463	463			463	463	0
002	Marion electric overhaul	187	187			187	187	0
003	Marion boom extension	0	0			0	0	0
004	Technical assistance	25	25			25	25	0
Total for Account 113		675	675	0	0	675	675	0
114	Shovels							
001	Reactivate (3) P&H 2100's	230	230			230	230	0
002	Reactivate (1) Marion	370	370			370	370	0
003	Bucket normalizing	28	28			28	28	0
004	Technical assistance	0	0			0	0	0
005	Boom extensions	0	0			0	0	0
006	Load controls	0	0			0	0	0
Total for Account 114		628	628	0	0	628	628	0
115	Other Equipment							
001	Activate LB80 loader	17	17			17	17	0
002	Activate dozers (D355A & D9)	104	104			104	104	0
003	Activate grader	20	20			20	20	0
004	Light vehicle inventory	13	13			13	13	0
005	Other small equipment	17	17			17	17	0
006	Warehouse forklift battery	0	0			0	0	0
Total for Account 115		171	171	0	0	171	171	0
=====								
TOTAL ACCT 110 - MINE EQUIPMENT		2,630	2,630	65	130	2,825	2,825	0
120	Mine Start-up Projects							

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec-1986	Previous Dec-86 Total	Variance Sep. to Oct./86
121	Pit Stabilization							
001	Pit Stabilization Studies	183	183			183	137	46
002	Pit Water Diversion & Ditch	47	47	75	20	142	150	(8)
003	Pit Dewatering	436	436	50		486	524	(38)
004	Pit Scaling	4	4			4	4	0
005	Faro Valley Dewatering	10	10	20	10	40	40	0
006	Dewatering Wells	7	7	58	35	100	100	0
	Total for Account 121	687	687	203	65	955	955	0
122 001	Gravel Crusher	1	1	0	0	1	1	0
123	Waste Dump Modifications							
001	Power Line Relocation	34	34			34	34	0
002	Vangorda Access Road	0	0			0	0	0
	Total for Account 123	34	34	0	0	34	34	0
124	Miscellaneous Projects							
001	Vehicle Plug-ins	45	45			45	45	0
002	Computer systems	0	0			0	0	0
	Total for Account 124	45	45	0	0	45	45	0
TOTAL ACCT 120 - MINE START-UP PROJECTS		767	767	203	65	1,035	1,035	0
130	Mine Start-up Indirects							
131 001	Fuels Inventory (Equipment)	0	0	0	0	0	0	0
132 001	Contingency on Reactivation Work	0	0	0	0	0	0	0
TOTAL ACCT 130 - MINE START-UP INDIRECTS		0	0	0	0	0	0	0
150	Mill Start-up Projects							
151	Crushing							
001	Primary Screen Modifications	59	59			59	59	0
002	Chute Modifications & Repairs	8	8			8	8	0
003	Conveyor Speed-up Mods.	45	45			45	45	0
004	Hydraulic Rock Breaker	99	99			99	99	0
005	Coarse Ore Bin Feeders	100	100	98		198	198	0
006	Secondary Screen Modifications	0	0			0	0	0
007	Tertiary Screen Installation	109	109			109	109	0
008	Primary Crusher Mantle	125	125			125	125	0
	Total for Account 151	545	545	98	0	643	643	0

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
152	Grinding							
001	Mill Alignment	80	80			80	80	0
002	Slot Feeder Chutes	1	1	58	57	116	116	0
003	Conveyor Belt Maintenance	59	59			59	59	0
004	Install 20" Cyclones	0	0			0	0	0
Total for Account 152		140	140	58	57	255	255	0
153	Flotation							
001	Regrind cyclone modifications	58	58			58	59	(1)
002	Zn Rougher Feed Conds & Pumps	62	62			62	62	0
003	Onstream Analyzer Maint. & Upgrade	22	22	29		51	50	1
004	Increase Weir Height	0	0			0	0	0
Total for Account 153		142	142	29	0	171	171	0
154	Reagent Handling							
001	Lime system	20	20			20	20	0
002	Soda ash system	32	32			32	32	0
Total for Account 154		52	52	0	0	52	52	0
155	Dewatering, Drying, and Loadout							
001	Thickener Overhaul	11	11			11	11	0
002	Conveyor belt maintenance	2	2			2	2	0
003	Coal & ash systems overhaul	1	1			1	1	0
004	Piping & Pump Modifications	58	58			58	57	1
005	Dryer Modifications	90	90			90	90	0
006	Control System	54	54	27		81	81	0
007	Concentrate Loadout Changes	508	508	8		516	517	(1)
Total for Account 155		724	724	35	0	759	759	0
TOTAL ACCT 150 - MILL START-UP PROJECTS		1,603	1,603	220	57	1,880	1,880	0
160	Mill Start-up Projects - General							
161	Water Distribution							
001	Pumping & Piping Changes	172	172			172	173	(1)
Total for Account 161		172	172	0	0	172	173	(1)
162	Fire Protection							
001	Smoke detection in Control Centres	19	19			19	19	0
002	Mechanics room insulation	1	1			1	1	0
003	Replace oil heaters	2	2			2	2	0
004	Auto sprinkler protection	222	222			222	221	1
Total for Account 162		244	244	0	0	244	243	1

Account Number	Description	Commit./Expend.		Total		Previous	Variance	
		To-Date	To-Date	to Dec-86	to Dec-86	Dec-86	Sep. to Oct./86	
TOTAL ACCT 160 - MILL START-UP PROJECTS - GEN'L		416	416	0	0	416	416	0
180	Services Capital Projects							
181	Tailings Impoundment							
001	Roads , Dam ( Overhaul Costs )	7	7			7	7	0
002	Pipeline	79	79	140		219	219	0
Total for Account 181		86	86	140	0	226	226	0
182 001	Water Reservoir							
001	Roads , Dam ( Overhaul Costs )	0	0			0	0	0
002	Spillway , Dam ( Local Borrow )	1	1			1	0	1
003	Fresh Water Wells	472	472	310	20	802	803	(1)
004	Security Deposit - Water Board	500	500			500	500	0
Total for Account 182		973	973	310	20	1,303	1,303	0
183 001	Coal Handling	0	0	0	0	0	0	0
184 001	Bulk Reagent Station	13	13	44	43	100	100	0
185	Sustaining Capital - Mill							
001	Mill sustaining capital	0	0			0	0	0
002	Contingency on reactivation work	0	0			0	0	0
Total for Account 185		0	0	0	0	0	0	0
TOTAL ACCT 180 - SERVICES CAPITAL PROJECTS		1,072	1,072	494	63	1,629	1,629	0
190	Capital Projects - Other							
191 001	Port Site Unloading	639	639	89	0	728	728	0
192 001	Camp Facilities	663	663	5	5	673	881	(208)
193	Travel & Subsistence							
001	Subsistence	1,463	1,463			1,463	1,239	224
002	Housing	22	22	1	1	24	98	(74)
003	Travel	186	186	20	15	221	152	69
004	Relocation Expense	20	20	10	5	35	65	(30)
Total for Account 193		1,691	1,691	31	21	1,743	1,554	189
194	Other Contractor Indirects							
001	Recruiting Costs (Watson Lake)	64	64	10		74	58	16
002	Fixed Overheads & Profits	349	349	50	50	449	471	(22)
003	Contractor Insurances	49	49	2		51	26	25

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
004	Legal Fees	0	0			0	0	0
	Total for Account 194	462	462	62	50	574	555	19
195 001	Whitehorse Truck Terminal	300	300	0	0	300	300	0
TOTAL for ACCOUNT 190 - CAPITAL PROJECTS - OTHER		3,755	3,755	187	76	4,018	4,018	0
**TOTAL ACCT 100 - CAPITAL PROJECTS**		10,243	10,243	1,169	391	11,803	11,803	0



5.0 MINE AND MILL OPERATIONS

MINE AND MILL OPERATIONS5.0 MINE AND MILL OPERATIONS5.1 Introduction

The mine and mill operations accounts relate to cost code areas 200-900 inclusive. All activities not related to capital projects are covered in this section of the report.

The production and shipping schedule shown on the following page incorporates the progress to the end of October for all aspects of the operation from mining and milling through to concentrate loadout and shipping at Skagway. Mine performance for October remained about the same as for September, while mill performance again showed a significant improvement.

The total production forecasts for the mine and mill for 1986 have been reduced marginally this month. Mined material, primarily waste production, has been reduced by 325,000 tonnes, or 1.3%. Mill throughput and concentrate production are also off by approximately the same factor.

**PRODUCTION AND SHIPPING SCHEDULE**

(November & December, 1986)

	<u>TO DATE</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>	<u>TOTAL</u>
<u>MINING</u>				
Tonnes Oxide	114,097	9,517	26,734	150,348
Tonnes Ore	1,350,529	445,000	210,000	2,005,529
Tonnes Low Grade	266,251	159,000	118,000	543,251
Tonnes Waste	17,563,595	1,986,000	2,280,000	21,829,595
Total Tonnes	19,294,472	2,599,517	2,634,734	24,528,723
<u>Milling</u>				
Feed Tonnes	1,309,168	405,000	405,000	2,119,168
Grade % Zn	4.54	4.79	4.17	
% Pb	2.97	2.89	2.64	
Silver G/DMT	41.36	35.0	35.0	
<u>Production</u>				
Zinc-Production (DMT)	82,899	30,749	26,074	139,722
-Grade	49.54	50.5	50.7	
-Recovery	69.35	80.07	78.27	
Lead-Production (DMT)	42,633	14,451	12,872	69,956
-Grade	55.76	59.9	60.5	
-Recovery	61.50	74.11	72.98	
Silver-(G/DMT)	509.64	509	555	
Total Conc. Prodn. (DMT)	125,532	45,200	38,946	209,678
<u>Shipping</u>				
Zinc-To Asia (DMT)	34,783	19,915	15,000	69,698
-To Europe (DMT)	33,993	-	21,000	54,993
-To Australia (DMT)	-	-	-	-
Lead-To Asia (DMT)	21,167	3,553	5,000	29,720
-To Europe (DMT)	15,117	-	9,000	24,117
-To Australia (DMT)	-	9,648	-	9,648
Silver-(G/DMT)	490	532	523	

The following table compares the forecast of key 1986 mining and milling production elements since last month.

<u>Production</u>	<u>Previous Forecast</u>	<u>Current Forecast</u>	<u>Net Change</u>
Oxide Ore	333,620	150,348	( 183,272)
High Grade Ore	1,890,639	2,005,529	114,890
Low Grade Ore	158,699	543,251	384,552
Waste	<u>22,471,080</u>	<u>21,829,595</u>	( 641,485)
Total Mine	24,854,038	24,528,723	( 325,315)
Mill Feed	2,152,396	2,119,168	( 33,228)
Zinc Concentrate (DMT)	140,932	139,722	( 1,210)
Lead Concentrate (DMT)	<u>70,460</u>	<u>69,956</u>	( 504)
Total Concentrate (DMT)	211,392	209,678	( 1,714)

## 5.2 Mine Operations

As expected road conditions improved substantially during October and truck availability improved marginally. The major reasons for the shortfall in production are reflected in the shovel availability of 66 percent and loader availability of 45 percent and generally increasing haul distances with the shift in waste production from JB to lower benches in the A zone, together with some truck delays on the narrow Vangorda Road dump development. Production for the month was as follows:

<u>Material</u>	<u>Actual (Tonnes)</u>	<u>Plan (Tonnes)</u>	<u>Variance (Tonnes)</u>	<u>% Variance</u>
Ore-High Grade	437,400	315,000	122,400	38.9
-Low Grade	<u>107,600</u>	<u>34,000</u>	<u>73,600</u>	<u>216.5</u>
Sub-Total Ore	545,000	349,000	196,000	56.2
Waste	<u>1,800,000</u>	<u>2,114,000</u>	<u>(314,000)</u>	<u>( 14.9)</u>
Total Mined	2,345,000	2,463,000	(118,000)	( 4.8)
Crusher Feed:	418,500	395,500	23,000	5.8

The above targets are based on 4th Quarter 1986 projections in Curragh Resources 1987 Budget Report.

Problems in hiring and retaining experienced manpower, particularly electricians, is still a problem. This issue has been discussed with Altus personnel and greater effort to resolve the problem has been requested. Meanwhile contract mechanics and electricians continue to be used. Currently there are eleven on site although this number fluctuates as there are insufficient suitable persons to cover turn-arounds. Also with the inability of TransWest Machinery or Arrow to provide sufficient electricians, other companies are being contacted.

### Drilling

Drills spent a considerable amount of time idle due to tight operating areas preventing drilling patterns from being staked. Utilization ran at 75 percent. The elimination of the use of anti-freeze mixed with water for dust suppression has caused some freeze up problems on drills, but with heaters, thermostats and valves to enable blow down of pipes to be performed and some training, this problem is coming under control. Mechanical availability of drills could have been better, however due to lack of drilling space, repairs at various times rated a low priority.

### Blasting

Only 1.3 million tonnes of material was broken in October with \$257,000 being spent on blasting. The increased cost at \$0.20/tonne compared to previous months reflects the return to toe loads of aluminized ANFO or slurry in JB, the reduced pattern size for digging with the loaders and the Klemke backhoe, and the fact that these blasts constituted almost 20 percent of ground blasted. With increased waste drilling in November, unit costs are expected to return to approximately \$0.13/tonne.

### Loading

With two major shovels down part time during October, the shovel availability was reduced to 66 percent. Number 5 shovel was down from

October 1 - 8 with problems in the control circuitry. It was found necessary to bring in a G.E. representative to solve this problem. As a result, a program of rebuilds and change outs on #5 shovel control circuitry is now in progress.

On #6 shovel a track overhaul had been scheduled for some time which had been continually deferred. The shovel was finally put down for this work on October 7. Due to problems with the hoist drum (work which was also scheduled) the shovel was not available until October 21.

With the shovel shortage during the month remaining shovels were fully truck complimented, resulting in a production rate of 1447 tonnes/hour compared to 1330 tonnes/hour budget for 1987.

The Klemke backhoe became available on the 19th of October and ran at its scheduled rate of 930 tonnes/hour in good digging, with trucks loading below the hoe. Some problems with our operators on trucks and their operators working together was experienced initially, but with the backhoe now in JB by itself the machine will be fully tested this month.

### Hauling

Some overtrucking obviously occurred as truck productivity dropped from 265 tonnes/hour in September to 255 tonnes/hour in October. With average haul distances on waste having increased from an average of 1.72 km in September to 2.05 km in October or approximately a 20 percent increase, it is not expected to reach truck productivities of 265 tonnes/hour average until "B" phase is included.

Generally road conditions are much improved for hauling, but fresh snow and inexperienced drivers are causing the whole fleet to slow down during these periods. With the lower turnover now becoming apparent in the pit, this situation should improve.

MINE PLANNING1987 Budget

Planning efforts were concentrated on producing a number of schedules for the 1987 Budget. The plan generating 548,000 tonnes of concentrate was selected as the base case. Total tonnes mined would be 31,013,000. Alternate plans were also developed for 541,000 and 527,000 tonnes of concentrate.

By Phase

A preliminary design for BY Phase with a permanent ramp on the southwest wall indicates that approximately 3 million tonnes of waste can be excluded from this pit. 299,000 tonnes of ore would also be left in the southwest wall. The incremental strip ratio of the material is greater than 10:1. The bulk of the waste is left under the southwest wall ramp. Slope stability will be superior above the ramp in the southwest (i.e. risk of losing the ramp is reduced).

Pit Design Alternatives

Two modified designs of Phase A meant to close the projected ore gap next March were examined. One alternative placed a ramp on the south wall, and the second widened the east wall ramp. Both were rejected due to low expected productivity in smaller pits. Furthermore, the smaller pits created an ore gap later in the year.

Truck Requirement

Scheduling revealed that a larger haulage fleet is required to meet production requirements next year. Detailed analysis indicates the best economics are realized by purchasing three used 170 ton trucks.

## Vangorda Plateau

Approximately 2.0 million tonnes have been placed in the access ramp to the rock drain across the North Fork of Rose Creek. A further 1.5 to 2.0 million tonnes is required before the rock drain is put in place.

## Geology

Mill feed was supplied from the 3750 and 3730 benches in JB, the 3710 bench in AY, the crusher stockpile, the coarse (screened) oxide pile and the Ramp Zone.

The breakdown of blast holes versus model is as follows:

<u>Pit</u>	<u>Blastholes</u>				<u>Model</u>			
	<u>Tonnes</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag g/t</u>	<u>Tonnes</u>	<u>Pb %</u>	<u>Zn %</u>	<u>Ag g/t</u>
JB	282,515	2.90	4.61	42	296,164	2.69	4.33	33
AY	98,056	2.59	4.61	35	76,021	2.84	4.19	42

A further 4,608 tonnes of Ramp Zone ore at 3.98% Pb, 4.16% Zn was mined. This zone is not included in the model.

## 5.3 Mine Maintenance

Parts stock out and manpower shortages still continue to be problem areas for the maintenance department. With the current manpower turnover, maintaining skill levels is also a problem, especially in the electrical department.

### Drills

01-04 No major problems; freezing up of drill water was experienced when the lower ambient temperatures first arrived.

01-06 The rotary motor had to be repaired twice; the first time with bearing failure and the next time with armature

failure. The auxiliary compressor failed and was changed out with a larger updated version. Freezing was also experienced with this machine at the same time as 01-04.

### Shovels

- 02-05      Electrical problems were encountered with this machine, mainly in control circuitry. A General Electric Serviceman was contacted and went over the complete control circuitry. The hoist motor pinion bearings failed and were replaced.
- 02-06      An overhaul was done on this shovel during the month. The overhaul included an undercarriage propel gear replacement, carbody inspections and repairs, boom inspections and repairs and a hoist gear realignment. The swing generator armature was changed, and electrical and mechanical inspections and adjustments were done to the rest of the shovel.
- 02-07      The magnatorque failed and was changed out.
- 02-08      No major problems.

### Haulage Fleet

- Wabcos - Experienced three cracked torque tubes which were repaired. Also nose cone failures were experienced. A number of electrical failures were also encountered, including two wheel motors and three generators. Electrical problems were further hampered due to lack of skilled manpower.
- Euclids - An engine was changed out in truck #50 due to component hours. This truck was also fitted with a new type suspension and radial tires on a trial basis.

When cold weather arrived, a number of freezing problems with haul trucks were encountered.

Support Equipment

## Dozers (Tracked)

- A transmission was changed out under warranty on 04-19.

## Dozers (Rubber Tired)

- 05-01 was in the shop all month due to failure of rebuilt components covered under warranty by outside suppliers.

Graders

- 08-05 - Front-end rebuild was in progress at month-end.

L-800 Loaders

- 06-09 - A wheel motor and "L" drives were changed out on this machine.
- 06-12 - A gearbox and a converter failed on this unit, and the rear axel had to be welded due to stress cracking.

General

We had started nightshift coverage with extra mechanics, and an extra electrician and a machinist. So far this has proved to be beneficial to lower maintenance downtime of equipment.

Fuel consumption was 886,067 litres for the month of October.

Fluctuations in the incoming power to the minesite caused numerous problems in the pit and mill again this month. The incoming voltage dropped as low as 3350 volts and rose as high as 4450 volts. There were ten power outages during October, five of which were attributable to the fluctuations in incoming power.

## ELECTRICAL COSTS

1986

MONTH	PEAK DEMAND (KVA)	DEMAND CHARGE (16.73/KVA)	ENERGY USAGE (KWHR)	ENERGY CHARGE (\$0.0129/KWHR)	FIXED CHARGE	OTHER CHARGES	TOTAL COST	COST (C/KWH)
JANUARY								
FEBRUARY								
MARCH								
1ST. QUARTER								
APRIL	5,360	89,672.80	2,381,900	30,726.51	21446.00	0	141,845.31	5.955
MAY	8,200	137,186.00	2,642,900	34,093.41	21446.00	0	192,725.41	7.290
JUNE	16,200	271,026.00	7,496,300	96,702.27	21446.00	0	389,174.27	5.192
2ND. QUARTER	29,760	497,884.80	12,521,100	161,522.19	64338.00	0	723,744.99	5.790
JULY	19,360	323,892.80	10,339,600	133,380.84	21446.00	0	478,719.64	4.630
AUGUST	22,480	376,090.40	12,802,200	165,148.38	21,446.00	0	562,684.78	4.395
SEPTEMBER	23,840	398,843.20	13,698,800	176,714.52	21,446.00	0	597,003.72	4.358
3RD. QUARTER	65,680	1,098,826.40	36,840,600	475,243.74	64,338.00	0	1,638,408.14	4.447
OCTOBER	24,080	402,858.40	14,420,900	186,029.61	21,446.00	0	610,334.01	4.232
NOVEMBER								
DECEMBER								
Y. T. D.	119,520	1,999,569.60	63,782,600	822,795.54	150,122.00	0	2,972,487.14	4.660

## 5.4 Mill Operations

### General

The mill statistical summary (Section 2.0) outlines the overall concentrator performance. Losses experienced this month were associated with the thickener overflows and some circuit spills which, due to contamination, had to be pumped to tails.

In October the mill treated JB ore, stockpile ore, oxide ore and some ramp zone material. At monthend a mixture of ramp and JB ores was treated to determine whether this mixing was acceptable or not. It was noted that the mill could not physically handle the ramp zone ores because of fines and moisture content - all crusher chutes and screens plugged immediately. Mixing was the only practical way of handling this ore.

The target for October was 13,500 tonnes per day. An average of 12,863 tonnes per day which was 95.3 percent of plan was achieved. The shortfall resulted from lifter bar changes in No. 3 ball mill and conveyor belt splicing of the slot feeder conveyors, plus an extended shutdown to replace the fine ore bin feed conveyor No. 13.

There were problems with thickeners, filters, and dryers during October. None of these problems were major, however they did contribute to a build-up of concentrate in the zinc thickener at monthend.

The water well work has produced approximately 2,000 IGPM or 2/3 of the projected volume required. Some internal water recycle is being used in the mill to augment the water supply. A new water balance is being prepared based on the forecast tonnage throughput.

Pre-screening of the oxide ore has commenced and the first batch of coarse oxide ore had been processed. Based on processing 45,000 tonnes of oxide ore over four days, the resultant concentrate statistics are as follows:

	<u>Zinc</u>	<u>Lead</u>
Concentrate (tonnes)	3,234	1,579
Grade (%)	47.0	59.8
Recovery (%)	71.1	67.6
Silver (g/DMT)	-	549.8

Specific comments by area as follows:

#### Crushing Circuits

The crushing circuits operated well all month. The primary crusher did plug, however this did not cause any downtime. Both incidents were a result of mechanical problems.

The major mechanical repairs were the replacement of the mainframe arm shields, arcing of the primary concaves, replacement of primary screen decks and the repair of the primary screens. Some additional work was done on the primary crusher lube system and apron feeder liners.

Nos. 12 and 13 conveyors were replaced in October. These were vulcanized on site to give as smooth a surface as possible for the scraper to work against.

#### Grinding Circuits

All of the grinding circuits operated satisfactorily during the month. Some work progressed on the clean out of the slot feeders on No. 3 circuit. Spillage occurred from plugged feed chutes to the rod mills and from pump boxes on occasion. Most of the plugged chutes resulted from chunks of oxidized ore from bin build-up getting stuck in the throat of the mill. The pump box spillage has been partially rectified by better operation and the relocation of overflow lines.

During October the mill treated 398,763 dry tonnes of ore which was 95.3 percent of the planned throughput. The final grind of 75.15 percent minus 200 mesh was 6.85 percent short of the target 82 percent.

Some lifter bars were changed in No. 3 ball mill. The slot feeder conveyors were all vulcanized. The feed end trunnion seal was changed on ball mill No. 4.

#### Flotation Circuits

The indicated grades were 60.4 percent Pb and 49.3 percent Zn with the respective recoveries at 68.25 percent and 75.22 percent. Several material handling problems were evident at the 14,000 tonne per day treatment rate. Sheaves were ordered to speed up pumps - these had been received at monthend and are being installed.

Some operational changes have been made in the flotation area. A senior flotation operator has been used to coordinate work on dayshift and to provide consistent follow up to the actions and reactions of the flotation operators on each shift.

As noted from these results both concentrate grades have to be improved. We were not able to run a soda ash circuit but had to go to lime to maintain adequate pH control.

Several problems with the on-stream x-ray analyser were resolved during the month, and after receipt of a new Pb detector, the unit will be back in perfect shape. All sample streams are functioning well at monthend. The overall mill tailings sample is now being brought on line. This will include all circuit spills, floor washings, compressor waters and mill tailings. This should help identify losses other than circuit loss, and allow faster reactions to correct the situation.

Reagent & Steel Consumption

<u>Commodity</u>	<u>Consumption</u>	<u>Month</u> <u>kg/tonne</u>	<u>Y.T.D.</u> <u>kg/tonne</u>
4" rods (steel)	96,390	0.2575	0.2466
3 1/2" rods(st)	80,040	0.2138	0.1364
1 1/2" balls	196,000	0.5235	0.3575
1" balls	310,250	0.8287	0.5420
Soda Ash	275,220	0.7351	1.3170
Lime	463,410	1.2378	1.4020
Copper Sulphate	126,323	0.3673	0.4196
Cyanide	40,400	0.1079	0.1181
Xanthate	62,375	0.1666	0.2006
MIBC	8,300	0.0222	0.0307
Dowfroth	3,470	0.0093	0.0220
Alcopol	6,000	0.0160	0.0168
Percol 351	75	0.0002	0.0006
Aerofloat (R242)	225	0.0006	0.0002

Dewatering & Drying

The thickeners worked well during October. On occasion there were some dirty overflows in the course of trying to establish the proper flocculant relationship with the thickener feed rate.

Since installing the thickener water sprays there have been no problems with the rakes and there is no froth build-up on the top of the solution with the spray system working.

No. 5 disc filter had to be repaired as the gear housing was cracked. This occurred when an attempt was made to reverse the drive to remove a jammed sector. Also several sectors were changed on both No. 5 and No. 4 filters. Testing of filter bags is currently underway to find a cheaper more effective filter media.

This area is still the operator entry level in the mill operating progression and as such requires more training than other areas.

Problems with the dryers are centered around the feed chutes, the bypass stack dampers and the plugging of the transition piece between the rotating shell and the combustion chamber. All of these areas require attention and some modification.

The fuel consumption of the heat generators and dryers is as follows:

	<u>Month</u>	<u>Year to Date</u>
Generator #1 coal	376.8 tonnes	446.8 tonnes
Generator #3 coal	45.1 tonnes	454.1 tonnes
Dryer #1 coal	169.3 tonnes	595.0 tonnes
Dryer #2 coal	206.7 tonnes	635.0 tonnes
Dryer #3 coal	208.8 tonnes	368.0 tonnes
Dryer #4 coal	232.4 tonnes	615.0 tonnes
Generator #2 oil	959.0 litres	18,230.0 litres
Dryer #5 oil	51,013.0 litres	232,737.0 litres
Total coal used	1,239.1 tonnes	3,113.9 tonnes
Total oil used	51,971.0 litres	250,967.0 litres

NOTE: These consumption figures are based since June start up.

### Heating Plant

The heating plant operated quite well during October. The stoker for No. 4 zinc dryer was rebuilt. The grates in No. 4 burner were also replaced.

All of the coal for 1986 has now been delivered. Further deliveries are not expected till April 1987. The present coal inventory as of monthend was 12,440 tonnes.

### Coal Crushing

There was minimum interruption in the coal supply this month with an operator on each shift. A net gain in clean up was noted in this area.

### Services

#### Water Supply

The well drilling by IWS has now produced in the order of 2,000 IGPM of fresh water which is 2/3 of our required volume. The drilling and well installation is continuing to develop the remaining 1,000 IGPM. Water recycle has been set up for the thickener-clarifier area. Power has been run for the new well pumps.

#### Fire Protection Systems

All systems are working well at monthend. Some modifications are being made as a result of the Factory Mutual Inspection in September.

#### Reagent Unloading & Mixing

All of the green containers have been emptied and returned. Too many problems have been experienced with the design of the lime containers. Many of the new containers have doors that are too large for the

unloading equipment. Also others have loose plastic inside that slides into the worm shafts and tangles up the apparatus. This also causes problems in the lime mixing system. The entire lime unloading system will be examined and changed in November.

R-242 and minerec were both tried as test reagents on the circuit with varied results. Both worked quite well but will require some fine tuning before further testing.

The reagent consumption is lower overall than last month however the soda ash was higher due to less oxide ore being treated.

#### Ventilation & Heating

Roof fans are being shut down to conserve heat while all heaters are now back in use.

#### Training

Training manuals for grinding and flotation have to be completed. Training in these areas is by example, on a one-to-one basis at this point. The other areas have formalized plans at this time. Labourers are trained by exercising close supervision.

### 5.4 Materials Control

#### Salvage Operations

Work on this activity was nearing completion by monthend. Pallet racking is to be erected at the south end of the warm storage building. This will be utilized to store the rubber ball and rod mill liners and rubber pump parts. Inside storage will result in less physical deterioration from sunlight. All documentation to list and value the goods returned will be finalized in early November prior to the physical count being conducted. All items in the outside storage area have been revamped and locations have been assigned.

Purchasing

Work progressed on training and testing of the BBJ purchasing system. Corrections of program errors and a rewrite to incorporate multiple currencies is required. A new copy of the purchasing program will be made available in November. The purchase order status report was reviewed and 563 old purchase orders were cancelled. This will eliminate the need to roll these orders over to the new system. The V-belt section of the warehouse was tendered during the month with an approximate 13 percent savings realized.

A proposal for a bulk propane facility was reviewed during the month to be tentatively scheduled for November.

Warehouse

Methods of establishing quantity and value for warehouse inventory was agreed to by Price Waterhouse during the month. As a result a count will be conducted in early November using pre-arranged controls and value determination methods.

The search continued for a replacement warehouse supervisor. During October, six offers were declined for this position. Advertizing will commence during November. Ongoing training and testing of the BBJ catalogue and inventory system continued. Two students from BCIT were assigned to work with the inventory analyst to assist in work required to be done prior to going live on the new system.

Statistics

Opening Inventory	\$8,363,171
Receipts	\$1,328,515
Issues	\$1,445,353
Adjustments	\$ 45,465
Closing Inventory	\$8,200,868

No. of Purchase Orders	668
------------------------	-----

## 5.6 Accounting

### Computer Systems

A BBJ system implementation schedule was developed, and has been reviewed by the implementation committee. Training on the BBJ system continued during the week of October 20 - 24.

Four programmers arrived on site to assist with the implementation and data entry of the BBJ system. There was also a BBJ representative and a Price Waterhouse consultant on site to document the BBJ system and the required procedures.

The chart of accounts, cost elements and plant ledger have been entered into the live BBJ system. Testing and familiarization of BBJ has been set up as a combined function using the training system, which has a similar but smaller structure than the live system.

Seven printers along with eleven new terminals (required for use of BBJ function keys) were received.

The current computer system continued to have problems with information being duplicated and dropped in a random manner. This has created problems with reporting and reconciliations.

### Financial Area

The Highline payroll system successfully produced the first set of payroll cheques on October 17.

Interdivision reconciliation continued, with the outstanding items presently being reviewed in Toronto by Price Waterhouse.

The accounts payable area was reorganized into three sections. This accommodates the new procedures under the BBJ system and provides the accounts payable clerks with control over the invoice from receipt to payment.

5.7 Human Resources

At monthend there were 475 people working on site, including contract personnel. The manpower breakdown is as follows:

	<u>SEP</u>	<u>OCT</u>		<u>SEP</u>	<u>OCT</u>
Curragh	50	54	Mine	227	245
Kilborn	4	1	Mill	139	155
Altus	359	397	Administration	43	51
Other	<u>19</u>	<u>23</u>	Contract	<u>23</u>	<u>24</u>
TOTAL	432	475	TOTAL	432	475

On October 18 and 19, a representative from High Line Data Systems Inc. conducted training sessions on the Human Resources information systems of the "Personality" package. The benefit administration, attendance reporting and occupational safety and health modules were identified as having the most potential for use within our department.

In the last week of October the apprenticeship training program was established at the mine. Those employees interested in the possibilities of gaining entry into an apprenticeship are currently making their interest known.

The United Steelworkers of America began their certification drive of Altus employees. The union representative was available in Faro for employees to sign union cards. On October 28, the union made application to the Canada Labour Relations Board for the certification of Altus employees.

Year-to-date there are 145 housing contracts signed, 29 houses rented and a total of 75, one and two bedroom apartments rented.

Safety

## Injury statistics October, 1986

Lost Time Accidents	8	Year-to-Date	36
Medical Aid	19		
First Aid	73		
Hours Worked	104,245	Year-to-Date	687,648
Frequency	76.74	Year-to-Date	52.35
Severity	326.15	Year-to-Date	231.22

The monthly safety tour conducted by the Safety and Health committee revealed a general improvement in the safety considerations at the mine site. However, employees not wearing eye protection is still a problem that must be rectified.

The mining inspector inspected all areas of the operation. He also met with representatives of the Safety and Health committee to explain the new Safety, Health and Mining regulations. He has indicated satisfaction with our efforts to-date.

CURRAGH RESOURCES

MONTHLY MANPOWER REPORT OCTOBER 1986

DEPT.	MONTH HIRES/TERM		YEAR TO DATE HIRES/TERM		ON ROLL BUDGET	ON ROLL ACTUAL	TURNOVER MONTH/YEARTODATE	
Mine Ops.	1	0	5	0	5	5	0	0
Mine Eng.	0	0	7	0	7	7	0	0
Mine Maint.	0	0	9	0	7	9	0	0
Mill Ops.	0	0	11	0	13	11	0	0
Mill Maint.	1	0	5	1	1	4	0	20%
Controller	0	0	6	0	5	6	0	0
Materials Control	0	0	3	0	4	3	0	0
Human Resources	0	0	4	1	3	3	0	25%
Adminis- tration	0	0	8	2	7	6	0	28%
TOTAL	3	0	58	4	55	54	0	1%

NEW HIRES:

<u>Name</u>	<u>Department</u>	<u>Position</u>	<u>Date of Hire</u>
John Bonenfant	Mill Maintenance	Maintenance Foreman	October 27, 1986
Richard Edwards	Mine Maintenance	Maintenance Foreman	October 20, 1986
Alvin Marusyk	Mine Operations	Operations Foreman	October 27, 1986

MONTHLY MANPOWER REPORT  
 October, 1986  
 Altus Construction

DEPARTMENT Y.T. RES.	HIRES MONTH/YEAR		TERMS MONTH/YEAR		OCT 31 ON ROLL	TURNOVER MONTH / YEAR TO DATE	
	Maintenance	11	153	2		76	77
Operations	13	216	9	116	100	9.0%	116.0%
Short Term	0	7	0	7	0	---	---
SUB-TOTAL	24	376	11	199	177	6.2%	112.4%
NON - RES.							
Maintenance	18	202	8	119	83	9.6%	143.4%
Operations	30	249	13	112	137	9.5%	81.8%
SUB-TOTAL	48	451	21	231	220	9.5%	105.0%
TOTAL ALL EMPLOYEES	72	827	32	430	397	8.1%	108.3%

Yukon Residents hired year to date:  
 Yukon Residents on roll October 31, 1986

376 = 45.5%  
 177 = 44.6%

## 5.8 Transportation

### Faro Loadout Facilities

Due to a shortage of mill personnel, the transfer of the scale house, which was scheduled for October 12, should now be completed by late November.

An experiment using fuel oil rather than glycol for spraying pots in order to prevent concentrate from freezing to the sides of the containers, was unsuccessful. The use of glycol will be continued.

The teflon lining which was installed in the loadout hoppers and chutes has helped eliminate the concentrate build-up considerably, however, some scraping in these areas is still required. Other prevention methods will be investigated in November.

The status of the container offloading system remains unchanged from September. It has been decided to procure the services of a consultant specializing in the offloading of bulk materials. This will be completed in November.

### Yukon Alaska Transport

The full complement of B-Trains (40 units) came on stream during October, however one was lost for a period due to an accident. This unit drove into a ditch on the Campbell Highway resulting in a loss of concentrate, minor damage to the trailer and extensive damage to the tractor and a container.

In October YAT transported 26,159 tonnes of zinc and 12,582 tonnes of lead for a total of 38,741 tonnes of concentrate. Based on 830 deliveries to Skagway, an average payload of 46.68 WMT/load was obtained. This B-Train loading rate is down slightly from September's rate (46.97 WMT/trip).

On October 20, the M.V. Oriental Castle was loaded with 18,730 WMT of zinc and 9,480 WMT of lead.

## 5.9 Engineering & Geology

### Engineering

Mine planning for the 1987 budget was completed during October in cooperation with the Faro Engineering Department.

The mine planning software package "MAXIPLAN" developed by K. Atherton to work with PC MINE files was completed during October including interface to the budgeting system. At monthend K. Atherton returned to Whitehorse to continue work on the Vangorda Plateau longterm plan.

Some assistance was provided to Bjorn Baarumaan of Boliden in examining the sensitivity of various changes to the phasing of the Faro pit.

### Geology

#### Faro Diamond Drill Program

Twelve diamond drill holes were completed in the AY Phase during October. The thirteenth was drilling at monthend. Two holes remain to be drilled after that one. Total footage drilled to date is 3,791.5' with an estimated 1,200' of drilling remaining.

Assays have been received for 2 holes. In general the assays are in accord with the model predictions but high grade zones are higher grade and low grade are lower grade. The bench by bench distribution of grade will be modified significantly in local areas as a result of the new drilling. The holes along the northeast margin of Phase A have encountered significant sections of barren pyrite mineralization separating 20-30' thick high grade zones. This is the expected distribution of grade for these holes and reinforces the importance of considering high dilution by low grade sulphides in that area.

Logging of the holes has been set back by cold weather and lack of an indoor logging facility at the mine. This has been solved temporarily by transporting the core to Grum camp and using the facility there. A minor injury to the core splitter has set back submission of samples to the assay lab but since the logging was behind schedule this has not affected the entire program significantly. At monthend not all samples submitted to the assay lab had been analysed. All logging and core splitting as well as drilling will be completed in November.

#### Other Faro Geology

Both Whitehorse geologists were at the Faro mine site during October. Some assistance was provided in pit mapping and ore control but the primary effort was devoted to diamond drilling and organization of geologic data.

As part of an effort to present data more effectively in three dimensions, pit outlines and phase limits were transferred to cross-sections. Several modifications were made to the HP-3000 section plotting capabilities and work started on a new program to plot the current pit outline on geologic sections using information stored in the Engineering Survey Point Database.

New drillhole information was entered to the HP-3000 Diamond Drillhole Database as it accumulated. Work also started in a program to reformat the Diamond Drillhole Database contents and convert to PC based files for import to PC-Mine.

Assay sections were made up for the JB zone and the pit limit plotted on them. The assays confirm that the feed grade from the remaining ore in JB is likely to be 7.0-7.2% Pb+Zn in accord with model predictions. During transfer of pit geology to section it became apparent that some diamond drill holes used to construct the model were not consistent with reality, probably because of survey control problems in years past. It is now clear that the major variance of the mine model from blastholes on the 3850 bench in JB was caused by

one of these errant holes. It is at least 50' too far southeast and made a fault-bounded block of massive ore appear to be about twice as extensive as it actually was resulting in a major estimation error. There is little that can be done about this sort of problem other than drill new holes as has been done in the AY Phase. This discovery resolves the last major question of the F1 model on the JB Phase.

The question of sulphides remaining in the northwest wall of the Faro pit has been raised several times. During October it became clear that any significant sulphides in that area have been mined long ago. There appears to be little potential for additional open pit ore in that area.

As a courtesy to the Whitehorse branch of the CIMM, a tour of the Faro mine and mill and the district geology was given to a group of 11 people on October 6.

#### Exploration

Discussions were held with Mr. Barry O'Neil of Whitehorse on several properties in the Keno/Mayo area of the Yukon. One of these properties may be worth further investigation next spring.

No work on coal or limestone was done during the month. It appears that the Yukon Government is not looking favourably upon possible quarry development at Eagles Nest Bluff because of tourism conflicts. Alternative sources have been suggested and they will be followed up this winter.

Budget proposals for exploration drilling on Vangorda Plateau and at Moose Lake in the Swim basin were prepared.

#### Land

All outstanding filing was completed in October. This includes renewal of two Vangorda mineral leases.

Joint venture partners in the PAS claims have been notified of our intention to drop the claims if and when they are transferred to us.

A letter stating Curragh's position with regard to a lead-zinc showing at Mt. Alcock in NE B.C. and requesting further information on the possible disposition of the land was sent to the B.C. Ministry of Mines.

The excluded assets question was postponed for another month. Cassels Brock is sending a letter to Dome reiterating those properties to be assigned to Curragh. Once there is agreement the properties can be transferred. The two outstanding properties Carmacks Coal and Cream Silver option, still appear not to have been finalized.

#### 5.10 Environmental

Curragh Whitehorse officials met with the Departments of Fisheries & Oceans, and Environment to review Curragh's proposal to build the North Fork Causeway (Vangorda Haul Road Stage I). It was agreed that the causeway could be constructed this winter and Curragh would monitor the impact on fish and, if reasonably possible, attempt to offset any negative impacts. A letter confirming this arrangement was received by Curragh on October 22.

A local environmental consultant has been hired to monitor the fisheries impact of the causeway. Study should be completed by late spring 1987.

The Water Board application to eliminate winter time 1000 gal. spill is scheduled to go to public hearing on December 2 if there are any interventions.

Curragh Faro and Whitehorse officials reviewed the final draft report on alternate abandonment plans during the month. The report will be finalized in November and submitted to the Water Board. The report will not contain a specific abandonment plan however it will propose

that a multi-year investigative program be conducted to ensure that the best overall plan is proposed.

Whitehorse and Faro staff are preparing an application for financial assistance from the Yukon Government for the construction of the North Fork causeway. The Vangorda haul road application should be completed and submitted the first week of November.

## OPERATING COST REPORT (\$Cdn.000's)

		JANUARY			FORECAST	FORECAST		
		BUDGET	COMMITTED	EXPENDED	TO	TOTAL TO	CURRENT	VARIANCE
		UPDATE	TO DATE	TO DATE	COMPLETE	DEC/1986	VARIANCE	TO DATE
<b>MINE</b>		-----						
210	Stripping & Ore Mining	3,893	3,867	3,867	800	4,667	345	774
240	Operations - Supplies	5,786	5,552	5,552	2,043	7,595	(168)	1,809
260	Maintenance - Labour	4,018	3,031	3,031	823	3,854	(409)	(164)
270	Maintenance - Supplies	6,260	5,133	5,133	1,393	6,526	13	266
280	Mine Staff	1,720	807	807	322	1,129	(40)	(591)
290	Fuels & Lubricants	4,951	3,947	3,947	592	4,539	141	(412)
Total Mine		26,628	22,337	22,337	5,973	28,310	(118)	1,682
<b>MILL</b>		-----						
310	Operations - Process	1,126	770	770	208	978	36	(148)
320	Operations - General	1,014	281	281	202	483	(23)	(531)
330	Operations - Supplies	8,966	4,277	4,277	2,462	6,739	(29)	(2,227)
340	Maintenance - Labour	2,385	2,264	2,264	648	2,912	(157)	527
350	Maintenance - Supplies	1,740	1,727	1,727	460	2,187	3	447
360	Mill Staff	1,290	539	539	210	749	(29)	(541)
370	Concentrate Loadout Contract	0	0	0	0	0	0	0
Total Mill		16,521	9,858	9,858	4,190	14,048	(199)	(2,473)
<b>SERVICES</b>		-----						
410	Power Supply	4,242	3,403	3,403	1,223	4,626	(7)	384
412	Inventory Clearing Account	0	0	0	0	0	0	0
416	Concentrate Loadout Contract	0	321	321	204	525	(76)	525
420	Fuel Supply	880	815	815	126	941	259	61
Total Services		5,122	4,539	4,539	1,553	6,092	176	970
<b>GENERAL &amp; ADMINISTRATION</b>		-----						
510	Toronto	2,510	3,614	3,614	575	4,189	149	1,679
520	Whitehorse	2,406	798	798	187	985	(85)	(1,421)
530	Faro	5,103	7,109	7,109	1,224	8,333	260	3,230
550	Town & Housing Expense	222	814	814	20	834	(148)	612
Total G & A		10,241	12,335	12,335	2,006	14,341	176	4,100

## OPERATING COST REPORT (\$Cdn.000's)

=====		JANUARY			FORECAST	FORECAST		
		BUDGET	COMMITTED	EXPENDED	TO	TOTAL TO	CURRENT	VARIANCE
		UPDATE	TO DATE	TO DATE	COMPLETE	DEC/1986	VARIANCE	TO DATE
-----		-----						
ROAD TRANSPORT		-----						
610	Concentrate	10,767	7,540	7,540	3,821	11,361	104	594
620	Backhaul	180	1,293	1,293	325	1,618	106	1,438
630	Miscellaneous	253	128	128	96	224	(6)	(29)
-----		-----						
Total Road Transport		11,200	8,961	8,961	4,242	13,203	204	2,003
PORT SITE		-----						
710	Concentrate Cost	2,280	887	887	800	1,687	(375)	(593)
720	Backhaul Cost	90	110	110	297	407	(90)	317
-----		-----						
Total Port Site		2,370	997	997	1,097	2,094	(465)	(276)
OCEAN TRANSPORT		-----						
810	Concentrate	5,175	3,038	3,038	2,159	5,197	329	22
820	Backhaul	428	467	467	192	659	(103)	231
-----		-----						
Total Ocean Transport		5,603	3,505	3,505	2,351	5,856	226	253
MARKETING & FINANCIAL		-----						
910	Marketing Expense	765	1,026	1,026	628	1,654	0	889
920	Smelter Charges - Zinc	0	0	0	0	0	0	0
930	Revenues - Zinc	0	0	0	0	0	0	0
940	Smelter Charges - Lead	0	0	0	0	0	0	0
950	Revenues - Lead	0	0	0	0	0	0	0
960	Financial Expense	3,219	3,890	3,890	0	3,890	0	671
980	Capital Transactions	0	0	0	0	0	0	0
-----		-----						
Total Marketing & Financial		3,984	4,916	4,916	628	5,544	0	1,560
-----		-----						
TOTAL OPERATING COSTS		81,669	67,448	67,448	22,040	89,488	0	7,819
-----		-----						

BUDGET FORECAST RECONCILIATION  
MINE & MILL OPERATIONS - DETAILS

(\$000'S)

	<u>AMOUNT</u>
Current Forecast to December 31, 1986.	89,488
September Progress Report forecast of Mine and Mill Costs to December 31, 1986.	89,488
Variance	<hr/> 0

Variance Analysis

General

The net cost variance during October to the operating accounts, from mining and milling through to concentrate transport and shipment, was zero. The main components of the internal variations are listed as follows:

1. Mine and Mill Operations (317)

The net change to the mine operating and maintenance labour was a decrease of \$64,000. A savings in mine operating supplies of \$168,000 (mainly explosives) was offset by continued pre-winter purchases of fuels and lubricants (+ \$141,000) for a net savings of \$27,000. Cost variances to the mill operating accounts (primarily maintenance labour) resulted in a forecast underrun of \$199,000. Other mine and mill operating account variances for the month of October resulted in a net savings of \$27,000.

2. Services

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A more accurate reflection of the timing of the payments for coal delivery, has resulted in \$259,000 being moved from January 1987 to December 1986. This increase has been partially offset by other savings, particularly in the to-date cost of the concentrate loadout contract.

3. General & Administration

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Although there were many offsetting variances for the month of October, costs being incurred in both Faro and Toronto for accounting assistance and personnel recruitment (+ \$231,000) were by far the most significant contributors. Forecast savings in the Faro Town and Housing account for recovery of employee housing loans and reallocation of commercial and recreational building payments, reduced the impact of the aforementioned cost increases.

4. Concentrate and Backhaul Transport

(35)

The net change to the concentrate and backhaul transport accounts (600, 700 and 800) was a forecast savings of \$35,000. This has resulted primarily from shortfalls in production and shipments for the month of October.

TOTAL OPERATING COSTS

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Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
200	MINE							
210	Waste Stripping & Ore Mining							
211 001	Drilling	293	293	27	27	347	327	20
212 001	Blasting	214	214	25	26	265	280	(15)
213 001	Loading	651	651	54	55	760	682	78
214 001	Hauling	1,493	1,493	184	190	1,867	1,743	124
215 001	Dump Maintenance	246	246	26	27	299	262	37
216 001	Road Maintenance	339	339	26	27	392	354	38
217 001	Stockpile Maintenance	4	4	13	13	30	39	(9)
218 001	General Service Labour	627	627	39	41	707	635	72
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TOTAL ACCT 210 - MINE OPERATIONS		3,867	3,867	394	406	4,667	4,322	345
240	Mine Operating Supplies							
241 001	Drill Bits & Steel	414	414	73	68	555	563	(8)
242 001	Explosives	3,048	3,048	442	430	3,920	4,086	(166)
243 001	Tire Contract	865	865	155	155	1,175	1,181	(6)
244 001	Wear Parts	592	592	25	26	643	681	(38)
245 001	Electric Service Supplies	130	130	5	5	140	144	(4)
246 001	Training Supplies	6	6	1	1	8	9	(1)
247 001	Engineering Supplies	61	61	8	8	77	65	12
248 001	Miscellaneous	319	319	22	21	362	319	43
002	Hydraulic Shovel - Lease	117	117	199	199	515	515	0
003	170T Trucks (3) - Lease	0	0			0	0	0
004	Diamond Drill - Lease	0	0	100	100	200	200	0
005	Spare	0	0			0	0	0
006	Spare	0	0			0	0	0
=====								
TOTAL ACCT 240 - MINE OPERATING SUPPLIES		5,552	5,552	1,030	1,013	7,595	7,763	(168)
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Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
260	Mine Maintenance Labour							
261 001	Maintenance Labour - General	2,889	2,889	379	389	3,657	4,044	(387)
002		0	0			0	0	0
003	Maintenance Labour - Drills	0	0			0	0	0
004	Maintenance Labour - Trucks	0	0			0	0	0
005	Maintenance Labour - Shovels	0	0			0	0	0
006	Maintenance Labour - Dozers	0	0			0	0	0
007	Maintenance Labour - Graders	0	0			0	0	0
008	Maintenance Labour - Loaders	0	0			0	0	0
009	Pumps & Piping	0	0			0	0	0
010	Electrical Distribution	0	0			0	0	0
Total for Account 261		2,889	2,889	379	389	3,657	4,044	(387)
262 001	Yards & Service - Labour	142	142	27	28	197	219	(22)
TOTAL ACCT 260 - MINE MAINTENANCE - GENERAL		3,031	3,031	406	417	3,854	4,263	(409)
270	Mine Maintenance Supplies							
270 001	Maintenance Supplies - General	4,963	4,963	666	659	6,288	6,275	13
002	Dozer Lease Contract	170	170	34	34	238	238	0
003	Maintenance Supplies - Drills	0	0			0	0	0
004	Maintenance Supplies - Trucks	0	0			0	0	0
005	Maintenance Supplies - Shovels	0	0			0	0	0
006	Maintenance Supplies - Dozers	0	0			0	0	0
007	Maintenance Supplies - Graders	0	0			0	0	0
008	Maintenance Supplies - Loaders	0	0			0	0	0
009	Pumps & Piping	0	0			0	0	0
010	Electrical Distribution	0	0			0	0	0
099	Inventory Credit	0	0			0	0	0
TOTAL ACCT 270 - MINE MAINTENANCE SUPPLIES		5,133	5,133	700	693	6,526	6,513	13
280	Mine Staff							
281 001	Spare	0	0	0	0	0	0	0
282 001	Operations Staff	238	238	51	51	340	364	(24)
283 001	Maintenance/Service Staff	242	242	58	58	358	382	(24)
284	Engineering							
001	Engineering/Geology Staff	157	157	25	25	207	200	7
002	Engineering Hourly	156	156	23	23	202	193	9

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
	Total for Account 284	313	313	48	48	409	393	16
285 001	Yard & Services Staff	14	14	4	4	22	30	(8)
=====								
	TOTAL ACCT 280 - MINE STAFF	807	807	161	161	1,129	1,169	(40)
290	Fuels & Lubricants							
291 001	Diesel (incl. Heating Oil )	2,934	2,934	191	191	3,316	3,273	43
292 001	Gasoline	244	244	42	54	340	331	9
293 001	Lubricants	769	769	57	57	883	794	89
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	TOTAL for ACCOUNT 290 - FUELS & LUBRICANTS	3,947	3,947	290	302	4,539	4,398	141
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	**TOTAL ACCT 200 - MINE**	22,337	22,337	2,981	2,992	28,310	28,428	(118)
300	MILL							
310	Mill Operating Labour							
311 001	Crushing & Screening	191	191	24	25	240	262	(22)
312 001	Grinding	147	147	13	13	173	159	14
313 001	Flotation	178	178	26	27	231	211	20
314 001	Reagent Handling	51	51	8	8	67	58	9
315 001	Dewatering & Drying	175	175	28	28	231	220	11
316 001	Loadout	8	8	0	0	8	9	(1)
317 001	Tailings	20	20	4	4	28	23	5
318 001	Mill General	0	0	0	0	0	0	0
=====								
	TOTAL ACCT 310 - MILL OPERATIONS - PROCESS	770	770	103	105	978	942	36
320	Mill Operations - General							
321 001	General Service Labour	52	52	56	58	166	217	(51)
322 001	Coal Handling	129	129	3	3	135	129	6
323 001	Office & Technical	100	100	40	42	182	160	22

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
TOTAL ACCT 320 - MILL OPERATIONS -GENERAL		281	281	99	103	483	506	(23)
330	Mill Operating Supplies							
331 001	Crushing & Screening	24	24	25	26	75	97	(22)
002	Screening Oxide Ore Stockpile	450	450	120	120	690	490	200
Total for Account 331		474	474	145	146	765	587	178
332 001	Grinding	1,153	1,153	466	481	2,100	2,079	21
333 001	Flotation & Reagents	2,422	2,422	536	486	3,444	3,628	(184)
334 001	Dewatering & Drying	27	27	41	43	111	152	(41)
335 001	Loadout (incl. in acct. 416.001)	0	0	0	0	0	0	0
336 001	Tailings	7	7	2	2	11	10	1
337 001	Miscellaneous	194	194	57	57	308	312	(4)
TOTAL ACCT 330 - MILL OPERATING SUPPLIES		4,277	4,277	1,247	1,215	6,739	6,768	(29)
340	Mill Maintenance - Labour							
341 001	Maintenance Labour	2,021	2,021	285	291	2,597	2,745	(148)
342 001	Heating Plant Labour	243	243	21	21	285	294	(9)
002	Boiler Fire Box Rebuild	0	0	30		30	30	0
Total for Account 342		243	243	51	21	315	324	(9)
TOTAL ACCT 340 - MILL MAINTENANCE -LABOUR		2,264	2,264	336	312	2,912	3,069	(157)
350	Mill Maintenance Supplies	1,727	1,727	230	230	2,187	2,184	3
351 001	Crushing & Screening	0	0	0	0	0	0	0
352 001	Grinding	0	0	0	0	0	0	0
353 001	Flotation & Reagents	0	0	0	0	0	0	0
354 001	Dewatering & Drying	0	0	0	0	0	0	0
355 001	Loadout	0	0	0	0	0	0	0

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec-1986	Previous Dec-86 Total	Variance Sep. to Oct./86
356 001	Tailings	0	0	0	0	0	0	0
357 001	Miscellaneous	0	0	0	0	0	0	0
TOTAL ACCT 350 MILL MAINTENANCE SUPPLIES		1,727	1,727	230	230	2,187	2,184	3
360	Mill Staff							
361 001	Spare	0	0	0	0	0	0	0
362 001	Operations Staff	162	162	36	36	234	235	(1)
363 001	Maintenance Staff	108	108	41	41	190	213	(23)
364 001	Engineering & Metallurgy	269	269	28	28	325	330	(5)
TOTAL ACCT 360 - MILL STAFF		539	539	105	105	749	778	(29)
370	L/O CONTRACT LABOUR in acct. 416.001	0	0	0	0	0	0	0
**TOTAL ACCT 300 - MILL**		9,858	9,858	2,120	2,070	14,048	14,247	(199)
400	SERVICES							
410	Power Supply							
411 001	NCPC Power Supply	3,403	3,403	603	620	4,626	4,633	(7)
TOTAL ACCT 410 - POWER SUPPLY		3,403	3,403	603	620	4,626	4,633	(7)
412 001	Inventory Clearing Account	0	0	0	0	0	0	0
416 001	Concentrate Loadout Contract	321	321	102	102	525	601	(76)
420	Fuel Supply - Heating							
421 001	Coal	815	815	126	0	941	682	259
422 001	Fuel Oil (incl. in 291.001)	0	0	0	0	0	0	0
TOTAL ACCT 420 - FUEL SUPPLY		815	815	126	0	941	682	259
**TOTAL ACCT 400 - SERVICES**		4,539	4,539	831	722	6,092	5,916	176

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct. /86
500	GENERAL & ADMINISTRATION							
510	G & A Toronto							
511	Human Resources							
001	Salaries	811	811	95	95	1,001	1,009	(8)
002	Employee Relations & Other	2	2			2	2	0
003	Payroll Benefits	55	55	6	6	67	66	1
004	Part-Time Employment	12	12			12	12	0
	Total for Account 511	880	880	101	101	1,082	1,089	(7)
512	Office Expense							
001	Office Supplies & Stationery	148	148	3	3	154	148	6
002	Reproduction & Xerox	1	1	2	2	5	8	(3)
003	Computer Service	94	94	7	6	107	110	(3)
004	Other Equipment Rental	14	14	1	1	16	15	1
005	Moving Expenses	22	22		5	27	35	(8)
006	Office Rent, Utilities	63	63	10	10	83	84	(1)
007	Renovations & Repairs	213	213	1	1	215	202	13
008	Other	11	11			11	0	11
	Total for Account 512	566	566	24	28	618	602	16
513	Communications							
001	Postage, Telex, Courier	21	21	3	3	27	26	1
002	Telephone & Telecopier	56	56	10	10	76	81	(5)
	Total for Account 513	77	77	13	13	103	107	(4)
514	Travel & Business Development							
001	Travel & Entertainment	349	349	20	20	389	368	21
002	Corporate Promotion, P/R & Donations	2	2		1	3	4	(1)
003	Dues, Subscriptions & Trade Assoc's	16	16	2	2	20	20	0
004	Lease Vehicles	18	18	2	2	22	21	1
005	Board Meeting Expenses	18	18		2	20	12	8
	Total for Account 514	403	403	24	27	454	425	29
515	Professional Services							
001	Management Services & Contracts	0	0			0	0	0
002	Legal Services	337	337	15	15	367	382	(15)
003	Accounting & Auditing Services	236	236		40	276	172	104
004	Engineering Services Purchased	16	16			16	16	0
005	Environmental Services & Supplies	0	0			0	0	0
006	Consultants & Recruiters	435	435	20	20	475	455	20
	Total for Account 515	1,024	1,024	35	75	1,134	1,025	109
516	Insurance & Taxes							
001	Insurance	658	658	42	92	792	787	5

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
002	Taxes	0	0			0	0	0
	Total for Account 516	658	658	42	92	792	787	5
517	Other Toronto Expense							
001	Gas, Repairs, etc.	4	4			4	3	1
002	Auto Insurance	2	2			2	2	0
	Total for Account 517	6	6	0	0	6	5	1
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TOTAL ACCT 510 - G & A TORONTO		3,614	3,614	239	336	4,189	4,040	149
520	G & A Whitehorse							
521	Human Resources					0	0	0
001	Salaries: Eng'ing & Transportation	272	272	47	47	366	372	(6)
002	Salaries: Other	0	0			0	4	(4)
003	Payroll Benefits	10	10	2	2	14	16	(2)
004	Part-Time Employment	0	0			0	6	(6)
	Total for Account 521	282	282	49	49	380	398	(18)
522	Office Expense							
001	Office Supplies & Stationery	7	7	1	1	9	11	(2)
002	Reproduction & Xerox	6	6	1	1	8	6	2
003	Computer Service	99	99	5	5	109	117	(8)
004	Other Equipment Rental	1	1			1	0	1
005	Moving & Relocation Expenses	56	56			56	63	(7)
006	Office Rent, Utilities	63	63	5	5	73	65	8
007	Renovations & Repairs	0	0			0	0	0
	Total for Account 522	232	232	12	12	256	262	(6)
523	Communications							
001	Postage, Telex, Courier	6	6	1	1	8	9	(1)
002	Telephone & Telecopier	30	30	7	7	44	45	(1)
	Total for Account 523	36	36	8	8	52	54	(2)
524	Travel & Business Development							
001	Travel & Entertainment	37	37	6	6	49	50	(1)
002	Corporate Promotion, P/R & Donations	9	9	1	1	11	7	4
003	Dues, Subscriptions & Trade Assoc's	1	1			1	3	(2)
	Total for Account 524	47	47	7	7	61	60	1
525	Professional Services							
001	Management Services & Contracts	10	10	1	1	12	13	(1)
002	Legal Services	28	28	1	1	30	17	13
003	Accounting & Auditing Services	0	0			0	0	0

Account Number	Description	Commit. / Expend.		Total		Previous Variance		
		To-Date	To-Date	Nov-86	Dec-86	to Dec-86	Dec-86 Sep. to Oct./86	
004	Engineering Services Purchased	31	31			31	26	5
005	Recruiting Costs	8	8			8	8	0
006	Bank Consultant	14	14	1	13	28	30	(2)
007	)	0	0			0	0	0
008	) Spare	0	0			0	0	0
009	)	0	0			0	0	0
010	Environmental Services - Dome	0	0	1	1	2	8	(6)
011	Environmental Studies	64	64	4	4	72	81	(9)
012	Environmental Fund	0	0			0	55	(55)
013	Environmental Presentations	0	0	1	1	2	3	(1)
Total for Account 525		155	155	9	21	185	241	(56)
526	Insurance & Taxes							
001	Insurance	6	6			6	6	0
002	Taxes	0	0			0	0	0
003	Land Holdings Licences & Fees Paid	34	34			34	34	0
004	Royalties & Land Holdings Payments	0	0			0	0	0
Total for Account 526		40	40	0	0	40	40	0
527	Other Whitehorse Expense							
001	Vehicles	2	2	2	3	7	15	(8)
002	Other	4	4			4	0	4
Total for Account 527		6	6	2	3	11	15	(4)
TOTAL ACCT 520 - G & A WHITEHORSE		798	798	87	100	985	1,070	(85)
530	G & A Faro							
531	Human Resources							
001	Salaries: Staff	935	935	91	91	1,117	661	456
002	Salaries: Hourly (in 538.003 )	0	0	0	0	0	0	0
003	Payroll Benefits	83	83	14	14	111	100	11
004	Altus	127	127	75	75	277	710	(433)
Total for Account 531		1,145	1,145	180	180	1,505	1,471	34
532	Office Expense							
001	Office Supplies & Stationary	18	18	2	2	22	19	3
002	Reproduction & Xerox	27	27	3	3	33	28	5
003	Computer Service	234	234	75	75	384	439	(55)
004	Other Equipment Rental	17	17	3	3	23	26	(3)
005	Moving & Relocation Expenses	262	262	70	10	342	338	4
006	Office Rent, Utilities	1	1			1	1	0
007	Renovations & Repairs	47	47	2	2	51	39	12
Total for Account 532		606	606	155	95	856	890	(34)

Account Number	Description	Commit. / Expend.		Total		Previous		Variance
		To-Date	To-Date	to Dec-86	to Dec-86	Dec-86	Sep. to Oct./86	
533	Communications							
001	Postage, Telex, Courier	18	18	2	2	22	22	0
002	Telephone & Telecopier	210	210	39	25	274	278	(4)
	Total for Account 533	228	228	41	27	296	300	(4)
534	Travel & Business Development							
001	Travel & Entertainment	84	84	4	4	92	87	5
002	Corporate Promotion, P/R & Donations	11	11	3	4	18	20	(2)
003	Dues, Subscriptions & Trade Assoc's	0	0			0	0	0
	Total for Account 534	95	95	7	8	110	107	3
535	Professional Services							
001	Management Services & Contracts	24	24			24	14	10
002	Legal Services	7	7			7	1	6
003	Accounting & Auditing Services	19	19			19	22	(3)
004	Engineering Services Purchased	35	35			35	3	32
005	Environmental Services & Supplies	0	0			0	0	0
006	Consultants & Recruiters	362	362	20	10	392	265	127
	Total for Account 535	447	447	20	10	477	305	172
536	Insurance & Taxes							
001	Insurance	0	0			0	10	(10)
002	Taxes	96	96	12	12	120	126	(6)
003	Land Holdings Licences & Fees Paid	10	10	4	4	18	14	4
004	Royalties & Land Holdings Payments	0	0			0	0	0
	Total for Account 536	106	106	16	16	138	150	(12)
537	Consultants							
001	Kilborn Pre-Closing Costs	0	0			0	0	0
002	Water Licence	7	7			7	60	(53)
003	Tailings Studies	27	27			27	0	27
004	Accounting System Design	35	35			35	0	35
005	Geotechnical - Pit	0	0			0	30	(30)
006	Mine Modelling	35	35			35	100	(65)
007	Tailings - Geochemical	0	0			0	65	(65)
008	( Spare	0	0			0	0	0
009	(	0	0			0	0	0
010	Kilborn Toronto Fees - General	303	303	29	26	358	387	(29)
011	Kilborn Toronto Fees - Cap. Projects	96	96			96	117	(21)
012	Kilborn Toronto Expenses	99	99	10	10	119	116	3
013	Kilborn Vancouver Fees - General	485	485	15	7	507	455	52
014	Kilborn Vancouver - Cap. Projects	277	277			277	277	0
015	Kilborn Vancouver Expenses	120	120	5	3	128	113	15
016	Kilborn Site Fees - General	306	306			306	306	0
017	Kilborn Site Fees - Mine	540	540			540	540	0
018	Kilborn Site Fees - Mill	522	522	23	13	558	473	85
019	Kilborn Site Fee - Whitehorse	62	62			62	62	0
020	Kilborn Site Expenses	171	171	8	6	185	170	15

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
Total for Account 537		3,085	3,085	90	65	3,240	3,271	(31)
538	Warehouse & Maintenance							
001	Road Maintenance	134	134	15	15	164	157	7
002	Security Contract & 1st Aid	286	286	33	33	352	329	23
003	Warehouse Labour & Supplies	300	300	20	20	340	307	33
004	Janitorial Services	192	192	22	22	236	203	33
005	Light Vehicle Contract (see 539.003)	0	0	0	0	0	0	0
006	Crane Rental	0	0	5	5	10	15	(5)
Total for Account 538		912	912	95	95	1,102	1,011	91
539	Other Faro Expense							
001	Vehicles	95	95	2	2	99	68	31
002	Other	0	0			0	11	(11)
003	Duty & Brokerage Fees	30	30			30	4	26
004	Light Vehicle Contract	360	360	60	60	480	485	(5)
Total for Account 539		485	485	62	62	609	568	41
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TOTAL ACCT 530 - G & A FARD		7,109	7,109	666	558	8,333	8,073	260
550	Faro Town & Housing Expense							
551	Town Costs							
001	Municipal & School Taxes	26	26	3	3	32	29	3
002	Property Management Fees	0	0			0	0	0
003	Other Town Costs	81	81	2	2	85	22	63
Total for Account 551		107	107	5	5	117	51	66
552	Housing Expenses							
001	Mortgage Expense	404	404			404	404	0
002	Insurance on Housing Units	0	0			0	0	0
003	Utilities	13	13	4	4	21	20	1
004	Repairs	16	16	1	1	18	18	0
005	Receipts from Housing	7	7			7	10	(3)
006	Other Housing Expenses	105	105			105	133	(28)
007	FREL Deficiency Payments	32	32	30		62	100	(38)
008	Employee Housing Loans	130	130	(15)	(15)	100	150	(50)
009	Mortgage - Mgt. & Guest House	0	0			0	20	(20)
010	Payments - Arena/Recreation Hall	0	0			0	56	(56)
011	Payments - Commercial Shops	0	0			0	20	(20)
Total for Account 552		707	707	20	(10)	717	931	(214)
=====								
TOTAL ACCT 550 - TOWN & HOUSING EXP.		814	814	25	(5)	834	982	(148)

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
**TOTAL ACCT 500 - GENERAL & ADMIN.**		12,335	12,335	1,017	989	14,341	14,165	176
600	ROAD TRANSPORTATION							
610	Concentrate Transport							
611 001	Transport Studies	401	401			401	401	0
002	Technical Assistance - Boliden	53	53	17	13	83	83	0
Total for Account 611		454	454	17	13	484	484	0
612 001	Trailers & Containers	688	688	53	53	794	795	(1)
002	Pot Modifications	71	71	2	84	157	223	(66)
Total for Account 612		759	759	55	137	951	1,018	(67)
613	Whitehorse Truck Terminal							
001	Building Lease Costs	21	21	13	13	47	50	(3)
002	Tools, Furniture & Vehicles	0	0			0	0	0
003	Taxes & Land Lease	2	2			2	2	0
Total for Account 613		23	23	13	13	49	52	(3)
614 001	Concentrate Haulage Cost	5,277	5,277	1,823	1,750	8,850	8,653	197
002	Start-up Cost	150	150			150	150	0
003	Road Investment	696	696			696	696	0
004	Interim Trucking Cost	181	181			181	204	(23)
Total for Account 614		6,304	6,304	1,823	1,750	9,877	9,703	174
615 001	Trailer Break Station	0	0	0	0	0	0	0
TOTAL ACCT 610 - CONCENTRATE TRANS.		7,540	7,540	1,908	1,913	11,361	11,257	104
620 001	Backhaul Transport(9.00/tb)	1,099	1,099	19	19	1,137	936	201
002	Backhaul Unloading - Plantsite	194	194	40	40	274	274	0
003	Bulk Commodities, Truck To Faro	0	0	58	59	117	167	(50)
004	General Freight, Truck To Faro	0	0	45	45	90	135	(45)
TOTAL ACCT 620 - BACKHAUL COSTS		1,293	1,293	162	163	1,618	1,512	106
630	Miscellaneous Transport Costs							
631 001	Road Usage Fee(1.00/tc)	128	128	49	47	224	230	(6)
002	U.S. Customs,Alaska (see 720.004)	0	0	0	0	0	0	0
TOTAL ACCT 630 - MISC TRANS. COSTS		128	128	49	47	224	230	(6)

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
**TOTAL ACCT 600 - ROAD TRANS.**		8,961	8,961	2,119	2,123	13,203	12,999	204
700	PORT SITE							
710 001	Terminal Charges - Conc. (9.00/tc)	852	852	409	391	1,652	2,027	(375)
002	Terminal Start-up	35	35			35	35	0
Total for Account 710		887	887	409	391	1,687	2,062	(375)
720 001	Backhaul Container Lease	11	11	6	6	23	29	(6)
002	Freight Consolidation at Seattle	0	0	36	37	73	110	(37)
003	Port Brokerage Charges B/H Only	21	21	3	3	27	15	12
004	U.S. Customs - Alaska	78	78	11	10	99	64	35
005	U.S. Customs Bond Costs - Port	0	0			0	1	(1)
006	Rail Costs To Seattle	0	0	92	93	185	278	(93)
007	Truck Costs To Seattle	0	0			0	0	0
008	Shipping Costs, U.K. To Seattle	0	0			0	0	0
009	Shipping Costs, Japan To Seattle	0	0			0	0	0
Total for Account 720		110	110	148	149	407	497	(90)
**TOTAL ACCT 700 - PORT SITE**		997	997	557	540	2,094	2,559	(465)
800	OCEAN TRANSPORT							
810 001	Conc. Shipping (incl.samp. & disch.)	3,025	3,025	816	1,343	5,184	4,858	326
002	Marine Insurance	13	13			13	10	3
Total for Account 810		3,038	3,038	816	1,343	5,197	4,868	329
820 001	Backhaul Barging, Seattle To Skagway	467	467	96	96	659	762	(103)
**TOTAL ACCT 800 - OCEAN TRANSPORT**		3,505	3,505	912	1,439	5,856	5,630	226
900	MARKETING & FINANCIAL							
910	Marketing Expense							
911 001	Sales Expense	761	761	239	355	1,355	1,354	1
002	Sampling - Skagway					0	0	0
003	Sampling & Discharge Costs					0	0	0
Total for Account 911		761	761	239	355	1,355	1,354	1
912	European Office							
001	Fees	0	0			0	0	0
002	Expenses	265	265	17	17	299	300	(1)

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
Total for Account 912		265	265	17	17	299	300	(1)
913	Commissions							
001	Boliden	0	0			0	0	0
002	Mitsui	0	0			0	0	0
Total for Account 913		0	0	0	0	0	0	0
914	Sales & Promotion Expense							
001	Conventions, Meetings & Conferences	0	0			0	0	0
002	Advertising & Sales Promotion	0	0			0	0	0
003	Entertainment	0	0			0	0	0
004	Other	0	0			0	0	0
Total for Account 914		0	0	0	0	0	0	0
TOTAL ACCT 910 - MARKETING EXPENSE		1,026	1,026	256	372	1,654	1,654	0
920 001	Smelter Charges - Zinc	0	0			0	0	0
930 001	Revenues - Zinc	0	0			0	0	0
940 001	Smelter Charges - Lead	0	0			0	0	0
950 001	Revenues - Lead	0	0			0	0	0
960	Financial Expense	0	0			0	0	0
961	Interest Expense							
001	Banks	0	0			0	0	0
002	Dome/CAMC	0	0			0	0	0
003	Government	0	0			0	0	0
Total for Account 961		0	0	0	0	0	0	0
962	Lenders Fees							
001	Engineering	0	0			0	0	0
002	Legal	0	0			0	0	0
003	Other	0	0			0	0	0
Total for Account 962		0	0	0	0	0	0	0
963 001	Commitment & Standby Charges	0	0			0	0	0
964 001	Banking Charges	0	0			0	0	0
965 001	Income Tax	0	0			0	0	0
966 001	Interest Income	0	0			0	0	0

Account Number	Description	Commit. To-Date	Expend. To-Date	Nov-86	Dec-86	Total to Dec. 1986	Previous Dec-86 Total	Variance Sep. to Oct./86
967 001	Other Financial Expense	3,890	3,890			3,890	3,890	0
TOTAL ACCT 960 - FINANCIAL EXPENSE		3,890	3,890	0	0	3,890	3,890	0
980	Capital Transactions							
981 001	Shareholder Contributions	0	0			0	0	0
982	Drawdown & Repayments							
001	Credit Facilities - Banks	0	0			0	0	0
002	Credit Facilities - Dome/CAMC	0	0			0	0	0
003	Credit Facilities - Government	0	0			0	0	0
004	Credit Facilities - Other	0	0			0	0	0
Total for Account 982		0	0	0	0	0	0	0
983 001	Dividends Paid	0	0			0	0	0
984 001	Royalties Paid	0	0			0	0	0
985 001	Other Capital Transactions	0	0			0	0	0
TOTAL ACCT 980 - CAPITAL TRANSACTIONS:		0	0	0	0	0	0	0
**TOTAL ACCT 900 - MARKET.& FINANC.**		4,916	4,916	256	372	5,544	5,544	0
*****TOTAL OPERATING COSTS*****		67,448	67,448	10,793	11,247	89,488	89,488	0