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CURRAGH RESOURCES

**LONG RANGE PLAN FOR
FARO, VANGORDA AND GRUM DEPOSITS
FARO, YUKON**

APRIL, 1987

VOLUME I

SUMMARY

Prepared by

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CURRAGH RESOURCES
FARO, VANGORDA AND GRUM DEPOSITS

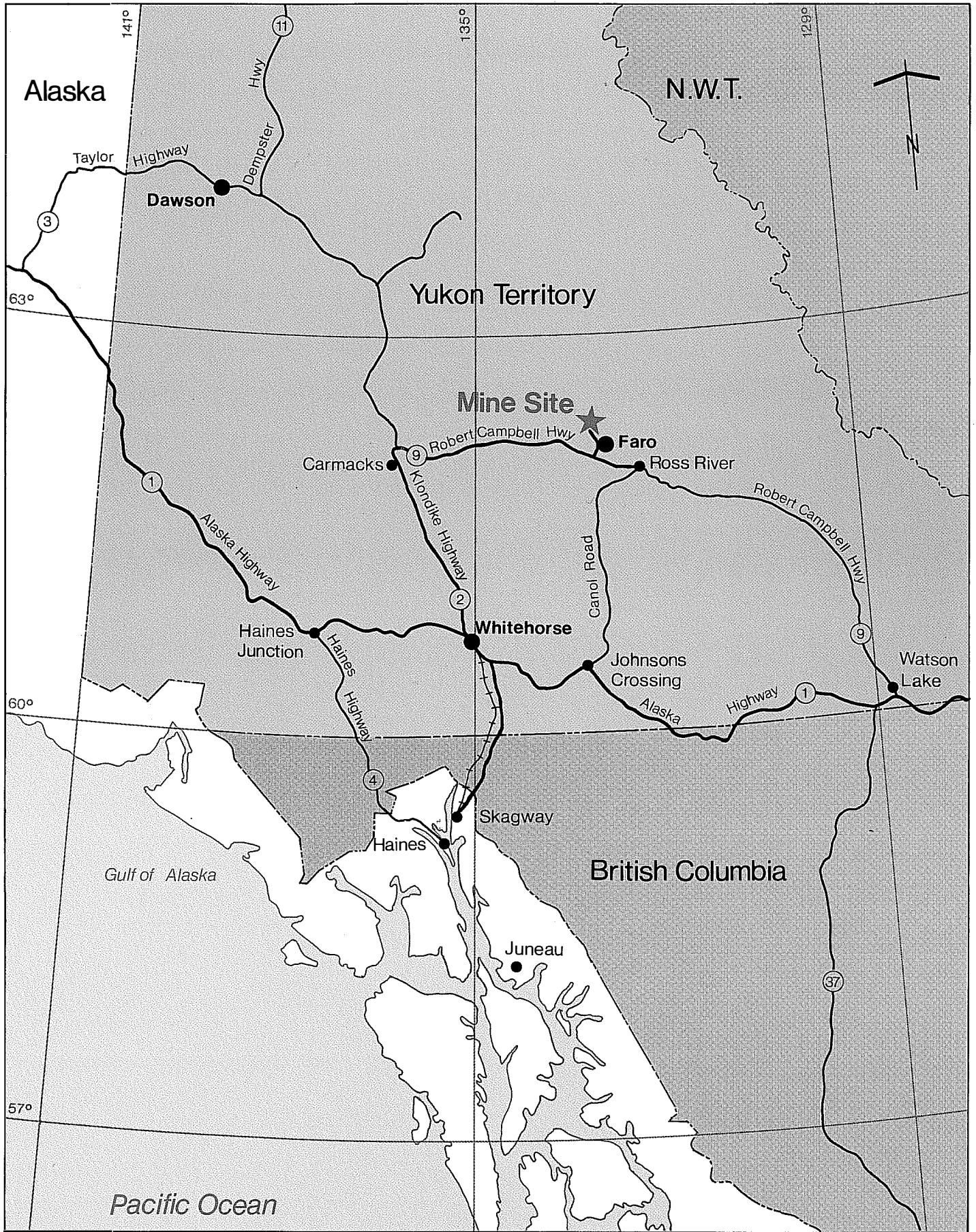
VOLUME I

SUMMARY

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1.0 INTRODUCTION



**Curragh Resources
Project Location Map**

1.0 INTRODUCTION

Curragh Resources presently operates a zinc-lead-silver mine and mill at Faro, Yukon at a rate of 11,000 tonnes per day to produce approximately 300,000 tonnes per year of zinc concentrate and 200,000 tonnes per year of lead concentrate. These products are shipped via road to the port of Skagway, Alaska where approximately fifty percent of the tonnage is loaded for shipment to Japan and Korea, and the remainder for various European destinations.

The mill is presently supplied with ore from the Faro open pit mine. The mine and mill operated from 1969 to 1982. From 1982 to 1984 a waste stripping program was carried out on the Faro pit. Mining and milling were resumed in 1986 and the Faro pit is capable of sustaining the current rate of mill feed for approximately five years.

In order to sustain the mill operation, Curragh now proposes to develop two other orebodies, Vangorda and Grum.

This report concerns the technical and financial feasibility of developing pits on the Vangorda and Grum deposits, and transporting ore to the existing mill via a new haul road. These developments would extend the life of the operation to 1999.

In this analysis, the Vangorda and Grum deposits are developed with shallow, low stripping ratio pits to minimize capital expenditures and maximize returns. Neither deposit would be mined to the limits of the mineralization. The development of underground reserves at Grum, after completion of surface mining, and at Dy is not included in this report. Curragh Resources will complete the planning for these developments over the next few years. These underground operations will require new equipment and labour skills, whereas the Vangorda and Grum developments will largely be carried out with existing open pit mining equipment by the present labour force at Faro.

The existing open-pit production equipment includes: 12 170-ton Euclid and Unit Rig haul trucks, 16 120-ton Wabco haul trucks, 1 Marion 191M and 3 P&H 2100 15 cu.yd. cable shovels, two Marion M4 electric rotary drills, 2 Le Tourneau L800 12 cu.yd. front-end loaders, 1 D8K, 2 D8L and 1 D9H tracked dozers, 2 rubber-tired dozers and a fleet of standard rubber-tired support equipment.

The mill at Faro is a conventional crushing, grinding, flotation, and drying facility, with an average daily capacity up to 13,500 tonnes of ore feed, and output of approximately 1600 tonnes of daily concentrate. The mill was modified in 1980 to handle the finer grained Vangorda and Grum ores, at an average rate of 11,000 tonnes per day.

The town of Faro has approximately 450 housing units, and accomodation and full services for up to 2000 persons. It is supported by an airport and all-weather highways. The town is independently owned and operated, and is not a direct financial responsibility of Curragh.

The transportation system for concentrate haulage from Faro to Skagway is based upon 40 B-train highway units, each consisting of one Western Star diesel-powered tractor unit, and two Westank Willock concentrate trailers. The payload of each B-train unit is approximately 50 tonnes. Travel time to port and return is approximately 22 hours.

Backhaul freight of mine supplies and bulk commodities incorporates ISO-containers and petroleum tanks, fitted onto the B-trains operating from the port of Skagway to Faro.

The Curragh Resources leased bulk concentrate storage and shipping terminal is located at the deep-water, all-season port of Skagway, and has capacity well in excess of the tonnages planned.

The total workforce required to implement the plan is approximately the existing 450 Curragh employees at Faro, plus 150 present contractor employees, primarily involved in the concentrate trucking and handling operation.

The plan incorporates a small underground operation to complete the mining in the Faro pit orebody. It is contemplated that underground work will be handled by contractors.

Capital cost requirements are reviewed in Volume III of this report.

New mining equipment required to develop Vangorda and Grum includes a fleet of four scrapers and two dozers for overburden removal, one new rotary drill, and five new haul trucks (necessary to meet haul requirements, 14 km to the mill).

New infrastructure includes power lines to the Vangorda and Grum pits, and water control structures and diversion ditches.

The mill plan incorporates raising of the existing tailings dam and necessary equipment replacement.

Detailed drilling will be required to complete month to month mine plans for Faro underground, Vangorda and Grum, and to collect further ore samples for metallurgical testing. A budget of \$3.3 million has been provided for this.

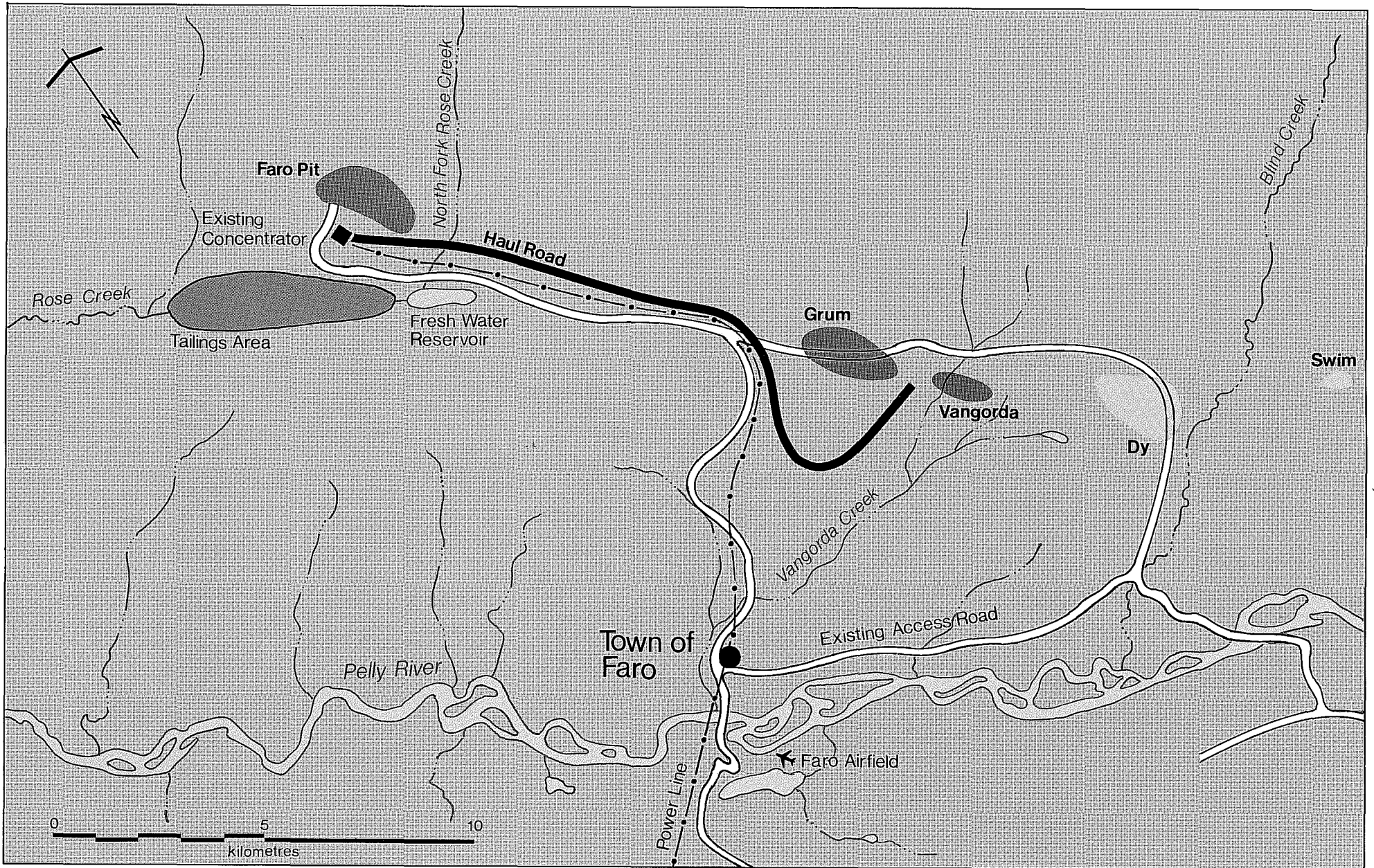
While the existing Faro pit could be the sole source of mill feed for several more years, a decision to develop Vangorda and Grum is required now as a major portion of the haul road can be constructed from waste currently being trucked from the Faro pit. A deferred decision would inevitably result in increased overall costs.

The proposed development has been reviewed by Kilborn in Volume II, Technical Review, and Volume III, Capital and Operating Cost Estimates.

The conclusions are summarized below. All dollars are Canadian.

1. The development is technically feasible.
2. An integrated plan for concurrent production and development of these projects, including a small underground development, carries production to the year 1999.

3. The 1987-1999 plan for Faro-Vangorda-Grum incorporates standard shovel and haul truck mining methods for the open pits, using existing equipment. For underground, production equipment requirements will be standard drill jumbos and scooptrams.
4. Cumulative production for the period 1987 through 1999 is 4.0 million tonnes of zinc concentrate, averaging 53.2 percent zinc metal content; and 2.2 million tonnes of lead concentrate, averaging 58.9 percent lead metal content. Payable metal produced is 1.8 million tonnes of zinc, and 1.2 million tonnes of lead.
5. The 1987-1999 plan for Faro-Vangorda-Grum will mine 53.7 million tonnes of ore. A further 47 million tonnes of geological reserves and mineral inventory are known to exist in the Faro area.
6. Cash capital costs in this plan are minimized by utilizing the existing mining equipment, milling facilities and infrastructure. The total cost of \$49,694,000 covers the additional exploration, equipment and infrastructure required during the period 1988 to 1999.
7. The operating cash costs from 1988 through 1999, inclusive, total \$1,311,863,000, averaging \$233 per tonne of concentrate produced during that period.



**Curragh Resources
Faro, Vangorda and Grum
Ore Deposits and Haul Road**

2.0 PROJECT SCHEDULE

2.0 PROJECT SCHEDULE

2.1 DESCRIPTION

The sequence of project development and critical dates are illustrated in the following activity schedule.

The schedule assumes continued production from the existing Faro open-pit until its exhaustion. This occupies the time frame 1987 to 1992. It results in 14.4 million tonnes of ore for the mill, averaging 8.24 percent combined lead and zinc grade, and 6.2 million tonnes with a combined lead plus zinc grade of 4.53 percent which is stockpiled.

An overlapping schedule projects underground development and production at Faro in the time frame 1988 through 1992, to produce 2.0 million tonnes of mill feed, averaging 11.6 percent combined lead and zinc grade.

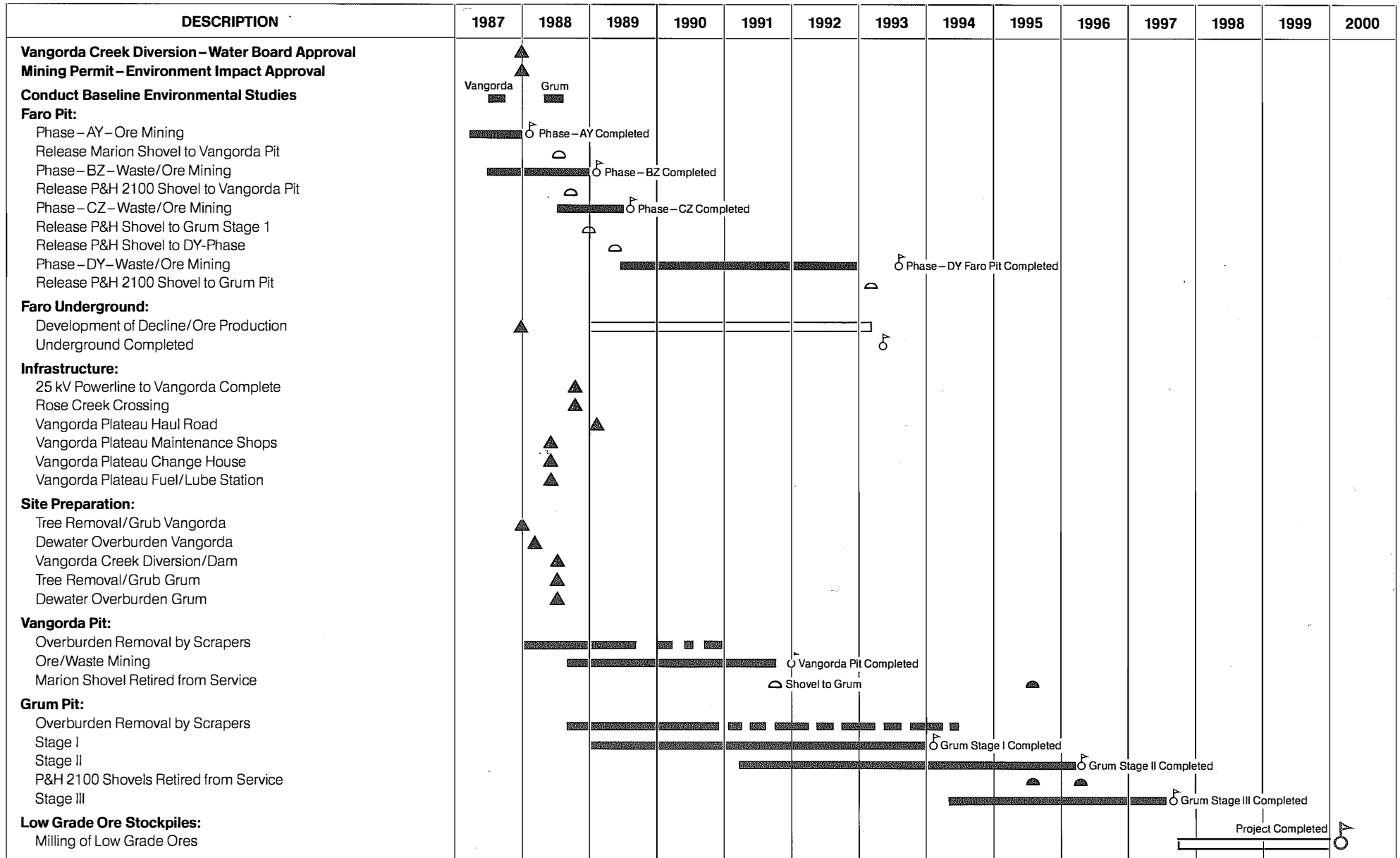
In the third phase, development and production from Vangorda open-pit mine commences in 1988 and ends in 1991. This will produce 5.8 million tonnes of mill ore, averaging 8.5 percent combined grade with 52.4 grammes per tonne of silver and 0.60 grammes per tonne of gold. A further 0.6 million tonnes with 3.9 percent lead plus zinc, 25.3 grammes per tonne of silver and 0.49 grammes per tonne of gold will be stockpiled.

Fourthly, there is development and production from the Grum open-pit, in the time frame 1988 through 1997. Grum production will be 21.7 million tonnes of mill ore, averaging 8.5 percent combined lead-zinc grade, 53.7 grammes per tonne of silver, and 0.84 grammes per tonne of gold, and 3.3 million tonnes of stockpile material grading 3.9 percent lead-zinc, 26.0 grammes per tonne of silver and 0.61 grammes per tonne of gold.

In the final phase, after mining is completed, the mill will operate for a further two years processing the accumulated 8.2 million tonnes of stockpiled material.

It is emphasized that the above project sequence does not exhaust all of Curragh's mineralization on the Vangorda Plateau. Depending on market prices and economics, any or all of the four deposits may be expanded to encompass additional reserves. Further, preliminary studies indicate that at today's prices economic underground reserves exist at Grum (approximately 8 million tonnes of geological reserves) and other Plateau deposits such as Dy (estimated 21 million tonnes of geological reserves). The Faro area geological reserves and mineral inventory are tabulated in Appendix III.

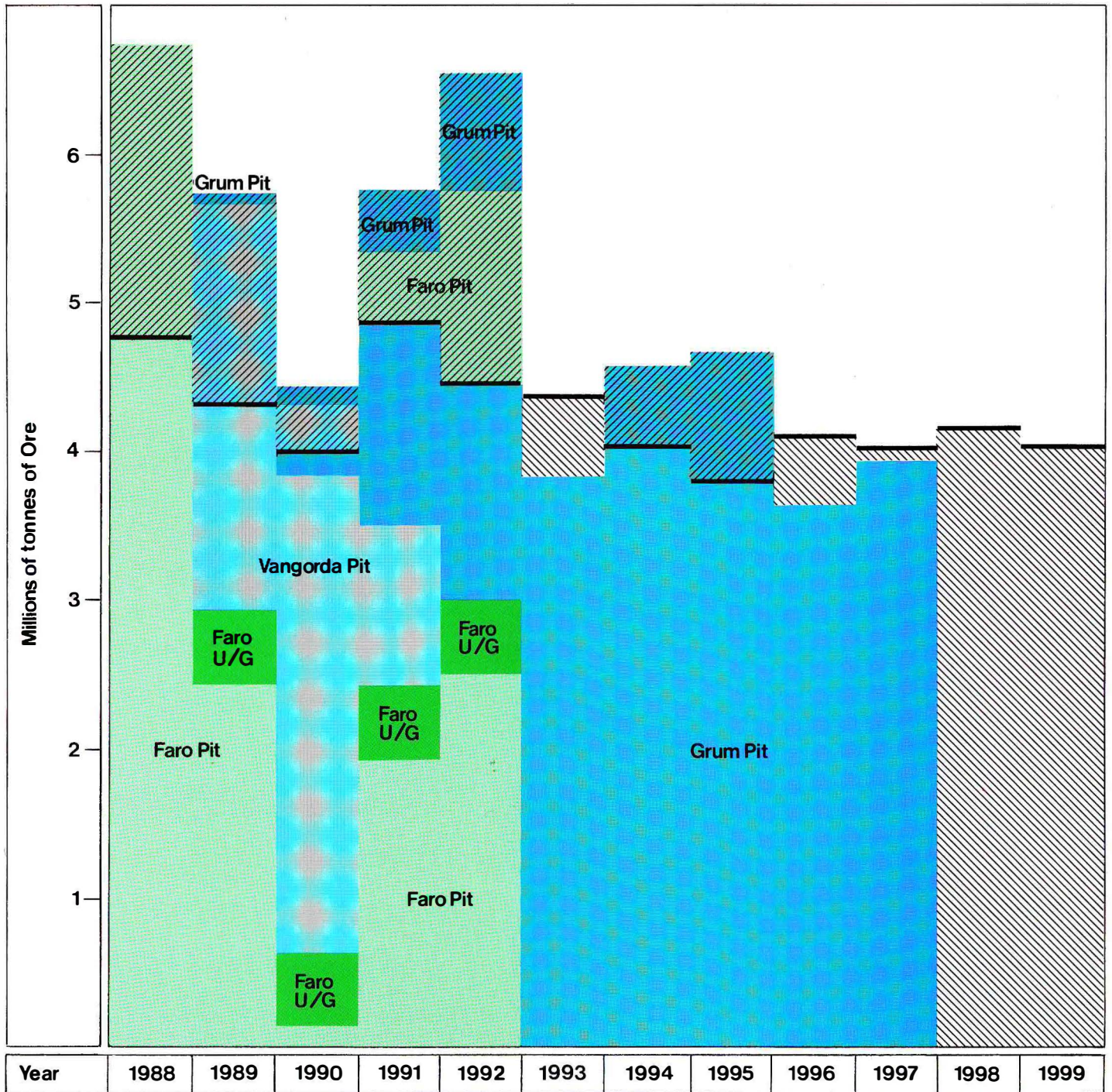
The basic infrastructure (mill, workshops, town, highway transportation system, port, support facilities, and organization) for development of these projects is in place today, with the major exception of the Vangorda Haul Road. Construction of the Haul Road commenced in October 1986 with the selective depositing of Faro Pit waste rock in the area of the North Fork of Rose Creek. The haul road can be completed in 1988, utilizing Curragh Resources' existing mine equipment and work force.



2.3 ANNUAL SOURCE OF ORE AND CONCENTRATE PRODUCTION

A Summary of waste, ore and concentrate production by pit is included as Appendix I to this volume. Yearly totals are further summarized below:

<u>Year</u>	<u>Waste Tonnes Mined</u>	<u>Ore Tonnes Mined</u>	<u>Ore Tonnes Milled</u>	<u>Zinc Concentrate Tonnes</u>	<u>Lead Concentrate Tonnes</u>
1987	20,375,000	4,153,875	3,533,005	269,269	153,930
1988	23,794,350	6,739,025	4,791,321	355,206	194,800
1989	33,040,550	5,726,082	4,324,747	345,732	202,882
1990	36,173,152	4,426,855	3,997,068	311,243	235,492
1991	34,816,796	5,783,211	4,879,716	350,245	206,735
1992	34,025,564	6,574,443	4,466,176	378,787	174,180
1993	34,276,804	3,836,829	4,374,324	319,620	156,404
1994	32,167,686	4,577,467	4,015,000	345,518	181,190
1995	29,422,998	4,677,002	3,800,000	361,435	180,814
1996	27,831,827	3,628,173	4,088,273	326,566	171,517
1997	3,706,641	3,925,407	4,015,000	318,959	162,821
1998	-	-	4,147,856	140,516	74,754
1999	-	-	4,018,403	152,975	78,287
TOTAL	309,631,368	54,048,369	54,450,889	3,976,071	2,173,806



Legend

Low Grade Ore to Stockpile
 Low Grade Ore from Stockpile
 Tonnes Milled

**Curragh Resources
 Faro, Vangorda and Grum
 Ore Production by Source**

2.5 TOTAL CONCENTRATE AND METAL PRODUCTION

Concentrate production is maintained at levels in excess of 500,000 tonnes per year, combined lead and zinc, for eleven years from 1987 through 1997. After 1997, the mill is fed from a low-grade stockpile for two years, with production in excess of 200,000 tonnes of concentrate per year until 1999. In years 1997 onward this tonnage may be supplemented with underground ore from Grum, Dy or Swim.

Cumulative production for the period 1987 through 1999 is 4.0 million tonnes of zinc concentrate, averaging 53.2 percent zinc metal content; and 2.2 million tonnes of lead concentrate, averaging 58.9 percent lead metal content. Payable metal produced is 1.8 million tonnes of zinc, and 1.2 million tonnes of lead.

Silver production from Vangorda and Grum is a very significant feature of the production plan. From 1987 through 1999 total silver production is 44.4 million ounces of payable metal.

Gold credits are also significant. From 1987 through 1999, total gold produced is 204,000 ounces of payable metal.

3.0 SUMMARY OF ESTIMATED CAPITAL AND OPERATING COSTS

3.0 SUMMARY OF ESTIMATED CAPITAL AND OPERATING COSTS

Production and capital equipment expenditures are summarized in Appendix II to this Volume and are the subject of Volume III in detail. All costs are expressed in first quarter 1987 dollars.

Capital expenditures are estimated at \$49,694,000 over the period from 1988 to 1995 as set out in Table AII-1.

The cash operating costs in this report are based upon 1986-1987 unit costs for the Faro pit and actual Curragh overheads. They include leasing costs for equipment used in underground mining at Faro and overburden removal at Vangorda and Grum. The total operating cost projected for the period 1988-1999 is \$1,331,863,000. This total corresponds to average unit costs of \$3.93 per tonne moved, \$26.69 per tonne of ore mined and \$26.16 per tonne of ore milled. Average costs per tonne of concentrate produced are as follows:

	Cash Operating Costs Per tonne of Concentrates (combined zinc and lead)
Mining	CDN \$ 89
Milling	62
Trucking to and from Skagway	59
Overhead, Faro, Whitehorse, Toronto	<u>23</u>
 TOTAL FOB SKAGWAY	 CDN \$233

APPENDIX I

APPENDIX I

BREAKDOWN OF ANNUAL SOURCES OF ORE AND CONCENTRATE

TABLE AI-1 Breakdown of Annual Tonnes of Ore and Waste Moved by
Source with Grades.

TABLE AI-2 Breakdown of Annual Ore Tonnes Mined and Milled and
Concentrates Produced with Grades.

TABLE AI-1

BREAKDOWN OF ANNUAL TONNES OF ORE AND WASTE MOVED

(Tonnes Stated In Thousands)

FARO OPEN PIT

Year	Waste Tonnes	Mill Grade Ore (> 6% Pb + Zn)						Stockpile Grade Ore (> 4% < 6% Pb + Zn)					
		Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t
1987	20,375	3,172	8.62	3.60	5.02	47	.09	981	4.53	1.86	2.67	29	.10
1988	15,794	4,864	7.99	3.26	4.73	42	.07	1,875	4.54	1.81	2.73	30	.10
1989	5,512	2,449	8.27	3.33	4.94	43	.11	888	4.59	1.84	2.75	32	.12
1990	7,833	32	6.77	2.62	4.15	38	.30	90	4.55	2.14	2.41	31	.31
1991	4,966	1,294	7.55	2.83	4.72	27	.14	1,138	4.42	1.62	2.80	22	.11
1992	2,342	2,569	8.57	3.02	5.55	26	.09	1,231	4.56	1.62	2.94	19	.10

VANGORDA OPEN PIT

Year	Waste Tonnes	Mill Grade Ore (> 5% Pb + Zn)						Stockpile Grade Ore (> 4% < 5% Pb + Zn)					
		Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t
1988	6,666												
1989	6,029	1,595	7.81	3.33	4.48	48	.55	242	3.88	1.62	2.26	28	.41
1990	8,132	3,217	8.91	3.87	5.04	54	.61	320	3.91	1.67	2.24	23	.49
1991	661	1,013	8.31	3.78	4.53	54	.66	72	3.92	1.95	1.97	27	.76

GRUM OPEN PIT

Year	Waste Tonnes	Mill Grade Ore (> 5% Pb + Zn)						Stockpile Grade Ore (> 4% < 5% Pb + Zn)					
		Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t	Tonnes	% Pb+Zn	% Pb	% Zn	Ag g/t	Au g/t
1988	1,334												
1989	21,500	52	5.86	2.20	3.66	36	.48						
1990	20,208	218	5.62	1.96	3.66	33	.66	51	3.81	1.27	2.54	24	.77
1991	29,190	1,377	7.37	2.66	4.71	44	.66	389	3.92	1.28	2.64	25	.53
1992	31,684	1,897	7.25	2.59	4.66	42	.62	378	3.85	1.27	2.58	24	.40
1993	34,277	3,374	7.77	2.85	4.92	47	.67	450	3.98	1.35	2.63	25	.50
1994	32,168	4,097	8.92	3.37	5.55	56	.85	481	3.91	1.54	2.37	27	.65
1995	29,423	3,958	9.58	3.53	6.05	60	.96	719	3.87	1.53	2.34	26	.63
1996	27,832	3,209	8.81	3.35	5.46	57	.88	419	3.86	1.57	2.29	28	.73
1997	3,707	3,558	8.87	3.31	5.56	59	1.01	367	3.88	1.55	2.33	27	.78

TABLE A1-2

BREAKDOWN OF ANNUAL ORE TONNES
MINED AND MILLED AND CONCENTRATES PRODUCED

	Apr - Dec 1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Ore Summary															
Mined															
Tonnes	4 153 875	6 739 025	5 726 082	4 426 855	5 783 211	6 574 443	3 836 829	4 577 467	4 677 002	3 628 173	3 925 407	U/G	U/G	U/G	54 040 367
% Pb+Zn	7.65	7.01	7.76	8.53	7.10	7.40	7.34	8.39	8.70	8.24	8.40	NA	NA	NA	7.70
% Pb	3.19	2.86	3.15	3.62	2.77	2.65	2.68	3.18	3.22	3.14	3.15	NA	NA	NA	3.02
% Zn	4.46	4.15	4.61	4.91	4.33	4.75	4.66	5.22	5.48	5.09	5.26	NA	NA	NA	4.76
Ag g/t	43	39	44	51	38	32	44	53	55	54	56	NA	NA	NA	44.83
Au g/t	0.10	0.11	0.22	0.53	0.37	0.25	0.65	0.83	0.91	0.86	0.99	NA	NA	NA	0.48
Mill Feed															
Tonnes	3 533 005	4 791 321	4 324 747	3 997 068	4 879 716	4 466 176	4 374 324	4 015 000	3 800 000	4 088 273	4 015 000	4 147 856	4 018 483	0	54 450 087
% Pb+Zn	8.11	7.90	8.57	9.02	7.79	8.35	7.56	8.92	9.50	8.30	8.30	4.00	4.36	0.00	7.76
% Pb	3.35	3.22	3.49	3.83	3.09	3.01	2.77	3.37	3.53	3.18	3.10	1.57	1.69	0.00	3.01
% Zn	4.76	4.60	5.00	5.20	4.70	5.34	4.79	5.55	6.05	5.21	5.21	2.51	2.66	0.00	4.74
Ag g/t	42	42	47	54	41	37	43	56	60	54	55	26	26	0	44.49
Au g/t	0.09	0.07	0.22	0.53	0.38	0.30	0.54	0.85	0.96	0.79	0.96	0.50	0.11	0.00	0.48
Concentrate															
Lead Conc															
Tonnes	153 930	194 000	202 082	235 492	206 735	174 100	156 404	181 190	180 814	171 517	162 821	74 754	78 287	0	2 173 007
% Pb	61.06	60.67	58.67	54.73	57.42	58.83	59.51	60.00	60.00	59.92	60.00	58.02	56.68	0.00	58.90
Ag g/t	551	553	582	606	590	545	737	823	837	821	876	751	590	0	677.50
Au g/t	1.40	1.40	1.40	3.29	2.87	2.11	4.63	6.22	6.68	6.12	7.74	7.10	0.00	0.00	3.07
Zinc Conc															
Tonnes	269 269	355 206	345 732	311 243	350 245	378 787	319 620	345 518	361 435	326 566	318 959	140 516	152 975	0	3 976 070
% Zn	50.90	50.91	51.56	53.93	52.85	52.29	54.10	55.00	55.00	54.77	55.00	53.74	50.73	0.00	53.23
Total Conc															
Tonnes	420 020	550 006	548 615	546 735	556 980	552 967	476 023	526 708	542 249	498 083	481 781	215 270	231 262	0	6 146 699

APPENDIX II

APPENDIX II

CAPITAL AND OPERATING COST FORECASTS

TABLE AII-1 Capital Cost Estimate Summary by Years.

TABLE AII-2 Operating Cost Estimate by Years.
(2 pages)

TABLE AII-1

FARO, VANGORDA AND GRUM

CAPITAL COST ESTIMATE SUMMARY

(1987 DOLLARS STATED IN THOUSANDS)

<u>ITEM</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>TOTAL</u>
Faro									
- Underground Exploration	800								800
- Mill Crusher Modification		1,500							1,500
- Tailings Dams and Lines	3,000	3,000			1,000				7,000
Vangorda and Grum									
- Power Supply	950								950
- Service Buildings	1,850								1,850
- Water Control	1,200	2,000							3,200
- Exploration Drilling	995	700							1,695
Equipment Replacement									
- Mine	830	1,790	1,300	2,630	3,290	9,220	6,500	4,690	30,250
- Mill	200	200	200						600
- Concentrate Haul Trailers						800			800
Metallurgical Testing									
	200								200
Regional Exploration									
		349	500						849
Totals	10,025	9,539	2,000	2,630	4,290	10,020	6,500	4,690	49,694

TABLE AII-2

OPERATING COST ESTIMATE

(Sheet 1 of 2)

	Unit Cost	87-04-01 to												Total
	87-12-31 **	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
	*****	****	****	****	****	****	****	****	****	****	****	****	****	****
Unit Costs, Mining														

Drill and Blast	0.20	4,840,000	5,680,400	6,820,000	6,820,000	6,820,000	6,820,000	6,820,000	6,820,000	6,292,000	1,526,410	0	0	59,258,810
U/G Mining	23.49	0	11,745,154	11,745,154	11,745,154	11,745,154	320,235	0	0	0	0	0	0	47,300,849
U/G Equipment Lease		1,595,106	1,595,106	1,595,106	1,595,106	1,595,106	0	0	0	0	0	0	0	7,975,530
Scraper Operating	0.63	5,040,000	5,040,000	3,780,000	3,780,000	3,780,000	2,520,000	1,666,446	0	0	0	0	0	25,606,446
Scraper Lease		1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	0	0	0	0	0	0	9,800,000
Mining Development														

Vangorda Road		5,000,000												5,000,000
Faro U/G Development		3,420,000												3,420,000
Op Hour Costs, Mining														

Shovel, Marion	227.06	0	307,694	1,183,437	1,183,437	1,183,437	1,183,437	1,183,437	1,183,437	1,183,437	90,994	0	0	8,682,744
Shovel, P&H 2100	151.13	2,630,380	2,869,505	2,869,505	2,869,505	2,869,505	2,869,505	2,869,505	2,869,505	2,582,555	765,201	0	0	26,064,673
Shovel, 23 cu m	230.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck, 154 tonne	126.90	8,504,077	8,493,855	8,495,776	8,495,693	8,496,160	11,338,769	14,173,461	15,590,807	15,590,807	8,197,334	3,482,575	0	110,859,312
Truck, 109 tonne	107.76	3,080,963	3,668,017	5,216,800	8,456,281	8,455,694	3,968,824	6,839,936	8,031,453	6,392,756	0	373,256	2,156,762	56,640,742
Front End Loader	148.21	740,368	1,128,427	1,485,367	1,205,461	1,263,114	1,490,918	1,433,887	1,357,104	1,460,172	1,433,887	1,481,183	1,479,600	15,959,487
Dozer, Tracked	73.23	1,274,550	1,510,921	1,853,891	1,853,891	1,853,891	1,853,891	1,853,891	1,853,891	1,714,849	406,414	0	0	16,030,078
Dozer, Wheeled	66.23	576,358	683,247	838,339	838,339	838,339	838,339	838,339	838,339	775,464	183,783	0	0	7,248,887
Grader	64.18	558,518	1,068,293	1,218,586	1,218,586	1,218,586	1,218,586	1,218,586	1,157,656	584,289	406,195	406,195	406,195	11,492,662

Subtotal, Mining		38,660,320	45,190,619	48,501,960	51,461,452	51,518,985	35,822,503	40,297,488	39,763,122	37,149,695	13,188,312	5,743,208	4,042,557	411,340,221
Unit Costs, Milling														

Primary Crushing	0.133	637,246	575,191	531,610	649,002	594,001	581,785	533,995	505,400	543,740	533,995	551,665	534,448	6,772,078
Secondary Crushing	0.216	1,034,925	934,145	863,367	1,054,019	964,694	944,854	867,240	820,800	883,067	867,240	895,937	867,975	10,998,263
Grinding	1.562	7,484,043	6,755,254	6,243,419	7,622,116	6,976,166	6,832,694	6,271,430	5,935,600	6,385,882	6,271,430	6,478,951	6,276,745	79,533,732
Flotation	0.258	1,236,161	1,115,785	1,031,243	1,258,967	1,152,273	1,128,576	1,035,870	980,400	1,054,774	1,035,870	1,070,147	1,036,748	13,136,814
Reagent Area	1.672	8,011,089	7,230,976	6,683,097	8,158,884	7,467,445	7,313,869	6,713,080	6,353,600	6,835,592	6,713,080	6,935,215	6,718,770	85,134,699
Freight backhaul	1.156	5,538,767	4,999,407	4,620,610	5,640,951	5,162,899	5,056,718	4,641,340	4,392,800	4,726,044	4,641,340	4,794,922	4,645,274	58,861,072
Unit Costs, Concentrate														

Dewatering	1.513	832,159	830,054	827,209	842,711	836,639	720,223	796,909	820,423	753,599	728,934	325,704	349,899	8,664,465
Drying	2.576	1,416,815	1,413,232	1,408,388	1,434,781	1,424,444	1,226,236	1,356,800	1,396,834	1,283,061	1,241,067	554,536	595,730	14,751,925
Load-Out	1.290	709,507	707,713	705,288	718,504	713,328	614,070	679,454	699,502	642,526	621,497	277,699	298,328	7,387,416
Road Transportation	39.624	21,793,428	21,738,317	21,663,810	22,069,781	21,910,772	18,861,951	20,870,285	21,486,091	19,736,022	19,090,082	8,529,870	9,163,512	226,913,921
Port	9.260	5,093,053	5,080,174	5,062,762	5,157,636	5,120,476	4,407,977	4,877,318	5,021,230	4,612,244	4,461,290	1,993,403	2,141,483	53,029,046

Subtotal, Mill & Conc		53,787,194	51,380,250	49,640,804	54,607,352	52,323,138	47,688,954	48,643,721	48,412,680	47,456,553	46,205,826	32,408,048	32,628,911	565,183,428

TABLE AII-2

OPERATING COST ESTIMATE

(Sheet 2 of 2)

	87-04-01 to Unit Cost 87-12-31 #	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total	
Annual Costs															

General, Mine															
Dewatering		362,600	362,600	362,600	362,600	362,600	362,600	362,600	362,600	362,600	362,600	362,600	362,600	3,626,000	
Salaries		1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	1,192,633	11,926,333	
Power		2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	2,174,400	21,744,000	
General		4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	4,339,467	43,394,667	
General, Mill															
Salaries		1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	1,605,831	19,269,972	
Power		5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	5,073,600	60,883,200	
General		4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	4,044,288	48,531,456	
Technical Services, Faro		1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	1,285,800	12,858,000	
S & A, Faro		4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	4,711,135	56,533,620	
All, Whitehorse		1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	1,381,000	16,572,000	
All, Toronto		5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	60,000,000	

Subtotal, Annual Costs		31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	31,170,754	21,815,854	21,815,854	355,339,248	

Total, Operating Cost		85,062,978	123,618,267	127,741,622	129,313,518	137,239,558	135,012,877	114,682,211	120,111,963	119,346,556	115,777,002	90,564,892	59,967,110	58,487,322	1,416,925,875

APPENDIX III

TABLE A III-1 FARO AREA GEOLOGICAL RESERVES AND
MINERAL INVENTORY

TABLE A III-1

FARO AREA

GEOLOGICAL RESERVES AND MINERAL INVENTORY

<u>Source</u>	<u>Cut-off % Pb+Zn</u>	<u>Class</u>	<u>Tonnes</u>	<u>% Pb+Zn</u>	<u>% Pb</u>	<u>% Zn</u>	<u>Ag g/t</u>	<u>Au g/t</u>
<u>Faro</u>								
Total Deposit	4.0	Proven	29,251,000	8.2	3.1	5.0	41	N.A.
<u>Grum</u>								
Main Zone (61W-87W)	4.0	Proven	30,649,000	9.0	3.4	5.6	57	0.95
Champ Zone (51W-61W)	4.0	Probable	1,700,000	7.8	3.5	4.3	46	N.A.
N.W. Extension (87W-100W)	N.A.	Possible	8,000,000	10.0	N.A.	N.A.	N.A.	N.A.
Total Deposit	N.A.	N.A.	40,349,000	9.1	N.A.	N.A.	N.A.	N.A.
<u>Vangorda</u>								
Total Deposit	4.0	Probable	7,457,000	8.7	3.8	4.9	54	0.69
<u>Dy</u>								
Total Deposit	9.0	Possible	21,059,000	12.2	5.5	6.7	84	0.95
<u>Swim</u>								
Total Deposit	6.0	Possible	4,309,000	8.5	3.8	4.7	51	N.A.
TOTAL INVENTORY			102,425,000	9.4	N.A.	N.A.	N.A.	N.A.

NOTES: Two other deposits, SB and Sea, contain sulphide mineralization but have not been evaluated due to sub-marginal grades.

Effective Date January 1, 1986. During 1986, 1.8 million tonnes were mined from the Faro open pit.