

2.1 FARO ZONE 3 DEPOSIT – GEOLOGICAL RESERVES

TABLE 3
FARO DEPOSIT: HISTORICAL GEOLOGICAL RESERVES
(1989–1991)

GEOLOGICAL RESERVES – (PROVEN) EXCLUDING UNDERGROUND
 (no mining loss or adjustments)

<u>PERIOD</u>	<u>CUT OFF</u>	<u>ORE TONNES</u>	<u>LEAD+ ZINC</u>	<u>% LEAD</u>	<u>% ZINC</u>	<u>g/mt Ag</u>	<u>g/mt Au</u>	<u>LEAD+ZINC METAL TNS</u>	<u>SOURCE</u>	<u>INTERP.</u>
1989 Jan 1	4.0	16,339,000	8.26	3.08	5.18	35	0.13	1,349,000	89–1	F8805
May 1990; Completion of 117 additional diamond drillholes. Geological rock model edited to respect additional drilling information. New reserve calculation (F9005) replacing the earlier (F8805 May 1988) calculation. Jan 1, 1989 to Jul 1, 1990; Mining of approximately 8.0 million tonnes of ore.										
1990 Jul 1	4.0	8,173,000	6.69	2.40	4.29	24	0.14	546,000	90–2a	F9005
Jul 1, 1990 to Oct 1, 1990; Mining of approximately 1.3 million tonnes of ore.										
1990 Oct 1	4.0	6,760,000	6.62	2.36	4.26	23	0.13	447,000	90–2b	F9005
Oct 1, 1990 to Jan 1, 1990; Mining of approximately 1.04 million tonnes of ore.										
1991 Jan 1	4.0	5,712,000	6.60	2.34	4.26	23	0.13	376,000	91–6	F9005

SOURCES

89–1 C.R.I. (Jan 89); F8805 interpretation, in-situ reserve calculation, no adjustments.
 90–2a C.R.I. (Jul 90); F9005 interpretation, in-situ reserve calculation, no adjustments.
 90–2b C.R.I. (Sep 90); F9005 interpretation, in-situ reserve calculation, no adjustments.
 91–6 C.R.I. (Dec 90); F9005 interpretation, in situ reserve calculation, no adjustments.

2.2 FARO ZONE 3 DEPOSIT – MINING RESERVES

TABLE 4
FARO DEPOSIT: HISTORICAL MINING RESERVES
(1989 – 1991)

MINING RESERVES – EXCLUDING UNDERGROUND (PROVEN)
(95% mining recovery)

PERIOD	CUT OFF	ORE TONNES	LEAD+ ZINC	% LEAD	% ZINC	g/mt Ag	g/mt Au	LEAD+ZINC METAL TNS	SOURCE	INTERP.
1989 Jan 1	4.0	14,051,000	7.75	2.96	4.79	33	0.11	1,088,000	89-2	F8805
New bench composited reserve calculation (F8908) replacing the earlier (F8805 May 1988) calculation. Jan 1, 1989 to Jul 1, 1989; Mining of approximately 2.5 million tonnes of ore.										
1989 Jul 1	4.0	12,011,000	7.43	2.75	4.68	31	0.21	892,000	89-3	F8908
Sept 1989; New Faro Ultimate Pit design (FIV89) replacing Cloutier's revised BZ Pit. Jul 1, 1989 to Jan 1, 1990; Mining of approximately 2.0 million tonnes of ore.										
1990 Jan 1	4.0	10,342,000	7.33	2.65	4.68	29	0.10	758,000	90-1	F8908
May 1990; Completion of 117 additional diamond drillholes. Geological rock model edited to respect additional drilling information. New reserve calculation (F9005) replacing the earlier (F8908) calculation. Jan 1, 1989 to Jul 1, 1990; Mining of approximately 3.5 million tonnes of ore.										
1990 Jul 1	4.0	5,818,000	6.70	2.39	4.31	22	0.16	389,000	90-3	F9005
August 1990; new cross, long, and plan section geology interpretation. September 1990; New mining reserve calculation (F9008). Jul 1, 1990 to Oct 1, 1990; Mining of approximately 1.3 million tonnes of ore.										
1990 Oct 1	4.0	4,118,000	6.58	2.29	4.29	20	0.14	270,000	90-4	F9008
Oct 1, 1990 to Jan 1, 1990; Mining of approximately 1.04 million tonnes of ore. Dec 1990; new ultimate pit design (revised FIV pit).										
1991 Jan 1	4.0	2,949,000	6.58	2.29	4.29	19	0.14	194,000	91-1	F9008

NOTES

██████████ = reserve quoted in July, 1989 Initial Public Offering Prospectus.

SOURCES

- 89-2 C.R.I. (Jan 89); MAXIPLAN calculation of 1989 starting mining reserve, based on F8805 interpretation, geology composites, diluted 10%, mining recovery = 95%
- 89-3 C.R.I. (May 90); PROSPECTUS (Alpha 2 mine plan based on F8908 reserves)
- 90-1 C.R.I. (Jan 90); F8908 3D computer block model, bench composites, 95% mining recovery.
- 90-3 C.R.I. (Jul 90); F9005 3D computer block model, bench composites, 95% mining recovery.
- 90-4 C.R.I. (Sep 90); F9008 3D computer block model, bench composites, 95% mining recovery.
- 91-1 C.R.I. (Dec 90); F9008 3D computer block model, bench composites, 95% mining recovery.

2.3 FARO UNDERGROUND

TABLE 5 FARO UNDERGROUND: HISTORICAL GEOLOGICAL AND MINING RESERVES (1989-1991)									
GEOLOGICAL RESERVES – FARO UNDERGROUND (PROBABLE) (no mining loss or adjustments)									
PERIOD	CUT OFF	ORE TONNES	LEAD+ ZINC	% LEAD	% ZINC	g/mt Ag	g/mt Au	LEAD+ZINC METAL TNS	SOURCE
1990 Jan 1	9.0	2,610,000	12.80	5.04	7.76	67	NA	334,000	89-4
January 1, 1990 (Start-up) to July 1, 1990; mining of 156,000 tonnes.									
1990 Jul 1	9.0	2,454,000	12.80	5.04	7.76	67	NA	314,000	90-5a
July 1, 1990 to October 1, 1990; mining of 208,000 tonnes.									
1990 Oct 1	9.0	2,246,000	12.80	5.04	7.76	67	NA	287,000	90-6a
October 1, 1990 to January 1, 1991; mining of 182,000 tonnes.									
1991 Jan 1	9.0	2,064,000	12.80	5.04	7.76	67	NA	264,000	91-6a
MINING RESERVES – FARO UNDERGROUND (PROBABLE)									
1989 Jan 1	9.0	2,014,000	11.59	4.59	7.00	61	NA	233,000	89-4
February 1989; New mine plan; S89 Alpha II. Carbonaceous ore types removed from the Alpha II mining reserve.									
1989 Jul 1	9.0	1,178,000	10.38	4.11	6.27	60	NA	122,000	89-5
1990 Jul 1	9.0	1,022,000	10.38	4.11	6.27	60	NA	106,000	90-5a
1990 Oct 1	9.0	814,000	10.38	4.11	6.27	60	NA	84,000	90-6b
December 1990; New mine plan; 91 Faro Operating Plan. Scheduled shut-down of underground on Oct. 31, 1991.									
1991 Jan 1	9.0	640,000	11.64	4.39	7.25	60	NA	74,000	91-2

NOTES

██████████ = reserve quoted in July, 1989 Initial Public Offering Prospectus.

SOURCES

89-4 Kilbom Limited (Feb 87); Faro Underground Mining, page 6-3.
 90-5a C.R.I. (June 1990); General Manager's Report. (1989 starting geological reserve – mined reserves to date).
 90-6a C.R.I. (Sept 1990); General Manager's Report. (1989 starting geological reserve – mined reserve to date).
 89-4 Kilbom Limited (Feb 1987; Faro Underground Mining, page 6-3).
 89-5 C.R.I. (Feb 1989); PROSPECTUS based on S89 Alpha II Mine Plan.
 90-5b C.R.I. (Jul 1990); General Manager's Report. (1989 starting Alpha II mine plan reserve – mined reserve to date).
 90-6b C.R.I. (Oct 1990); General Manager's Report. (1989 starting Alpha II mine plan reserve – mined reserve to date).
 91-6a C.R.I. (Dec 1990); General Manager's Report. (1989 starting geological reserve – mined reserve to date).
 91-2 C.R.I. (Dec 1990); Faro 1991 Operating Plan.

2.4 FARO STOCKPILES

TABLE 6
FARO STOCKPILE INVENTORY
(1989 - 1991)

HIGH GRADE +5% LEAD+ZINC

PERIOD	CUT OFF	ORE TONNES	LEAD+ ZINC	% LEAD	% ZINC	g/mt Ag	g/mt Au	LEAD+ZINC METAL TNS	SOURCE
1989 Jan 1	5.0	177,900	8.54	3.58	4.96	46	NA	15,000	89-7
1990 Jan 1	5.0	160,500	6.38	2.45	3.93	33	NA	10,000	90-9
1990 Jul 1	5.0	744,000	7.92	3.07	4.85	NA	NA	58,000	90-10
1990 Oct 1	5.0	912,000	6.22	2.36	3.86	NA	NA	56,000	90-11
1991 Jan 1	5.0	802,000	6.29	2.36	3.93	NA	NA	50,000	91-3

LOW GRADE 3-5% LEAD+ZINC

1989 Jan 1	3.0	721,200	4.66	1.92	2.74	27	NA	33,000	89-7
1990 Jan 1	3.0	1,434,800	4.58	1.85	2.73	28	NA	65,000	90-9
1990 Jul 1	3.0	1,601,000	4.53	1.84	2.69	NA	NA	72,000	90-10
September 1, 1990 Faro low grade cutoff lowered to 3%									
1990 Oct 1	3.0	1,800,000	4.51	1.80	2.71	NA	NA	81,000	90-11
1991 Jan 1	3.0	2,008,000	4.48	1.77	2.71	NA	NA	89,000	91-3

NOTES

- 3-4% material stockpiled in the low grade stockpile.

SOURCES

89-7 C.R.I. (Jan 1989) Faro Geology Department December 1988 Month End Report.
 90-9 C.R.I. (Jan 1990) General Manager's December 1989 Month End Report.
 90-10 C.R.I. (Jul 1990) General Manager's June 1990 Month End Report.
 90-11 C.R.I. (Oct 1990) General Manager's September 1990 Month End Report.
 91-3 C.R.I. (Dec 1990) General Manager's December 1990 Month End Report.

2.5 GRUM DEPOSIT

TABLE 7
GRUM DEPOSIT: HISTORICAL GEOLOGICAL AND MINING RESERVES
(1989 - 1991)

GEOLOGICAL RESERVES MAIN ZONE (PROVEN)
(no mining loss or adjustments)

<u>PERIOD</u>	<u>CUT OFF</u>	<u>ORE TONNES</u>	<u>LEAD+ ZINC</u>	<u>% LEAD</u>	<u>% ZINC</u>	<u>g/mt Ag</u>	<u>g/mt Au</u>	<u>LEAD+ZINC METAL TNSNS</u>	<u>SOURCE</u>	<u>INTERP.</u>
1989 Jan 1	4.0	32,182,000	8.98	3.40	5.58	57	0.95	2,889,000	89-8	G8705
1991 Jan 1	4.0	-----	-----	-----	-----	-----	-----	NO CHANGE	-----	-----

GEOLOGICAL RESERVES CHAMP ZONE (PROBABLE)
(no mining loss or adjustments)

1989 Jan 1	4.0	1,700,000	7.80	3.50	4.30	57	0.95	132,000	89-16	
1991 Jan 1	4.0	-----	-----	-----	-----	-----	-----	NO CHANGE	-----	-----

GEOLOGICAL RESERVES NW UNDERGROUND (POSSIBLE)
(no mining loss or adjustments)

1989 Jan 1	9.0	8,000,000	10.00	NA	NA	NA	NA	800,000	89-17	
1991 Jan 1	9.0	-----	-----	-----	-----	-----	-----	NO CHANGE	-----	-----

MINING RESERVES (PROVEN)

1989 Jan 1	4.0	25,161,000	7.97	2.96	5.01	50	0.81	2,005,000	89-9	G8705
1991 Jan 1	4.0	-----	-----	-----	-----	-----	-----	NO CHANGE	-----	-----

NOTES

- Champ and NW zones are not included in current mine plans.
- [shaded] = reserve quoted in July, 1989 Initial Public Offering Prospectus.
- Preliminary work with new calculation methods and new drill data yields a highly conservative estimate of 21.2 million tonnes averaging 8.07 Pb+Zn within the same pit. Work on reinterpreting the geological structure and verification of mining dilution at Vangorda is still ongoing. Thus, the new reserve calculation has not been adopted.

SOURCES

- 89-8 C.R.I. (Jun 86); G8705 in-situ reserve calculation, 5% pulp SG reduction removed.
- 89-9 C.R.I. (Jan 89); Alpha Mine Plan Reserves based on G8705 calculation, 15% dilution, 95% mining recovery.
- 89-16 Kerr Addison Mines (1978); A.Y. Po in Sirola (1977) Grum Joint Venture Mineral Inventory.
- 89-17 C.A.M.C. (1984) Estimate of reserve based on extrapolation of reserves NW of main zone.

2.6 VANGORDA DEPOSIT

TABLE 8
VANGORDA DEPOSIT: HISTORICAL GEOLOGICAL AND MINING RESERVES
(1989 - 1991)

GEOLOGICAL RESERVES (PROVEN)

(no mining loss or adjustments)

PERIOD	CUT OFF	ORE TONNES	LEAD+ ZINC	% LEAD	% ZINC	g/mt Ag	g/mt Au	LEAD+ZINC METAL TNSNS	SOURCE	INTERP.
1989 Jan 1	4.0	8,161,000	8.67	3.79	4.88	54	0.76	707,000	89-10	V8803
August 1988; completion of 63 additional diamond drill holes. March 1988; New geological interpretation of the Vangorda orebody. December 1988; New reserve calculation (V8912) replacing the earlier V8803 calculation.										
1990 Jul 1	4.0	8,471,000	8.14	3.57	4.57	52	0.77	689,000	90-14	V8912
August 1990; completion of 120 additional diamond drillholes. Drillhole grid is 15.24m NE-SW by 30.48m NW-SE. August 1990; total dataset = 445 drillholes (rotary and diamond) of which 319 diamond drillholes (6700 assay intervals) were selected for grade compositing. All rotary holes and selected 1951-55 DDH's with questionable recoveries and drill logs were excluded. September 1990; New cross section, long section, and bench geology plans were interpreted. October 1990; New computer reserve calculation (V9009) replacing the V8912 calculation. Start-up Jul 1990 to Oct 1, 1990 mining of 164,000 tonnes of ore.										
1990 Oct 1	4.0	7,244,000	8.93	3.95	4.98	49	0.78	646,000	90-15	V9009
October 1, 1990 to January 1, 1991 mining of 524,000 tonnes of ore.										
1991 Jan 1	4.0	6,720,000	8.84	3.89	4.95	48	0.77	594,000	91-7	V9009

MINING RESERVES (PROVEN)

1989 Jan 1	4.0	6,935,000	8.00	3.49	4.51	48	0.65	554,000	89-11	V8803
December 1989; New Vangorda Ultimate Pit design (VIV89). New reserve calculation (V8912).										
1990 Jul 1	4.0	5,669,000	8.96	3.94	5.02	56	0.79	507,000	90-16	V8912
New reserve calculation (V9009). Mining loss increased to 10%, Dilution increased to 20% at "0" grade.										
1990 Oct 1	4.0	6,022,080	7.75	3.43	4.32	43	0.64	466,000	90-17	V9009
December 1990: New Vangorda ultimate pit design (VWEST PIT).										
1991 Jan 1	4.0	6,116,000	7.62	3.37	4.25	42	0.66	466,000	91-5	V9009

NOTES

██████████ = reserve quoted in July, 1989 Initial Public Offering Prospectus.

SOURCES

- 89-10 C.R.I. (Mar 88); V8803 3D computer block model in-situ reserve calculation. No adjustments.
- 90-14 C.R.I. (Dec 89); V8912 3D computer block model in-situ reserve calculation. No adjustments.
- 90-15 C.R.I. (Sep 90); V9009 3D computer block model in-situ reserve calculation. No adjustments.
- 89-11 C.R.I. (Jan 89); Alpha Mine Plan Reserves based on V8803 model, 15% dilution, 95% mining recovery.
 This reserve is quoted in initial public offering prospectus, July 1, 1989.
- 90-16 C.R.I. (Sep 90); V8912 3D block model mining reserve calculation. Bench composites, 95% mining recovery.
- 90-17 C.R.I. (Sep 90); V9009 3D block model mining reserve calculation. Geology composites, 20% dilution, 90% mining recovery.
- 91-7 C.R.I. (Dec 90); V9009 3D computer block model in-situ reserve calculation. No adjustments.
- 91-5 C.R.I. (Dec 90); V9009 3D block model mining reserve calculation. Geology composites, 20% dilution, 90% mining recovery.

2.7 VANGORDA STOCKPILES

TABLE 9
VANGORDA STOCKPILE INVENTORY
(1989 - 1991)

HIGH GRADE +5% LEAD+ZINC

<u>PERIOD</u>	<u>CUT OFF</u>	<u>ORE TONNES</u>	<u>LEAD+ ZINC</u>	<u>% LEAD</u>	<u>% ZINC</u>	<u>g/mt Ag</u>	<u>g/mt Au</u>	<u>LEAD+ZINC METAL TNS</u>	<u>SOURCE</u>
1990 Jul 1	5.0	Nil							
1990 Oct 1	5.0	164,000	8.19	4.11	4.08	NA	NA	13,000	90-6
1991 Jan 1	5.0	580,000	8.72	4.28	4.44	NA	NA	50,000	91-3

LOW GRADE 3-5% LEAD+ZINC

1990 Jul 1	3.0	Nil							
1990 Oct 1	3.0	Nil							
1991 Jan 1	3.0	Nil							

NOTES

- Approximately 50% of stockpiled material is oxidized and may be refractory.

SOURCES

90-6 C.R.I. (Oct 1990) General Manager's September 90 Month End Report.

91-3 C.R.I. (Dec 1990) General Manager's December 90 Month End Report.

2.8 DY DEPOSIT

TABLE 10
DY DEPOSIT: HISTORICAL GEOLOGICAL AND MINING RESERVES
(1989 - 1991)

GEOLOGICAL RESERVES (PROBABLE)
(no mining loss or adjustments)

<u>PERIOD</u>	<u>CUT OFF</u>	<u>ORE TONNES</u>	<u>LEAD+ ZINC</u>	<u>% LEAD</u>	<u>% ZINC</u>	<u>g/mt Ag</u>	<u>g/mt Au</u>	<u>LEAD+ZINC METAL TNS</u>	<u>SOURCE</u>
1989 Jan 1	9.0	21,059,000	12.28	5.54	6.74	83	0.95	2,586,000	89-12
1991 Jan 1	9.0	-----	-----	-----	-----	NO CHANGE	-----	-----	-----

MINING RESERVES (PROBABLE)

1989 Jan 1	9.0	11,404,000	13.94	6.47	7.47	95	1.02	1,589,000	89-13
1989 Jul 1	9.0	11,300,000	12.66	5.82	6.84	83	0.94	1,430,000	89-3
1991 Jan 1	9.0	-----	-----	-----	-----	NO CHANGE	-----	-----	-----

NOTES

- mining reserve includes primary stoping and pillar tonnage.
- = reserve quoted in July, 1989 Initial Public Offering Prospectus.

SOURCES

- 89-12 Rollings, R.W. (1982); Reserve Summary, Cyprus Anvil Mining Corporation in-house report.
- 89-13 Canadian Mine Development (May 88); Dy Deposit Exploration and Mining Cost Estimate, page 9.
- 89-3 C.R.I. PROSPECTUS (May 90), Based on S89 Alpha 2 mine plan.

2.9 SWIM DEPOSIT

TABLE 11
SWIM DEPOSIT: HISTORICAL GEOLOGICAL AND MINING RESERVES
(1989-1991)

GEOLOGICAL RESERVES (PROBABLE)
 (no mining loss or adjustments)

<u>PERIOD</u>	<u>CUT OFF</u>	<u>ORE TONNES</u>	<u>LEAD+ ZINC</u>	<u>% LEAD</u>	<u>% ZINC</u>	<u>g/mt Ag</u>	<u>g/mt Au</u>	<u>LEAD+ZINC METAL TNS</u>	<u>SOURCE</u>
1989 Jan 1	4.0	5,130,000	7.90	3.50	4.40	47	NA	405,000	89-15
1991 Jan 1	4.0	----- NO CHANGE -----							

MINING RESERVES (PROBABLE)

1989 Jan 1	4.0	3,910,000	7.13	3.22	3.91	42	NA	278,000	89-15
1991 Jan 1	4.0	----- NO CHANGE -----							

NOTES

- Swim reserves not included in S89 Alpha 2 long range mine plan.
- Reserves calculated by the polygonal method.
- March 1988; Mining reserves calculated within preliminary open pit design (SIV88 Pit).

SOURCES

89-15 Vintila, I. (March 88); Preliminary Open Pit Reserve Evaluation For The Swim Deposit, page 5.