Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	27,274	2.34	63,745	6.26	2.31	3.96	33.9	0.22	3,997
3810	31,443	2.64	83,144	6.34	2.24	4.10	15.6	0.01	5,271
3790	63,847	2.87	183,094	8.49	3.04	5.45	34.1	0.08	15,545
3770	103,003	2.87	295,203	6.74	2.37	4.37	34.2	0.19	19,897
3750	100,017	2.68	268,176	6.65	2.70	3.95	38.3	0.28	17,834
3730	114,323	2.88	328,757	6.40	2.44	3.96	33.6	0.12	21,040
3710	113,576	2.80	317,880	6.42	2.61	3.80	36.6	0.14	20,376
3690	61,733	2.78	171,656	6.83	2.58	4.25	34.5	0.15	11,724
3670	45,251	2.77	125,182	6.09	2.25	3.84	29.7	0.15	7,624
3650	30,602	2.90	88,635	5.92	2.43	3.49	31.8	0.16	5,247
3630	53,833	3.04	163,742	5.29	2.11	3.18	22.1	0.19	8,662
3610	63,226	2.99	189,079	6.24	2.38	3.86	24.4	0.20	11,798
3590	77,749	2.98	231,392	6.13	2.28	3.85	24.9	0.17	14,184
3570	65,899	3.08	202,806	6.11	2.35	3.76	23.2	0.15	12,391
3550	110,030	3.12	343,786	6.86	2.76	4.10	31.6	0.11	23,584
3530	181,653	3.17	575,510	7.55	2.98	4.57	33.2	0.11	43,451
3510	229,297	3.02	693,291	8.18	3.38	4.80	41.0	0.13	56,711
3490	189,086	3.00	567,882	8.11	3.45	4.66	44.1	0.13	46,055
3470	164,393	2.88	473,148	6.64	2.73	3.91	35.7	0.10	31,417
3450	101,976	3.04	310,185	7.02	2.83	4.19	31.4	0.09	21,775
3430	60,147	3.22	193,601	8.59	3.40	5.19	38.8	0.12	16,630
3410	1,368	3.40	4,646	6.52	2.63	3.89	22.6	0.06	303
3390	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3370	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3350	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3330	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3310	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
Total	1,989,726	2.95	5,874,534	7.07	2.81	4.27	34.32	0.14	415,517

Blasthole Calculation

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	14,727	3.00	44,180	7.80	3.10	4.70	NA	3,446
3870	9,570	3.00	28,711	7.46	2.81	4.65	NA	2,142
3850	9,850	3.00	29,549	6.24	2.41	3.83	NA	1,844
3830	33,849	3.00	101,547	6.77	2.66	4.11	NA	6,875
3810	40,107	3.00	120,320	7.06	2.97	4.09	NA	8,495
3790	63,360	3.00	190,080	8.28	3.40	4.88	NA	15,739
3770	75,947	3.00	227,840	6.92	2.66	4.26	33.7	15,767
3750	91,354	3.00	274,062	7.00	2.79	4.21	39.2	19,184
3730	136,085	3.00	408,256	7.05	2.80	4.25	41.8	28,782
3710	113,390	3.00	340,170	6.83	2.65	4.18	36.9	23,234
3690	79,885	3.00	239,655	6.58	2.40	4.18	30.8	15,769
3670	37,725	3.00	113,175	6.25	2.34	3.91	32.1	7,073
3650	2,133	3.00	6,400	7.01	2.34	4.67	27.0	449
3630	76,298	3.00	228,893	6.61	2.52	4.09	24.9	15,130
3610	52,071	3.00	156,212	7.48	2.60	4.88	23.6	11,685
3590	82,801	3.00	248,404	7.54	2.78	4.76	29.7	18,730
3570	47,414	3.00	142,243	7.07	2.71	4.36	28.0	10,057
3550	99,850	3.00	299,549	7.78	3.21	4.57	38.5	23,305
3530	172,950	3.00	518,849	8.69	3.40	5.29	35.1	45,088
3510	231,307	3.00	693,922	9.25	3.80	5.45	46.4	64,188
3490	203,989	3.00	611,968	8.95	3.77	5.18	45.8	54,771
3470	148,273	3.00	444,818	8.54	3.56	4.98	43.0	37,987
3450	101,215	3.00	303,645	8.00	3.40	4.60	40.5	24,292
3430	66,668	3.00	200,005	8.08	3.37	4.71	36.5	16,160
3410	1,778	3.00	5,333	10.19	4.75	5.44	48.0	543
3390	0	0.00	0					0
3370	0	0.00	0					0
3350	0	0.00	0					0
3330	0	0.00	0					0
3310	0	0.00	0					0
Total	1,992,595	3.00	5,977,786	7.87	3.16	4.72	NA	470,733

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3870	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3850	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3830	19.4	22.1	37.2	7.5	13.2	3.6		41.9
3810	21.6	11.9	30.9	10.2	24.6	-0.2		37.9
3790	-0.8	4.4	3.7	-2.5	10.6	-11.7		1.2
3770	-35.6	4.5	-29.6	2.6	10.9	-2.6	-1.4	-26.2
3750	-9.5	10.6	2.1	5.0	3.2	6.2	2.3	7.0
3730	16.0	4.1	19.5	9.2	12.9	6.8	19.7	26.9
3710	-0.2	6.7	6.6	6.0	1.5	9.1	0.8	12.3
3690	22.7	7.3	28.4	-3.8	-7.5	-1.7	-12.0	25.7
3670	-19.9	7.8	-10.6	2.6	3.8	1.8	7.4	-7.8
3650	-1334.5	3.5	-1284.9	15.5	-3.8	25.3	-17.8	-1069.6
3630	29.4	-1.4	28.5	20.0	16.3	22.2	11.2	42.7
3610	-21.4	0.3	-21.0	16.6	8.5	20.9	-3.4	-1.0
3590	6.1	0.8	6.8	18.7	18.0	19.1	16.2	24.3
3570	-39.0	-2.6	-42.6	13.6	13.3	13.8	17.1	-23.2
3550	-10.2	-4.1	-14.8	11.8	14.0	10.3	18.0	-1.2
3530	-5.0	-5.6	-10.9	13.1	12.4	13.6	5.4	3.6
3510	0.9	-0.8	0.1	11.6	11.1	11.9	11.6	11.6
3490	7.3	-0.1	7.2	9.4	8.5	10.0	3.7	15.9
3470	-10.9	4.1	-6.4	22.2	23.3	21.5	16.9	17.3
3450	-0.8	-1.4	-2.2	12.3	16.8	8.9	22.5	10.4
3430	9.8	-7.3	3.2	-6.3	-0.9	-10.2	-6.4	-2.9
3410	23.0	-13.2	12.9	36.0	44.6	28.5	52.9	44.3
3390								
3370								
3350								
3330								
3310								
Total	0.1	1.6	1.7	10.2	11.1	9.6	NA	11.7

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	18,037	2.40	43,282	7.15	2.64	4.51	36.0	0.22	3,095
3810	21,055	2.75	57,798	7.06	2.46	4.61	21.0	0.01	4,086
3790	49,386	3.04	149,967	9.36	3.29	6.07	34.8	0.07	14,037
3770	93,050	2.91	270,855	6.92	2.44	4.47	35.0	0.19	18,716
3750	81,170	2.73	221,483	7.08	2.91	4.18	39.6	0.29	15,703
3730	73,582	3.06	225,131	7.25	2.79	4.47	36.1	0.11	16,345
3710	101,851	2.83	288,553	6.60	2.70	3.90	37.4	0.14	19,044
3690	53,398	2.80	149,521	7.16	2.70	4.46	35.9	0.15	10,706
3670	39,404	2.77	109,250	6.29	2.35	3.93	31.0	0.15	6,861
3650	20,557	2.95	60,553	6.49	2.80	3.69	37.2	0.15	3,930
3630	31,348	3.00	94,183	5.93	2.37	3.56	25.3	0.20	5,585
3610	52,062	3.03	157,852	6.56	2.49	4.07	25.0	0.20	10,355
3590	61,174	3.02	184,880	6.53	2.50	4.03	27.8	0.17	12,073
3570	56,476	3.09	174,477	6.36	2.49	3.87	25.3	0.16	11,097
3550	93,423	3.12	291,194	7.30	3.02	4.29	35.4	0.12	21,286
3530	160,039	3.16	505,562	7.96	3.14	4.82	35.1	0.11	40,243
3510	215,769	3.03	652,983	8.41	3.47	4.94	41.8	0.13	54,916
3490	164,082	3.01	493,316	8.66	3.67	4.99	46.8	0.12	42,721
3470	131,241	2.86	374,994	7.20	2.96	4.24	38.9	0.09	27,000
3450	89,381	3.09	276,194	7.33	2.98	4.35	32.8	0.09	20,245
3430	56,477	3.25	183,379	8.82	3.50	5.31	39.9	0.13	16,156
3410	1,368	3.40	4,646	6.52	2.63	3.89	22.6	0.06	303
3390	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3370	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3350	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3330	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3310	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
Total	1,664,330	2.99	4,970,049	7.54	3.01	4.53	36.53	0.14	374,501

Blasthole Calculation

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	14,727	3.00	44,180	7.80	3.1	4.7	NA	3,446
3870	6,793	3.00	20,378	8.60	3.3	5.3	NA	1,753
3850	9,850	3.00	29,549	6.24	2.41	3.83	NA	1,844
3830	27,307	3.00	81,920	7.30	2.79	4.51	NA	5,980
3810	33,280	3.00	99,840	7.60	3.19	4.41	NA	7,588
3790	61,440	3.00	184,320	8.40	3.45	4.95	NA	15,483
3770	66,560	3.00	199,680	7.28	2.79	4.49	35.2	14,537
3750	69,416	3.00	208,249	7.71	3.11	4.6	43.0	16,056
3730	101,530	3.00	304,589	7.68	3.06	4.62	44.3	23,392
3710	91,303	3.00	273,908	7.32	2.9	4.42	38.9	20,050
3690	56,509	3.00	169,527	7.37	2.65	4.72	31.9	12,494
3670	25,328	3.00	75,983	7.07	2.67	4.4	36.2	5,372
3650	2,133	3.00	6,400	7.01	2.34	4.67	27.0	449
3630	54,946	3.00	164,838	7.29	2.73	4.56	26.4	12,017
3610	48,711	3.00	146,134	7.66	2.64	5.02	23.3	11,194
3590	70,415	3.00	211,244	8.14	3.01	5.13	32.1	17,195
3570	43,888	3.00	131,663	7.28	2.78	4.5	28.5	9,585
3550	98,674	3.00	296,022	7.80	3.21	4.59	38.6	23,090
3530	161,479	3.00	484,438	8.99	3.49	5.5	35.3	43,551
3510	223,701	3.00	671,102	9.41	3.86	5.55	47.1	63,151
3490	188,803	3.00	566,408	9.28	3.89	5.39	47.2	52,563
3470	144,939	3.00	434,818	8.64	3.59	5.05	43.2	37,568
3450	96,354	3.00	289,061	8.20	3.47	4.73	40.0	23,703
3430	63,646	3.00	190,938	8.25	3.43	4.82	37.0	15,752
3410	1,778	3.00	5,333	10.19	4.75	5.44	48.0	543
3390	0	0.00	0	0.00				0
3370	0	0.00	0	0.00				0
3350	0	0.00	0	0.00				0
3330	0	0.00	0	0.00				0
3310	0	0.00	0	0.00				0
Total	1,763,507	3.00	5,290,522	8.29	3.32	4.96	NA	438,355

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1986 to December 31 1987

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3870	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3850	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3830	33.9	20.0	47.2	2.1	5.4	0.0		48.3
3810	36.7	8.5	42.1	7.1	22.9	-4.5		46.1
3790	19.6	-1.2	18.6	-11.4	4.6	-22.6		9.3
3770	-39.8	3.0	-35.6	4.9	12.5	0.4	0.7	-28.8
3750	-16.9	9.0	-6.4	8.2	6.4	9.1	7.9	2.2
3730	27.5	-2.0	26.1	5.6	8.8	3.2	18.6	30.1
3710	-11.6	5.6	-5.3	9.8	6.9	11.8	3.8	5.0
3690	5.5	6.7	11.8	2.8	-1.9	5.5	-12.6	14.3
3670	-55.6	7.6	-43.8	11.0	12.0	10.7	14.2	-27.7
3650	-863.6	1.8	-846.1	7.4	-19.7	21.0	-37.8	-776.0
3630	42.9	-0.1	42.9	18.7	13.2	21.9	4.2	53.5
3610	-6.9	-1.1	-8.0	14.4	5.7	18.9	-7.3	7.5
3590	13.1	-0.7	12.5	19.8	16.9	21.4	13.5	29.8
3570	-28.7	-3.0	-32.5	12.6	10.4	14.0	11.1	-15.8
3550	5.3	-3.9	1.6	6.4	5.9	6.5	8.2	7.8
3530	0.9	-5.3	-4.4	11.5	10.0	12.4	0.7	7.6
3510	3.5	-0.9	2.7	10.6	10.1	11.0	11.2	13.0
3490	13.1	-0.2	12.9	6.7	5.7	7.4	0.9	18.7
3470	9.5	4.8	13.8	16.7	17.5	16.0	10.0	28.1
3450	7.2	-3.0	4.5	10.6	14.1	8.0	18.0	14.6
3430	11.3	-8.2	4.0	-6.9	-2.0	-10.2	-7.8	-2.6
3410	23.0	-13.2	12.9	36.0	44.6	28.5	52.9	44.3
3390								
3370								
3350								
3330								
3310								
Total	5.6	0.5	6.1	9.1	9.5	8.7	NA	14.6

Faro Computer Model Ore Predictions vs Actual Blasthole Results By Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	435	2.10	912	4.06	1.52	2.54	25.0	0.05	37
3830	840	2.21	1,853	4.25	1.49	2.76	27.6	0.20	79
3810	93	2.45	228	4.60	1.78	2.82	20.5	0.06	10
3790	62	2.29	143	4.45	1.90	2.55	33.5	0.12	6
3770	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3750	31	2.46	76	5.11	1.76	3.35	36.3	0.34	4
3730	404	2.35	950	4.90	1.87	3.03	34.1	0.18	47
3710	2,395	2.45	5,862	5.06	1.94	3.12	30.4	0.18	297
3690	217	2.53	551	5.35	1.91	3.44	30.5	0.16	29
3670	186	2.34	437	5.90	1.90	4.00	29.6	0.14	26
3650	62	2.14	133	5.70	2.32	3.38	34.1	0.24	8
3630	186	2.55	475	4.85	1.51	3.35	13.9	0.29	23
3610	186	2.55	475	5.60	1.55	4.05	12.0	0.33	27
3590	9,486	3.01	28,548	8.36	3.47	4.89	49.4	0.03	2,387
3570	80,424	2.89	232,009	8.55	3.76	4.79	48.5	0.16	19,837
3550	125,612	2.92	367,023	7.39	3.26	4.13	46.2	0.10	27,123
3530	166,912	2.93	488,728	7.95	3.72	4.23	54.9	0.21	38,854
3510	211,696	2.90	613,216	7.91	3.37	4.53	49.9	0.15	48,444
3490	255,856	2.87	734,930	8.28	3.48	4.79	45.1	0.11	60,779
3470	321,726	2.96	952,195	8.79	3.71	5.07	45.5	0.07	83,603
3450	245,376	3.04	745,883	8.08	3.44	4.64	40.2	0.05	60,267
3430	15,860	3.10	49,201	8.23	3.31	4.93	36.9	0.08	4,054
3410	45,405	3.23	146,604	6.06	2.43	3.63	25.1	0.05	8,884
3390	18,629	3.14	58,577	6.80	2.68	4.12	24.9	0.05	3,983
3370	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3350	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3330	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3310	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
Total	1,502,081	2.95	4,429,005	8.10	3.48	4.62	45.34	0.11	358,807

Blasthole Calculation

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0	0.00				0
3910	0	0.00	0	0.00				0
3890	0	0.00	0	0.00				0
3870	0	0.00	0	0.00				0
3850	0	0.00	0	0.00				0
3830	0	0.00	0	0.00				0
3810	0	0.00	0	0.00				0
3790	0	0.00	0	0.00				0
3770	0	0.00	0	0.00				0
3750	0	0.00	0	0.00				0
3730	0	0.00	0	0.00				0
3710	0	0.00	0	0.00				0
3690	0	0.00	0	0.00				0
3670	0	0.00	0	0.00				0
3650	0	0.00	0	0.00				0
3630	0	0.00	0	0.00				0
3610	0	0.00	0	0.00				0
3590	7,969	3.00	23,906	9.53	5.10	4.43	74.0	2,278
3570	105,044	3.00	315,132	8.45	3.87	4.58	58.8	26,629
3550	149,373	3.00	448,118	8.58	4.09	4.49	62.1	38,449
3530	149,008	3.00	447,024	9.30	4.26	5.04	57.6	41,573
3510	208,414	3.00	625,242	8.99	3.86	5.13	58.1	56,209
3490	288,137	3.00	864,411	9.55	3.99	5.56	52.3	82,551
3470	299,160	3.00	897,481	9.25	3.86	5.39	55.1	83,017
3450	241,268	3.00	723,805	8.62	3.65	4.97	45.0	62,392
3430	0	0.00	0	0.00				0
3410	50,934	3.00	152,801	6.40	2.60	3.80	23.0	9,779
3390	27,112	3.00	81,336	6.65	2.62	4.03	24.0	5,409
3370	0	0.00	0	0.00				0
3350	0	0.00	0	0.00				0
3330	0	0.00	0	0.00				0
3310	0	0.00	0	0.00				0
Total	1,526,419	3.00	4,579,256	8.92	3.86	5.06	53.0	408,286

%VARIANCE (Blasthole-diluted model)/blasthole #100

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890								
3870								
3850								
3830								
3810								
3790								
3770								
3750								
3730								
3710								
3690								
3670								
3650								
3630								
3610								
3590	-19.0	-0.3	-19.4	12.3	32.0	-10.4	33.2	-4.8
3570	23.4	3.8	26.4	-1.2	2.8	-4.6	17.5	25.5
3550	15.9	2.6	18.1	13.9	20.3	8.0	25.6	29.5
3530	-12.0	2.4	-9.3	14.5	12.7	16.1	4.7	6.5
3510	-1.6	3.4	1.9	12.0	12.7	11.7	14.1	13.8
3490	11.2	4.3	15.0	13.3	12.8	13.8	13.8	26.4
3470	-7.5	1.3	-6.1	5.0	3.9	5.9	17.5	-0.7
3450	-1.7	-1.3	-3.1	6.3	5.8	6.6	10.6	3.4
3430								
3410	10.9	-7.6	4.1	5.3	6.5	4.5	-9.2	9.2
3390	31.3	-4.8	28.0	-2.3	-2.3	-2.2	-3.7	26.4
3370								
3350								
3330								
3310								
Total	1.6	1.7	3.3	9.1	9.8	8.6	14.5	12.1

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3810	31	2.46	76	5.08	2.20	2.88	34.6	0.08	4
3790	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3770	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3750	31	2.46	76	5.11	1.76	3.35	36.3	0.34	4
3730	31	3.07	95	5.71	2.41	3.30	40.6	0.10	5
3710	715	3.04	2,176	6.02	2.67	3.35	38.7	0.18	131
3690	62	2.76	171	7.05	2.36	4.69	36.6	0.13	12
3670	186	2.34	437	5.90	1.90	4.00	29.6	0.14	26
3650	62	2.14	133	5.70	2.32	3.38	34.1	0.24	8
3630	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3610	186	2.55	475	5.60	1.55	4.05	12.0	0.33	27
3590	9,299	3.02	28,073	8.43	3.51	4.91	50.0	0.03	2,364
3570	79,989	2.89	230,736	8.57	3.78	4.80	48.7	0.16	19,797
3550	124,959	2.92	365,266	7.40	3.27	4.13	46.3	0.10	27,030
3530	156,369	2.92	456,770	8.19	3.85	4.34	56.7	0.22	37,409
3510	191,356	2.89	552,055	8.28	3.53	4.75	52.5	0.15	45,710
3490	199,940	2.90	579,301	9.28	3.89	5.39	49.3	0.10	53,759
3470	292,213	2.96	863,883	9.22	3.89	5.33	47.3	0.07	79,650
3450	172,945	3.20	552,881	9.33	3.95	5.38	44.7	0.05	51,584
3430	12,688	3.30	41,819	8.91	3.62	5.29	38.8	0.08	3,726
3410	37,817	3.37	127,471	6.26	2.54	3.73	24.1	0.06	7,992
3390	18,629	3.14	58,577	6.80	2.68	4.12	24.9	0.05	3,983
3370	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3350	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3330	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3310	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
Total	1,297,509	2.98	3,860,468	8.63	3.71	4.92	47.88	0.11	333,221

Blasthole Calculation

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	0	0.00	0	0.00				0
3870	0	0.00	0	0.00				0
3850	0	0.00	0	0.00				0
3830	0	0.00	0	0.00				0
3810	0	0.00	0	0.00				0
3790	0	0.00	0	0.00				0
3770	0	0.00	0	0.00				0
3750	0	0.00	0	0.00				0
3730	0	0.00	0	0.00				0
3710	0	0.00	0	0.00				0
3690	0	0.00	0	0.00				0
3670	0	0.00	0	0.00				0
3650	0	0.00	0	0.00				0
3630	0	0.00	0	0.00				0
3610	0	0.00	0	0.00				0
3590	7,969	3.00	23,906	9.53	5.10	4.43	74.0	2,278
3570	99,488	3.00	298,464	8.65	3.97	4.68	54.1	25,817
3550	139,061	3.00	417,182	8.87	4.23	4.64	64.0	37,004
3530	145,248	3.00	435,745	9.38	4.30	5.08	58.0	40,873
3510	203,045	3.00	609,134	9.08	3.90	5.18	58.8	55,309
3490	270,347	3.00	811,042	9.85	4.11	5.74	53.5	79,888
3470	265,265	3.00	795,795	9.80	4.09	5.71	57.8	77,988
3450	234,325	3.00	702,975	8.73	3.69	5.04	45.1	61,370
3430	0	0.00	0	0.00				0
3410	44,415	3.00	133,245	6.67	2.70	3.97	22.9	8,887
3390	18,890	3.00	56,670	7.28	2.90	4.38	24.0	4,126
3370	0	0.00	0	0.00				0
3350	0	0.00	0	0.00				0
3330	0	0.00	0	0.00				0
3310	0	0.00	0	0.00				0
Total	1,428,053	3.00	4,284,158	9.19	3.97	5.21	54.0	393,540

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1988 to December 31 1988

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890								
3870								
3850								
3830								
3810								
3790								
3770								
3750								
3730								
3710								
3690								
3670								
3650								
3630								
3610								
3590	-16.7	-0.6	-17.4	11.5	31.2	-10.8	32.4	-3.8
3570	19.6	3.8	22.7	0.9	4.8	-2.6	10.0	23.3
3550	10.1	2.6	12.4	16.6	22.7	11.0	27.7	27.0
3530	-7.7	2.6	-4.8	12.7	10.5	14.6	2.2	8.5
3510	5.8	3.8	9.4	8.8	9.5	8.3	10.7	17.4
3490	26.0	3.4	28.6	5.8	5.4	6.1	7.8	32.7
3470	-10.2	1.5	-8.6	5.9	4.9	6.7	18.1	-2.1
3450	26.2	-6.6	21.4	-6.9	-7.0	-6.7	0.9	15.9
3430								
3410	14.9	-12.4	4.3	6.1	5.9	6.0	-5.5	10.1
3390	1.4	-4.8	-3.4	6.6	7.6	5.9	-3.7	3.5
3370								
3350								
3330								
3310								
Total	9.1	0.8	9.9	6.0	6.7	5.5	11.3	15.3

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	156	2.20	342	4.24	1.95	2.29	33.6	0.15	15
3810	3,794	2.22	8,427	5.05	2.24	2.81	38.1	0.13	426
3790	6,095	2.25	13,718	4.78	2.02	2.75	32.9	0.10	654
3770	1,057	2.28	2,413	4.34	1.74	2.60	29.3	0.14	105
3750	93	2.34	219	5.11	1.76	3.35	36.3	0.34	11
3730	1,244	2.68	3,335	4.36	1.64	2.72	26.3	0.10	145
3710	27,306	2.77	75,525	5.36	2.16	3.21	32.2	0.14	4,056
3690	51,128	2.95	150,708	6.91	2.63	4.29	37.6	0.14	10,429
3670	73,427	2.84	208,544	6.56	2.30	4.26	29.0	0.14	13,680
3650	71,809	2.77	198,683	6.15	2.41	3.73	28.5	0.16	12,199
3630	83,005	2.88	239,220	5.14	2.21	2.93	30.0	0.19	12,296
3610	133,479	2.91	387,752	8.17	3.30	4.87	45.4	0.13	31,679
3590	126,576	2.91	368,258	9.22	3.76	5.45	47.7	0.18	33,917
3570	98,276	2.82	277,467	8.25	3.30	4.95	42.3	0.13	22,891
3550	77,345	3.04	234,869	7.06	2.85	4.21	34.8	0.11	16,582
3530	47,022	3.07	144,391	6.87	2.99	3.88	37.9	0.14	9,920
3510	5,660	3.14	17,784	8.08	2.90	5.17	23.6	0.12	1,435
3490	746	3.42	2,556	10.13	4.73	5.40	57.5	0.00	259
3470	8,272	3.14	25,973	6.68	2.86	3.82	34.0	0.09	1,735
3450	28,767	3.29	94,649	6.11	2.76	3.34	33.2	0.09	5,774
3430	237,259	3.20	758,585	8.09	3.24	4.84	35.1	0.08	61,294
3410	217,573	3.12	679,602	7.30	2.80	4.50	27.9	0.06	49,611
3390	185,322	2.91	538,422	6.48	2.40	4.08	27.0	0.08	34,890
3370	108,507	3.05	330,648	7.44	2.68	4.76	24.3	0.06	24,600
3350	77,656	2.90	225,302	7.49	2.53	4.96	22.5	0.04	16,875
3330	13,218	2.34	30,970	5.80	1.83	3.97	22.5	0.01	1,796
3310	4,136	2.23	9,215	5.04	1.69	3.35	30.0	0.00	464
Total	1,688,929	2.98	5,027,571	7.31	2.86	4.46	33.27	0.10	367,737

Blasthole Calculation

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	0	0.00	0	0.00				0
3870	0	0.00	0	0.00				0
3850	0	0.00	0	0.00				0
3830	0	0.00	0	0.00				0
3810	1,185	3.00	3,556	7.35	3.36	3.99	50.0	261
3790	6,443	3.00	19,328	8.58	3.79	4.79	50.4	1,658
3770	3,919	3.00	11,756	9.32	3.61	5.71	73.0	1,096
3750	0	0.00	0	0.00				0
3730	0	0.00	0	0.00				0
3710	11,372	3.00	34,117	9.93	3.34	6.59	55.9	3,388
3690	36,019	3.00	108,056	6.92	2.92	4.00	41.1	7,477
3670	48,389	3.00	145,167	8.20	3.29	4.91	50.8	11,904
3650	63,867	3.00	191,602	8.18	3.22	4.96	33.4	15,673
3630	103,843	3.00	311,530	7.25	2.75	4.50	34.1	22,586
3610	129,192	3.00	387,577	8.38	3.31	5.07	45.8	32,479
3590	142,539	3.00	427,616	7.89	3.18	4.71	48.7	33,739
3570	103,006	3.00	309,017	7.64	3.06	4.58	44.9	23,609
3550	75,843	3.00	227,528	6.97	2.89	4.08	36.1	15,859
3530	61,471	3.00	184,413	7.13	2.83	4.30	38.0	13,149
3510	13,327	3.00	39,980	7.29	2.69	4.60	24.6	2,915
3490	0	0.00	0	0.00				0
3470	0	0.00	0	0.00				0
3450	20,174	3.00	60,522	5.73	2.39	3.34	23.2	3,468
3430	232,040	3.00	696,119	7.07	2.87	4.20	35.5	49,216
3410	228,932	3.00	686,797	7.23	2.85	4.38	29.6	49,655
3390	155,888	3.00	467,665	7.03	2.60	4.43	32.7	32,877
3370	147,226	3.00	441,679	7.29	2.57	4.72	28.5	32,198
3350	79,195	3.00	237,584	6.67	2.31	4.36	18.0	15,847
3330	24,748	3.00	74,245	6.65	2.16	4.49	19.6	4,937
3310	0	0.00	0	0.00				0
Total	1,688,618	3.00	5,065,854	7.38	2.87	4.51	35.8	373,990

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890								
3870								
3850								
3830								
3810	-220.1	26.0	-137.0	31.3	33.3	29.6	23.8	-62.8
3790	5.4	25.0	29.0	44.3	46.7	42.6	34.8	60.5
3770	73.0	23.9	79.5	53.4	51.8	54.5	59.9	90.4
3750								
3730								
3710	-140.1	7.8	-121.4	46.0	35.3	51.3	42.4	-19.7
3690	-41.9	1.7	-39.5	0.1	9.9	-7.3	8.6	-39.5
3670	-51.7	5.3	-43.7	20.0	30.1	13.2	42.9	-14.9
3650	-12.4	7.8	-3.7	24.8	25.2	24.8	14.6	22.2
3630	20.1	3.9	23.2	29.1	19.6	34.9	12.1	45.6
3610	-3.3	3.2	-0.0	2.5	0.3	3.9	0.9	2.5
3590	11.2	3.0	13.9	-16.9	-18.2	-15.7	2.1	-0.5
3570	4.6	5.9	10.2	-8.0	-7.8	-8.1	5.7	3.0
3550	-2.0	-1.2	-3.2	-1.3	1.4	-3.2	3.5	-4.6
3530	23.5	-2.4	21.7	3.6	-5.7	9.8	0.3	24.6
3510	57.5	-4.7	55.5	-10.8	-7.8	-12.4	4.1	50.8
3490								
3470								
3450	-42.6	-9.7	-56.4	-6.6	-15.5	0.0	-43.4	-66.5
3430	-2.2	-6.6	-9.0	-14.4	-12.9	-15.2	1.0	-24.5
3410	5.0	-4.1	1.0	-1.0	1.8	-2.7	5.8	0.1
3390	-18.9	3.2	-15.1	7.8	7.7	7.9	17.4	-6.1
3370	26.3	-1.6	25.1	-2.1	-4.3	-0.8	14.8	23.6
3350	1.9	3.3	5.2	-12.3	-9.5	-13.8	-24.8	-6.5
3330	46.6	21.9	58.3	12.8	15.3	11.6	-15.1	63.6
3310								
Total	-0.0	0.8	0.8	0.9	0.5	1.2	7.1	1.7

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3810	1,337	2.32	3,097	6.09	2.89	3.20	50.2	0.18	189
3790	1,057	2.17	2,299	5.28	2.00	3.27	32.4	0.08	121
3770	62	2.15	133	5.58	2.33	3.25	38.6	0.14	7
3750	93	2.34	219	5.11	1.76	3.35	36.3	0.34	11
3730	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3710	11,881	3.09	36,689	6.24	2.74	3.50	38.2	0.18	2,289
3690	38,408	2.88	110,732	7.74	2.82	4.91	39.8	0.13	8,560
3670	59,432	2.91	173,081	6.96	2.49	4.46	30.2	0.14	12,029
3650	45,686	2.88	131,547	6.99	2.80	4.19	31.5	0.14	9,195
3630	23,605	2.90	68,552	6.49	2.74	3.74	35.3	0.25	4,442
3610	130,214	2.92	379,554	8.24	3.33	4.92	45.9	0.14	31,313
3590	101,945	3.02	307,610	10.15	4.15	6.00	52.7	0.16	31,222
3570	92,335	2.83	260,937	8.49	3.38	5.11	42.7	0.13	22,154
3550	70,285	3.02	212,382	7.35	2.93	4.42	35.5	0.11	15,610
3530	44,845	3.07	137,826	6.97	3.03	3.94	38.4	0.14	9,606
3510	5,660	3.14	17,784	8.08	2.90	5.17	23.6	0.12	1,435
3490	746	3.42	2,556	10.13	4.73	5.40	57.5	0.00	259
3470	6,189	3.11	19,219	7.46	3.17	4.29	36.9	0.08	1,434
3450	15,176	3.30	50,132	7.50	3.31	4.18	38.4	0.09	3,755
3430	199,753	3.31	661,514	8.62	3.48	5.13	36.7	0.08	56,956
3410	177,952	3.30	587,623	7.76	3.01	4.75	27.3	0.06	45,600
3390	166,973	2.96	494,883	6.64	2.45	4.19	26.5	0.07	32,860
3370	90,158	3.21	289,475	7.85	2.83	5.03	23.9	0.05	22,753
3350	68,637	2.99	205,286	7.79	2.64	5.15	22.1	0.05	15,992
3330	9,890	2.38	23,532	6.28	1.96	4.32	20.7	0.01	1,478
3310	2,053	2.25	4,608	5.73	1.92	3.81	35.1	0.00	264
Total	1,364,372	3.06	4,181,264	7.88	3.08	4.80	34.48	0.10	329,534

Blasthole Calculation

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	0	0.00	0	0.00				0
3870	0	0.00	0	0.00				0
3850	0	0.00	0	0.00				0
3830	0	0.00	0	0.00				0
3810	0	0.00	0	0.00				0
3790	4,148	3.00	12,444	9.72	4.11	5.61	54.0	1,210
3770	3,919	3.00	11,756	9.32	3.61	5.71	73.0	1,096
3750	0	0.00	0	0.00				0
3730	0	0.00	0	0.00				0
3710	11,372	3.00	34,117	9.93	3.34	6.59	55.9	3,388
3690	28,641	3.00	85,923	7.48	3.10	4.38	43.8	6,427
3670	47,516	3.00	142,548	8.28	3.32	4.96	51.2	11,803
3650	61,289	3.00	183,867	8.33	3.28	5.05	33.6	15,316
3630	80,965	3.00	242,894	8.20	3.07	5.13	36.8	19,917
3610	123,539	3.00	370,618	8.57	3.38	5.19	46.7	31,762
3590	122,610	3.00	367,829	8.45	3.39	5.06	50.6	31,082
3570	83,734	3.00	251,201	8.49	3.34	5.15	47.4	21,327
3550	54,319	3.00	162,958	8.26	3.33	4.93	39.1	13,460
3530	52,619	3.00	157,856	7.62	2.99	4.63	39.0	12,029
3510	13,327	3.00	39,980	7.29	2.69	4.60	24.6	2,915
3490	0	0.00	0	0.00				0
3470	0	0.00	0	0.00				0
3450	16,889	3.00	50,668	5.94	2.43	3.51	23.0	3,010
3430	190,944	3.00	572,832	7.62	3.07	4.55	37.4	43,650
3410	204,174	3.00	612,521	7.55	2.96	4.59	30.1	46,245
3390	131,839	3.00	395,517	7.41	2.74	4.67	31.9	29,308
3370	132,935	3.00	398,804	7.56	2.68	4.88	28.0	30,150
3350	57,806	3.00	173,417	7.47	2.63	4.84	17.3	12,954
3330	13,612	3.00	40,835	7.85	2.62	5.23	20.0	3,206
3310	0	0.00	0					0
Total	1,436,195	3.00	4,308,585	7.90	3.06	4.84	37.0	340,252

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1989 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890								
3870								
3850								
3830								
3810								
3790	74.5	27.5	81.5	45.7	51.3	41.7	40.0	90.0
3770	98.4	28.4	98.9	40.1	35.5	43.1	47.1	99.3
3750								
3730								
3710	-4.5	-2.9	-7.5	37.2	18.0	46.9	31.7	32.4
3690	-34.1	3.9	-28.9	-3.5	9.0	-12.1	9.0	-33.2
3670	-25.1	2.9	-21.4	15.9	25.0	10.1	41.0	-1.9
3650	25.5	4.0	28.5	16.1	14.6	17.0	6.3	40.0
3630	70.8	3.2	71.8	20.9	10.7	27.1	4.2	77.7
3610	-5.4	2.8	-2.4	3.9	1.5	5.2	1.7	1.4
3590	16.9	-0.6	16.4	-20.1	-22.4	-18.6	-4.1	-0.5
3570	-10.3	5.8	-3.9	0.0	-1.2	0.8	9.8	-3.9
3550	-29.4	-0.7	-30.3	11.0	12.0	10.3	9.3	-16.0
3530	14.8	-2.4	12.7	8.5	-1.3	14.9	1.5	20.1
3510	57.5	-4.7	55.5	-10.8	-7.8	-12.4	4.1	50.8
3490								
3470								
3450	10.1	-10.1	1.1	-26.3	-36.2	-19.1	-67.0	-24.8
3430	-4.6	-10.4	-15.5	-13.1	-13.4	-12.7	1.8	-30.5
3410	12.8	-10.1	4.1	-2.8	-1.7	-3.5	9.3	1.4
3390	-26.6	1.2	-25.1		10.6	10.3	17.0	-12.1
3370	32.2	-7.0	27.4		-5.6	-3.1	14.8	24.5
3350	-18.7	0.3	-18.4		-0.4	-6.4	-27.7	-23.4
3330	27.3	20.7	42.4		25.2	17.4	-3.5	53.9
3310								
Total	5.0	-2.2	3.0	0.2	-0.7	0.8	6.9	3.2

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	435	2.10	912	4.06	1.52	2.54	25.0	0.05	37
3830	28,270	2.33	65,940	6.20	2.29	3.92	33.7	0.22	4,090
3810	35,330	2.60	91,799	6.22	2.24	3.98	17.7	0.02	5,707
3790	70,005	2.81	196,954	8.23	2.97	5.26	34.0	0.08	16,205
3770	104,059	2.86	297,616	6.72	2.36	4.36	34.2	0.18	20,001
3750	100,141	2.68	268,470	6.65	2.70	3.95	38.3	0.28	17,849
3730	115,970	2.87	333,042	6.38	2.43	3.94	33.5	0.12	21,232
3710	143,277	2.79	399,266	6.19	2.52	3.68	35.7	0.14	24,728
3690	113,078	2.86	322,915	6.87	2.60	4.27	35.9	0.15	22,183
3670	118,864	2.81	334,163	6.38	2.28	4.10	29.3	0.15	21,330
3650	102,474	2.81	287,451	6.07	2.42	3.66	29.5	0.16	17,454
3630	137,025	2.94	403,437	5.20	2.17	3.03	26.8	0.19	20,981
3610	196,892	2.93	577,306	7.54	3.00	4.54	38.5	0.16	43,504
3590	213,811	2.94	628,197	8.04	3.20	4.84	39.4	0.17	50,487
3570	244,599	2.91	712,282	7.74	3.18	4.56	38.9	0.15	55,119
3550	312,987	3.02	945,678	7.12	2.98	4.14	38.1	0.11	67,288
3530	395,587	3.06	1,208,628	7.63	3.28	4.35	42.5	0.15	92,224
3510	446,652	2.96	1,324,291	8.05	3.37	4.68	44.9	0.14	106,590
3490	445,688	2.93	1,305,367	8.20	3.47	4.73	44.7	0.12	107,093
3470	494,392	2.94	1,451,315	8.04	3.38	4.67	42.1	0.08	116,755
3450	376,119	3.06	1,150,716	7.63	3.22	4.41	37.3	0.07	87,816
3430	313,266	3.20	1,001,386	8.19	3.27	4.91	35.9	0.09	81,978
3410	264,347	3.14	830,851	7.08	2.73	4.34	27.4	0.06	58,798
3390	203,951	2.93	596,999	6.51	2.43	4.08	26.8	0.08	38,873
3370	108,507	3.05	330,648	7.44	2.68	4.76	24.3	0.06	24,600
3350	77,656	2.90	225,302	7.49	2.53	4.96	22.5	0.04	16,875
3330	13,218	2.34	30,970	5.80	1.83	3.97	22.5	0.01	1,796
3310	4,136	2.23	9,215	5.04	1.69	3.35	30.0	0.00	464
Total	5,180,736	2.96	15,331,110	7.45	3.02	4.43	37.16	0.12	1,142,060

Blasthole Calculation

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					0
3910	0	0.00	0					0
3890	14,727	3.00	44,180	7.80	3.10	4.70	NA	3,446
3870	9,570	3.00	28,711	7.46	2.81	4.65	NA	2,142
3850	9,850	3.00	29,549	6.24	2.41	3.83	NA	1,844
3830	33,849	3.00	101,547	6.77	2.66	4.11	NA	6,875
3810	41,292	3.00	123,876	7.07	2.98	4.09	NA	8,756
3790	69,803	3.00	209,408	8.31	3.44	4.87	NA	17,397
3770	79,865	3.00	239,596	7.04	2.71	4.33	35.7	16,862
3750	91,354	3.00	274,062	7.00	2.79	4.21	39.2	19,184
3730	136,085	3.00	408,256	7.05	2.80	4.25	41.8	28,782
3710	124,762	3.00	374,287	7.11	2.71	4.40	38.6	26,621
3690	115,904	3.00	347,711	6.69	2.56	4.12	34.0	23,247
3670	86,114	3.00	258,342	7.35	2.87	4.47	42.6	18,977
3650	66,001	3.00	198,002	8.14	3.19	4.95	33.2	16,122
3630	180,141	3.00	540,423	6.98	2.65	4.33	30.2	37,716
3610	181,263	3.00	543,789	8.12	3.11	5.02	39.4	44,164
3590	233,309	3.00	699,926	7.82	3.10	4.72	42.8	54,747
3570	255,464	3.00	766,392	7.87	3.33	4.54	47.5	60,294
3550	325,065	3.00	975,195	7.96	3.54	4.42	48.8	77,612
3530	383,429	3.00	1,150,286	8.68	3.64	5.03	44.3	99,810
3510	453,048	3.00	1,359,144	9.07	3.79	5.28	51.1	123,312
3490	492,126	3.00	1,476,379	9.30	3.90	5.40	49.6	137,322
3470	447,433	3.00	1,342,299	9.01	3.76	5.25	51.1	121,004
3450	362,657	3.00	1,087,972	8.29	3.51	4.78	42.5	90,152
3430	298,708	3.00	896,124	7.30	2.98	4.31	35.7	65,376
3410	281,644	3.00	844,931	7.10	2.82	4.28	28.5	59,978
3390	183,000	3.00	549,001	6.97	2.60	4.37	31.4	38,286
3370	147,226	3.00	441,679	7.29	2.57	4.72	28.5	32,198
3350	79,195	3.00	237,584	6.67	2.31	4.36	18.0	15,847
3330	24,748	3.00	74,245	6.65	2.16	4.49	19.6	4,937
3310	0	0.00	0					0
Total	5,207,632	3.00	15,622,896	8.02	3.27	4.75	NA	1,253,010

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3870	100.0	100.0	100.0	100.0	100.0	100.0		100.0
3850	95.6	30.2	96.9	34.9	36.9	33.7		98.0
3830	16.5	22.2	35.1	8.4	14.1	4.7		40.5
3810	14.4	13.4	25.9	12.0	24.9	2.7		34.8
3790	-0.3	6.2	5.9	1.0	13.6	-8.0		6.8
3770	-30.3	4.7	-24.2	4.5	12.6	-0.6	4.2	-18.6
3750	-9.6	10.6	2.0	5.0	3.3	6.2	2.3	7.0
3730	14.8	4.3	18.4	9.6	13.2	7.2	19.8	26.2
3710	-14.8	7.1	-6.7	12.9	7.3	16.4	7.6	7.1
3690	2.4	4.8	7.1	-2.7	-1.6	-3.5	-5.7	4.6
3670	-38.0	6.3	-29.3	13.1	20.6	8.3	31.3	-12.4
3650	-55.3	6.5	-45.2	25.4	24.3	26.2	11.0	-8.3
3630	23.9	1.9	25.3	25.5	18.2	29.9	11.4	44.4
3610	-8.6	2.3	-6.2	7.2	3.5	9.5	2.3	1.5
3590	8.4	2.1	10.2	-2.7	-3.2	-2.5	8.1	7.8
3570	4.3	2.9	7.1	1.6	4.5	-0.4	18.1	8.6
3550	3.7	-0.7	3.0	10.6	15.9	6.3	22.0	13.3
3530	-3.2	-1.8	-5.1	12.1	9.9	13.6	4.0	7.6
3510	1.4	1.2	2.6	11.3	11.2	11.3	12.2	13.6
3490	9.4	2.4	11.6	11.8	11.0	12.4	9.9	22.0
3470	-10.5	2.1	-8.1	10.8	10.2	11.1	17.6	3.5
3450	-3.7	-2.0	-5.8	7.9	8.3	7.6	12.4	2.6
3430	-4.9	-6.6	-11.7	-12.2	-9.8	-13.9	-0.6	-25.4
3410	6.1	-4.8	1.7	0.3	2.9	-1.4	4.1	2.0
3390	-11.4	2.4	-8.7	6.6	6.7	6.6	14.6	-1.5
3370	26.3	-1.6	25.1	-2.1	-4.3	-0.8	14.8	23.6
3350	1.9	3.3	5.2	-12.3	-9.5	-13.8	-24.8	-6.5
3330	46.6	21.9	58.3	12.8	15.3	11.6	-15.1	63.6
3310								
Total	0.5	1.4	1.9	7.1	7.7	6.7	NA	8.9

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	ERR	0	ERR	ERR	ERR	ERR	ERR	0
3830	18,037	2.40	43,282	7.15	2.64	4.51	36.0	0.22	3,095
3810	22,424	2.72	60,971	7.02	2.48	4.54	22.5	0.01	4,279
3790	50,444	3.02	152,266	9.30	3.27	6.03	34.8	0.07	14,158
3770	93,112	2.91	270,988	6.91	2.44	4.47	35.0	0.18	18,723
3750	81,294	2.73	221,778	7.09	2.91	4.18	39.6	0.29	15,718
3730	73,613	3.06	225,226	7.26	2.79	4.47	36.1	0.11	16,350
3710	114,447	2.86	327,418	6.56	2.70	3.85	37.5	0.14	21,465
3690	91,868	2.83	260,424	7.40	2.75	4.65	37.6	0.14	19,277
3670	99,022	2.86	282,768	6.69	2.43	4.25	30.5	0.15	18,916
3650	66,305	2.90	192,233	6.83	2.80	4.03	33.3	0.14	13,133
3630	54,953	2.96	162,735	6.16	2.53	3.64	29.5	0.22	10,027
3610	182,462	2.95	537,881	7.75	3.08	4.67	39.7	0.15	41,695
3590	172,418	3.02	520,562	8.77	3.53	5.24	43.7	0.16	45,659
3570	228,800	2.91	666,150	7.96	3.29	4.68	40.2	0.15	53,047
3550	288,667	3.01	868,842	7.36	3.10	4.25	40.0	0.11	63,926
3530	361,253	3.05	1,100,157	7.93	3.42	4.51	44.5	0.16	87,259
3510	412,784	2.96	1,222,821	8.35	3.49	4.86	46.4	0.14	102,061
3490	364,768	2.95	1,075,172	9.00	3.79	5.21	48.2	0.11	96,739
3470	429,643	2.93	1,258,095	8.59	3.60	4.99	44.6	0.08	108,083
3450	277,502	3.17	879,206	8.60	3.61	4.99	40.6	0.07	75,584
3430	268,918	3.30	886,711	8.67	3.49	5.17	37.5	0.09	76,838
3410	217,137	3.31	719,739	7.49	2.92	4.56	26.7	0.06	53,895
3390	185,602	2.98	553,461	6.66	2.47	4.18	26.3	0.07	36,844
3370	90,158	3.21	289,475	7.86	2.83	5.03	23.9	0.05	22,753
3350	68,637	2.99	205,286	7.79	2.64	5.15	22.1	0.05	15,992
3330	9,890	2.38	23,532	6.28	1.96	4.32	20.7	0.01	1,478
3310	2,053	2.24	4,608	5.73	1.92	3.81	35.1	0.00	264
Total	4,326,211	3.01	13,011,780	7.97	3.24	4.74	39.24	0.12	1,037,256

Blasthole Calculation

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950	0	0.00	0					
3910	0	0.00	0					
3890	14,727	3.00	44,180	7.80	3.10	4.70	NA	3,446
3870	6,793	3.00	20,378	8.60	3.30	5.30	NA	1,753
3850	9,850	3.00	29,549	6.24	2.41	3.83	NA	1,844
3830	27,307	3.00	81,920	7.30	2.79	4.51	NA	5,980
3810	33,280	3.00	99,840	7.60	3.19	4.41	NA	7,588
3790	65,588	3.00	196,764	8.48	3.49	4.99	NA	16,692
3770	70,479	3.00	211,436	7.39	2.84	4.56	37.3	15,632
3750	69,416	3.00	208,249	7.71	3.11	4.60	43.0	16,056
3730	101,530	3.00	304,589	7.68	3.06	4.62	44.3	23,392
3710	102,675	3.00	308,025	7.61	2.95	4.66	40.8	23,438
3690	85,150	3.00	255,450	7.41	2.80	4.61	35.9	18,921
3670	72,844	3.00	218,531	7.86	3.09	4.77	46.0	17,175
3650	63,422	3.00	190,267	8.29	3.25	5.04	33.4	15,765
3630	135,911	3.00	407,732	7.83	2.93	4.90	32.6	31,934
3610	172,251	3.00	516,752	8.31	3.17	5.14	40.1	42,956
3590	200,993	3.00	602,979	8.38	3.32	5.06	45.1	50,555
3570	227,109	3.00	681,328	8.33	3.51	4.82	46.7	56,729
3550	292,054	3.00	876,162	8.40	3.72	4.68	50.8	73,554
3530	359,346	3.00	1,078,039	8.95	3.74	5.20	45.0	96,452
3510	440,072	3.00	1,320,216	9.19	3.84	5.35	51.8	121,375
3490	459,150	3.00	1,377,450	9.62	4.02	5.60	50.9	132,450
3470	410,204	3.00	1,230,613	9.39	3.91	5.48	52.6	115,556
3450	347,568	3.00	1,042,704	8.45	3.57	4.88	42.6	88,082
3430	254,590	3.00	763,770	7.78	3.16	4.62	37.3	59,402
3410	250,366	3.00	751,099	7.41	2.93	4.49	28.9	55,676
3390	150,729	3.00	452,187	7.39	2.76	4.63	30.9	33,433
3370	132,935	3.00	398,804	7.56	2.68	4.88	28.0	30,150
3350	57,806	3.00	173,417	7.47	2.63	4.84	17.3	12,954
3330	13,612	3.00	40,835	7.85	2.62	5.23	20.0	3,206
3310	0	0.00	0					
Total	4,627,755	3.00	13,883,265	8.44	3.44	5.00	NA	1,172,148

%VARIANCE (Blasthole-diluted model)/blasthole *100

Period: January 1 1986 to December 31 1989

%Pb+Zn Cutoff = 5%

Bench (Toe)	Volume	Density	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Metal
3950								
3910								
3890			100.0	100.0	100.0	100.0		100.0
3870			100.0	100.0	100.0	100.0		100.0
3850	100.0		100.0					100.0
3830	33.9	20.0	47.2	2.1	5.4	0.0		48.3
3810	32.6	9.4	38.9	7.7	22.2	-2.9		43.6
3790	23.1	-0.6	22.6	-9.6	6.3	-20.8		15.2
3770	-32.1	3.0	-28.2	6.5	14.0	1.9	6.3	-19.8
3750	-17.1	9.1	-6.5	8.1	6.5	9.2	7.9	2.1
3730	27.5	-2.0	26.1	5.5	8.8	3.3	18.6	30.1
3710	-11.5	4.6	-6.3	13.8	8.3	17.4	8.0	8.4
3690	-7.9	5.5	-1.9	0.1	1.8	-1.0	-4.7	-1.9
3670	-35.9	4.8	-29.4	14.9	21.3	10.7	33.6	-10.1
3650	-4.5	3.4	-1.0	17.5	13.8	20.0	0.3	16.7
3630	59.6	1.3	60.1	21.3	13.9	25.8	9.5	68.6
3610	-5.9	1.7	-4.1	6.7	2.8	9.2	0.9	2.9
3590	14.2	-0.6	13.7	-4.6	-6.2	-3.6	3.0	9.7
3570	-0.7	3.0	2.2	4.4	6.3	2.9	13.8	6.5
3550	1.2	-0.3	0.8	12.4	16.5	9.0	21.2	13.1
3530	-0.5	-1.5	-2.1	11.4	8.6	13.3	1.2	9.5
3510	6.2	1.3	7.4	9.2	9.2	9.2	10.4	15.9
3490	20.6	1.7	21.9	6.4	5.7	7.0	5.3	27.0
3470	-4.7	2.4	-2.2	8.5	8.0	8.9	15.2	6.5
3450	20.2	-5.6	15.7	-1.8	-1.1	-2.2	4.7	14.2
3430	-5.6	-9.9	-16.1	-11.4	-10.5	-12.1	-0.5	-29.4
3410	13.3	-10.5	4.2	-1.0	0.1	-1.7	7.7	3.2
3390	-23.1	0.6	-22.4	10.0	10.4	9.7	14.8	-10.2
3370	32.2	-7.0	27.4	-4.0	-5.6	-3.1	14.8	24.5
3350	-18.7	0.3	-18.4	-4.3	-0.4	-6.4	-27.7	-23.4
3330	27.3	20.7	42.4	20.0	25.2	17.4	-3.5	53.9
3310								
Total	6.5	-0.3	6.3	5.6	5.9	5.3	NA	11.5

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: Remaining as of January 1, 1990

%Pb+Zn Cutoff = 4%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3830	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3810	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3790	373	2.90	1,083	9.87	3.51	6.37	43.0	0.06	0
3770	964	3.09	2,983	8.68	3.28	5.39	51.6	0.32	0
3750	1,897	2.44	4,636	4.88	1.75	3.13	34.6	0.26	0
3730	4,820	2.82	13,595	4.64	1.87	2.77	33.0	0.10	0
3710	11,290	3.19	35,986	5.01	2.57	2.45	41.1	0.25	0
3690	7,557	3.05	23,057	4.85	2.19	2.66	36.6	0.19	0
3670	30,478	2.91	88,597	5.35	2.12	3.23	26.8	0.21	0
3650	96,906	2.62	253,432	5.94	2.03	3.92	20.0	0.24	0
3630	120,977	2.64	319,732	5.41	1.79	3.62	18.4	0.26	0
3610	136,029	2.61	355,367	5.74	1.87	3.87	19.0	0.21	0
3590	155,435	2.73	424,460	5.95	2.13	3.81	21.8	0.19	0
3570	180,253	2.75	495,007	6.81	2.49	4.32	25.2	0.15	0
3550	232,066	2.85	660,887	5.75	2.24	3.52	25.7	0.18	0
3530	258,003	2.87	741,057	6.25	2.52	3.72	29.4	0.20	0
3510	363,025	2.87	1,042,321	6.89	2.65	4.24	29.1	0.14	0
3490	350,679	2.97	1,040,849	6.93	2.67	4.26	28.0	0.14	0
3470	368,500	2.91	1,072,978	7.61	2.87	4.74	26.8	0.13	0
3450	282,975	3.00	849,462	7.67	2.89	4.78	28.1	0.13	0
3430	221,616	3.07	680,941	7.24	2.70	4.55	26.8	0.13	0
3410	183,208	2.99	547,685	6.81	2.44	4.38	22.9	0.11	0
3390	164,020	2.90	476,112	6.40	2.21	4.19	17.9	0.10	0
3370	112,892	2.79	315,115	8.26	2.83	5.44	20.5	0.11	0
3350	101,572	2.49	253,261	7.57	2.47	5.10	24.3	0.19	0
3330	54,113	2.40	129,941	7.74	2.52	5.21	24.9	0.06	0
3310	41,891	2.29	96,064	6.51	2.17	4.33	31.4	0.00	0
Total	3,481,537	2.85	9,924,603	6.79	2.52	4.28	25.59	0.15	0

Faro Computer Reserve Predictions vs Actual Blasthole Results By Year and Bench

F9003 - 1/d interpolation - Undiluted, Bench Composite Reserves
- Assays clipped to 95th Percentile By Rock Type

Period: Remaining as of January 1, 1990

%Pb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	%Pb+Zn	%Pb	%Zn	Ag g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3B90	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3B70	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3B50	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3B30	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3B10	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3790	373	2.90	1,083	9.87	3.51	6.37	43.0	0.06	107
3770	964	3.09	2,983	8.68	3.28	5.39	51.6	0.32	259
3750	809	2.39	1,928	5.45	1.82	3.62	35.9	0.34	105
3730	1,213	2.86	3,468	5.34	2.23	3.11	39.3	0.08	185
3710	5,287	3.23	17,072	5.47	2.82	2.64	47.3	0.26	932
3690	1,368	2.84	3,886	6.34	2.27	4.07	30.1	0.08	246
3670	16,452	2.95	48,602	5.96	2.41	3.55	29.7	0.25	2,897
3650	82,694	2.65	219,203	6.15	2.13	4.03	20.7	0.24	13,503
3630	63,443	2.55	161,757	6.34	1.90	4.44	19.0	0.26	10,255
3610	95,289	2.65	252,415	6.23	2.02	4.21	19.7	0.20	15,725
3590	102,286	2.80	286,055	6.64	2.35	4.29	22.8	0.17	18,994
3570	135,718	2.72	368,999	7.61	2.76	4.85	27.4	0.14	28,081
3550	138,363	2.87	397,461	6.59	2.60	3.99	30.5	0.15	26,193
3530	196,954	2.87	565,174	6.79	2.76	4.03	32.0	0.20	38,375
3510	297,996	2.91	865,602	7.37	2.85	4.52	31.1	0.13	63,795
3490	272,184	2.99	814,540	7.60	2.95	4.65	30.4	0.13	61,905
3470	317,124	2.92	924,645	8.13	3.07	5.06	28.3	0.13	75,174
3450	250,880	3.04	763,097	8.04	3.03	5.01	29.0	0.13	61,353
3430	180,316	3.09	556,244	7.83	2.91	4.92	29.0	0.14	43,554
3410	148,687	3.03	450,357	7.29	2.64	4.65	24.0	0.12	32,831
3390	104,993	3.13	328,710	7.27	2.53	4.74	17.7	0.09	23,897
3370	109,968	2.81	308,532	8.35	2.86	5.49	20.6	0.11	25,762
3350	96,907	2.50	242,440	7.71	2.53	5.18	24.6	0.18	18,692
3330	47,271	2.42	114,437	8.17	2.66	5.51	24.3	0.06	9,350
3310	34,645	2.31	80,028	6.93	2.31	4.62	32.6	0.00	5,546
Total	2,702,184	2.88	7,778,714	7.43	2.75	4.67	27.34	0.14	577,716