

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

Faro Mixup 8805 - No Adjustments

10 foot Horizontal Slice
5 foot Vertical Slice

Period: January 1 1986 to December 31 1987

IPb+Zn Cutoff = 5Z

Bench	Volume Density bcy mt/bcy	Tonnes	IPb+Zn	IPb	IZn	Ag	g/mt	Au	g/mt	Metal
3950	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3910	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3890	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3870	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3850	1,964	2.7	5,290	5.25	2.01	3.24	29.2	0.09	278	278
3830	7,858	2.349	18,550	5.86	2.06	3.80	24.4	0.04	1,087	1,087
3810	35,360	2.619	92,730	6.98	2.42	4.55	28.6	0.10	6,469	6,469
3790	51,076	2.862	145,760	8.06	2.84	5.23	32.9	0.17	11,754	11,754
3770	76,515	2.835	216,210	7.51	2.76	4.76	34.0	0.22	16,244	16,244
3750	106,440	2.835	300,660	7.04	2.74	4.31	34.2	0.21	21,175	21,175
3730	122,876	2.727	336,630	6.84	2.67	4.17	35.3	0.18	23,029	23,029
3710	108,830	2.7	292,410	6.32	2.45	3.86	34.6	0.17	18,469	18,469
3690	55,430	2.592	143,360	6.70	2.53	4.17	33.5	0.16	9,612	9,612
3670	31,759	2.754	87,330	6.68	2.63	4.04	32.8	0.16	5,830	5,830
3650	15,224	2.889	43,780	6.43	2.90	3.53	36.6	0.15	2,815	2,815
3630	32,872	2.997	98,080	6.25	2.60	3.65	27.7	0.15	6,131	6,131
3610	43,676	3.051	133,100	6.38	2.48	3.89	24.4	0.20	8,488	8,488
3590	48,161	2.997	144,200	6.02	2.26	3.76	22.9	0.19	8,682	8,682
3570	45,248	3.078	139,480	6.15	2.43	3.71	24.3	0.15	8,572	8,572
3550	102,970	2.997	309,450	6.68	2.72	3.96	29.7	0.11	20,674	20,674
3530	196,183	3.051	596,740	7.30	2.89	4.41	31.8	0.12	43,550	43,550
3510	237,501	3.024	717,190	8.07	3.29	4.78	39.2	0.12	57,892	57,892
3490	203,254	2.997	610,800	8.34	3.57	4.77	44.5	0.12	50,916	50,916
3470	141,538	2.943	417,780	7.55	3.29	4.26	41.5	0.12	31,522	31,522
3450	86,337	3.132	269,360	7.83	3.33	4.50	39.8	0.13	21,094	21,094
3430	59,031	3.24	191,420	8.55	3.47	5.07	40.7	0.10	16,363	16,363
3410	1,375	3.348	4,590	7.40	3.00	4.40	28.7	0.06	340	340
3390	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3370	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3350	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3330	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
3310	0	0	0	0.00	0.00	0.00	0.0	0.00	0	0
Total	1,811,480	2.93	5,314,900	7.36	2.96	4.39	35.6	0.14	390,984	390,984

Blasthole Calculation

Period: January 1 1986 to December 31 1987

IPb+Zn Cutoff = 5Z

Bench	Volume Density bcy mt/bcy	Tonnes	IPb+Zn	IPb	IZn	Ag	g/mt	Au	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

IPb+Zn Cutoff = 5Z

Bench	Volume Density bcy mt/bcy	Tonnes	IPb+Zn	IPb	IZn	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	80.1	10.0	82.1	15.9	16.6	15.5		84.9
3830	71.2	21.7	77.4	19.7	26.1	15.8		81.8
3810	-6.3	12.7	7.1	8.2	24.0	-3.2		14.7
3790	16.9	4.6	20.9	4.0	17.7	-5.6		24.1
3770	-15.0	5.5	-8.3	-3.2	1.2	-5.9	3.5	-11.7
3750	-53.3	5.5	-44.4	8.6	12.0	6.4	20.5	-31.9
3730	-21.0	9.1	-10.5	10.9	12.7	9.7	20.4	1.6
3710	-19.2	10.0	-6.8	13.7	15.4	12.6	11.0	7.9
3690	1.9	13.6	15.4	9.0	4.4	11.6	-5.0	23.1
3670	-25.4	8.2	-14.9	5.6	1.4	8.1	9.3	-8.5
3650	-613.6	3.7	-584.1	8.3	-24.1	24.5	-35.6	-527.4
3630	40.2	0.1	40.5	14.3	4.8	19.9	-4.9	49.0
3610	10.3	-1.7	8.9	16.7	5.9	22.5	-4.7	24.2
3590	31.6	0.1	31.7	26.0	24.9	26.7	28.7	49.5
3570	-3.1	-2.6	-5.9	15.6	12.5	17.5	14.6	10.6
3550	-4.4	0.1	-4.5	14.3	15.2	13.8	23.0	10.5
3530	-21.5	-1.7	-23.2	18.8	17.3	19.8	10.0	0.0
3510	-6.2	-0.8	-6.9	14.2	14.7	13.9	16.7	8.3
3490	-7.7	0.1	-7.8	10.2	8.4	11.5	5.7	3.1
3470	2.3	1.9	3.9	12.7	8.4	15.7	3.9	16.1
3450	10.4	-4.4	6.8	4.5	4.1	4.8	0.5	11.0
3430	7.3	-8.0	-0.3	-3.6	-1.3	-5.3	-10.0	-3.9
3410	22.6	-11.6	13.9	27.4	36.9	19.1	40.2	37.5
3390								
3370								
3350								
3330								
3310								
Total	-2.7	2.2	-0.5	11.2	10.8	11.5	NA	10.8

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

Faro Mixup 8805 - No Adjustments

Period: January 1 1988 to December 31 1988

ZPb+Zn Cutoff = 5%

Bench	Volume	Density	Tonnes	ZPb+Zn	ZPb	ZZn	Ag	g/at	Au	g/at	Metal
	bcy	mt/bcy									
3950	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3910	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3890	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3870	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3850	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3830	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3810	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3790	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3770	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3750	164	2.673	440	5.95	2.42	3.53	37.0	0.26	26		26
3730	196	2.7	530	6.28	2.49	3.78	40.9	0.26	33		33
3710	1,735	2.592	4,510	6.02	2.34	3.69	33.7	0.22	272		272
3690	33	2.646	90	5.71	1.91	3.80	29.6	0.14	5		5
3670	33	2.43	80	5.89	1.96	3.93	27.8	0.13	5		5
3650	33	2.511	80	5.62	2.18	3.44	28.6	0.21	4		4
3630	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3610	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3590	13,129	2.673	35,110	6.18	2.61	3.57	34.4	0.00	2,169		2,169
3570	93,835	2.673	249,780	6.64	2.94	3.71	39.0	0.13	16,595		16,595
3550	125,135	2.835	355,790	7.58	3.49	4.09	46.7	0.14	26,951		26,951
3530	180,533	2.862	517,250	7.56	3.44	4.12	49.7	0.13	39,083		39,083
3510	229,316	2.808	642,570	7.79	3.35	4.44	48.3	0.10	50,024		50,024
3490	291,033	2.808	820,920	8.65	3.61	5.04	47.5	0.07	71,034		71,034
3470	300,756	2.916	875,800	9.12	3.84	5.28	48.7	0.06	79,890		79,890
3450	268,670	3.024	814,170	8.63	3.61	5.02	43.5	0.06	70,238		70,238
3430	16,305	3.159	51,430	7.99	3.22	4.77	37.6	0.08	4,107		4,107
3410	45,575	3.24	147,110	7.60	3.05	4.55	33.4	0.06	11,177		11,177
3390	16,829	3.213	54,270	6.63	2.68	3.95	25.7	0.08	3,599		3,599
3370	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3350	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3330	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
3310	0	0	0	0.00	0.00	0.00	0.0	0.00	0		0
Total	1,583,309	2.89	4,569,930	8.21	3.51	4.70	45.9	0.08	375,214		375,214

Blasthole Calculation

Period: January 1 1988 to December 31 1988

ZPb+Zn Cutoff = 5%

Bench	Volume	Density	Tonnes	ZPb+Zn	ZPb	ZZn	Ag	g/at	Au	g/at	Metal
	bcy	mt/bcy									
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		2,278
3570	99,488	3.00	298,464	8.65	3.97	4.68	54.1		25,817		25,817
3550	139,061	3.00	417,182	8.87	4.23	4.64	64.0		37,004		37,004
3530	145,248	3.00	435,745	9.38	4.30	5.08	58.0		40,873		40,873
3510	203,045	3.00	609,134	9.08	3.90	5.18	58.8		55,309		55,309
3490	270,347	3.00	811,042	9.85	4.11	5.74	53.5		79,888		79,888
3470	265,265	3.00	795,795	9.80	4.09	5.71	57.8		77,988		77,988
3450	234,325	3.00	702,975	8.73	3.67	5.04	45.1		61,370		61,370
3430	0	0.00	0						0		0
3410	44,415	3.00	133,245	6.67	2.70	3.97	22.9		8,887		8,887
3390	18,890	3.00	56,670	7.28	2.90	4.38	24.0		4,126		4,126
3370	0	0.00	0						0		0
3350	0	0.00	0						0		0
3330	0	0.00	0						0		0
3310	0	0.00	0						0		0
Total	1,428,053	3.00	4,284,158	9.19	3.97	5.21	54.0		393,540		393,540

ZVARIANCE (Blasthole-diluted model)/blasthole #100

Period: January 1 1988 to December 31 1988

ZPb+Zn Cutoff = 5%

Bench	Volume	Density	Tonnes	ZPb+Zn	ZPb	ZZn	Ag	g/at	Metal
	bcy	mt/bcy							
3950									
3910									
3890									
3870									
3850									
3830									
3810									
3790									
3770									
3750									
3730									
3710									
3690									
3670									
3650									
3630									
3610									
3590	-64.8	10.9	-46.9	35.2	48.9	19.4	53.5		4.8
3570	5.7	10.9	16.3	23.2	26.1	20.7	27.9		35.7
3550	10.0	5.5	14.7	14.6	17.5	12.0	27.1		27.2
3530	-24.3	4.6	-18.7	19.4	20.0	19.0	14.3		4.4
3510	-12.9	6.4	-5.5	14.3	14.1	14.4	17.8		9.6
3490	-7.7	6.4	-1.2	12.2	12.2	12.1	11.1		11.1
3470	-13.4	2.8	-10.1	6.9	6.0	7.5	15.7		-2.4
3450	-14.7	-0.8	-15.8	1.2	2.2	0.4	3.5		-14.5
3430									
3410	-2.6	-8.0	-10.4	-13.9	-13.0	-14.5	-46.2		-25.8
3390	10.9	-7.1	4.2	8.9	7.7	9.7	-7.1		12.8
3370									
3350									
3330									
3310									
Total	-10.9	3.8	-6.7	10.6	11.7	9.8	NA		4.7

10' nyc.

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

Faro Mixup 8805 - No Adjustments

Period: January 1 1989 to December 31 1989

ZPb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	ZPb+Zn	ZPb	Zn Ag	g/mt	Au g/mt	Metal
3950	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3910	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3890	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3870	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3850	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3830	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3810	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3790	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3770	0	0	0	0.00	0.00	0.00	0.0	0.00	0
3750	33	2.889	90	6.87	2.79	4.09	40.9	0.28	6
3730	262	2.97	780	5.24	2.53	2.72	48.3	0.31	41
3710	13,587	2.727	37,100	5.71	2.20	3.51	30.1	0.14	2,120
3690	39,584	2.808	110,920	7.10	2.74	4.36	36.6	0.13	7,876
3670	47,343	2.862	135,960	7.16	2.67	4.48	32.3	0.14	9,728
3650	47,179	2.916	137,310	6.78	2.68	4.10	30.7	0.22	9,307
3630	100,940	2.835	287,100	6.95	2.76	4.19	36.0	0.17	19,939
3610	150,182	2.862	428,810	7.49	3.14	4.35	43.2	0.14	32,096
3590	149,461	2.835	422,610	7.97	3.36	4.61	45.0	0.17	33,674
3570	117,998	2.808	330,060	7.65	3.18	4.48	39.7	0.19	25,259
3550	78,414	2.97	233,800	7.59	3.10	4.49	35.9	0.15	17,750
3530	51,370	3.105	159,730	7.65	3.02	4.64	30.9	0.15	12,224
3510	5,959	3.213	19,180	7.91	2.95	4.96	26.6	0.17	1,517
3490	786	2.943	2,310	6.13	2.82	3.30	31.5	0.00	142
3470	5,075	3.132	15,870	7.63	3.31	4.32	38.2	0.03	1,210
3450	19,579	3.267	64,120	7.20	3.16	4.05	37.8	0.05	4,618
3430	249,943	3.24	811,130	8.04	3.29	4.75	36.2	0.07	65,191
3410	222,408	3.159	705,160	7.26	2.85	4.40	29.6	0.08	51,159
3390	154,634	3.105	478,480	7.06	2.64	4.42	25.4	0.10	33,785
3370	105,982	3.159	334,940	7.53	2.73	4.81	22.1	0.08	25,228
3350	76,057	2.97	225,550	7.00	2.42	4.58	21.6	0.07	15,793
3330	26,716	2.754	73,600	6.41	2.23	4.17	26.3	0.14	4,714
3310	2,226	2.457	5,480	5.74	2.12	3.62	31.0	0.33	314
Total	1,665,718	3.01	5,020,090	7.44	2.95	4.49	33.6	0.12	373,692

Blasthole Calculation

Period: January 1 1989 to December 31 1989

ZPb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	ZPb+Zn	ZPb	Zn Ag	g/mt	Au g/mt	Metal
3950	0	0.00	0	0.00					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	0.00					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

ZPb+Zn Cutoff = 5%

Bench	Volume bcy	Density mt/bcy	Tonnes	ZPb+Zn	ZPb	Zn Ag	g/mt	Metal
3950								
3910								
3890								
3870								
3850								
3830								
3810								
3790	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3770	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3750								
3730								
3710	-19.5	9.1	-8.7	42.5	34.0	46.7	46.1	37.4
3690	-38.2	6.4	-29.1	5.1	11.5	0.5	16.4	-22.6
3670	0.4	4.6	4.6	13.6	19.5	9.6	36.9	17.6
3650	23.0	2.8	25.3	18.6	18.3	18.8	8.7	39.2
3630	-24.7	5.5	-18.2	15.3	10.2	18.4	2.3	-0.1
3610	-21.6	4.6	-15.7	12.7	7.2	16.2	7.5	-1.1
3590	-21.9	5.5	-14.9	5.7	0.8	9.0	11.1	-8.3
3570	-40.9	6.4	-31.4	9.9	4.9	13.1	16.2	-18.4
3550	-44.4	1.0	-43.5	8.1	7.0	8.8	8.3	-31.9
3530	2.4	-3.5	-1.2	-0.4	-0.9	-0.1	20.7	-1.6
3510	55.3	-7.1	52.0	-8.5	-9.8	-7.8	-8.0	47.9
3490								
3470								
3450	-15.9	-8.9	-26.5	-21.2	-29.8	-15.3	-64.3	-53.4
3430	-30.9	-8.0	-41.6	-5.5	-7.2	-4.3	3.2	-49.3
3410	-8.9	-5.3	-15.1	3.9	3.6	4.1	1.7	-10.6
3390	-17.3	-3.5	-21.0	4.7	3.6	5.4	20.4	-15.3
3370	20.3	-5.3	16.0	0.4	-1.7	1.5	21.2	16.3
3350	-31.6	1.0	-30.1	6.3	7.9	5.4	-24.9	-21.9
3330	-96.3	8.2	-80.2	18.4	14.8	20.2	-31.5	-47.1
3310								
Total	-16.0	-0.5	-16.5	5.7	3.3	7.3	NA	-9.8

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

Faro Mixup 8805 - No Adjustments

Period: January 1 1986 to December 31 1989

IPb+Zn Cutoff = 51

Bench	Volume	Density	Tonnes	IPb+Zn	IPb	IZn	Ag g/mt	Au g/mt	Metal
3950	0		0						0
3910	0		0						0
3890	0		0						0
3870	0		0						0
3850	1,964	2.69	5,290	5.25	2.01	3.24	29.2	0.09	278
3830	7,858	2.36	18,550	5.86	2.06	3.80	24.4	0.04	1,087
3810	35,360	2.62	92,730	6.98	2.42	4.55	28.6	0.10	6,469
3790	51,076	2.85	145,760	8.06	2.84	5.23	32.9	0.17	11,754
3770	76,515	2.83	216,210	7.51	2.76	4.76	34.0	0.22	16,244
3750	106,636	2.82	301,190	7.04	2.74	4.30	34.2	0.21	21,208
3730	123,334	2.74	337,940	6.84	2.67	4.17	35.3	0.18	23,103
3710	124,153	2.69	334,020	6.25	2.42	3.82	34.1	0.17	20,860
3690	95,046	2.68	254,370	6.88	2.62	4.25	34.9	0.15	17,494
3670	79,134	2.82	223,370	6.97	2.66	4.31	32.5	0.15	15,563
3650	62,436	2.90	181,170	6.69	2.73	3.96	32.1	0.20	12,126
3630	133,811	2.88	385,180	6.77	2.72	4.05	33.9	0.17	26,070
3610	193,858	2.90	561,910	7.22	2.98	4.24	38.7	0.16	40,584
3590	210,752	2.86	601,920	7.40	3.06	4.34	39.1	0.16	44,525
3570	257,080	2.80	719,320	7.01	2.95	4.06	36.5	0.16	50,427
3550	306,519	2.93	899,040	7.27	3.12	4.15	38.0	0.13	65,376
3530	428,086	2.98	1,273,720	7.45	3.13	4.32	39.0	0.13	94,858
3510	472,777	2.92	1,378,940	7.94	3.31	4.62	43.3	0.11	109,433
3490	495,073	2.90	1,434,030	8.51	3.59	4.92	46.2	0.09	122,092
3470	447,369	2.93	1,309,450	8.60	3.66	4.94	46.3	0.08	112,622
3450	374,587	3.06	1,147,650	8.36	3.52	4.84	42.3	0.08	95,950
3430	325,279	3.24	1,053,980	8.13	3.32	4.81	37.1	0.07	85,660
3410	269,358	3.18	856,860	7.31	2.89	4.43	30.2	0.08	62,676
3390	171,463	3.11	532,750	7.02	2.64	4.37	25.4	0.10	37,384
3370	105,982	3.16	334,940	7.53	2.73	4.81	22.1	0.08	25,228
3350	76,057	2.97	225,550	7.00	2.42	4.58	21.6	0.07	15,793
3330	26,716	2.75	73,600	6.41	2.23	4.17	26.3	0.14	4,714
3310	2,226	2.46	5,480	5.73	2.12	3.62	31.0	0.33	314
Total	5,060,507	2.95	14,904,920	7.65	3.13	4.52	38.1	0.12	1,139,891

Blasthole Calculation

Period: January 1 1986 to December 31 1989

IPb+Zn Cutoff = 51

Bench	Volume	Density	Tonnes	IPb+Zn	IPb	IZn	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	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					0
Total	4,627,755	3.00	13,883,265	8.44	3.44	5.00	NA	1,172,148

7.9

ZVARIANCE (Blasthole-diluted model)/blasthole #100

Period: January 1 1986 to December 31 1989

IPb+Zn Cutoff = 51

Bench (Toe)	Tonnes	IPb+Zn	IPb	IZn	Ag g/mt	Metal
3950						
3910						
3890	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
3850	80.1	10.2	82.1	15.9	16.6	15.5
3830	71.2	21.3	77.4	19.7	26.1	15.8
3810	-6.3	12.6	7.1	8.2	24.0	-3.2
3790	22.1	4.9	25.9	4.9	18.7	-4.7
3770	-8.6	5.8	-2.3	-1.6	2.8	-4.4
3750	-53.6	5.9	-44.6	8.7	12.0	6.4
3730	-21.5	8.7	-10.9	11.0	12.8	9.8
3710	-20.9	10.3	-8.4	17.9	17.8	18.0
3690	-11.6	10.8	0.4	7.2	6.3	7.6
3670	-8.6	5.9	-2.2	11.3	14.2	9.5
3650	1.6	3.3	4.8	19.2	15.9	21.4
3630	1.5	4.0	5.5	13.6	7.3	17.3
3610	-12.5	3.4	-8.7	13.1	5.9	17.6
3590	-4.9	4.8	0.2	11.8	8.1	14.2
3570	-13.2	6.7	-5.6	15.8	16.0	15.7
3550	-5.0	2.2	-2.6	13.4	16.0	11.3
3530	-19.1	0.8	-18.2	16.8	16.5	17.0
3510	-7.4	2.8	-4.4	13.7	13.8	13.6
3490	-7.8	3.4	-4.1	11.5	10.7	12.0
3470	-9.1	2.4	-6.4	8.4	6.5	9.8
3450	-7.8	-2.1	-10.1	1.0	1.4	0.7
3430	-27.8	-8.0	-38.0	-4.5	-5.1	-4.1
3410	-7.6	-6.0	-14.1	1.3	1.3	1.3
3390	-13.8	-3.6	-17.8	5.1	4.2	5.6
3370	20.3	-5.3	16.0	0.4	-1.7	1.5
3350	-31.6	1.1	-30.1	6.3	7.9	5.4
3330	-96.3	8.2	-80.2	18.4	14.8	20.2
3310						
Total	-9.4	1.8	-7.4	9.4	9.1	9.6

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

Faro Mixup 8805 - No Adjustments

Periods Remaining as of January 1, 1990

ZPb+Zn Cutoff = 5%I

Bench	Volume bcy	Density mt/bcy	Tonnes	ZPb+Zn	ZPb	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	0	0.00	0	0.00	0.00	0.00	0.0	0.00	0
3770	360	2.57	930	6.63	2.45	4.18	33.9	0.26	62
3750	3,209	2.67	8,600	6.38	2.49	3.89	34.6	0.25	549
3730	4,354	2.92	12,750	6.08	2.83	3.25	46.7	0.23	775
3710	3,831	3.05	11,670	5.58	2.69	2.89	48.0	0.26	651
3690	4,387	2.97	12,990	5.26	2.22	3.04	31.8	0.28	683
3670	2,717	2.86	7,770	5.46	2.17	3.29	26.7	0.27	424
3650	23,999	2.38	57,250	5.50	1.67	3.83	18.1	0.14	3,150
3630	62,207	2.65	165,390	6.51	2.04	4.47	21.5	0.18	10,765
3610	98,517	2.78	274,190	6.92	2.38	4.54	25.4	0.17	18,985
3590	97,436	2.81	273,610	6.59	2.34	4.25	22.7	0.14	18,028
3570	117,539	2.81	328,550	6.74	2.51	4.23	27.8	0.13	22,151
3550	115,182	2.86	329,490	6.68	2.59	4.09	29.5	0.13	22,010
3530	177,684	2.86	506,660	6.64	2.60	4.05	30.5	0.13	33,657
3510	287,104	2.89	829,120	6.87	2.66	4.21	31.3	0.11	56,961
3490	309,826	3.00	928,920	7.54	2.85	4.69	32.1	0.09	70,031
3470	329,110	3.00	982,680	7.80	2.89	4.91	31.7	0.09	76,639
3450	263,104	3.05	804,270	8.01	2.99	5.02	31.0	0.08	64,422
3430	185,247	3.16	586,910	7.98	3.03	4.95	29.6	0.08	46,847
3410	140,032	3.13	439,160	7.66	2.82	4.83	25.7	0.09	33,631
3390	122,287	3.11	380,000	7.92	2.73	5.19	21.7	0.08	30,081
3370	118,653	2.89	343,540	8.57	2.82	5.75	22.3	0.09	29,428
3350	110,009	2.59	285,390	8.19	2.64	5.56	23.0	0.07	23,379
3330	58,344	2.43	141,680	7.99	2.48	5.51	21.1	0.02	11,322
3310	23,050	2.32	53,570	6.26	1.97	4.29	19.0	0.08	3,353
Total	2,658,188	2.92	7,765,090	7.44	2.73	4.71	28.5	0.10	577,984