

F8908 1989

003517

MINING RESERVE EVALUATION

DESCRIPTION : Mined Reserves By Period

TOP SURFACE GRID RECORD : 2 F2 - FARD DECEMBER 31 1988 CUT SURFACE  
 BOTTOM SURFACE GRID RECORD : 31 DEC 1987 CORRECTED YEAR END CUT SURFACE

BLOCKS USED :

COLUMNS 1 TO 128 ROWS 1 TO 128

BENCH TOTALS FOR WASTE FROM .0000 [%Pb+Zn] TO 4.0000 [%Pb+Zn]

BENCH	CREST	TOE	VOLUME	DENSITY	TONNAGE	AVERAGE GRADES				ECONOMIC FACTOR	
						[%Pb+Zn]	[%Pb]	[%Zn]	[Cu g/t]		[Au g/t]
[ft]	[ft]	[ft]	[1000]	[tn/bcf]	[TONS 1000]	[%Pb+Zn]	[%Pb]	[%Zn]	[Cu g/t]	[Au g/t]	[Cdn \$ 1000]
1	4270.00	4230.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
2	4230.00	4190.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
3	4190.00	4150.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
4	4150.00	4110.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
5	4110.00	4070.00	7.07	.000	.00	.000	.000	.000	.000	.00	.000
6	4070.00	4030.00	135.23	.044	5.90	.000	.000	.000	.000	.00	.000
7	4030.00	3990.00	435.51	.063	39.70	.000	.000	.000	.000	.00	.000
8	3990.00	3950.00	839.69	.066	55.82	.000	.000	.000	.000	.00	.000
9	3950.00	3910.00	10648.15	.071	759.89	.000	.000	.000	.000	.00	.000
10	3910.00	3870.00	7223.09	.074	533.87	.000	.000	.000	.000	.00	.000
11	3870.00	3830.00	8239.55	.074	609.79	.000	.000	.000	.000	.00	.000
12	3830.00	3790.00	8239.54	.074	613.37	.038	.015	.023	.3	.003	.00
13	3790.00	3750.00	8214.81	.075	612.63	.010	.005	.006	.1	.001	.00
14	3750.00	3710.00	8348.26	.075	625.53	.002	.001	.001	.0	.000	.00
15	3710.00	3670.00	7272.59	.075	542.80	.024	.007	.017	.2	.002	.00
16	3670.00	3630.00	5257.34	.075	393.32	.012	.004	.009	.1	.001	.00
17	3630.00	3590.00	5553.44	.076	423.98	.000	.000	.000	.0	.000	.00
18	3590.00	3550.00	10945.18	.076	833.32	.033	.012	.020	.2	.001	.00
19	3550.00	3510.00	11697.32	.076	894.13	.081	.026	.054	.5	.002	.00
20	3510.00	3470.00	12265.69	.077	948.64	.216	.080	.136	1.5	.008	.00
21	3470.00	3430.00	11877.65	.077	913.45	.233	.070	.163	1.4	.009	.00
22	3430.00	3390.00	11515.25	.078	897.90	.331	.129	.202	2.2	.014	.00
23	3390.00	3350.00	9156.13	.077	706.25	.244	.086	.158	1.5	.009	.00
24	3350.00	3310.00	6837.71	.077	524.56	.131	.052	.079	.7	.005	.00
25	3310.00	3270.00	6407.25	.079	503.41	.414	.210	.204	3.0	.021	.00
26	3270.00	3230.00	2970.73	.079	233.28	.492	.283	.210	4.7	.020	.00
27	3230.00	3190.00	1303.73	.079	103.57	.414	.219	.195	3.6	.013	.00
28	3190.00	3150.00	562.15	.078	44.09	.482	.230	.251	3.7	.014	.00
29	3150.00	3110.00	1.77	.076	.13	.000	.000	.000	.0	.000	.00
30	3110.00	3070.00	22.10	.076	1.68	.000	.000	.000	.0	.000	.00
31	3070.00	3030.00	70.71	.123	8.68	3.101	1.525	1.576	22.8	.007	.00
32	3030.00	2990.00	243.07	.115	27.98	3.035	1.400	1.635	22.2	.001	.00
33	2990.00	2950.00	1725.34	.086	148.95	1.185	.436	.748	8.3	.001	.00
34	2950.00	2910.00	1619.27	.078	126.23	.049	.016	.032	.3	.000	.00
35	2910.00	2870.00	1428.35	.083	117.97	.564	.215	.349	3.4	.007	.00
36	2870.00	2830.00	1906.53	.078	149.58	1.111	.433	.678	8.8	.019	.00
37	2830.00	2790.00	654.96	.077	50.47	1.021	.289	.733	6.4	.001	.00

35	3770.00	3770.00	4720.97	.115	17.11	6.656	2.751	4.111	23.7	.023	.00
36	3770.00	3770.00	2630.43	.121	318.14	7.471	2.000	4.634	23.9	.023	.00
37	3370.00	3350.00	2123.97	.111	236.61	7.631	2.712	4.719	24.8	.023	.00
38	3350.00	3330.00	560.38	.101	56.75	6.435	2.221	4.214	23.5	.051	.00
39	3330.00	3310.00	132.58	.090	11.92	6.622	2.656	3.966	23.7	.338	.00
40	3310.00	3290.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
41	3290.00	3270.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
42	3270.00	3250.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
43	3250.00	3230.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
44	3230.00	3210.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
45	3210.00	3190.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
46	3190.00	3170.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
47	3170.00	3150.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
48	3150.00	3130.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
49	3130.00	3110.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
50	3110.00	3090.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
TOTAL FOR ALL BENCHES			40379.31	.116	4685.18	7.956	3.170	4.786	36.0	.100	.00

100% WHITE BRUSH  
 100%

MINING RESERVE EVALUATION

DESCRIPTION : Mined Reserves By Period

TOP SURFACE GRID RECORD : 2 F2 - FARO DECEMBER 31 1988 CUT SURFACE  
 BOTTOM SURFACE GRID RECORD : 31 DEC 1989 CORRECTED YEAR END CUT SURFACE

BLOCKS USED :  
 COLUMNS 1 TO 128 ROWS 1 TO 128  
 BENCH TOTALS FOR ORE ABOVE 5.0000 [%Pb+Zn]

BENCH	CREST	TOE	VOLUME	DENSITY	TONNAGE	AVERAGE GRADES					ECONOMIC FACTOR
						[%Pb+Zn]	[%Pb]	[%Zn]	[Ag g/t]	[Au g/t]	
1	4270.00	4230.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
2	4230.00	4190.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
3	4190.00	4150.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
4	4150.00	4110.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
5	4110.00	4070.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
6	4070.00	4030.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
7	4030.00	3990.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
8	3990.00	3950.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
9	3950.00	3910.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
10	3910.00	3870.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
11	3870.00	3830.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
12	3830.00	3790.00	15.91	.089	1.41	5.492	1.972	3.522	33.9	.121	.00
13	3790.00	3750.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
14	3750.00	3710.00	60.10	.088	5.27	6.180	2.928	3.252	58.3	.371	.00
15	3710.00	3670.00	114.02	.088	9.72	5.901	2.539	5.362	49.4	.252	.00
16	3670.00	3630.00	6.19	.088	.55	6.880	2.684	4.192	49.8	.244	.00
17	3630.00	3590.00	2.65	.088	.23	5.650	1.822	3.828	34.6	.217	.00
18	3590.00	3550.00	13.26	.122	1.62	6.235	2.360	3.875	29.1	.195	.00
19	3550.00	3510.00	533.86	.107	56.90	6.482	2.478	4.004	37.1	.136	.00
20	3510.00	3470.00	1112.81	.107	119.56	8.968	3.293	5.675	45.8	.188	.00
21	3470.00	3430.00	1096.01	.110	120.86	8.032	2.871	5.162	34.9	.122	.00
22	3430.00	3390.00	1191.47	.110	131.35	7.726	3.047	4.679	32.9	.140	.00
23	3390.00	3350.00	2261.85	.112	252.66	7.428	3.004	4.423	38.5	.185	.00
24	3350.00	3310.00	3526.70	.115	406.30	8.486	3.555	4.931	49.1	.114	.00
25	3310.00	3270.00	2760.37	.112	310.09	9.722	4.053	5.669	52.0	.181	.00
26	3270.00	3230.00	2446.59	.111	270.41	9.199	3.689	5.510	50.6	.313	.00
27	3230.00	3190.00	1961.33	.118	230.64	8.117	3.298	4.819	38.7	.163	.00
28	3190.00	3150.00	1149.05	.116	132.90	7.907	3.211	4.696	39.9	.165	.00
29	3150.00	3110.00	160.87	.120	19.31	8.566	3.055	5.511	25.2	.104	.00
30	3110.00	3070.00	21.21	.127	2.70	10.514	4.975	5.538	60.0	.000	.00
31	3070.00	3030.00	163.52	.121	19.77	8.407	3.603	4.804	40.7	.015	.00
32	3030.00	2990.00	557.73	.126	70.25	7.389	3.421	3.968	38.5	.015	.00
33	2990.00	2950.00	5960.92	.124	742.04	8.323	3.514	4.809	35.9	.070	.00
34	2950.00	2910.00	5395.22	.122	659.47	7.569	2.950	4.619	27.7	.021	.00
35	2910.00	2870.00	4420.30	.113	497.74	6.654	2.483	4.173	27.5	.056	.00
36	2870.00	2830.00	2630.43	.121	318.14	7.471	2.850	4.604	25.9	.023	.00



MINING RESERVE EVALUATION

DESCRIPTION : Mined Reserves By Period

TOP SURFACE GRID RECORD : 2 F2 - FARD DECEMBER 31 1988 CUT SURFACE  
 BOTTOM SURFACE GRID RECORD : 31 DEC 1989 CORRECTED YEAR END CUT SURFACE

BLOCKS USED :

COLUMNS 1 TO 128 ROWS 1 TO 128

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [%Pb+Zn] TO 5.0000 [%Pb+Zn]

BENCH	CREST		VOLUME [bcf x1000]	DENSITY [tn/bcf]	TONNAGE [ TONS x1000]	AVERAGE GRADES					ECONOMIC FACTOR [Cdn # x1000]	
	[ft]	[ft]				[%Pb+Zn]	[%Pb]	[%Zn]	[Ag g/t]	[Au g/t]		
1	4270.00	4230.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
2	4230.00	4190.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
3	4190.00	4150.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
4	4150.00	4110.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
5	4110.00	4070.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
6	4070.00	4030.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
7	4030.00	3990.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
8	3990.00	3950.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
9	3950.00	3910.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
10	3910.00	3870.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
11	3870.00	3830.00	.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
12	3830.00	3790.00	50.38	.086	4.33	4.446	1.597	2.850	28.3	.099	.00	.00
13	3790.00	3750.00	5.30	.084	.44	4.340	1.848	2.492	34.7	.241	.00	.00
14	3750.00	3710.00	44.19	.083	3.66	4.704	2.098	2.606	40.5	.220	.00	.00
15	3710.00	3670.00	57.45	.085	4.88	4.431	1.860	2.571	41.0	.312	.00	.00
16	3670.00	3630.00	10.61	.086	.91	4.446	1.709	2.737	37.2	.341	.00	.00
17	3630.00	3590.00	.00	.000	.00	.000	.000	.000	.0	.000	.00	.00
18	3590.00	3550.00	18.56	.083	1.54	4.376	1.483	2.893	28.6	.141	.00	.00
19	3550.00	3510.00	111.37	.097	10.79	4.614	1.825	2.789	28.4	.177	.00	.00
20	3510.00	3470.00	353.55	.111	39.28	4.578	1.900	2.678	28.6	.159	.00	.00
21	3470.00	3430.00	647.00	.096	62.04	4.589	1.572	3.017	24.8	.122	.00	.00
22	3430.00	3390.00	373.88	.105	39.14	4.571	1.912	2.659	27.1	.189	.00	.00
23	3390.00	3350.00	621.37	.102	63.42	4.535	1.943	2.592	27.8	.107	.00	.00
24	3350.00	3310.00	247.49	.088	21.84	4.279	1.751	2.529	24.3	.195	.00	.00
25	3310.00	3270.00	647.89	.099	63.88	4.461	2.334	2.127	37.9	.227	.00	.00
26	3270.00	3230.00	284.61	.099	28.24	4.487	2.172	2.315	36.3	.158	.00	.00
27	3230.00	3190.00	104.30	.122	12.71	4.576	2.402	2.173	35.7	.098	.00	.00
28	3190.00	3150.00	138.77	.123	17.08	4.513	2.201	2.312	29.6	.074	.00	.00
29	3150.00	3110.00	.00	.000	.00	.000	.000	.000	.0	.000	.00	.00
30	3110.00	3070.00	.00	.000	.00	.000	.000	.000	.0	.000	.00	.00
31	3070.00	3030.00	60.10	.127	7.65	4.463	2.065	2.398	28.5	.010	.00	.00
32	3030.00	2990.00	314.66	.124	39.10	4.640	2.213	2.428	27.3	.013	.00	.00
33	2990.00	2950.00	648.77	.105	68.12	4.484	1.690	2.794	26.4	.057	.00	.00
34	2950.00	2910.00	956.36	.092	87.88	4.473	1.570	2.984	30.2	.096	.00	.00
35	2910.00	2870.00	598.39	.097	58.07	4.674	1.812	2.862	33.2	.070	.00	.00
36	2870.00	2830.00	604.58	.090	54.17	4.486	1.735	2.751	29.6	.071	.00	.00

38	3350.00	3330.00	531.21	.084	44.82	4.565	1.466	3.039	27.1	.017	.00
39	3350.00	3310.00	10.61	.088	.93	4.875	1.903	2.965	30.2	.207	.00
40	3310.00	3290.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
41	3290.00	3270.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
42	3270.00	3250.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
43	3250.00	3230.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
44	3230.00	3210.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
45	3210.00	3190.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
46	3190.00	3170.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
47	3170.00	3150.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
48	3150.00	3130.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
49	3130.00	3110.00	.00	.000	.00	.000	.000	.000	.0	.000	.00
50	3110.00	3090.00	.00	.000	.00	.000	.000	.000	.0	.000	.00

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TOTAL FOR ALL BENCHES			7561.61	.099	745.38	4.526	1.843	2.652	27.6	.111	.00
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MINING RESERVE EVALUATION

DESCRIPTION : Mined Reserves By Period

TOP SURFACE GRID RECORD : 2 F2 - FARD DECEMBER 31 1988 CUT SURFACE  
 BOTTOM SURFACE GRID RECORD : 31 DEC 1989 CORRECTED YEAR END CUT SURFACE

BLOCKS USED :  
 COLUMNS 1 TO 128 ROWS 1 TO 128  
 BENCH TOTALS FOR ALL MATERIAL

BENCH	DREST		TOE	VOLUME	DENSITY	TONNAGE	AVERAGE GRADES				ECONOMIC FACTOR		
	[m]	[DFT]					[bcf]	[#1000]	[t/bcf]	[TONS #1000]		[%Pb+Zn]	[%Pb]
1	4070.00	4130.00		.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
2	4070.00	4190.00		.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
3	4070.00	4150.00		.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
4	4110.00	4110.00		.00	.000	.00	.000	.000	.000	.000	.0	.000	.00
5	4110.00	4070.00		7.07	.000	.00	.000	.000	.000	.000	.0	.000	.00
6	4070.00	4030.00		135.23	.044	5.90	.000	.000	.000	.000	.0	.000	.00
7	4050.00	3990.00		635.51	.063	39.78	.000	.000	.000	.000	.0	.000	.00
8	3990.00	3950.00		839.69	.066	55.82	.000	.000	.000	.000	.0	.000	.00
9	3950.00	3910.00		10648.15	.071	759.89	.000	.000	.000	.000	.0	.000	.00
10	3910.00	3890.00		7223.09	.074	533.87	.000	.000	.000	.000	.0	.000	.00
11	3890.00	3870.00		8239.55	.074	607.79	.000	.000	.000	.000	.0	.000	.00
12	3870.00	3850.00		8305.83	.075	619.12	.081	.031	.050	.000	.6	.003	.00
13	3850.00	3830.00		8220.11	.075	613.07	.013	.006	.000	.000	.1	.001	.00
14	3830.00	3810.00		8452.54	.075	634.46	.081	.037	.043	.000	.7	.004	.00
15	3810.00	3790.00		7444.06	.075	557.40	.165	.068	.097	.000	1.5	.009	.00
16	3790.00	3770.00		5274.14	.075	394.78	.032	.012	.020	.000	.3	.002	.00
17	3770.00	3750.00		5556.09	.076	424.22	.004	.001	.002	.000	.0	.000	.00
18	3750.00	3730.00		10977.00	.076	836.48	.053	.020	.033	.000	.4	.002	.00
19	3730.00	3710.00		12342.57	.078	961.83	.510	.192	.319	.000	3.0	.012	.00
20	3710.00	3690.00		13732.07	.081	1107.48	1.315	.492	.824	.000	7.2	.024	.00
21	3690.00	3670.00		13620.70	.080	1096.36	1.339	.464	.875	.000	6.4	.028	.00
22	3670.00	3650.00		13080.63	.082	1068.39	1.395	.553	.942	.000	6.9	.036	.00
23	3650.00	3630.00		12039.40	.085	1022.33	2.286	.922	1.363	.000	12.3	.058	.00
24	3630.00	3610.00		10611.91	.090	952.70	3.789	1.585	2.204	.000	21.9	.058	.00
25	3610.00	3590.00		9815.51	.089	877.38	3.998	1.723	2.275	.000	22.9	.072	.00
26	3590.00	3570.00		5701.93	.093	531.93	5.131	2.114	3.016	.000	29.7	.177	.00
27	3570.00	3550.00		3369.36	.103	346.92	5.688	2.346	3.342	.000	28.1	.116	.00
28	3550.00	3530.00		1849.96	.105	194.08	5.921	2.445	3.476	.000	30.7	.123	.00
29	3530.00	3510.00		162.63	.120	19.45	8.507	3.034	5.473	.000	25.0	.103	.00
30	3510.00	3490.00		43.31	.101	4.38	6.488	3.070	3.418	.000	37.5	.000	.00
31	3490.00	3470.00		294.33	.123	36.11	6.295	2.777	3.518	.000	33.8	.012	.00
32	3470.00	3450.00		1115.46	.123	137.33	5.719	2.665	3.034	.000	32.0	.012	.00
33	3450.00	3430.00		8335.03	.115	959.11	6.941	2.906	4.035	.000	30.9	.058	.00
34	3430.00	3410.00		7970.84	.110	873.58	6.171	2.387	3.784	.000	24.0	.025	.00
35	3410.00	3390.00		6447.04	.105	673.79	5.418	2.028	3.391	.000	23.8	.049	.00
36	3390.00	3370.00		5141.55	.102	521.89	5.339	2.041	3.287	.000	28.1	.027	.00

36	3161.00	3170.00	5141.00	.102	521.00	5.000	1.011	1.000	10.1	.007	.000
37	3170.00	3250.00	2899.14	.103	297.49	6.398	2.263	4.135	21.7	.019	.000
38	3170.00	3250.00	1499.06	.039	133.78	4.724	1.590	2.184	27.3	.045	.000
39	3200.00	3210.00	193.57	.087	16.75	5.122	2.046	3.077	40.6	.255	.000
40	3210.00	3290.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
41	3290.00	3270.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
42	3270.00	3250.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
43	3250.00	3230.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
44	3230.00	3210.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
45	3210.00	3190.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
46	3190.00	3170.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
47	3170.00	3150.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
48	3150.00	3130.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
49	3130.00	3110.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
50	3110.00	3090.00	.00	.000	.00	.000	.000	.000	.0	.000	.000
TOTAL FOR ALL BENCHES			212224.10	.004	17917.65	2.388	.953	1.435	11.5	.034	.00