

PC-MINE VERSION 1.20
 SERIAL NO : 20000
 4/ 6/1990

GEMCOM SERVICES INC.
 ***** VANGORDA DEPOSIT - V8912 INTERPRETATION *****

SOFTWARE BY GEMCOM SERVICES INC
 MODULE 3.12
 PAGE 1

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves

SURFACE GRID RECORD : 2 V1 - Surface Topography Start-up of Mining (POLYSECT)

BLOCKS USED :

COLUMNS 1 TO 100 ROWS 1 TO 90

BENCH TOTALS FOR WASTE FROM .0000 [%Pb+Zn] TO 2.9900 [%Pb+Zn]

BENCH	CREST		TOE		VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [TONS x1000]	A V E R A G E G R A D E S			
	[m]	[m]				[%Pb+Zn]	[%Pb]	[%Zn
1	1230.00	1224.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
2	1224.00	1218.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
3	1218.00	1212.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
4	1212.00	1206.00	.00	.000	.00	.000	.000	.000	.000	.00	.000
5	1206.00	1200.00	3.25	2.076	6.75	.000	.000	.000	.000	.00	.000
6	1200.00	1194.00	23.51	1.641	38.58	.000	.000	.000	.000	.00	.000
7	1194.00	1188.00	61.48	1.160	71.33	.000	.000	.000	.000	.00	.000
8	1188.00	1182.00	118.96	.913	108.58	.000	.000	.000	.000	.00	.000
9	1182.00	1176.00	184.71	1.032	190.58	.000	.000	.000	.000	.00	.000
10	1176.00	1170.00	400.36	1.539	615.95	.000	.000	.000	.000	.00	.000
11	1170.00	1164.00	909.41	1.821	1656.02	.000	.000	.000	.000	.00	.000
12	1164.00	1158.00	1548.56	1.921	2975.13	.000	.000	.000	.000	.00	.000
13	1158.00	1152.00	2108.16	1.745	3679.27	.000	.000	.000	.000	.00	.000
14	1152.00	1146.00	2639.44	1.921	5070.80	.052	.028	.024	.60	.027	
15	1146.00	1140.00	3031.61	2.006	6080.68	.073	.035	.038	.78	.032	
16	1140.00	1134.00	3263.07	2.062	6728.43	.091	.041	.051	.93	.042	
17	1134.00	1128.00	3425.80	2.121	7266.32	.112	.051	.061	1.06	.053	
18	1128.00	1122.00	3501.17	2.164	7577.48	.125	.058	.067	1.24	.057	
19	1122.00	1116.00	3545.94	2.190	7765.63	.099	.047	.052	.95	.043	
20	1116.00	1110.00	3504.71	2.199	7706.76	.073	.033	.040	.70	.034	
21	1110.00	1104.00	3468.91	2.213	7677.88	.087	.038	.049	.82	.039	
22	1104.00	1098.00	3476.73	2.230	7754.13	.088	.039	.048	.86	.040	
23	1098.00	1092.00	3492.78	2.248	7852.40	.082	.037	.045	.80	.039	
24	1092.00	1086.00	3529.40	2.258	7969.03	.088	.040	.048	.92	.045	
25	1086.00	1080.00	3512.53	2.259	7933.09	.107	.049	.058	1.03	.048	
26	1080.00	1074.00	3521.17	2.256	7944.55	.101	.046	.055	.98	.044	
27	1074.00	1068.00	3517.88	2.256	7935.44	.119	.053	.066	1.17	.047	
28	1068.00	1062.00	3563.15	2.261	8056.18	.114	.052	.062	1.12	.047	
29	1062.00	1056.00	3568.66	2.262	8117.07	.108	.049	.060	1.04	.042	
30	1056.00	1050.00	3647.50	2.267	8269.42	.090	.039	.051	.86	.038	
31	1050.00	1044.00	3684.13	2.258	8320.33	.043	.019	.024	.39	.017	
32	1044.00	1038.00	3690.71	2.254	8319.87	.026	.011	.015	.22	.009	
33	1038.00	1032.00	3694.00	2.252	8320.73	.024	.009	.015	.19	.006	
34	1032.00	1026.00	3695.24	2.253	8324.57	.026	.010	.016	.20	.004	
35	1026.00	1020.00	3692.77	2.253	8318.29	.026	.010	.016	.20	.003	
36	1020.00	1014.00	3694.83	2.253	8324.39	.022	.008	.013	.17	.002	
37	1014.00	1008.00	3688.24	2.251	8301.48	.014	.006	.008	.09	.001	
38	1008.00	1002.00	3695.24	2.251	8319.78	.007	.003	.004	.04	.001	

39	1002.00	996.00	3698.53	2.251	8324.86	.003	.001	.002	.02	.001
40	996.00	990.00	3699.76	2.251	8327.05	.002	.001	.001	.02	.001

TOTAL FOR ALL BENCHES	100522.30			2.191	220248.80	.063	.028	.035	.60	.026
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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves

SURFACE GRID RECORD : 2 V1 - Surface Topography Start-up of Mining (POLYSECT)
 BLOCKS USED :
 COLUMNS 1 TO 100 ROWS 1 TO 90
 BENCH TOTALS FOR STOCKPILE FROM 2.9900 [%Pb+Zn] TO 3.0000 [%Pb+Zn]

BENCH	CREST TOE		VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [TONS x1000]	AVERAGE GRADES				
	[m]	[m]				[%Pb+Zn]	[%Pb]	[%Zn]	[Ag g/m]	[Au g/m]
1	1230.00	1224.00	.00	.000	.00	.000	.000	.000	.00	.000
2	1224.00	1218.00	.00	.000	.00	.000	.000	.000	.00	.000
3	1218.00	1212.00	.00	.000	.00	.000	.000	.000	.00	.000
4	1212.00	1206.00	.00	.000	.00	.000	.000	.000	.00	.000
5	1206.00	1200.00	.00	.000	.00	.000	.000	.000	.00	.000
6	1200.00	1194.00	.00	.000	.00	.000	.000	.000	.00	.000
7	1194.00	1188.00	.00	.000	.00	.000	.000	.000	.00	.000
8	1188.00	1182.00	.00	.000	.00	.000	.000	.000	.00	.000
9	1182.00	1176.00	.00	.000	.00	.000	.000	.000	.00	.000
10	1176.00	1170.00	.00	.000	.00	.000	.000	.000	.00	.000
11	1170.00	1164.00	.00	.000	.00	.000	.000	.000	.00	.000
12	1164.00	1158.00	.00	.000	.00	.000	.000	.000	.00	.000
13	1158.00	1152.00	.00	.000	.00	.000	.000	.000	.00	.000
14	1152.00	1146.00	.00	.000	.00	.000	.000	.000	.00	.000
15	1146.00	1140.00	.00	.000	.00	.000	.000	.000	.00	.000
16	1140.00	1134.00	.82	4.170	3.43	2.992	1.363	1.630	21.05	1.142
17	1134.00	1128.00	.82	3.560	2.93	2.992	1.589	1.404	23.02	1.130
18	1128.00	1122.00	.41	2.729	1.12	2.998	.253	2.745	29.43	.800
19	1122.00	1116.00	.41	3.394	1.40	2.991	1.287	1.704	21.71	.782
20	1116.00	1110.00	.41	3.844	1.58	2.992	1.298	1.694	29.64	1.261
21	1110.00	1104.00	.41	2.901	1.19	2.992	1.079	1.913	19.21	.490
22	1104.00	1098.00	.41	2.896	1.19	2.994	1.146	1.848	22.10	.403
23	1098.00	1092.00	1.65	3.027	4.98	2.994	1.219	1.776	14.64	.372
24	1092.00	1086.00	.41	3.111	1.28	2.990	1.064	1.926	.00	.000
25	1086.00	1080.00	.00	.000	.00	.000	.000	.000	.00	.000
26	1080.00	1074.00	.00	.000	.00	.000	.000	.000	.00	.000
27	1074.00	1068.00	.00	.000	.00	.000	.000	.000	.00	.000
28	1068.00	1062.00	.00	.000	.00	.000	.000	.000	.00	.000
29	1062.00	1056.00	.82	3.569	2.94	2.992	1.580	1.412	19.97	.956
30	1056.00	1050.00	.00	.000	.00	.000	.000	.000	.00	.000
31	1050.00	1044.00	.00	.000	.00	.000	.000	.000	.00	.000
32	1044.00	1038.00	.00	.000	.00	.000	.000	.000	.00	.000
33	1038.00	1032.00	.00	.000	.00	.000	.000	.000	.00	.000
34	1032.00	1026.00	.00	.000	.00	.000	.000	.000	.00	.000
35	1026.00	1020.00	.00	.000	.00	.000	.000	.000	.00	.000
36	1020.00	1014.00	.00	.000	.00	.000	.000	.000	.00	.000
37	1014.00	1008.00	.00	.000	.00	.000	.000	.000	.00	.000
38	1008.00	1002.00	.00	.000	.00	.000	.000	.000	.00	.000

37	1002.00	996.00	.00	.0000	.00	.000	.000	.000	.00	.000
40	996.00	990.00	.00	.000	.00	.000	.000	.000	.00	.000

TOTAL FOR ALL BENCHES	6.58	3.349	22.05	2.993	1.279	1.714	19.54	.768
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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves

SURFACE GRID RECORD : 2 V1 - Surface Topography Start-up of Mining (POLYSECT)
 BLOCKS USED :
 COLUMNS 1 TO 100 ROWS 1 TO 90
 BENCH TOTALS FOR ORE ABOVE 3.0000 [%Pb+Zn]

BENCH	CREST		VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [TONS x1000]	A V E R A G E G R A D E S				
	[m]	[m]				[%Pb+Zn]	[%Pb]	[%Zn]	[Ag g/m]	[Au g/m]
1	1230.00	1224.00	.00	.000	.00	.000	.000	.000	.00	.000
2	1224.00	1218.00	.00	.000	.00	.000	.000	.000	.00	.000
3	1218.00	1212.00	.00	.000	.00	.000	.000	.000	.00	.000
4	1212.00	1206.00	.00	.000	.00	.000	.000	.000	.00	.000
5	1206.00	1200.00	.00	.000	.00	.000	.000	.000	.00	.000
6	1200.00	1194.00	.00	.000	.00	.000	.000	.000	.00	.000
7	1194.00	1188.00	.00	.000	.00	.000	.000	.000	.00	.000
8	1188.00	1182.00	.00	.000	.00	.000	.000	.000	.00	.000
9	1182.00	1176.00	.00	.000	.00	.000	.000	.000	.00	.000
10	1176.00	1170.00	.00	.000	.00	.000	.000	.000	.00	.000
11	1170.00	1164.00	.00	.000	.00	.000	.000	.000	.00	.000
12	1164.00	1158.00	.00	.000	.00	.000	.000	.000	.00	.000
13	1158.00	1152.00	.00	.000	.00	.000	.000	.000	.00	.000
14	1152.00	1146.00	20.16	3.935	79.34	7.596	3.619	3.977	53.04	1.353
15	1146.00	1140.00	90.94	3.843	349.48	7.557	3.282	4.274	48.61	.975
16	1140.00	1134.00	160.48	3.826	613.92	7.997	3.523	4.474	50.74	.842
17	1134.00	1128.00	169.53	3.727	631.81	7.413	3.287	4.126	47.99	.783
18	1128.00	1122.00	162.53	3.583	582.38	7.316	3.142	4.174	48.78	.772
19	1122.00	1116.00	151.84	3.552	539.26	7.380	3.094	4.286	47.33	.742
20	1116.00	1110.00	198.33	3.489	691.95	7.345	3.132	4.213	46.02	.723
21	1110.00	1104.00	234.13	3.390	793.78	6.911	2.898	4.012	43.29	.725
22	1104.00	1098.00	226.31	3.430	776.16	6.872	2.940	3.932	44.46	.756
23	1098.00	1092.00	209.03	3.596	751.71	7.652	3.398	4.253	50.72	.691
24	1092.00	1086.00	173.64	3.731	647.89	7.974	3.533	4.441	50.54	.698
25	1086.00	1080.00	190.93	3.641	695.21	7.591	3.373	4.217	48.13	.673
26	1080.00	1074.00	182.29	3.724	678.91	7.902	3.535	4.367	50.55	.714
27	1074.00	1068.00	185.58	3.651	677.48	7.416	3.355	4.060	48.43	.723
28	1068.00	1062.00	140.31	3.705	519.89	7.539	3.436	4.103	49.30	.755
29	1062.00	1056.00	113.98	3.714	423.27	7.511	3.382	4.129	48.93	.764
30	1056.00	1050.00	55.96	3.811	213.27	7.475	3.469	4.005	49.17	.954
31	1050.00	1044.00	19.34	3.981	76.99	7.332	3.402	3.930	49.17	1.240
32	1044.00	1038.00	12.76	4.053	51.70	7.470	3.383	4.087	50.20	1.265
33	1038.00	1032.00	9.46	4.134	39.13	6.955	3.087	3.868	49.07	1.303
34	1032.00	1026.00	8.23	3.581	29.47	6.291	2.561	3.730	41.36	.946
35	1026.00	1020.00	10.70	3.207	34.31	5.116	1.963	3.153	31.22	.623
36	1020.00	1014.00	8.64	3.185	27.52	4.634	1.684	2.950	26.72	.513
37	1014.00	1008.00	15.22	3.083	46.93	4.866	1.695	3.171	27.66	.541
38	1008.00	1002.00	8.23	3.037	24.99	4.202	1.475	2.727	24.58	.534

39	1002.00	996.00	4.94	3.071	15.16	4.016	1.442	2.575	24.07	.508
40	996.00	990.00	3.70	2.970	11.00	3.623	1.272	2.352	21.09	.407

TOTAL FOR ALL BENCHES	2767.20	3.622	10022.92	7.423	3.257	4.166	47.83	.761
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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves

SURFACE GRID RECORD : 2 V1 - Surface Topography Start-up of Mining (POLYSECT)

BLOCKS USED :

COLUMNS 1 TO 100 ROWS 1 TO 90

BENCH TOTALS FOR ALL MATERIAL

BENCH	CREST		TOE		VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [TONS x1000]	A V E R A G E G R A D E S				
	[m]	[m]				[%Pb+Zn]	[%Pb]	[%Zn]
1	1230.00	1224.00	.00	.000	.00	.000	.00	.000	.000	.000	.00	.000
2	1224.00	1218.00	.00	.000	.00	.000	.00	.000	.000	.000	.00	.000
3	1218.00	1212.00	.00	.000	.00	.000	.00	.000	.000	.000	.00	.000
4	1212.00	1206.00	.00	.000	.00	.000	.00	.000	.000	.000	.00	.000
5	1206.00	1200.00	3.25	2.076	6.75	.000	.000	.000	.000	.00	.000	
6	1200.00	1194.00	23.51	1.641	38.58	.000	.000	.000	.000	.00	.000	
7	1194.00	1188.00	61.48	1.160	71.33	.000	.000	.000	.000	.00	.000	
8	1188.00	1182.00	118.96	.913	108.58	.000	.000	.000	.000	.00	.000	
9	1182.00	1176.00	184.71	1.032	190.58	.000	.000	.000	.000	.00	.000	
10	1176.00	1170.00	400.36	1.539	615.95	.000	.000	.000	.000	.00	.000	
11	1170.00	1164.00	909.41	1.821	1656.02	.000	.000	.000	.000	.00	.000	
12	1164.00	1158.00	1548.56	1.921	2975.13	.000	.000	.000	.000	.00	.000	
13	1158.00	1152.00	2108.16	1.745	3679.27	.000	.000	.000	.000	.00	.000	
14	1152.00	1146.00	2659.60	1.936	5150.14	.169	.083	.085	1.41	.047	.000	
15	1146.00	1140.00	3122.55	2.059	6430.15	.480	.212	.268	3.38	.084	.000	
16	1140.00	1134.00	3424.38	2.145	7345.77	.753	.332	.421	5.10	.110	.000	
17	1134.00	1128.00	3596.16	2.197	7901.05	.697	.311	.386	4.82	.111	.000	
18	1128.00	1122.00	3664.13	2.227	8160.99	.639	.278	.360	4.64	.108	.000	
19	1122.00	1116.00	3698.19	2.246	8306.29	.572	.245	.327	3.96	.088	.000	
20	1116.00	1110.00	3703.47	2.268	8400.29	.673	.289	.384	4.44	.091	.000	
21	1110.00	1104.00	3703.47	2.288	8472.86	.726	.306	.420	4.80	.103	.000	
22	1104.00	1098.00	3703.47	2.304	8531.48	.705	.303	.402	4.83	.106	.000	
23	1098.00	1092.00	3703.47	2.325	8609.09	.744	.331	.413	5.17	.096	.000	
24	1092.00	1086.00	3703.47	2.327	8618.21	.681	.303	.378	4.65	.094	.000	
25	1086.00	1080.00	3703.47	2.330	8628.30	.710	.317	.393	4.83	.098	.000	
26	1080.00	1074.00	3703.47	2.328	8623.46	.715	.321	.395	4.88	.097	.000	
27	1074.00	1068.00	3703.47	2.326	8612.91	.693	.312	.380	4.89	.101	.000	
28	1068.00	1062.00	3703.47	2.316	8576.07	.564	.257	.307	4.05	.090	.000	
29	1062.00	1056.00	3703.47	2.307	8543.28	.476	.214	.262	3.42	.078	.000	
30	1056.00	1050.00	3703.47	2.290	8482.68	.276	.126	.150	2.07	.061	.000	
31	1050.00	1044.00	3703.47	2.267	8397.32	.110	.050	.060	.84	.028	.000	
32	1044.00	1038.00	3703.47	2.260	8371.57	.072	.031	.040	.53	.017	.000	
33	1038.00	1032.00	3703.47	2.257	8359.86	.057	.024	.033	.42	.012	.000	
34	1032.00	1026.00	3703.47	2.256	8354.04	.048	.019	.029	.34	.007	.000	
35	1026.00	1020.00	3703.47	2.255	8352.60	.047	.018	.029	.33	.006	.000	
36	1020.00	1014.00	3703.47	2.255	8351.92	.037	.014	.023	.25	.004	.000	
37	1014.00	1008.00	3703.47	2.254	8348.41	.041	.015	.026	.25	.004	.000	
38	1008.00	1002.00	3703.47	2.253	8344.77	.019	.007	.012	.12	.003	.000	

39	1002.00	996.00	3703.47	2.252	8340.02	.010	.004	.006	.06	.002
40	996.00	990.00	3703.47	2.251	8338.05	.007	.003	.004	.05	.002

TOTAL FOR ALL BENCHES	103296.30			2.229	230293.70	.383	.169	.215	2.66	.058
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