

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Above Grum by different cutoffs

TOTAL FOR ALL BENCHES

TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1088.50 [m ]

SURFACE GRID RECORD : 1 TOPOGRAPHY

INCREMENTAL RESULTS

CUT-OFF GRADES		ROCK-TYPE CODE	VOLUME		DENSITY [tn/bcm]	TONNAGE		AVERAGE GRADES			
FROM [%Pb+Zn]	TO [%Pb+Zn]		[bcm	x1000]		[ TONS x1000]	[%Pb+Zn]	[ %Pb ]	[ %Zn ]	[Ag g/t]	[Au g/t]
12.000	100.000	1) A	28.62		3.430	98.16	13.741	4.855	8.886	79.382	1.302
12.000	100.000	2) A	62.10		3.337	207.22	13.405	4.686	8.719	82.199	.815
12.000	100.000	3) CD	1.08		3.638	3.93	13.972	4.930	9.042	81.708	.455
12.000	100.000	4) CD	191.70		3.549	680.43	16.503	5.812	10.690	96.696	1.300
12.000	100.000	5) E	86.40		3.626	313.26	15.009	5.535	9.473	87.484	1.093
12.000	100.000	6) E	556.20		4.030	2241.42	17.022	6.249	10.773	104.665	1.337
12.000	100.000	7) LG	197.64		4.139	818.02	14.270	5.971	8.299	96.070	1.019
12.000	100.000	9) LG	.54		2.996	1.62	12.277	4.502	7.775	89.000	.482
11.000	100.000	1	23.22		3.313	76.94	11.501	4.151	7.350	68.503	1.161
11.000	100.000	2	51.84		3.245	168.20	11.500	4.068	7.432	69.668	.990
11.000	100.000	3	2.16		3.454	7.46	11.517	4.062	7.455	67.515	.469
11.000	100.000	4	38.88		3.324	129.25	11.465	4.221	7.245	68.486	.905
11.000	100.000	5	28.62		3.517	100.65	11.479	4.267	7.211	70.783	1.168
11.000	100.000	6	34.02		3.945	134.21	11.584	4.595	6.989	76.668	1.118
11.000	100.000	7	69.66		4.022	280.17	11.492	5.292	6.200	81.373	.901
11.000	100.000	9	3.78		3.047	11.52	11.315	3.888	7.427	72.982	.627
10.000	100.000	1	19.98		3.339	66.71	10.490	3.750	6.739	62.430	1.137
10.000	100.000	2	114.48		3.199	366.26	10.455	3.692	6.763	63.028	1.009
10.000	100.000	3	1.62		3.377	5.47	10.520	3.706	6.815	61.349	.456
10.000	100.000	4	54.54		3.250	177.23	10.459	3.820	6.639	61.235	.787
10.000	100.000	5	23.22		3.668	85.17	10.479	3.972	6.507	66.885	1.164
10.000	100.000	6	21.60		4.025	86.95	10.492	4.147	6.344	70.435	1.071
10.000	100.000	7	72.36		3.866	279.75	10.576	4.709	5.866	74.415	.815
10.000	100.000	9	8.10		3.068	24.85	10.430	3.622	6.808	64.390	.643
9.000	100.000	1	19.44		3.211	62.42	9.573	3.372	6.201	55.661	.949
9.000	100.000	2	197.10		3.146	620.10	9.474	3.295	6.179	55.715	.907
9.000	100.000	3	2.16		3.339	7.21	9.582	3.407	6.175	56.254	.463
9.000	100.000	4	48.06		3.297	158.43	9.534	3.464	6.069	57.417	.948
9.000	100.000	5	15.66		3.642	57.03	9.566	3.729	5.837	61.569	1.107
9.000	100.000	6	30.78		3.994	122.92	9.514	3.958	5.557	65.963	1.060
9.000	100.000	7	57.78		3.947	228.06	9.573	4.114	5.459	67.636	.879

9.000	100.000	9	11.34	3.147	35.68	9.442	3.529	5.912	57.046	.564
8.000	100.000	1	43.20	3.216	138.95	8.469	3.021	5.448	49.211	.992
8.000	100.000	2	338.58	3.088	1045.51	8.411	3.006	5.405	50.839	.842
8.000	100.000	3	3.24	3.239	10.49	8.602	3.031	5.571	50.185	.467
8.000	100.000	4	75.60	3.236	244.68	8.413	3.119	5.293	52.240	.848
8.000	100.000	5	27.00	3.733	100.80	8.434	3.472	4.962	55.597	1.035
8.000	100.000	6	38.88	3.892	151.32	8.552	3.650	4.902	62.533	.957
8.000	100.000	7	13.50	3.720	50.22	8.587	3.741	4.846	56.248	.656
8.000	100.000	9	21.60	2.999	64.78	8.464	3.001	5.462	54.813	.654
7.000	100.000	1	88.02	3.138	276.19	7.381	2.617	4.764	43.400	.866
7.000	100.000	2	528.66	3.071	1623.45	7.482	2.655	4.827	45.925	.772
7.000	100.000	3	2.70	3.215	8.68	7.322	2.694	4.628	43.932	.659
7.000	100.000	4	119.34	3.054	364.48	7.509	2.677	4.832	43.011	.561
7.000	100.000	5	40.50	3.836	155.35	7.439	3.366	4.073	52.857	1.021
7.000	100.000	6	17.82	3.953	70.44	7.645	3.240	4.405	52.003	1.189
7.000	100.000	7	1.62	3.625	5.87	7.927	3.422	4.505	49.991	.598
7.000	100.000	9	30.78	3.014	92.78	7.489	2.675	4.814	47.540	.661
6.000	100.000	1	181.44	3.119	565.90	6.461	2.312	4.149	39.111	.924
6.000	100.000	2	757.08	3.032	2295.33	6.550	2.288	4.262	39.699	.652
6.000	100.000	3	8.64	3.313	28.62	6.385	2.372	4.014	40.583	.777
6.000	100.000	4	181.44	2.955	536.10	6.545	2.306	4.239	36.569	.453
6.000	100.000	5	35.64	3.740	133.30	6.512	2.927	3.585	48.331	.897
6.000	100.000	6	2.16	4.043	8.73	6.379	2.451	3.928	41.733	1.098
6.000	100.000	9	45.36	3.012	136.61	6.434	2.279	4.154	38.545	.768
5.000	100.000	1	420.66	3.054	1284.49	5.495	1.964	3.530	34.342	.800
5.000	100.000	2	267.30	3.025	808.66	5.642	2.078	3.565	34.193	.662
5.000	100.000	3	38.34	3.222	123.51	5.433	2.090	3.343	35.506	.616
5.000	100.000	4	30.24	2.995	90.57	5.645	2.110	3.536	35.242	.646
5.000	100.000	5	109.08	3.700	403.60	5.372	2.356	3.016	39.689	1.105
5.000	100.000	6	33.48	4.226	141.49	5.330	2.883	2.447	51.506	1.627
5.000	100.000	9	43.74	3.018	132.02	5.443	1.909	3.533	32.026	.616
4.000	100.000	1	589.14	3.018	1778.06	4.492	1.646	2.846	29.941	.700
4.000	100.000	2	26.46	2.949	78.03	4.805	1.899	2.907	29.854	.770
4.000	100.000	3	162.54	3.077	500.07	4.459	1.694	2.764	29.454	.619
4.000	100.000	4	11.34	3.028	34.34	4.678	1.776	2.903	32.645	.635
4.000	100.000	5	81.00	3.820	309.42	4.535	1.968	2.567	36.855	1.163
4.000	100.000	9	129.60	2.945	381.72	4.426	1.706	2.721	28.132	.544
3.000	100.000	1	388.80	2.976	1156.99	3.573	1.359	2.214	24.737	.653
3.000	100.000	2	1.08	3.247	3.51	3.918	1.524	2.395	31.445	.958
3.000	100.000	3	88.02	3.281	288.78	3.496	1.493	2.003	26.067	.623
3.000	100.000	4	44.82	3.402	152.46	3.326	1.843	1.483	32.404	.784
3.000	100.000	5	35.10	3.774	132.47	3.639	1.628	2.011	28.288	.780
3.000	100.000	6	.54	3.433	1.85	3.928	1.451	2.477	28.000	.272
3.000	100.000	9	97.74	2.904	283.87	3.558	1.596	1.962	23.807	.577
.000	9999.000	****	211917.10	2.620	555297.40	.003	.001	.002	.025	.001

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TOTAL 219193.60 2.642 579148.60 .349 .131 .219 2.201 .036

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FC-MINE VERSION 1.10  
 SERIAL NO : 20000  
 12/11/1986

GEMCOM SERVICES INC.  
 Grum 8606 Geological Model

SOFTWARE BY GEMCOM SERVICES INC  
 MODULE 3.11  
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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Above Grum by different cutoffs

TOTAL FOR ALL BENCHES

TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1088.50 [m ]

SURFACE GRID RECORD : 1 TOPOGRAPHY

CUMULATIVE RESULTS

	CUT-OFF GRADES		ROCK-TYPE CODE	VOLUME		DENSITY [tn/bcm]	TONNAGE [ TONS x1000]	AVERAGE GRADES				
	FROM [%Pb+Zn]	TO [%Pb+Zn]		[bcm	x1000]			[%Pb+Zn]	[ %Pb ]	[ %Zn ]	[Ag g/t]	[Au g/t]
	12.000	100.000	1	28.62		3.430	98.16	13.741	4.855	8.886	79.382	1.302
	12.000	100.000	2	90.72		3.366	305.37	13.513	4.740	8.773	81.294	.971
	12.000	100.000	3	91.80		3.369	309.30	13.519	4.743	8.776	81.299	.965
+12	12.000	100.000	4	283.50		3.491	989.73	15.570	5.478	10.092	91.884	1.195
	12.000	100.000	5	369.90		3.523	1302.99	15.435	5.492	9.943	90.826	1.170
	12.000	100.000	6	926.10		3.827	3544.41	16.439	5.971	10.468	99.578	1.276
	12.000	100.000	7	1123.74		3.882	4362.43	16.032	5.971	10.061	98.920	1.228
	12.000	100.000	8	1123.74		3.882	4362.43	16.032	5.971	10.061	98.920	1.228
	12.000	100.000	9	1124.28		3.882	4364.04	16.031	5.970	10.061	98.916	1.228
	11.000	100.000	1	1147.50		3.870	4440.98	15.952	5.939	10.014	98.390	1.226
	11.000	100.000	2	1199.34		3.843	4609.18	15.790	5.870	9.919	97.341	1.218
	11.000	100.000	3	1201.50		3.842	4616.64	15.783	5.868	9.915	97.293	1.216
	11.000	100.000	4	1240.38		3.826	4745.89	15.665	5.823	9.843	96.509	1.208
+11	11.000	100.000	5	1269.00		3.819	4846.54	15.578	5.790	9.788	95.974	1.207
	11.000	100.000	6	1303.02		3.822	4980.75	15.471	5.758	9.713	95.454	1.205
	11.000	100.000	7	1372.68		3.833	5260.92	15.259	5.733	9.526	94.704	1.189
	11.000	100.000	8	1372.68		3.833	5260.92	15.259	5.733	9.526	94.704	1.189
	11.000	100.000	9	1376.46		3.830	5272.44	15.250	5.729	9.521	94.657	1.187
	10.000	100.000	1	1396.44		3.823	5339.15	15.191	5.705	9.486	94.254	1.187
	10.000	100.000	2	1510.92		3.776	5705.41	14.887	5.575	9.311	92.250	1.175
	10.000	100.000	3	1512.54		3.776	5710.88	14.883	5.574	9.309	92.220	1.175
	10.000	100.000	4	1567.08		3.757	5888.11	14.750	5.521	9.229	91.287	1.163
+10	10.000	100.000	5	1590.30		3.756	5973.28	14.689	5.499	9.190	90.939	1.163
	10.000	100.000	6	1611.90		3.760	6060.23	14.628	5.479	9.149	90.645	1.162
	10.000	100.000	7	1684.26		3.764	6339.98	14.450	5.445	9.004	89.929	1.146
	10.000	100.000	8	1684.26		3.764	6339.98	14.450	5.445	9.004	89.929	1.146
	10.000	100.000	9	1692.36		3.761	6364.83	14.434	5.438	8.996	89.829	1.144
	9.000	100.000	1	1711.80		3.755	6427.25	14.387	5.418	8.968	89.498	1.143
	9.000	100.000	2	1908.90		3.692	7047.35	13.954	5.231	8.723	86.525	1.122
	9.000	100.000	3	1911.06		3.691	7054.56	13.950	5.229	8.720	86.494	1.121
	9.000	100.000	4	1959.17		3.682	7213.00	13.853	5.191	8.662	85.855	1.117

9.000	100.000	5	1974.78	3.681	7270.03	13.819	5.179	8.640	85.665	1.117
9.000	100.000	6	2005.56	3.686	7392.95	13.748	5.159	8.589	85.337	1.116
9.000	100.000	7	2063.34	3.694	7621.01	13.623	5.128	8.495	84.808	1.109
9.000	100.000	8	2063.34	3.694	7621.01	13.623	5.128	8.495	84.808	1.109
9.000	100.000	9	2074.68	3.691	7656.69	13.603	5.120	8.483	84.678	1.107
8.000	100.000	1	2117.88	3.681	7795.64	13.512	5.083	8.429	84.046	1.105
8.000	100.000	2	2456.46	3.599	8841.16	12.909	4.837	8.071	80.119	1.074
8.000	100.000	3	2459.70	3.599	8851.65	12.903	4.835	8.068	80.084	1.073
8.000	100.000	4	2535.30	3.588	9096.33	12.783	4.789	7.994	79.335	1.067
8.000	100.000	5	2562.30	3.589	9197.13	12.735	4.774	7.961	79.075	1.066
8.000	100.000	6	2601.18	3.594	9348.45	12.667	4.756	7.911	78.807	1.065
8.000	100.000	7	2614.68	3.595	9398.67	12.645	4.751	7.895	78.686	1.062
8.000	100.000	8	2614.68	3.595	9398.67	12.645	4.751	7.895	78.686	1.062
8.000	100.000	9	2636.28	3.590	9463.45	12.617	4.739	7.878	78.523	1.060
7.000	100.000	1	2724.30	3.575	9739.64	12.468	4.679	7.790	77.527	1.054
7.000	100.000	2	3252.96	3.493	11363.09	11.756	4.390	7.366	73.012	1.014
7.000	100.000	3	3255.66	3.493	11371.77	11.753	4.388	7.364	72.990	1.014
7.000	100.000	4	3375.00	3.477	11736.25	11.621	4.335	7.286	72.059	1.000
7.000	100.000	5	3415.50	3.482	11891.61	11.566	4.322	7.244	71.808	1.000
7.000	100.000	6	3433.32	3.484	11962.05	11.543	4.316	7.227	71.691	1.001
7.000	100.000	7	3434.94	3.484	11967.92	11.541	4.316	7.226	71.681	1.001
7.000	100.000	8	3434.94	3.484	11967.92	11.541	4.316	7.226	71.681	1.001
7.000	100.000	9	3465.72	3.480	12060.70	11.510	4.303	7.207	71.495	.998
6.000	100.000	1	3647.16	3.462	12626.60	11.284	4.214	7.070	70.043	.995
6.000	100.000	2	4404.24	3.388	14921.93	10.556	3.918	6.638	65.376	.942
6.000	100.000	3	4412.88	3.388	14950.55	10.548	3.915	6.633	65.328	.942
6.000	100.000	4	4594.32	3.371	15486.66	10.409	3.859	6.550	64.333	.925
6.000	100.000	5	4629.96	3.374	15619.96	10.376	3.851	6.525	64.196	.925
6.000	100.000	6	4632.12	3.374	15628.69	10.374	3.850	6.523	64.184	.925
6.000	100.000	7	4632.12	3.374	15628.69	10.374	3.850	6.523	64.184	.925
6.000	100.000	8	4632.12	3.374	15628.69	10.374	3.850	6.523	64.184	.925
6.000	100.000	9	4677.48	3.370	15765.30	10.339	3.837	6.503	63.961	.923
5.000	100.000	1	5098.14	3.344	17049.79	9.974	3.696	6.279	61.730	.914
5.000	100.000	2	5365.44	3.328	17858.45	9.778	3.622	6.156	60.483	.903
5.000	100.000	3	5403.78	3.328	17981.96	9.748	3.612	6.137	60.311	.901
5.000	100.000	4	5434.02	3.326	18072.54	9.728	3.604	6.124	60.186	.899
5.000	100.000	5	5543.10	3.333	18476.14	9.633	3.577	6.056	59.738	.904
5.000	100.000	6	5576.58	3.339	18617.63	9.600	3.572	6.028	59.676	.909
5.000	100.000	7	5576.58	3.339	18617.63	9.600	3.572	6.028	59.676	.909
5.000	100.000	8	5576.58	3.339	18617.63	9.600	3.572	6.028	59.676	.909
5.000	100.000	9	5620.32	3.336	18749.64	9.571	3.560	6.011	59.481	.907
4.000	100.000	1	6209.46	3.306	20527.71	9.131	3.394	5.737	56.922	.889
4.000	100.000	2	6235.92	3.304	20605.73	9.114	3.389	5.726	56.820	.889
4.000	100.000	3	6398.46	3.299	21105.81	9.004	3.348	5.656	56.171	.883
4.000	100.000	4	6409.80	3.298	21140.15	8.997	3.346	5.651	56.133	.882
4.000	100.000	5	6490.80	3.305	21449.57	8.933	3.326	5.607	55.855	.886
4.000	100.000	6	6490.80	3.305	21449.57	8.933	3.326	5.607	55.855	.886
4.000	100.000	7	6490.80	3.305	21449.57	8.933	3.326	5.607	55.855	.886
4.000	100.000	8	6490.80	3.305	21449.57	8.933	3.326	5.607	55.855	.886
4.000	100.000	9	6620.40	3.298	21831.29	8.854	3.298	5.556	55.370	.880
3.000	100.000	1	7009.20	3.280	22988.28	8.588	3.200	5.388	53.829	.869
3.000	100.000	2	7010.28	3.280	22991.79	8.587	3.200	5.388	53.825	.869
3.000	100.000	3	7098.30	3.280	23280.57	8.524	3.179	5.346	53.481	.866
3.000	100.000	4	7143.12	3.281	23433.03	8.491	3.170	5.321	53.344	.865
3.000	100.000	5	7178.22	3.283	23565.50	8.463	3.161	5.302	53.203	.865
3.000	100.000	6	7178.76	3.283	23567.35	8.463	3.161	5.302	53.201	.865
3.000	100.000	7	7178.76	3.283	23567.35	8.463	3.161	5.302	53.201	.865
3.000	100.000	8	7178.76	3.283	23567.35	8.463	3.161	5.302	53.201	.865
3.000	100.000	9	7276.50	3.278	23851.23	8.405	3.143	5.262	52.851	.861
.000	9999.000	0	7276.50	3.278	23851.23	8.405	3.143	5.262	52.851	.861
.000	9999.000	****	219193.60	2.642	579148.60	.349	.131	.219	2.201	.036

+5

+4

+3

TOTAL 219193.60 2.642 579148.60 .349 .131 .219 2.201 .036