

*Grum 1989  
 mining + geological reserves*

000416

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves - Champ Zone - 51W to 61W

*Champ Zone*

TOTAL FOR ALL BENCHES

TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 998.50 [m ]

SURFACE GRID RECORD : 1 G1 - Grum 1979 Orthophoto Surface Topography (POLYSECT)  
 RESERVE INSIDE POLYGON RECORD : 987 CHAMP ZONE 51W - 61W

INCREMENTAL RESULTS

CUT-OFF GRADES		ROCK-TYPE CODE	VOLUME [bcm x1000]	DENSITY [t/bcm]	TONNAGE [TONS x1000]	AVERAGE GRADES				
FROM [Pb+Zn%]	TO [Pb+Zn%]					[Pb+Zn%]	[Pb %]	[Zn %]	[Ag g/t]	[Au g/t]
5.000	100.000	1	7.02	3.455	24.25	5.636	2.107	3.529	278.515	.000
5.000	100.000	2	4.32	3.080	13.30	9.958	3.533	6.424	554.495	.271
5.000	100.000	5	173.34	3.945	683.83	9.942	4.534	5.409	530.236	.027
5.000	100.000	6	75.06	3.784	284.00	9.643	3.624	6.020	568.549	.715
5.000	100.000	7	31.32	3.907	122.36	9.845	4.442	5.403	603.582	.617
4.000	5.000	1	3.78	3.491	13.20	4.307	1.680	2.627	246.638	.298
4.000	5.000	3	.54	3.574	1.93	4.000	1.796	2.204	318.000	.000
4.000	5.000	5	47.52	3.922	186.38	4.241	2.100	2.141	299.366	.212
4.000	5.000	6	16.74	3.714	62.17	4.650	2.173	2.477	291.886	.302
4.000	5.000	7	3.24	3.658	11.85	4.284	2.091	2.193	314.493	.000
.010	4.000	1	222.48	3.276	728.83	1.599	.616	.984	144.581	.605
.010	4.000	3	139.86	3.439	480.94	2.654	1.340	1.314	254.029	.013
.010	4.000	5	158.22	3.726	589.53	3.201	1.630	1.571	253.620	.223
.010	4.000	6	13.50	3.657	49.37	3.195	1.376	1.820	229.045	.224
.010	4.000	7	16.20	3.475	56.29	3.591	1.785	1.806	259.726	.000
.000	.010	1	41.58	3.000	124.74	.000	.000	.000	.000	.000
.000	.010	3	28.08	3.000	84.24	.000	.000	.000	.000	.000
.000	.010	5	47.52	3.000	142.56	.000	.000	.000	.000	.000
.000	.010	6	12.42	3.000	37.26	.000	.000	.000	.000	.000
.000	.010	7	2.16	3.000	6.48	.000	.000	.000	.000	.000
.000	9999.000	9	97.20	3.207	311.71	1.416	.632	.784	120.829	.000
.000	9999.000	10	64554.30	2.700	174296.60	.000	.000	.000	.000	.000
.000	9999.000	11	12816.48	2.099	26901.92	.001	.000	.001	.050	.000
TOTAL			78512.88	2.614	205213.80	.085	.038	.047	5.534	.005

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves - Champ Zone - 51W to 61W

*gts in reaction*

TOTAL FOR ALL BENCHES

TOP ELEVATION : 1336.00 [m ]  
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SURFACE GRID RECORD : 1 61 - Grum 1979 Orthophoto Surface Topography (POLYSECT)  
 RESERVE INSIDE POLYGON RECORD : 987 CHAMP ZONE 51W - 61W

CUMULATIVE RESULTS

CUT-OFF GRADES FROM	TO	ROCK-TYPE CODE	VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [ TONS x1000]	AVERAGE GRADES				
						[Pb+Zn%]	[Pb %]	[Zn %]	[Ag g/t] [Au g/t]	
5.000	100.000	1	7.02	3.455	24.25	5.636	2.107	3.529	278.515	.000
5.000	100.000	2	11.34	3.312	37.56	7.167	2.612	4.555	376.285	.096
5.000	100.000	3	11.34	3.312	37.56	7.167	2.612	4.555	376.285	.096
5.000	100.000	4	11.34	3.312	37.56	7.167	2.612	4.555	376.285	.096
5.000	100.000	5	184.68	3.906	721.38	9.798	4.434	5.364	522.221	.031
5.000	100.000	6	259.74	3.871	1005.38	9.754	4.205	5.549	535.308	.224
5.000	100.000	7	291.06	3.875	1127.74	9.764	4.231	5.533	542.716	.267
5.000	100.000	8	291.06	3.875	1127.74	9.764	4.231	5.533	542.716	.267
4.000	5.000	1	294.84	3.870	1140.94	9.701	4.201	5.500	539.291	.267
4.000	5.000	2	294.84	3.870	1140.94	9.701	4.201	5.500	539.291	.267
4.000	5.000	3	295.38	3.869	1142.87	9.691	4.197	5.494	538.918	.267
4.000	5.000	4	295.38	3.869	1142.87	9.691	4.197	5.494	538.918	.267
4.000	5.000	5	342.90	3.876	1329.25	8.927	3.903	5.024	505.329	.259
4.000	5.000	6	359.64	3.869	1391.42	8.736	3.826	4.910	495.793	.261
4.000	5.000	7	362.88	3.867	1403.27	8.698	3.811	4.887	494.261	.259
4.000	5.000	8	362.88	3.867	1403.27	8.698	3.811	4.887	494.261	.259
.010	4.000	1	585.36	3.642	2132.10	6.272	2.719	3.553	374.728	.377
.010	4.000	2	585.36	3.642	2132.10	6.272	2.719	3.553	374.728	.377
.010	4.000	3	725.22	3.603	2613.04	5.606	2.465	3.141	352.513	.310
.010	4.000	4	725.22	3.603	2613.04	5.606	2.465	3.141	352.513	.310
.010	4.000	5	883.44	3.625	3202.58	5.163	2.311	2.852	334.309	.294
.010	4.000	6	896.94	3.626	3251.95	5.133	2.297	2.836	332.710	.293
.010	4.000	7	913.14	3.623	3308.24	5.107	2.288	2.819	331.468	.288
.010	4.000	8	913.14	3.623	3308.24	5.107	2.288	2.819	331.468	.288
.000	.010	1	954.72	3.596	3432.98	4.921	2.205	2.716	319.424	.277
.000	.010	2	954.72	3.596	3432.98	4.921	2.205	2.716	319.424	.277
.000	.010	3	982.80	3.579	3517.22	4.804	2.152	2.651	311.774	.271
.000	.010	4	982.80	3.579	3517.22	4.804	2.152	2.651	311.774	.271
.000	.010	5	1030.32	3.552	3659.78	4.617	2.068	2.548	299.629	.260
.000	.010	6	1042.74	3.546	3697.04	4.570	2.048	2.522	296.605	.258
.000	.010	7	1044.90	3.544	3703.52	4.562	2.044	2.518	296.091	.257

.000	.010	7	1044.90	3.544	3703.52	4.562	2.044	2.518	296.091	.257
.000	.010	8	1044.90	3.544	3703.52	4.562	2.044	2.518	296.091	.257
.000	9999.000	9	1142.10	3.516	4015.23	4.318	1.934	2.383	282.485	.237
.000	9999.000	10	65696.40	2.714	178311.80	.097	.044	.054	6.361	.005
.000	9999.000	11	78512.88	2.614	205213.80	.085	.038	.047	5.534	.005
.000	9999.000	12	78512.88	2.614	205213.80	.085	.038	.047	5.534	.005
.000	9999.000	***	78512.88	2.614	205213.80	.085	.038	.047	5.534	.005

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TOTAL			78512.88	2.614	205213.80	.085	.038	.047	5.534	.005
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PC-MINE VERSION 1.10  
 SERIAL NO : 20320  
 9/ 1/1989

CURRAGH RESOURCES  
 BRUM DEPOSIT - 68705 MODEL

SOFTWARE BY GENDON SERVICES INC  
 MODULE 3.11  
 PAGE 1

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Geological Reserves - Main Zone - 61W to 87W

TOTAL FOR ALL BENCHES

TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 998.50 [m ]

SURFACE GRID RECORD : 1 G1 - Grum 1979 Orthophoto Surface Topography (POLYSECT)  
 RESERVE INSIDE POLYGON RECORD : 988 MAIN ZONE 61W - 87W

INCREMENTAL RESULTS

CUT-OFF GRADES		ROCK-TYPE CODE	VOLUME [bcm x1000]	DENSITY [tn/bcm]	TONNAGE [ TONS x1000]	AVERAGE GRADES				
FROM [Pb+Zn%]	TO [Pb+Zn%]					[Pb+Zn%]	[Pb % ]	[Zn % ]	[Ag g/t]	[Au g/t]
5.000	100.000	1	968.22	3.124	3024.81	6.819	2.457	4.361	41.877	.905
5.000	100.000	2	2579.04	3.095	7982.26	7.895	2.817	5.078	48.318	.787
5.000	100.000	3	72.90	3.321	242.12	6.339	2.475	3.863	41.104	.718
5.000	100.000	4	912.06	3.254	2967.78	10.200	3.712	6.488	61.325	.926
5.000	100.000	5	508.68	3.681	1872.39	8.604	3.446	5.157	56.485	1.056
5.000	100.000	6	1105.38	4.025	4449.69	13.631	5.194	8.437	87.253	1.322
5.000	100.000	7	748.98	4.057	3038.27	12.098	4.978	7.120	82.678	1.064
5.000	100.000	8	8.64	3.763	32.52	15.213	5.193	10.020	106.451	1.322
4.000	5.000	1	686.34	3.043	2088.79	4.481	1.668	2.812	30.370	.741
4.000	5.000	2	38.88	3.096	120.38	4.717	1.949	2.768	31.502	.790
4.000	5.000	3	199.80	3.126	624.60	4.473	1.789	2.684	30.411	.681
4.000	5.000	4	12.42	3.092	38.40	4.631	1.807	2.824	32.735	.687
4.000	5.000	5	152.82	3.755	573.87	4.528	2.027	2.501	36.230	1.123
4.000	5.000	6	2.16	3.746	8.09	4.925	2.551	2.374	40.504	1.286
4.000	5.000	7	696.06	3.001	2089.04	3.287	1.270	2.018	23.600	.695
.010	4.000	2	1.62	3.588	5.81	3.899	1.727	2.172	33.252	.797
.010	4.000	3	332.64	3.304	1099.18	2.960	1.174	1.786	23.620	.706
.010	4.000	4	51.30	3.437	176.32	3.346	1.829	1.517	32.226	.834
.010	4.000	5	140.94	3.653	514.83	3.446	1.730	1.716	28.580	.881
.010	4.000	6	1.08	3.197	3.45	3.613	1.294	2.319	24.295	.348
.010	4.000	7	.54	4.113	2.22	3.925	2.203	1.722	43.000	1.765
.010	4.000	8	4.32	3.553	15.35	3.480	1.829	1.651	28.251	.351
.000	.010	1	39.96	2.988	119.39	.000	.000	.000	.000	.000
.000	.010	2	37.80	2.919	110.32	.000	.000	.000	.000	.000
.000	.010	3	19.98	2.895	57.83	.000	.000	.000	.000	.000
.000	.010	4	113.40	2.965	336.23	.000	.000	.000	.000	.000
.000	.010	5	43.20	2.895	125.06	.000	.000	.000	.000	.000
.000	.010	6	43.74	2.931	128.22	.000	.000	.000	.000	.000
.000	.010	7	32.40	2.882	93.39	.000	.000	.000	.000	.000
.000	.010	8	4.22	3.056	12.31	.000	.000	.000	.000	.000

.000	9999.000	9	561.06	2.984	1674.17	4.830	1.867	2.962	30.494	.530
.000	9999.000	10	198551.60	2.700	536089.30	.000	.000	.000	.000	.000
.000	9999.000	11	18182.41	2.099	38165.32	.000	.000	.000	.000	.000

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TOTAL			226854.70	2.880	607881.70	.437	.166	.271	2.812	.049
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