

020733

** GRUM INTERIM MODEL.G3, SUMMARY OF GEOLOGICAL RESERVES OCT.
 ** CYPRUS ANVIL MINING CORPORATION **
 ** G R U M D E P O S I T **

SUMMARY OF RESERVES FOR GEOLOGIC

BENCH REFERENCE NO.	1	2	3	4	5
BENCH TOE ELEVATION	1320.	1311.	1302.	1293.	1284.
AREA 1: GRUM	1309.4	1300.4	1291.4	1282.4	1273.4
WSTE T.F.=	1.00				
WSTE WASTE- - .00	7087500.	7087500.	7087500.	7085475.	7069275.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
WSTE TOTAL TONS	7087500.	7087500.	7087500.	7085475.	7069275.
SFDE T.F.=	1.00				
SFDE ABOVE 4.00	0.	0.	0.	700.	14700.
GRADE 1 = PB	0.	0.	0.	4.7000	3.2259
GRADE 2 = ZN	0.	0.	0.	8.3000	6.0776
GRADE 3 = AG	0.	0.	0.	79.0000	52.3265
GRADE 4 = EQUV	0.	0.	0.	13.0000	9.3034
SFDE ABOVE 3.50	0.	0.	0.	700.	14700.
GRADE 1 = PB	0.	0.	0.	4.7000	3.2259
GRADE 2 = ZN	0.	0.	0.	8.3000	6.0776
GRADE 3 = AG	0.	0.	0.	79.0000	52.3265
GRADE 4 = EQUV	0.	0.	0.	13.0000	9.3034
SFDE ABOVE 3.00	0.	0.	0.	700.	14700.
GRADE 1 = PB	0.	0.	0.	4.7000	3.2259
GRADE 2 = ZN	0.	0.	0.	8.3000	6.0776
GRADE 3 = AG	0.	0.	0.	79.0000	52.3265
GRADE 4 = EQUV	0.	0.	0.	13.0000	9.3034
SFDE WASTE- 3.00	0.	0.	0.	1802.	13304.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
SFDE TOTAL TONS	0.	0.	0.	2502.	28004.
*UNSPECIFIED TONS	0.	0.	0.	0.	0.
**BENCH TOTAL TONS	7087500.	7087500.	7087500.	7087977.	7097279.

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SUMMARY OF RESERVES FOR GEOLOGIC

NCH REFERENCE NO.	6	7	8	9	10
NCH TOE ELEVATION	1275.	1266.	1257.	1248.	1239.
REA 1: GRUM	1264.4	1255.4	1246.4	1237.4	1228.4
WSTE* T.F.=	1.00				
WSTE* WASTE- .00	7032825.	6974100.	6931575.	6844500.	6739200.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
WSTE* TOTAL TONS	7032825.	6974100.	6931575.	6844500.	6739200.
SFDE* T.F.=	1.00				
SFDE* ABOVE 4.00	62000.	177300.	204800.	386900.	491800.
GRADE 1 = PB	1.624	1.8777	2.3945	2.7901	2.7846
GRADE 2 = ZN	3.419	3.9900	4.5794	4.8541	4.6818
GRADE 3 = AG	26.229	30.3869	37.6938	42.3960	42.6529
GRADE 4 = EQUV	5.043	5.8677	6.9739	7.6442	7.4664
SFDE* ABOVE 3.50	62000.	177300.	260200.	386900.	504600.
GRADE 1 = PB	1.624	1.8777	2.1615	2.7901	2.7467
GRADE 2 = ZN	3.419	3.9900	4.1296	4.8541	4.6250
GRADE 3 = AG	26.229	30.3869	34.1630	42.3960	42.1746
GRADE 4 = EQUV	5.043	5.8677	6.2910	7.6442	7.3717
SFDE* ABOVE 3.00	62000.	177300.	260200.	386900.	505900.
GRADE 1 = PB	1.624	1.8777	2.1615	2.7901	2.7424
GRADE 2 = ZN	3.419	3.9900	4.1296	4.8541	4.6183
GRADE 3 = AG	26.229	30.3869	34.1630	42.3960	42.1202
GRADE 4 = EQUV	5.043	5.8677	6.2910	7.6442	7.3607
SFDE* WASTE- 3.00	33980.	54230.	69093.	117612.	186118.
GRADE 1 = PB	0.	0.	0.	0.	.0794
GRADE 2 = ZN	0.	0.	0.	0.	.1175
GRADE 3 = AG	0.	0.	0.	0.	1.4471
GRADE 4 = EQUV	0.	0.	0.	0.	.1969
SFDE* TOTAL TONS	95980.	231530.	329293.	504512.	692018.
UNSPECIFIED TONS	0.	0.	0.	0.	0.
BENCH TOTAL TONS	7128805.	7205630.	7260868.	7349012.	7431218.

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SUMMARY OF RESERVES FOR GEOLOGIC

BENCH REFERENCE NO.	11	12	13	14	15
BENCH TOE ELEVATION	1230.	1221.	1212.	1203.	1194.
AREA 1: GRUM	1219.4	1210.4	1201.4	1192.4	1183.4
WSTE T.F.= 1.00					
WSTE WASTE- - .00	6607575.	6518475.	6524550.	6492150.	6435450.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
WSTE TOTAL TONS	6607575.	6518475.	6524550.	6492150.	6435450.
SFDE T.F.= 1.00					
SFDE ABOVE 4.00	790900.	827600.	914700.	881000.	989300.
GRADE 1 = PB	3.424	3.5780	3.3395	3.5018	3.3438
GRADE 2 = ZN	5.988	6.2023	5.5907	5.8468	5.4302
GRADE 3 = AG	52.153	54.8719	52.6521	53.8554	51.8185
GRADE 4 = EQUV	9.412	9.7802	8.9301	9.3486	8.7740
SFDE ABOVE 3.50	804500.	844400.	919900.	898500.	1019700.
GRADE 1 = PB	3.390	3.5340	3.3296	3.4594	3.2850
GRADE 2 = ZN	5.924	6.1268	5.5707	5.7807	5.3369
GRADE 3 = AG	51.621	54.2637	52.4866	53.3022	50.9701
GRADE 4 = EQUV	9.314	9.6608	8.9003	9.2401	8.6219
SFDE ABOVE 3.00	811800.	862600.	947700.	917400.	1050100.
GRADE 1 = PB	3.370	3.4838	3.2817	3.4114	3.2253
GRADE 2 = ZN	5.889	6.0404	5.4494	5.7043	5.2374
GRADE 3 = AG	51.348	53.4892	51.6212	52.6802	50.1283
GRADE 4 = EQUV	9.259	9.5243	8.7311	9.1157	8.4627
SFDE WASTE- 3.00	224087.	304439.	271836.	318006.	330905.
GRADE 1 = PB	.057	.1231	.0156	.0363	.0704
GRADE 2 = ZN	.082	.2142	.0194	.0592	.0851
GRADE 3 = AG	.958	2.6739	.2831	.9424	1.2851
GRADE 4 = EQUV	.139	.3372	.0350	.0955	.1554
SFDE TOTAL TONS	1035887.	1167039.	1219536.	1235406.	1381005.
*UNSPECIFIED TONS	0.	0.	0.	0.	0.
**BENCH TOTAL TONS	7643462.	7685514.	7744086.	7727556.	7816455.

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 ** GRUM DEPOSIT **

SUMMARY OF RESERVES FOR GEOLOGIC

BENCH REFERENCE NO.	16	17	18	19	20
BENCH TOE ELEVATION	1185.	1176.	1167.	1158.	1149.
AREA 1: GRUM	1174.4	1165.4	1156.4	1147.4	1138.4
WSTE T.F.=	1.00				
WSTE WASTE- --.00	6386850.	6311925.	6192450.	6143850.	6072975.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
WSTE TOTAL TONS	6386850.	6311925.	6192450.	6143850.	6072975.
SFDE T.F.=	1.00				
SFDE ABOVE 4.00	1084300.	1101600.	1231500.	1312800.	1549000.
GRADE 1 = PB	2.991	3.1595	3.4604	3.5547	3.2693
GRADE 2 = ZN	4.616	4.6480	5.1727	5.3129	4.8819
GRADE 3 = AG	46.099	47.1485	51.7270	53.5897	50.2777
GRADE 4 = EQUV	7.607	7.8075	8.6331	8.8675	8.1512
SFDE ABOVE 3.50	1103300.	1132000.	1238700.	1370000.	1606200.
GRADE 1 = PB	2.963	3.1158	3.4479	3.4716	3.2130
GRADE 2 = ZN	4.576	4.5793	5.1560	5.1798	4.7752
GRADE 3 = AG	45.690	46.5256	51.5600	52.5093	49.3783
GRADE 4 = EQUV	7.539	7.6951	8.6039	8.6514	7.9882
SFDE ABOVE 3.00	1121800.	1179400.	1246800.	1449000.	1721300.
GRADE 1 = PB	2.932	3.0371	3.4339	3.3673	3.0896
GRADE 2 = ZN	4.535	4.4753	5.1342	4.9871	4.5785
GRADE 3 = AG	45.264	45.5014	51.4005	51.2071	47.6438
GRADE 4 = EQUV	7.467	7.5124	8.5681	8.3544	7.6681
SFDE WASTE- 3.00	354699.	410832.	515747.	505541.	501005.
GRADE 1 = PB	.091	.1410	.1704	.1778	.1843
GRADE 2 = ZN	.168	.2021	.2784	.2632	.2607
GRADE 3 = AG	2.169	2.8440	4.0716	3.8013	3.8277
GRADE 4 = EQUV	.260	.3431	.4488	.4410	.4450
SFDE TOTAL TONS	1476499.	1590232.	1762547.	1954541.	2222305.
*UNSPECIFIED TONS	0.	0.	0.	0.	0.
**BENCH TOTAL TONS	7863349.	7902157.	7954997.	8098391.	8295280.

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SUMMARY OF RESERVES FOR GEOLOGIC

BENCH REFERENCE NO.	21	22	23	24	25
BENCH TOE ELEVATION	1140.	1131.	1122.	1113.	1104.
AREA 1: GRUM	1124.4	1120.4	1111.4	1102.4	1093.4
WSTE T.F.= 1.00					
WSTE WASTE- -.00	5987925.	5998050.	6111450.	6147900.	6182325.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.
WSTE TOTAL TONS	5987925.	5998050.	6111450.	6147900.	6182325.
SFDE T.F.= 1.00					
SFDE ABOVE 4.00	1389700.	1483900.	1429600.	1340000.	1311200.
GRADE 1 = PB	2.987	3.0223	3.0273	2.9559	3.0194
GRADE 2 = ZN	4.599	4.6643	4.7752	4.5646	4.6811
GRADE 3 = AG	45.225	45.8795	45.4899	44.3395	47.5262
GRADE 4 = EQUV	7.586	7.6866	7.8025	7.5205	7.7005
SFDE ABOVE 3.50	1544200.	1628400.	1542000.	1491900.	1451700.
GRADE 1 = PB	2.826	2.8896	2.9219	2.8207	2.8813
GRADE 2 = ZN	4.371	4.4484	4.5836	4.3127	4.4299
GRADE 3 = AG	42.958	43.9148	43.8482	42.1691	45.1923
GRADE 4 = EQUV	7.197	7.3379	7.5054	7.1333	7.3112
SFDE ABOVE 3.00	1588100.	1762900.	1635600.	1608700.	1576700.
GRADE 1 = PB	2.777	2.7629	2.8269	2.7176	2.7574
GRADE 2 = ZN	4.311	4.2613	4.4320	4.1304	4.2214
GRADE 3 = AG	42.311	42.1292	42.3810	40.6406	43.1583
GRADE 4 = EQUV	7.088	7.0243	7.2589	6.8480	6.9788
SFDE WASTE- 3.00	618435.	551914.	479520.	448355.	425777.
GRADE 1 = PB	.219	.1501	.1736	.2312	.2411
GRADE 2 = ZN	.365	.2345	.2711	.3171	.3286
GRADE 3 = AG	4.525	2.8435	2.9054	3.9429	4.2709
GRADE 4 = EQUV	.585	.3845	.4447	.5483	.5698
SFDE TOTAL TONS	2206535.	2314814.	2115120.	2057055.	2002477.
*UNSPECIFIED TONS	0.	0.	0.	0.	0.
**BENCH TOTAL TONS	8194460.	8312864.	8226570.	8204955.	8184802.

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 ** GRUM DEPOSIT **

SUMMARY OF RESERVES FOR GEOLOGIC

BENCH REFERENCE NO.	26	27	28	29	30
BENCH TOE ELEVATION	1095.	1086.	1077.	1068.	1059.

AREA 1: GRUM	1084.4	1075.4			
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WSTE T.F. = 1.00

WSTE WASTE - -.00	6228900.	6356475.	6384825.	6469875.	6494175.
GRADE 1 = PB	0.	0.	0.	0.	0.
GRADE 2 = ZN	0.	0.	0.	0.	0.
GRADE 3 = AG	0.	0.	0.	0.	0.
GRADE 4 = EQUV	0.	0.	0.	0.	0.

WSTE TOTAL TONS	6228900.	6356475.	6384825.	6469875.	6494175.
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SFDE T.F. = 1.00

SFDE ABOVE 4.00	1228900.	1246000.	995000.	775600.	799200.
GRADE 1 = PB	3.148	3.1679	3.1613	2.8600	3.1005
GRADE 2 = ZN	4.871	4.9114	4.9915	4.5992	4.5168
GRADE 3 = AG	49.108	49.8939	49.5135	47.0674	48.7930
GRADE 4 = EQUV	8.019	8.0793	8.1527	7.4592	7.6173

SFDE ABOVE 3.50	1270000.	1301300.	1057200.	847700.	878000.
GRADE 1 = PB	3.094	3.1042	3.0649	2.7479	2.9556
GRADE 2 = ZN	4.785	4.7868	4.8282	4.3933	4.3100
GRADE 3 = AG	48.215	48.7915	48.1373	45.2306	46.5451
GRADE 4 = EQUV	7.879	7.8910	7.8932	7.1412	7.2656

SFDE ABOVE 3.00	1356900.	1346700.	1164000.	901000.	899600.
GRADE 1 = PB	2.988	3.0493	2.9153	2.6735	2.9152
GRADE 2 = ZN	4.594	4.6828	4.5405	4.2303	4.2549
GRADE 3 = AG	46.512	47.8391	45.7472	43.8689	45.8886
GRADE 4 = EQUV	7.582	7.7321	7.4558	6.9038	7.1702

SFDE WASTE - 3.00	446958.	327929.	355975.	350264.	329306.
GRADE 1 = PB	.224	.2377	.2662	.1833	.1033
GRADE 2 = ZN	.270	.2501	.3151	.2544	.1703
GRADE 3 = AG	3.566	3.8533	4.2380	3.2376	2.2568
GRADE 4 = EQUV	.495	.4878	.5814	.4376	.2736

SFDE TOTAL TONS	1803858.	1674629.	1519975.	1251264.	1228906.
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*UNSPECIFIED TONS	0.	0.	0.	0.	0.
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**BENCH TOTAL TONS	8032758.	8031104.	7904800.	7721139.	7723081.
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10/10/81
 ULTIMATE PIT RESERVES
 BY BENCH (1-20)

1302

93

84

75

1266

57

48

39

30

21

12

03

1194

85

76

67

58

49

40

31

22

13

1104

1095

86

77

68

59

50

41

32

23

14

1005

996

87

78

69

60

51

42

24

15

906
-07

1338
29
20
1311